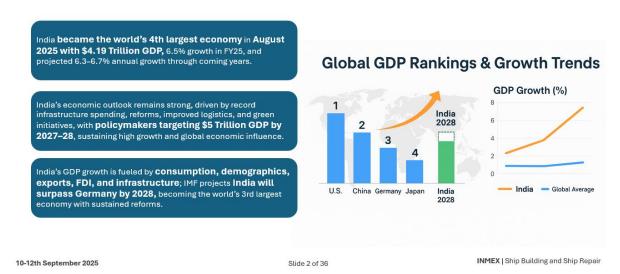


The event focuses on the current state of the shipbuilding industry in India, the growth prospects, government initiatives, and the challenges faced in terms of infrastructure, skilled workforce, and technological advancements.



India's Economic Growth





India's Regional and Global Standing

India is now the **4th largest economy globally as of August 2025**, overtaking Japan, and trailing only the United States, China, and Germany in nominal GDP rankings. The country's nominal GDP stands at **\$4.19 trillion** with a GDP per capita of around **\$2,934**. This rapid ascent reflects strong domestic consumption, a large working-age population, resilient export sectors (notably engineering, petroleum, and electronics), high foreign direct investment, and improved infrastructure.

India's real GDP grew 6.5% in FY25, signaling robust post-pandemic recovery, reaching ₹187.97 lakh crore. Economic projections from IMF, World Bank, and other institutions forecast annual growth between 6.3% and 6.7% over the next few years. CPI inflation fell to 3.16%, the lowest since 2019, aided by improved supply chains and prudent policy measures.

Merchandise shipments hit **US\$277.63 billion in April–July 2025**, up **5.23% year-on-year**, while FDI inflows rose **14% to US\$81.04 billion in FY25**, confirming India's position as a preferred investment destination. Per-capita GDP climbed to **₹133,501**, indicative of rising prosperity and stronger domestic demand.



Rankings and Economic Position

India's steady economic growth is expected to allow it to surpass Germany by 2028, potentially becoming the **world's 3rd largest economy** if current momentum and reforms persist. This growth is largely driven by domestic demand, ongoing export expansion, and strategic government investments in infrastructure and policy reform, including labor, industry compliance, and digital transformation initiatives.

The real GDP growth rate for 2024–25 was 6.5%, slightly down from the previous year's post-pandemic rebound of 9.2%, but still the highest among major economies worldwide. The United Nations, Confederation of Indian Industry, and IMF all project growth rates between 6.3% to 6.7% annually through 2027. India's exports reached \$436.6 billion in FY25, and total goods and service exports have surged by 76% over the past decade, now at \$825 billion. FDI inflows rose over 15% year-on-year to reach \$49.3 billion in FY25, reinforcing India's position as a preferred global investment destination. Meanwhile, inflation dropped to 2.82% as of May 2025, its lowest in six years, aided by improved supply chains, softer commodity prices, and monetary policy stability.

Economic Prospectus

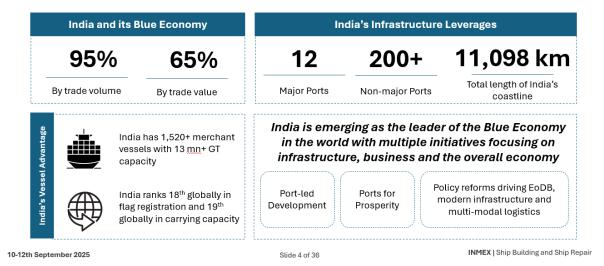
India's economic prospects are strengthened by government policies focused on **infrastructure-led growth**, which contributed to a record \$176 billion capital **spending in H1 FY25**, expected to rise further in FY26. Reduced port congestion, improved compliance, and ongoing reforms in labor and industrial laws are boosting productivity. With a strong emphasis on domestic consumption, digital transformation, and green initiatives, the nation is on track to cross the \$5 trillion GDP mark by 2027–28, further enhancing its global economic influence.



Contribution of the Blue Economy



Towards Viksit Bharat 2047



Current Maritime Landscape

India's blue economy is central to its growth, with **95% of trade by volume and 70% by value** moving by sea. But in an interconnected maritime world, domestic progress must always be viewed alongside international obligations — particularly at the IMO.

India's maritime growth story is significant:

- Ports have tripled in capacity in the past decade, making us better prepared to implement IMO's facilitation and safety norms.
- Inland waterways cargo has nearly tripled since 2014, advancing sustainable logistics in line with IMO's decarbonisation agenda.
- Cruise tourism and lighthouse tourism have grown manifold, opening new
 dimensions of maritime activity while demanding stricter safety and
 environmental oversight. Cruise passenger traffic has crossed 0.5 million
 annually, with year-on-year double-digit growth.
- Seafarer strength has more than doubled in the past decade India now ranks as the second-largest supplier of seafarers worldwide.

At the same time, our ports are going greener with **over 60% of major ports adopting renewable energy**, and ship recycling at Alang is embracing **Hong Kong Convention-compliant practices** — areas where India's domestic progress directly strengthens its credibility at the IMO.

Thus, India's maritime advancements are not just national milestones but also **building blocks of global compliance**, **sustainability**, **and competitiveness**, reinforcing our contributions at the IMO.

India's Position in Global Maritime Governance

India stands today at a pivotal moment in its maritime journey — both as a regional leader in the Indian Ocean and as an active global voice at the IMO.

- With the second-largest pool of seafarers worldwide (over 2.5 lakh active seafarers, including ~45,000 women), India plays a direct role in upholding international safety and welfare standards.
- As a leader in ship recycling, accounting for 33% of global dismantling, India's transition towards green recycling directly contributes to IMO's sustainability agenda.
- In port performance, India now features prominently in global rankings, with Visakhapatnam (20th), JNPA (28th), and Mundra (27th) among the world's top 100 container ports (Lloyd's List 2023 rankings), demonstrating efficiency and competitiveness.
- On the Logistics Performance Index 2023 (World Bank), India ranks 38th globally, ahead of many advanced economies in vessel turnaround time and port efficiency, showcasing operational improvements that strengthen global supply chains.

Strategically located in the **Indian Ocean Region**, India is also at the crossroads of major global shipping routes, including the **Strait of Malacca**. With initiatives like the **Chabahar Agreement, INSTC, and SAGAR and MAHASAGAR policy**, India is integrating connectivity, security, and sustainability in ways that reinforce its global maritime relevance.



India's Vision for the Maritime Sector





Maritime India Vision (MIV) 2030

- Position India Globally in the Top 10 Shipbuilding, repair nations
- Production Targets: Increase from current 30k GT to 500k+ GT annually by 2030
- · Investment: INR 20,000+ Crores
- Employment Generation: 1,00,000+ additional jobs (direct and indirect)



Maritime Amrit Kaal Vision 2047

- Advanced phase targeting Top 5 global position in shipbuilding and maintaining 1 position in ship recycling
- 69% Indian-Built Ships Share (up from current 5%)
- · 300+ Strategic Initiatives across 11 key maritime areas
- Financial Assistance: 20-30% assistance for green vessels (including retrofitting)

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Maritime India Vision 2030

The MIV 2030 focuses on ten core themes, including:

- 1. **Best-in-Class Port Infrastructure**: We are investing in brownfield expansions and developing mega ports, particularly focusing on southern transshipment hubs.
- 2. **End-to-End Logistics Efficiency**: Approximately 200 connectivity projects are underway, integrating road, rail, coastal, and inland waterways to enhance logistics efficiency and reduce evacuation times.
- 3. **Technology-led Logistics**: The National Logistics Portal (Marine) and smart ports are being developed to facilitate digitalization and system-based monitoring.
- 4. **Policy & Institutional Reforms**: We are establishing new regulatory frameworks and promoting public-private partnerships (PPP) to enhance operational efficiency.
- 5. **Shipbuilding, Repair & Recycling**: Our focus is on meeting domestic shipbuilding demand and developing a marine design ecosystem.
- 6. **Inland Waterways (IWT)**: We aim to enhance cargo and passenger movement through improved terminal and fairway infrastructure.
- 7. **Cruise Sector Growth**: We are planning an eightfold growth in cruise tourism, developing terminal infrastructure and training academies.
- 8. **Global Maritime Cooperations**: Strengthening linkages with neighboring nations and enhancing our representation in the International Maritime Organization (IMO).

- 9. **Safe, Sustainable & Green Maritime**: Our target is to achieve 40% renewable energy integration by 2030, focusing on emissions reduction and safety programs.
- 10. **Seafaring & Training Excellence**: We aim to enhance research, education, and the seafarer ecosystem, as India currently supplies 10–12% of global seafarers.

Hon. Prime Minister Shri Narendra Modi has emphasized, "India is very serious about growing in the maritime sector and emerging as a leading Blue Economy of the world." This vision is not just about infrastructure; it is about creating a sustainable and resilient maritime ecosystem.

Maritime Amrit Kaal Vision 2047

Looking further ahead, the **Maritime Amrit Kaal Vision 2047** projects about ₹**80,00,000 crores** investments and **40 million** jobs by 2047 a testament to the pivotal role shipping will play in India's journey towards becoming a developed nation.

The eleven key themes of MAKV are:

1. Lead the World in Safe, Sustainable & Green Maritime Sector

India is committed to reducing maritime emissions in line with the IMO's GHG strategy and COP26 goals. 22 initiatives are planned including carbon-neutral ports, alternate fuel adoption like LNG and hydrogen, and over 20 pilot projects under the Green Shipping Programme.

2. Promote Ocean, Coastal & River Cruise Sector

Despite our vast coastline, India's cruise tourism remains underdeveloped. 25 initiatives are planned including cruise terminals on both coasts, inland waterway development, relaxed cabotage rules, and fiscal incentives like GST reduction and e-visa extension.

3. Enhance Modal Share of Coastal Shipping & Inland Water Transport

With 14,000 km of navigable waterways, water transport remains underutilized. 46 initiatives are planned including operationalizing 50 waterways by 2047, coastal berths near production hubs, and low-draft vessel designs with tug-barge combinations.

4. Promote Maritime Cluster

Industrial maritime clusters are being developed at DPA, VoCPA, SMPA (Haldia), and Andaman & Nicobar Islands. 30 initiatives are planned including bunkering hubs, ship repair facilities, and investor-friendly policies to attract private sector participation.

5. Promote Maritime Professional Services

As India's maritime sector expands, so does the need for robust financial and legal services. 28 initiatives are planned including a Maritime Development Fund, international arbitration center, and tax incentives to ease financing and insurance settlements.

6. Become a Global Player in Shipbuilding, Repair & Recycling

India's shipbuilding share is just 1% globally, far behind China and Singapore. 17 initiatives are planned including policy extensions, expansion of Alang Shipyard, and new recycling hubs in Andhra Pradesh, Odisha, and West Bengal.

7. Develop World Class Education, Research & Training

India's maritime education ecosystem needs integration and innovation. 39 initiatives are planned including incubators, Maritime Knowledge Clusters, Centers of Excellence at IIM Ahmedabad and IIFT Delhi, and global training partnerships.

8. Strengthen India's Global Maritime Presence

India is enhancing its global maritime stature through strategic partnerships. 43 initiatives are planned including a dedicated IMO cell, permanent IMO representative, and implementation of the BIMSTEC Master Plan for regional cooperation.

9. Develop World Class Next Generation Ports

India's ports handled over 1.3 billion tonnes of cargo in 2019–20, yet capacity must grow. 42 initiatives are planned including deeper drafts, transshipment hubs, two new major ports, and private sector participation under PM Gati Shakti.

10. Enhance Efficiency through Technology & Innovation

Technology is key to maritime transformation and efficiency. 17 initiatives are planned including E-Gate 2.0 using computer vision, drone-based inventory, Al-powered berth allotment, and digital twins for port planning and optimization.

11. Enhance India's Tonnage

India's fleet accounts for just 1% of global tonnage, compared to 5% for China. 9 initiatives are planned including fiscal reforms, infrastructure status for shipping, and easing ship leasing and financing norms to boost Indian-flagged vessels.

The vision foresees India as the largest global supplier of certified seafarers, with the **blue economy contributing up to 12% of our GDP—up from about 4% today**. Our ports will be carbon-neutral, our ships propelled by zero-emission fuels, and our shipbuilding industry globally competitive, positioning India at the forefront of green, smart, and secure shipping.

Sagarmanthan 2024: India's Maritime Vision

Against this backdrop, the Ministry of Ports, Shipping and Waterways, in partnership with the Observer Research Foundation, convened the **first edition of 'Sagarmanthan: The Great Oceans Dialogue' on 18–19 November 2024 in New Delhi**. As South Asia's largest maritime thought leadership forum, Sagarmanthan brought together policymakers,

global experts, and industry leaders to deliberate on the future of oceans through four thematic pillars — **New Frontiers, Blue Growth, Green and Blue, and Coasts and Communities**.

The event spotlighted India's growing maritime strengths: record turnaround times at major ports (22.57 hours), Paradip Port emerging as the largest cargo-handling port at 145.38 MT in FY24, and green initiatives such as the Green Tug Transition Programme and development of Green Hydrogen Hubs. With India investing US\$ 82 billion in port infrastructure by 2035 and launching transformative schemes like Sagarmala and Maritime India Vision 2030, Sagarmanthan reaffirmed India's role as a rising maritime power.

By fostering dialogue on sustainability, governance, and innovation, Sagarmanthan has set the course for a **future-ready maritime ecosystem**, cementing India's place as a central player in global maritime governance.



Why Shipbuilding is Critical?





Mother Industry for Heavy Engineering



Employment Generation



Increasing Indian Tonnage in Energy imports



Reduce Dependability & Outflow of FOREX



Creation of Strategic Assets

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Why Shipbuilding is Critical?

Shipbuilding is a strategic industry that underpins national economic development, maritime security, and industrial growth. Often referred to as the "mother industry" for heavy engineering, shipbuilding has strong forward and backward linkages with sectors such as steel, electronics, logistics, and marine equipment manufacturing. Its multiplier effect on employment and industrial output makes it a cornerstone of coastal and regional development.

India's maritime ambitions are closely tied to the growth of its shipbuilding and ship repair capabilities. With over 50 shipyards across the country, India has the infrastructure to build a wide range of vessels—from naval warships and submarines to offshore support vessels and inland waterway crafts. However, India currently ranks 16th globally in shipbuilding capacity, indicating significant room for expansion. Strengthening this sector is essential to reduce reliance on foreign-built ships, retain economic value within the country, and enhance self-reliance in maritime logistics.

Shipbuilding also plays a vital role in national security. The ability to construct and maintain strategic assets such as aircraft carriers, frigates, and patrol vessels ensures operational readiness and sovereignty in maritime defense. Public sector shipyards like Cochin Shipyard Ltd and Hindustan Shipyard Ltd have demonstrated capabilities in delivering complex naval platforms, while private yards are increasingly contributing to commercial and export-oriented shipbuilding.

From an economic standpoint, India spends billions annually on chartering foreign vessels for trade and energy imports. Enhancing domestic shipbuilding capacity can significantly reduce this outflow of foreign exchange (FOREX), increase Indian tonnage,

and support the country's goal of becoming a \$1 trillion export economy by 2030. Moreover, the ship repair and recycling sectors offer additional avenues for growth. India already commands a 25% share of the global ship recycling market and is emerging as a cost-effective alternative for ship repair services.

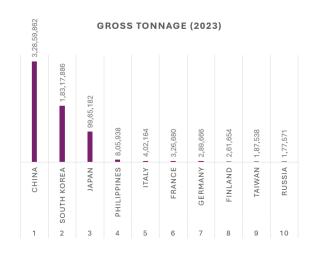
The global maritime industry is undergoing rapid transformation, driven by stricter environmental regulations and the demand for greener, more efficient vessels. This presents India with an opportunity to leapfrog into next-generation shipbuilding by investing in LNG, electric, and hybrid propulsion technologies. Initiatives like the Shipbuilding Financial Assistance Policy (SBFAP) and the Maritime Amrit Kaal Vision 2047 aim to position India among the top five global shipbuilding nations, with targets to build over 1,000 green vessels and establish integrated shipbuilding clusters.

In conclusion, shipbuilding is not just an industrial activity—it is a strategic imperative. It supports economic independence, enhances national security, creates employment, and enables India to assert its presence in global maritime trade. With the right policy support, infrastructure investment, and stakeholder collaboration, India can transform its shipbuilding industry into a pillar of Viksit Bharat 2047.



Global Shipbuilding Scenario





- Global ship building market is estimated ton be approx. USD 70 Billion.
- Primary dominance is shown by China, South Korea and Japan.
- India currently ranks 16th among global shipbuilding nations

Vessel Type	Approx. Share of Global Orders (2024)
Container Ships 🚅	~38–40%
Gas Carriers (LNG/LPG)	~15–18%
Tankers ≣	~20–22%
Bulk Carriers 🕹	~18–20%
Passenger & Cruise 🚢	~5%

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Global Shipbuilding Scenario

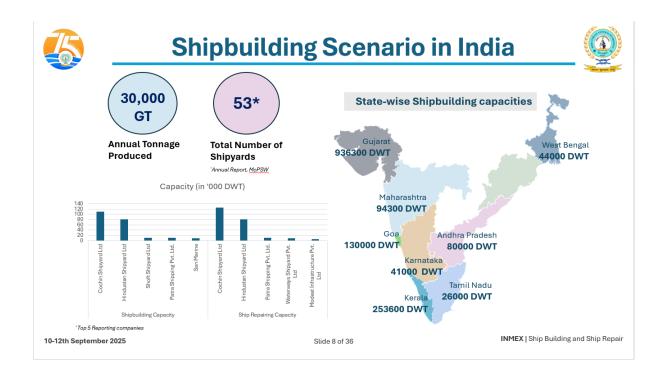
The global shipbuilding industry is a cornerstone of international trade and maritime infrastructure, with an estimated market size of approximately **USD 70 billion**. This sector is dominated by a few key players—**China, South Korea, and Japan**—which collectively account for the majority of global shipbuilding output. These countries benefit from decades of sustained policy support, advanced industrial ecosystems, and robust financial incentives, enabling them to maintain leadership in both volume and technological innovation.

In 2023, **China** led the global shipbuilding market with a gross tonnage of over **32.95** million DWT, followed by **South Korea** at **18.31** million DWT and **Japan** at **9.96** million DWT. Other notable contributors include the **Philippines**, **Italy**, **France**, **Germany**, **Finland**, **Taiwan**, and **Russia**, each with varying degrees of capacity and specialization.

The demand for ship types is also evolving. According to 2024 projections, **container ships** represent the largest share of global orders at **38–40**%, followed by **tankers** (**20–22**%), **bulk carriers** (**18–20**%), and **gas carriers** such as LNG and LPG vessels (**15–18**%). **Passenger and cruise ships** account for a smaller share at around **5**%, reflecting niche demand and specialized construction requirements.

This global landscape presents both challenges and opportunities for emerging shipbuilding nations like India. While India currently ranks 16th in global shipbuilding capacity, it has the potential to rise significantly by leveraging its strategic location, expanding infrastructure, and investing in green and digital shipbuilding technologies. As global demand shifts toward cleaner, more efficient vessels, India can position itself as a

mid-sized vessel segmen	o congested East Asian s ts.	mpyards, especially	пт ѕрестапгей апи



Shipbuilding Scenario in India

Capacity & Status of Indian Shipyards

India's shipbuilding industry comprises of both private and public shipyards, with about 53 shipyards and Shipbuilding assets (not including many minor boat yards) distributed on both the east and west coast.

S.No.	Company Name	Capacity (in '000 DWT)			
Shipbuilding Capacity					
1	Cochin Shipyard Ltd	110			
2	Hindustan Shipyard Ltd	80			
3	Shoft Shipyard Ltd	10			
4	Patra Shipping Pvt. Ltd.	10			
5	San Marine	8			
Ship Repairing Capacity					
1	Cochin Shipyard Ltd	125			
2	Hindustan Shipyard Ltd	80			
3	Patra Shipping Pvt. Ltd.	10			
4	Waterways Shipyard Pvt. Ltd	8			
5	Modest Infrastructure Pvt. Ltd	6			

Top 5 performing companies. (Source: MoPSW)

For defence shipbuilding, the infrastructure and capability exists for building state of art combatants i.e. aircraft carriers, submarines, destroyers, frigates etc. For commercial shipbuilding also, capacity, capability and infrastructure exist for building vessels ranging from niche high speed crafts to very large cargo vessels up to 400,000 DWT.

Despite the above, the Indian shipbuilding industry finds itself in a position that is below its true potential. The industry today exists as a largely monopsonist market for defence shipbuilding with a reasonably strong domestic demand, while not making any significant headway in commercial shipbuilding, with very little demand. Defence shipbuilding is dominated by DPSUs and PSUs, along with a small amount of work shared with private shippards. However, despite a slew of efforts from the government to encourage private participation in defence shipbuilding and efforts to stimulate the supply side, the private industry has gradually waned over the last few years.

Some of the factors which gave boost to commercial shipbuilding in India in last two decades are

- Unprecedented worldwide growth since 2003, which is riding on stimulus of global demand
- Favourable govt. policies- viz subsidies up to 30 per cent, on massive infrastructure investments
- Indian Industry market share grew from 0.3 per cent to reaching over 7.0 per cent at 2023.

Factors which gave bust to commercial shipbuilding industry in India are

- Withdrawal of govt subsidy in 2007.
- Global recession 2008
- Relatively less competitive global market, leading to large scale order cancellation
- Overleveraged capital, poor cash flow. Market share 0.01 per cent by 2013.
- Oil prices and freight cost plunge. Slowdown of shipping industry and consequently of commercial shipbuilding leading to overdependence on naval shipbuilding.

Financial Support and incentives in major shipbuilding countries

The governments in all major shipbuilding countries have laid a thrust on development of the sector through formulation of supportive policies and measures such as subsidies, financial aid, easy finance, loan deferments, tax benefits, export promotion policies, preferential orders, etc. The governments have also established special economic zones and shipbuilding industrial bases to provide infrastructure, have supported the

development of advanced technologies and innovation in the industry and have encouraged mergers and acquisitions among shipbuilding companies to enhance their competitiveness and efficiency. Several such policies triggered the development at various stages namely as under: -

- Subsidized land and licensing procedures to set up shipyards
- Favorable loans, grants and preferential tax policies. Lower VAT rates and customs duties.
- Subsidized input materials such as cheap shipbuilding quality steel.
- Guarantees for new building from banks
- Income Tax rebate for shipyards.
- Scrap and new-ship build subsidy
- Research, Development and Innovation funding with special emphasis to clean energy.



Challenges faced by Indian Shipbuilding Industry

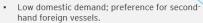


Structural and Financial challenges



- Lack of access to low-cost, long-term capital; high cost of working capital (~10.5% interest).
- Inverted GST duty structure leading to blocked input tax credits.
- Restoration of customs duties increasing shipbuilding costs by 4.5-5.25%.
- Limited number of shipyards focused on commercial shipbuilding.

Market & Policy Limitations



No dedicated maritime financing institutions or credit schemes.

Operational gaps



- Weak ancillary industry; 50-60% of components still imported.
- Lack of standardized indigenous ship designs and design repositories.
- Shortage of skilled labour across technical disciplines.
- Absence of a centralized shipyard database for visibility and planning.

Strategic & Emerging Issues



- High cost and lack of support for green vessels and decarbonization.
- Cybersecurity vulnerabilities and outdated digital infrastructure.

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Challenges faced by Indian Shipbuilding Industry

1. Non availability of low-cost capital in Indian shipbuilding sector

Ship is not provided 'Infrastructure Status'. Shipbuilding needs long-term and low-interest capital loans and unfortunately, banks do not offer such loans, making it difficult for shipbuilders/buyers to access the necessary funds. Moreover, there is no specialised bank, like agriculture-focused ones, for the shipbuilding industry. Further, the cost of funds for Indian banks is high and consequently the cost of FOREX as well as rupee funds is extremely high. Therefore, long term, low-cost funding is not made available for building of new shipping tonnage to Indian shipyards/shipping companies.

2. Inadequate support from Ancillary Industry

Indian shipbuilding industry is in deep difficulty and the share of Indian made ships is very minimal. This logically led to the decline of equipment manufacturing also in India thus reducing the competitiveness and availability of quality products. As a result, presently the Indian shipbuilding industry is heavily dependent on imports of equipment and materials to the extent of 50%-60% of the material cost, which, in turn, typically constitutes 40%-50% of the cost of a ship.

All equipment and materials used onboard a ship need a type approval certificate in accordance with the standards set by IMO / Classification society. Many small industries, which are otherwise capable of producing such materials and equipment, do not go for such certification due to the cost involved and low volume of supply. Further, most of these type approved items can be sourced from abroad at a much lower cost. This has

adversely affected the cost structure and rendered the domestic ancillary industry uncompetitive in the domestic as well as international market.

Therefore, due to unavailability of Infrastructure or price competitiveness, most of ocean-going vessel owners head overseas for shipbuilding and repairs.

3. Blocked funds in Inverted Duty Structure/Accumulation of Credit

The Outward supply of vessels was taxed (output tax) at the rate of 5%, and the rate applicable to ship repairs was reduced to 5% from 2nd June 2021. GST law prescribes a reduced rate of 5% for parts of vessels (tax on materials and Service procured). Sub contracted input services which qualify as maintenance, repair or overhaul services of ships and other vessels, their engines and other components or parts also enjoy a reduced rate of 5%.

However, across the supply chain there are confusion regarding what input goods qualifies as parts of vessels or what services can be classified as maintenance, repairs, overhaul of ships that are eligible for reduced rates. Hence, the majority of the procurement of goods as well as services made by the Indian Shipyards for use in ship building and Ship repair are at a higher rate (12%, 18% or even 28%) which is resulting in accumulation of input tax credit. (i.e. difference between the output tax of 5% and the input tax of 12%,18% or 28%).

This is resulting in blocked working capital funds. There is thereby a cost escalation of approximately 2 - 4% for ship building and 0.5 - 1% for ship repair on account of the accumulated input tax credit which in turn would form part of the cost of the vessel to the shipyard making the vessels costlier and noncompetitive. Apart from non-availability of working capital, the above blocked funds is an impediment to development of shipbuilding and repair in the country.

4. Customs duty restoration

Customs duty was not applicable on import of raw materials and parts, for use in the manufacture/repairs of vessels as per Customs Notification 50/2017 dated 30th June 2017. In the Union Budget 2023, it was announced that the exemptions shall be withdrawn with effect from 01st April 2024 and Notification 02/2023 dated 01.02.2023 was issued accordingly. The customs duty exemptions granted for capital goods and spares, raw materials, parts, material handling equipment and consumables were restricted till 31-03-2025 for parts of shipbuilding and up to 31-03-2024 for parts of ship repair as per the Customs Notification 02/2023 dated 01.02.2023. This customs duty withdrawal will result in increasing the cost of vessel building by approximately by 4.55% to 5.25%.

5. Limited number of shipyards for commercial shipbuilding

At present, the shipyards catering to building higher deadweight capacity cargo vessels are limited. Presently, except Cochin Shipyard, other shipyards that cater to commercial shipbuilding are medium or small-scale shipyards and are building small ships / boats only.

Private shipyard like ABG Shipyard, Bharti Shipyard and Reliance Naval and Engineering Limited, Pipavav has gone under NCLT and still remains non-operational. On the other hand, the bigger government owned shipyards like Hindustan Shipyard Limited (Visakhapatnam), Mazagon Dock Shipbuilders Limited (Mumbai), Garden Reach Shipbuilders & Engineers (Kolkata) and Goa Shipyard Ltd (Goa) are predominantly engaged with naval projects only. The private facility, L&T Shipbuilding, Kattupalli (Chennai) is also engaged with the construction of defence orders presently.

The Indian shipbuilding industry has capacity to build large cargo vessels. But the industry is performing below its true potential due to monopsonist market (a market defined by a single buyer) for defence shipbuilding and insignificant demand for commercial shipbuilding. Additionally, defence shipbuilding is dominated by DPSUs/PSUs with small opportunities for private companies that makes private shipyards financially constrained. Further, improper utilisation of assets and capacity has led to insolvency proceedings against many private shipyards. While there are many structural gaps in the industry, overdependence on defence shipbuilding and lack of orders for commercial shipbuilding is central to all other challenges.

The current position of the shipbuilding industry and the status of many private shipyards can be attributed to several gap areas and challenges that have plagued the sector. The government, for its part has attempted to address some of these challenges, with some measures on the supply side. First among them is by reviving the financial assistance to Indian Shipyards for contracts signed between April 1, 2016 and March 31, 2026 with rate of financial assistance starting from 20% in 2016 and diminishing to 11% in 2026. Proving infrastructure status to shipbuilding industry makes the shipyards eligible for long-term low interest funding. However, there are other basic structural and capability issues that would still need to be addressed in a comprehensive and consolidated manner. Some of the major capability gaps in the industry relate to ship design and process engineering, lower production efficiency, limited availability of specific skilled labour, limited output of supply chain, etc.

One gap area is the skewed distribution of capability, particularly for defence shipbuilding, wherein the DPSUs dominate. This is attributable to India's conscious effort to invest in indigenous warship design and shipbuilding capabilities in 1950s. The Indian Navy took control of this endeavour, by setting up and nurturing its inhouse warship design, overseeing, quality control and trial organisations and nurturing its own Shipbuilding ecosystem in conjunction with the DPSU shipyards. The DPSU shipyards have also built up their capability, expertise and experience through years of focus on

defence shipbuilding, based on the Navy's long-term perspective plans for fleet acquisitions. In contrast, there is no equivalent eco-system or a long-term perspective plan for India's commercial fleet. It therefore emerges that using the strength of India's defence shipbuilding capabilities to create and nurture a similar eco system for commercial shipbuilding can benefit the entire industry and the nation significantly.

- 6. Market Low demand in commercial shipbuilding from the shipping Industry
- Low and Volatile Demand: The global demand for ships has been low and fluctuating, due to the recession, the oversupply, the environmental regulations, and the geopolitical uncertainties. The domestic demand has also been inadequate, due to the lack of a strong and modern merchant marine, the preference for cheaper and older foreign ships, and the competition from other modes of transport. The export orders have been scarce, due to the low competitiveness of Indian shipyards and the lack of a level playing field in the international market. This has resulted in overdependence on defence shipbuilding, for which the capabilities/skillsets are not evenly distributed or easily available. The lack of demand from the international market in the immediate future is understandable given the cyclic nature of shipbuilding demand and the ongoing low demand scenario globally. However, the lack of local demand from India's commercial shipping industry is an area that merits a more detailed examination and analysis to identify means to address the same.
- High and variable costs: The costs of shipbuilding in India are high and variable, due to the high cost of raw materials, such as steel, equipment etc., the high cost of finance, such as interest rates and taxes etc. The costs are also affected by the fluctuations in the exchange rates, the inflation rates, and the fuel prices.
- Low and uncertain profitability: The profitability of shipbuilding in India is low and uncertain, due to the low and volatile demand, the high and variable costs, the low and delayed payments, the high and frequent disputes, and the low and erratic incentives. The profitability is also influenced by the cyclical and seasonal nature of the industry, the long and complex production process, and the high and unpredictable risks.
 - 7. Non availability of a centralized data on Shipbuilding/repair yards for showcasing

The shipyards are registered under either a Central Act or under State Acts. There is no centralized data available with respect to the details, capacity, projects undertaken, ongoing projects, percentage utilization etc of Ship building yards or yards which undertake repairs in the country. Globally, the shipbuilding capacity is determined based on the deadweight value of the vessels built (Clarkson/UNCTAD reports). In the absence of a centralized data-base we are not able to project the capacity available in building as well as repair front.

DGS has certain data on the Ship Building Financial Assistance portal, which is not adequate to project the national capacity available.

8. Non availability of proven indigenous ship designs

In India, most of the basic designs and detailed engineering designs are prepared and classified from scratch for every vessel manufactured. Further, indigenous capability in basic design is limited. Non-availability of pre-approved standardized marine designs reduce the shipyard's productivity and increase the cost of shipbuilding. The MIV 2030 envisaged production of indigenous standard designs for various categories of ships, which is still not taken off.

9. Cost of Working Capital

The shipbuilding activity is highly capital intensive; the shipyards require working capital of around 35 to 40% of the cost of the ship during the period the ship is built. The interest rates charged by the banks in the country towards the working capital loans averages around 10.5 % and are comparatively higher in comparison to China, Japan and South Korea. Modernization and Upgradation of technology, Shipyard layout, Project Delay, Debts Problems, Funding Gap from the Government, Lack of Educational Institutions and Research & Development Centers are also some factors which restrains the growth of ship building in India.

10. Lack of adequate and skilled Labour

There are other challenges as well in private shipyards like production efficiency, limited availability of skilled labour, limitation of supply chain, etc. The shipbuilding industry in India lacks adequate and skilled human resources, which can contribute to the growth and innovation of the industry. The existing human resources are insufficient, unskilled, and unproductive, and do not match the demand and supply of the industry. The human resources include the managers, the engineers, the designers, the technicians, the workers, the trainers, and the researchers.



Global Leaders

The global shipbuilding industry is dominated by three Asian nations—China, South Korea, and Japan—which collectively control over 80% of the world's shipbuilding capacity. This analysis examines the strategic policies and best practices employed by these maritime powerhouses to achieve and maintain their market leadership. Their approaches offer valuable insights for emerging shipbuilding nations seeking to enhance their competitive position in the global maritime sector.

China: The Rise to Global Dominance

1. Market Performance and Trajectory

China's shipbuilding industry represents one of the most remarkable industrial transformations in modern history. From a modest 5.6% global market share in 2000, China has systematically expanded its dominance, reaching 30.35% by 2019 and an impressive 52.56% by 2025. This exponential growth reflects a carefully orchestrated national strategy combining protectionist policies, substantial government support, and strategic market positioning.

2. Strategic Policy Framework

Cabotage Regulations and Market Protection China employs a dual-tier cabotage system that strategically balances protectionism with market openness. Under this framework, domestic coastal shipping is exclusively reserved for Chinese-flagged vessels, ensuring captive demand for domestically built ships. However, China demonstrates policy innovation through the Shanghai Free Trade Zone, where foreign-flagged but Chinese-built vessels are permitted to operate. This

approach allows Chinese shipyards to capture international orders while maintaining domestic market protection.

Financial Incentives and Support Mechanisms
The Chinese government provides substantial financial backing through multiple
channels:

- Direct Subsidies: A 17% subsidy on ship prices for Chinese buyers significantly reduces the cost barrier for domestic vessel procurement
- Soft Loans: Preferential lending rates for local shipbuilders reduce capital costs and enable competitive pricing
- Tax Exemptions: Comprehensive tax relief programs support shipyard operations and vessel sales

These financial instruments collectively create a competitive advantage that enables Chinese shipyards to offer attractive pricing while maintaining profitability.

South Korea: Maintaining Technological Leadership

1. Market Stability and Strategic Positioning

South Korea has demonstrated remarkable consistency in maintaining its market position, holding approximately 20-25% global market share over the past two decades. This stability reflects a mature industry strategy focused on technological excellence and specialized vessel segments, particularly LNG carriers, container ships, and offshore platforms.

2. Policy Innovation and Market Support

Demand Stimulation Programs South Korea's approach emphasizes demand-side interventions through innovative financing mechanisms. The government's financial support program, which reimburses up to 60% of new vessel costs (as implemented in 2018), represents a sophisticated approach to market stimulation. This policy directly addresses the cyclical nature of the shipping industry by providing counter-cyclical support during market downturns.

Shipbuilder Support Infrastructure
The Korean model includes comprehensive support for shipbuilders through:

- Easy Financing Options: Streamlined access to capital for shipyard operations and expansion
- Bailout Support: Government intervention during financial crises, as demonstrated during the 2008-2009 global financial crisis

Cabotage Framework

Like its regional competitors, South Korea maintains strict cabotage laws reserving domestic shipping for Korean-flagged vessels, ensuring a stable domestic market base for local shippards.

Japan: Adaptation Through Innovation

1. Market Challenges and Strategic Response

Japan's shipbuilding industry faces the most significant challenges among the three nations, with market share declining from 28-30% in 2000 to just 7.11% by 2025. This decline reflects intensifying competition from lower-cost producers and the industry's struggle to maintain competitiveness in standard vessel segments.

2. Innovative Policy Responses

Fleet Modernization Incentives
Japan has pivoted toward fleet modernization and efficiency improvements through
targeted incentive programs:

- Scrapping Subsidies: Financial support for vessel owners to replace aging tonnage with modern, efficient ships
- Accelerated Depreciation: Tax benefits allowing up to 60% depreciation within five years for Japanese-owned vessels, encouraging fleet renewal

Focus on High-Value Segments Japanese shipbuilders have concentrated on technologically advanced vessel types, including specialized carriers, cruise ships, and vessels incorporating cutting-edge environmental technologies.

Comparative Analysis and Strategic Implications

1. Common Success Factors

All three nations share several strategic elements:

- a) Protective Cabotage Policies: Exclusive domestic market access provides stable demand foundations
- b) Government Financial Support: Substantial public sector backing through various mechanisms
- c) Long-term Strategic Planning: Consistent policy frameworks spanning decades
- d) Integration of Industrial and Maritime Policies: Coordination between shipbuilding promotion and fleet development

- 2. Differentiated Approaches
- China: Volume-focused expansion with aggressive financial support
- South Korea: Technology and quality leadership with sophisticated financing
- Japan: Specialization and fleet modernization emphasis

Lessons for Emerging Shipbuilding Nations

1. Policy Framework Development

Emerging shipbuilding nations should consider:

- a) Graduated Market Protection: Implementing cabotage laws while allowing strategic exceptions
- b) Multi-layered Financial Support: Combining subsidies, soft loans, and tax incentives
- c) Demand-Side Interventions: Supporting domestic ship owners alongside shipbuilders
- d) Specialization Strategy: Focusing on specific vessel segments rather than competing across all markets
- 2. Implementation Considerations
- Fiscal Sustainability: Balancing support levels with public finance capabilities
- WTO Compliance: Ensuring policies align with international trade regulations
- Market Timing: Coordinating support with global market cycles
- Technology Transfer: Leveraging partnerships with established shipbuilders

The shipbuilding success of China, South Korea, and Japan demonstrates that sustained government support, strategic market protection, and long-term planning are essential for building competitive maritime industries. While each nation's approach reflects its unique economic context and development stage, the common elements of their strategies provide a roadmap for other nations seeking to develop their shipbuilding capabilities.

For countries like India, with ambitious targets to become top-5 global shipbuilders by 2047, these best practices offer proven frameworks for policy development. However, successful implementation requires adaptation to local conditions, consideration of current global market dynamics, and coordination with broader maritime and industrial development strategies.

advancement aı	nd international	competitiven	iess.	



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Removal of Operational &

Taxation Hurdles

Proposed Interventions to Boost Shipbuilding

Subsidies for green conversion

As part of Amrit Kaal Vision 2047 Action Plan, several initiatives have been identified for shipbuilding and repair. The initiatives for shipbuilding and repair include extending the policy for shipbuilding for 5-10 years beyond the end of Financial Year 2025-26, promoting Atmanirbhar Bharat provisions (such as post 2023 only Indian Flagged Vessels to be allowed to serve PSU/ Govt. requirements), grading of shipyards based on technical capacities, simplification of custom procedures for import of vessel spares etc. A few initiative details and suggestions under different heads are indicated below for deliberation: -

Required Support in financial terms for promotion of shipbuilding

1. Ship building Financial Assistance

In India, the shipbuilding industry is required to pay several types of taxes and levies, which reduces the cost competitiveness. In order to offset the competitive disadvantage of the shipbuilding sector and make the Indian shippards more competitive in the global market in securing orders, it is essential to:-

- Continue the Ship Building Financial Assistance Scheme further to 2026. The scheme should continue to support with higher rate of assistance for the green fuel technology.
- There should not be any capping on financial assistance for such vessels using green fuels and for hybrid vessels.

- A higher rate of financial assistance to be provided under the 'Scrap and Build' policy.
- Financial assistance for retrofit or conversion to green fuels for existing Indian ships.

2. Financial Services through IFSCA

The International Financial Services Centre at GIFT City has issued framework for ship financing and leasing activities. However, low-cost funding for shipbuilding is not catered to by the IFSCA.

Necessary policy measures to provide low-cost financing for shipbuilding need to be initiated through IFSCA. IFSCA shall also facilitate funding for retrofit/conversion to hybrid/green fuels for existing Indian vessels. Modalities to be worked out.

3. Maritime Development Fund (MDF)

The MDF as envisaged to be created by the Ministry in Amritkaal Vision document need to be hastened up. MDF shall provide support to the key financing requirements of maritime sector as a mother fund. It requires heavy infusion of funds into the shipbuilding infrastructure and support sector, taking example of other major shipbuilding nations.

4. Funding through Sagarmala Development Corporation Ltd.

Ministry may take necessary action through SDCL in developing several financial support schemes such as:-

- Provide subsidized shipbuilding finance especially for green fueled/hybrid vessels
- Schemes to support acquisition of ship design and analysis softwares by the 'Ship Design & Research Institution'.
- Schemes to support research and development of standard designs.
- Schemes to support conversion to hybrid or green fuels for Indian ships.
 - 5. Resolve GST issue with Finance Ministry

Ship Building Ancillary items to be identified and the input tax credit issue with respect to the ancillary items to be resolved. This will allow the blocked funds to be made available for the shipyard for better utilization and infrastructure development.

Matter to be taken up with Finance Ministry by MoPSW.

Showcasing of Shipyard and Ancillary industry

1. Development of an Online portal for shipbuilding and repair yards

An online portal needs to be developed wherein all the shipyards located in the country shall be mandated to be registered. The portal shall be able to identify building and repair facilities separately. The portal shall include the facility details, capacity and capabilities, data of past shipbuilding and repair undertaken, ongoing projects etc.

ROs and State / Maritime Boards shall be mandated to ensure registration of the facility prior undertaking survey or certification of vessels in the facility.

Grading of Shipyards can be done further to compilation of data. The portal shall be hosted on the DGS website.

In lieu of the above, the data collected from the shipyards through a coordinated effort by the Naval Architecture Wing is enclosed at Section 6 for reference.

2. Provide wide coverage to the Marine Equipment Manufacturer's Portal for use by the yards.

Indian Register of Shipping has prepared a web portal as a common platform to showcase the products available for Indian shipbuilding. This portal shall be given wide publicity to promote indigenous manufacturers of marine equipment.

Establishing a Ship Design and Research Centre

NSDRC Visakhapatnam was set up in 1989 with objective to promote and develop design and research activities for Shipping and Ship Building to improve efficiency in shipping sector, preparation of long and short term plans for research and development in maritime sector; to provide consultancy and training facilities in various fields connected with shipping. However, this organized was closed and not existing.

Presently the country needs an advanced state of the art establishment as available in major ship building nations to facilitate availability of proven designs, conduct research etc. This organization shall act as a centre for providing complete package of ship design including, basic design, production designs, 3-D models, hydrodynamic solutions, software solutions etc.

Amritkaal Vision envisages the setting up of this 'Ship Design and Research Centre' at IMU. This Centre shall be manned with senior engineers, naval architects and domain experts equipped with necessary research funding and funds for acquisition of design and analysis software through

Development of Indigenous Standard Designs for use by stakeholders

One of the initiatives of MIV 2030 was "Create common database of standard-vessel basic designs with pre-approval from IRS available to all shipyards to drive standardization, improve design process and leverage cost economies"

We have generated ASTDS, Tug designs for use by stakeholders with the help of Cochin Shipyard. Similarly, we need to generate designs for green tugs and several other categories of vessels, like port crafts, dredgers, offshore vessels, inland cargo vessels etc.

- Government may re-establish different Standard Specification Committees for different types of vessels with relevant industry experts and design firm association (IMDA).
- The 'Ship Design and Research Centre' shall be the repository for the proven designs.
- The designs may also be sourced through shipyard's basic design or R&D centres.
- The designs need to be validated by the 'Ship Design and Research Centre' using tie-ups with facilities available with NSTL, IITs, Recognized Universities like CUSAT, Andhra University etc.

Development of a Scrap and build policy and financial assistance for scrapping

Policy measures on scrap and build and subsidy, aimed to support ship demand and subsequently increase ship production and reduce average age of fleet needs to be developed.

Government of India has issued Age Norms for the maximum allowed age to which they can remain in the Indian Registry. In order to urge the existing owners to choose for renewal of their fleet, a financial support for scrapping the aging vessel may be granted subject to building a new vessel in an Indian shipyard.

Cluster Development with Free Trade Ware Housing Zones for Ancillary

Clusters induce innovations, create employment opportunities, attract foreign investors and also spark new ideas. Shipbuilding clusters and maritime parks are some of the concepts practiced in top maritime nations. These clusters will focus on developing various components of the maritime cluster like ship building & ancillary services, maritime services, promoting maritime tourism and marine products. Given the manufacturing strength, size of the ports and synergies with other steel ancillaries, both the maritime clusters can attract business and improve the overall economics for the cluster participants. We should foster cluster development and encourage ancillary industries and more indigenous components. Clusters will also encourage public-private partnerships and will be a key enabler in attracting new technology, fostering strategic alliances and boosting investments. Ancillaries need to develop along with the shipbuilding industry as they are the key competitive differentiator for establishing/relocating shipbuilding and ship repair facilities.

Government should support creation of maritime clusters so that the ancillary industries can be developed in these clusters. The facilitation could be in the form of low interest loans, easy land availability at concessional rates, single window approvals / clearance / co-ordination by concerned state authorities, easing of custom formalities, private-public participation, tax holidays etc.

One example what we have is the Goa cluster. Similar cluster should be developed ideally one in Kochi and one in Kolkata where the Cochin Shipyard is developing their International Ship Repair facilities. Availability of shipbuilding ancillary can be resolved by developing such clusters where the continuous demand of ancillary is projected.

Free trade ware houses or depot associated with the clusters can be an imminent solution to the non-availability of ancillary items.

Setting up an empowered Organization for strengthening India's maritime infrastructure

'Shipbuilding industry's' link to India's 'Commercial shipping' and the need to address the two interlinked industries holistically as India's "Maritime infrastructure", is obvious. Setting up an empowered national level Organization for holistically strengthening and regulating India's maritime infrastructure, is recommended, with active participation of the MoS and other stakeholders.

Role of Organization for strengthening the supply side:

- 1. The Organization should take concrete steps for establishing shipbuilding and commercial shipping as a strategic sector. A key role of the Organization would be to evolve a business model/structure for consolidating shipbuilding resources, efforts and act as an Organization for evaluating and distributing shipbuilding work judiciously to ensure optimal utilization of all available resources. The Organization should identify specific measures to facilitate holistic long-term build-up of capability, distributed across all entities in the industry.
- 2. Another important role would be to set up avenues for low interest funding of shipyards and associated industries to aid in the efforts of consolidation, enhancing shipbuilding Infrastructure and for facilitating easy availability of working capital.
- 3. The Organization should co-ordinate with the Ministry of Skill Development and Entrepreneurship (MSDE) for evolving medium term and long-term skill development initiatives to widen base of the specific skilled manpower i.e. both blue collar and white collar required for shipbuilding.
- 4. In order to optimise the resources, the Organization should consider evolving standard product lines, common designs and related build strategy for construction to ensure quick, assembly-line-like production of ships with maximum use of modular multi location construction techniques to improve production efficiency.

- 5. The Organization should institutionalise a mechanism for carrying out vendor identification, indigenisation of shipboard equipment, commonality identification for defence & commercial shipboard equipment and evolving efficient supply chain.
- 6. Attracting and promoting investment both for shipbuilding and Indian owned commercial shipping should be facilitated by the Organization through international tie-ups/ partnerships for technology/process upgradation etc. for enhancing capability to build.
- 7. Building up capacity & capability of the Indian industry should be a key focus area of the Organization, by using the domestic demand to improve international competitiveness of industry. This would be crucial when the international commercial shipbuilding cycle demand picks up again in the next 10 years.
- 8. The Organization should evolve long term strategies for increasing India's global shipbuilding market share considerably and act as a centralised business development unit for Indian shipbuilding industry for export of both defence as well as commercial ships.



Maritime Development Fund





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Maritime Development Fund

The Maritime Development Fund (MDF) is a strategic financial mechanism designed to catalyze growth across India's maritime ecosystem. It aims to provide **low-cost**, **long-term financing** to support the expansion and modernization of shipping, port infrastructure, and allied sectors. As India aspires to become a global maritime hub, MDF plays a pivotal role in bridging the capital gap for both public and private stakeholders.

Under the **Growth** component, MDF supports the acquisition of vessels by Indian shipping companies, development of ports, jetties, shippards, and navigable inland and coastal waterways. It also extends to the creation of supporting infrastructure such as roads, inland container depots (ICDs), and maritime training centers—ensuring a comprehensive logistics and industrial ecosystem.

The **Development** arm of MDF focuses on innovation and capability enhancement. It offers equity, debt, and venture capital financing for R&D, technology upgrades, ship design and engineering, consultancy, and promotional activities—encouraging modernization and global competitiveness.

To boost market access, the **Marketing Support** component provides long-term credit facilities that can be extended to customers and stakeholders. This helps in developing new markets and sustaining demand for Indian-built vessels and maritime services.

Recognizing the cyclical nature of the maritime industry, MDF also includes a **Distress Assistance** mechanism. This allows the fund to intervene in financially stressed situations—such as acquiring distressed vessels or supporting loans declared non-performing by banks—thereby stabilizing the sector and preserving strategic assets.

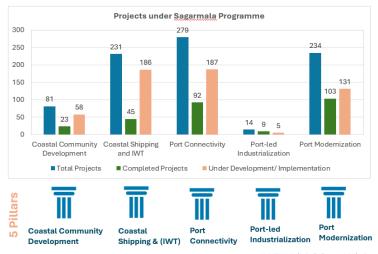
In essence, MDF is a tr Maritime Amrit Kaal Visi but also for innovation,	on 2047. It ensures th	at capital is availab	le not just for expansion



Sagarmala Projects







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Sagarmala Projects

The Sagarmala Programme is a flagship initiative by the Government of India to drive portled development, capitalize on the country's 11,098 km coastline and 14,500 km of potentially navigable waterways, and leverage its strategic location on international trade routes. Approved by the Union Cabinet in March 2015, Sagarmala's core objective is to reduce logistics costs for both domestic and EXIM cargo while minimizing infrastructure investment.

As of September 2025, Sagarmala comprises 839 projects with an estimated investment of ₹5.79 lakh crore, aiming for implementation completion by 2035. Out of these, 272 projects worth approximately ₹1.41 lakh crore have been completed, and 214 projects worth ₹1.62 lakh crore are under implementation. Additionally, 353 projects valued at ₹2.75 lakh crore are in various stages of development. Implementation responsibilities are distributed among central ministries, state governments, and major ports, supported by robust monitoring and project management information systems.

Projects are classified under five pillars: Port Modernization, Port Connectivity, Port-Led Industrialization, Coastal Community Development, and Coastal Shipping and Inland Water Transport. The ongoing holistic development of coastal districts has led to the identification of 567 projects, estimated at around ₹58,000 crore. Further modernization efforts encompass mechanization, digital transformation, and capacity expansion to improve ease of doing business, reduce time and costs, and address environmental concerns.

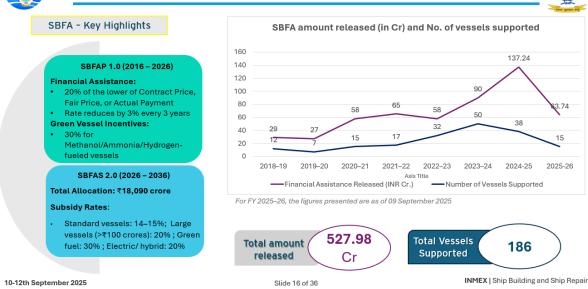
Under the dedicated Sagarmala scheme budget, 119 projects have received sanction, with a total value of ₹9,420 crore and central funding support of ₹3,600 crore. Out of

these, 68 projects worth ₹4,290 crore have been completed, and 50 projects worth ₹5,120 crore are currently under implementation. The scheme addresses critical maritime sector needs such as capacity enhancement, connectivity, urban water transportation, fishing harbor development, and coastal community skill-building, underpinning India's objective of an efficient and competitive maritime ecosystem.



Ship Building Finance Assistance Scheme





Ship Building Finance Assistance Scheme

The Shipbuilding Financial Assistance Policy (SBFAP), approved by the Union Cabinet on 9th December 2015, aims to promote shipbuilding in Indian shipyards through financial support for contracts signed between 2016 and 2026, with revisions made in October 2017, April 2022, and August 2023, and applications processed online by the Directorate General of Shipping. Under SBFAP 1.0, Indian shipyards receive 20% financial assistance on the lower of the contract price, fair price, or actual payment for each vessel built, with the rate decreasing by 3% every three years, while green initiatives offer 30% assistance for vessels powered by methanol, ammonia, or hydrogen fuel cells, and 20% for electric or hybrid propulsion systems. SBFAP 2.0, covering 2026–2036, allocates ₹18,900 crore and provides subsidies of 14–15% for standard vessels, 20% for large vessels over ₹100 crore, 30% for green-fuelled vessels, and 20% for electric or hybrid vessels. As per the data, a total of ₹527.98 crore has been released, supporting 186 vessels, with financial assistance rising from ₹29 crore in FY2018-19 to ₹137.24 crore in FY2024-25, and the highest number of vessels supported being 58 in FY2023-24.



Removal of Operational & Taxation Hurdles



Below mentioned are the Taxation anomalies hampering Indian Tonnage vis a vis Global Maritime.

Sr. No.	Operating Parameters for a coastal voyage	Indian flag ship	Foreign flag ship
1	Direct Tax - Seafarers' wages taxation	Wages of Indian seafarers working on Indian flag ships in coastal waters are subject to Income tax and TDS provisions.	No tax on wages earned by Indian or Foreign seafarers working on foreign flag ships operating in coastal waters of India even for Indians working on foreign flag ships on the coast
2	Direct tax – Tonnage Tax Rate	Rate of tonnage tax is higher under the Indian Income tax High rate of tax on income OR Tonnage tax + training obligation	Lower rate of tonnage tax
3	Direct Tax – Cadet Training Cost	Free Cadet training provided by Indian Ships under Tonnage Tax Scheme – We train 1.5 cadets for every 10 persons on board our vessels	No such training obligation on foreign ships by their maritime administration
4	IGST on import of ships	5% on the value of the ship	No GST on the acquisition of ships in their country Even if the foreign ship is operating in India no GST applies
5	Inability to offset input GST on goods procured	5% of the value of the goods (Bunkers, stores, spares) gets blocked in the Indian shipping company	Does not apply
6	GST on (freight) transport of cargoes between two Indian ports	5% on the value of the service	Does not apply – no GST is payable on coastal provided by foreign flag vessel

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Removal of Operational & Taxation Hurdles

Issue: TDS on Seafarer's wages

Wage costs, which account for 30-33% of vessel operating expenses, are disproportionately impacted by TDS on salaries of Indian seafarers on Indian-flagged vessels. This TDS does not apply to wages of Indian seafarers on foreign-flagged vessels operating in coastal waters, creating an imbalance.

Recommendation: Establish a level playing field by either exempting TDS on wages of Indian seafarers on Indian-flagged vessels operating in coastal waters or applying TDS to wages of Indian seafarers on foreign-flagged vessels operating in coastal waters.

Justifications: This is the most important factor affecting the competitiveness of shipping under the Indian flag. Out of a total gap of ~20% half of that is due to the TDS on wages.

Once seafaring under both Indian and foreign flags remains the same, both segments will attract equally competent seafarers. Which would eventually better the reputation of Indian shipping, even further

Issue: homogenise the GST jurisdiction

No input tax credit is available on goods purchased in various states for coastal shipping due to the place of supply rules [EoDB].

Explanation: According to Section 10(1)(a) of the IGST Act, the place of supply for goods is defined as the location where the movement of goods terminates for delivery. However, since shipping companies provide transportation services from different states or ports, they cannot claim input tax credits on goods consumed elsewhere. This results in a

significant blockage of input tax credit, affecting the competitive and pricing ability of Indian-flagged vessels. Additionally, when ships undergo dry dock in different states, spares and other items are charged CGST and SGST, leading to a loss of GST credit.

Recommendation:

- 1. Amend the definition of the place of supply for shipping companies to the location of the principal place of business of the shipping company.
- 2. Revise the rate schedule to allow input tax credit for goods other than capital goods.

Issue: No input tax credit available for consumables

Inputs to vessels, such as Furnace Oil, spares, and lubes, are charged at 5% GST with no provision for Input Tax Credit (ITC) for both time and voyage charters.

Explanation: According to Notification 11/2017 Central Tax (Rate) & Notification 1/2018 Central Tax (Rate), the rate schedule for voyage and time charters prohibits availing ITC on inputs. Consequently, taxes paid on these inputs become direct costs, increasing the overall transportation costs for the shipping sector. Unlike the shipping industry, other transportation sectors do not face this issue since their primary fuels, Diesel and Air Turbine Fuel (ATF), are not under the GST regime. Removing this restriction would allow the shipping industry to benefit from ITC on fuel and other inputs, reducing operational costs.

Recommendation: Allow ship owners to avail Input Tax Credit on inputs like Furnace Oil, spares, and lubes, which are critical for vessel operations. This change would lower the cost of transportation, reduce logistics costs, and positively impact the economy.

Issue: Higher GST of 12% on multimodal transportation

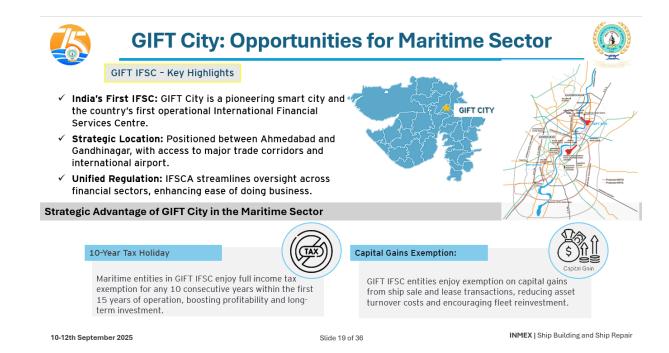
Explanation: The applicable GST rate for single modes of transport, such as road or rail, is 5%, while for coastal shipping and inland waterways, which predominantly involve multimodal movement, the rate is 12%. This higher GST rate increases the overall logistics cost, particularly for commodities with lower GST rates, such as fertilizers, adding an additional financial burden.

Recommendation: To avoid disadvantaging coastal shipping, a representation should be sent to the GST Council to reduce the GST on multimodal transportation to 5%.

Issue- Cargo Handling charges at Ports:

The GST rate of 18% on handling charges at ports is high. This rate is applied even when services are provided for commodities such as agricultural products, which are exempt from GST. As a result, multimodal companies accumulate unutilized credit.

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GIFT City: Opportunities for Maritime Sector

The International Financial Services Centres Authority (IFSCA) assumes the pivotal role of overseeing financial products and services within India's GIFT IFSC. Prior to its establishment, regulatory responsibilities for the GIFT IFSC were spread across domestic regulators, including the Reserve Bank of India (RBI), the Securities and Exchange Board of India (SEBI), the Pension Fund Regulatory and Development Authority (PFRDA), and the Insurance Regulatory and Development Authority of India (IRDAI). The creation of IFSCA was driven by the need to streamline regulatory efforts and promote effective coordination among these regulatory bodies. IFSCA's primary mission is to cultivate a conducive and business-friendly environment within GIFT IFSC. It aspires to establish a world-class regulatory framework that not only supports global connections but also positions GIFT IFSC as a preeminent global financial hub, not only for the region but also on the global stage. In essence, IFSCA represents India's commitment to fostering a robust and efficient financial ecosystem within GIFT IFSC, thereby attracting international businesses and investors. Through its efforts, IFSCA seeks to unlock the full potential of GIFT IFSC, making it a significant player in the global financial landscape.

Global IFSCs have consistently depicted an enabling outlook on taxation and the same is now exemplified at GIFT City. With taxation benefits across the board, GIFT City offers an empowering framework aimed at individual and organizational success.

Permissible Activities:

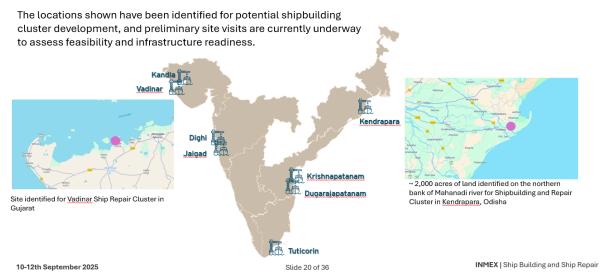
Financial lease, hybrid of financial and operating lease or operating lease, including sale and leaseback, purchase, novation, transfer, assignment and other similar transactions in relation to ship lease

- Voyage charters, contracts of affreightment, employment in shipping pools, and all other legal commercial transactions for employment of ships
- Asset management support services for assets owned or leased by group entities
- Ship broking related to ship-leasing activities and third-party asset management services can be performed by registering separately under Ancillary Services Framework
- Any other related activity with the prior approval of the IFSCA



Proposed Shipbuilding and Ship repair Clusters





Proposed Shipbuilding and Ship repair Clusters

Clusters induce innovations, create employment opportunities, attract foreign investors and also spark new ideas. Shipbuilding clusters and maritime parks are some of the concepts practiced in top maritime nations. These clusters will focus on developing various components of the maritime cluster like ship building & ancillary services, maritime services, promoting maritime tourism and marine products. Given the manufacturing strength, size of the ports and synergies with other steel ancillaries, both the maritime clusters can attract business and improve the overall economics for the cluster participants. We should foster cluster development and encourage ancillary industries and more indigenous components. Clusters will also encourage public-private partnerships and will be a key enabler in attracting new technology, fostering strategic alliances and boosting investments. Ancillaries need to develop along with the shipbuilding industry as they are the key competitive differentiator for establishing/relocating shipbuilding and ship repair facilities.

The maritime clusters development is aided with the creation of the ancillary industries that can be developed in these clusters. The facilitation could be in the form of low interest loans, easy land availability at concessional rates, single window approvals / clearance / co-ordination by concerned state authorities, easing of custom formalities, private-public participation, tax holidays etc.



Business Development Unit for Ship building



Scope

Stage One - Blueprinting- Design the roadmap for attracting investments and set up the shipbuilding cell

- ✓ Baseline Assessment for:
 - · Shipbuilding and ship repair market in India.
 - · Policies and supply market drivers.
 - · Investments
 - Technological collaborations, capacity building interventions, inter-departmental initiatives and regulatory support.
 - Central & State Gov initiatives
- Analysis of emerging market opportunities in Shipbuilding.
- ✓ Socio-economic benefits.

Stage Two - Implementation support- Handhold the shipbuilding cell to deliver the Objectives of Project

- Setup and operationalize the working model of the shipbuilding cell.
- ✓ Assistance in investment attractions.
- ✓ Evaluation of proposals / counter-proposals and key business terms.
- Strategic support to the Shipbuilding on emerging trends, geopolitical shifts, or investment realignment opportunities.
- Refine the investment blueprint and institutional roadmap.

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Business Development Unit for Ship Building

The key elements of the scope entail:

Define the strategic roadmap to attract investment and promote economic activities across the value chain of ship building and ship repair businesses in India including green shipping, coastal cargo segments, and globally benchmarked capacity enhancement targets under Maritime India vision (MIV) 2030 and Maritime Amrit kaal vision (MAKV) 2047.

Define action agenda and policy interventions to be further developed, in addition to the already announced initiatives such as enhancements to SBFA scheme, introduction of Green Shipbuilding Mission 2030 etc.

Define/refine mechanism to implement the relevant schemes and provide regulatory support including digitized workflows, a central shipbuilding dashboard, real-time disbursement tracking, and a policy evaluation framework aligned with global best practices.

Create value proposition for Indian shipbuilding/ship repair industry for investment attraction through sector-specific investment pitchbooks, investor kits, project pipeline teasers, and comparison with international incentive models

Conduct reach outs to relevant global entities for investments in India by engaging top 25 global OEMs and shipyards, activating maritime investment desks at Indian embassies, and facilitating participation in key global shipbuilding events

Assisting in delivering the mandates for shipbuilding cell as defined in the objectives section including operational setup, KPI definition, green readiness monitoring, and convening of forums.

The scope of work shall be delivered in two stages:

Stage-1: Blueprinting- Design the roadmap for attracting investments and set up the shipbuilding cell (18 weeks)

Stage-2: Implementation support- Handhold the shipbuilding cell to deliver the Objectives of Project (16 weeks)

Baseline assessment of shipbuilding and ship repair market in India. The Consultant shall reach out to relevant stakeholders to map the opportunities and challenges emanating from the Global / Indian market dynamics using at least 10 stakeholder consultations and leveraging own understanding of the market. This assessment shall include a comparative analysis with global leaders (e.g., Korea, Singapore, Japan, China) on capacities, competitiveness, technology levels, and market share.

Baseline assessment of policies and supply market drivers in India. The Consultant shall analyze the published policies and announcements without any speculative assessments. The Consultant shall conduct at least 10 stakeholder consultations to assess the impact and/or shortcomings of the policies and regulatory interventions. The Consultant shall identify alignment gaps with global regulatory practices (IMO 2030/2050, EU Green Shipping Mandate) and propose harmonization approaches.

Baseline assessment of investments attracted in the Indian shipbuilding / ship repair market in recent past. The Consultant shall also synthesize the drivers for the investments and/or lack of thereof. The Assessment to include project typologies (greenfield, brownfield), funding sources, and role of state maritime boards and multilateral agencies.

Baseline assessment of technological collaborations, capacity building interventions, inter-departmental initiatives and regulatory support. Special focus shall be placed on the adoption of green propulsion systems, modular construction techniques, and pre-outfitting practices.

Baseline assessment of various incentives by central and state governments for promoting investments in ship building and ship repair markets. The Consultant shall synthesize the incentives to identify gaps and propose interventions required for enhancing their effectiveness and recommend policy and process improvements to integrate FTWZ benefits with shipbuilding clusters, including SEZ relaxation proposals and customs automation models.

Conduct reach-out to select potential investors (domestic and international) to understand their perspective on the effectiveness, gaps, and attractiveness of baseline incentives and policy frameworks for the investments.

Analysis of emerging market opportunities in Shipbuilding and identification of critical success factors to realize them and facilitate global partnerships for design localization. The Consultant shall conduct at least 10 stakeholder consultations to synthesize the opportunities. These opportunities shall be leveraged to conceptualize investable proposals with value chain linkages.

Develop a comprehensive roadmap for promoting investments in the shipbuilding and ship repair market in India. The roadmap shall include areas such as but not limited to—

Potential investable projects and clusters in India by Conducting a feasibility study for establishing dedicated shipbuilding and ship repair clusters in strategic coastal states

Partnership and joint venture opportunities with global yards and OEMS

Refined Value proposition and pitchbooks for target investor segments

Incentive / policy/ regulatory interventions required at National/state level

Potential workshare from the point of view of technology, production, infrastructure, R&D and other relevant areas

A Risk identification and mitigation strategies, including legal and fiscal risks

Key action agenda with assigned stakeholders and delivery milestones

Short-, medium-m and long-term timelines for phased implementation

Socio-economic benefits including employment, localization, and sustainability impactDefine the operating model for Shipbuilding cell including but not limited to areas such as –

Detailed action agenda and governance charter, in alignment with the Authority

Governance model for tracking action taken by relevant stakeholders in Indian ecosystem

Methodology to involve industry private/public stakeholders, academia and states in defining/refining roadmap

Methodology to collaborate with various investment attraction agencies

Proactive global investor outreach model including country desks and lead processing framework

Frameworks for periodic policy evaluation / impact tracking

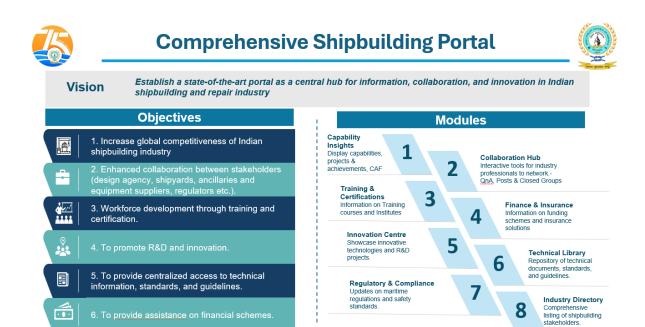
Organizational structure and talent onboarding mechanism

Roles, responsibilities and Key Result Areas (KRAs) for key organizational positions

Propose a national grading/rating system for shipyards based on infrastructure, delivery performance, certifications, and green readiness

Coordinate with state maritime boards to streamline land/port access and identify brownfield upgrade opportunities

Long-term and sustainable funding strategy for Shipbuilding Cell and associated programs



Comprehensive Shipbuilding Portal

10-12th September 2025

The Comprehensive Shipbuilding Portal is envisioned as a central hub for information, collaboration, and innovation in the Indian shipbuilding and repair sector. Its objectives include increasing the global competitiveness of the industry, promoting enhanced collaboration among stakeholders such as design agencies, shipyards, ancillaries, equipment suppliers, and regulators, and developing the workforce through training and certification. The portal is also aimed at advancing research and development, providing centralized access to technical standards and guidelines, and offering assistance on financial schemes.

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The portal comprises several key modules:

- 1. Capability Insights: Showcases industry capabilities, projects, and achievements.
- 2. Collaboration Hub: Offers interactive networking tools for industry professionals, including QnA, posts, and closed groups.
- 3. Training & Certifications: Provides information on training courses and institutes relevant to shipbuilding.
- 4. Finance & Insurance: Shares resources about funding schemes and insurance solutions.
- 5. Innovation Centre: Highlights innovative technologies and R&D projects in the sector.
- 6. Technical Library: Maintains a repository of technical documents, standards, and guidelines.

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- 7. Regulatory & Compliance: Delivers updates on maritime regulations and safety standards.
- 8. Industry Directory: Presents a comprehensive listing of shipbuilding stakeholders.

This integrated digital platform supports industry advancement by streamlining access to knowledge, collaboration opportunities, and professional development resources, thereby facilitating the growth and modernization of India's shipbuilding ecosystem.



Role of State Government and Maritime Boards



Policy Framework and Incentives



Land Management and Facilitation



- Maharashtra approved a shipbuilding policy in 2025 aimed at creating 40,000 direct jobs in the sector by 2030 through financial incentives and infrastructure grants totalling over ₹4,000 crore.
- Gujarat and Andhra Pradesh have announced plans to develop shipyard infrastructure with investments exceeding ₹3,000 crore.

 Maritime Boards manages leases covering more than 200 hectares dedicated to shipbuilding and repairs.

Employment and Skill Development



Sagarmala Programme and Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY), targeting to train and employ over 10,000 coastal youth annually in maritime skills.

Promotion of Innovation and



In 2025, around 25% increase in patent filings related to shipbuilding technologies driven by coordinated government and Maritime Board initiatives.

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Role of State Government and Maritime Boards

1. Policy & Governance:

State Governments design state-level maritime and port policies, often aligned with central government goals but customized to regional priorities.

They provide statutory approvals, environmental clearances, and land acquisition support for port projects.

Policies also address tariff regulations, security protocols, and trade facilitation to ensure smooth port operations.

Example: Gujarat and Andhra Pradesh have progressive maritime policies that attract private port investments.

2. Infrastructure Development

States focus on developing and modernizing non-major ports, ensuring they complement major ports instead of competing.

They build coastal cargo terminals, ship repair facilities, inland water transport nodes, and fishing harbors.

Integration with road, rail, and multimodal corridors is facilitated by state public works and transport departments.

Example: Maharashtra's Ro-Pax services connect ports with road transport networks to boost passenger and cargo mobility.

3. Investment Promotion

State Governments actively invite domestic and foreign investors through roadshows, MoUs, and PPP projects.

They provide incentives like long-term land leases, concessional port charges, and tax rebates to reduce entry barriers.

PPP has become the backbone of port expansion in states such as Gujarat and Odisha.

4. Employment & Skill Development

Ports and shipping are labor-intensive. States collaborate with maritime training institutes, polytechnics, and universities to ensure a skilled workforce.

They fund fishermen training programs, seafarer skill upgrades, and coastal community skilling.

By aligning education with industry needs, states help reduce manpower shortages in shipbuilding and logistics.

5. Sustainability & Coastal Management

States are responsible for coastal regulation zone (CRZ) compliance, mangrove protection, and disaster management along coasts.

They encourage solar and wind-powered ports, waste-to-energy systems, and electrified cargo handling equipment.

Example: Kerala promotes solar-powered ferries and eco-friendly boat jetties under its coastal development initiatives.



Coastal Shipping and possibilities



"Coastal Shipping Bill, 2025 aims to boost coastal cargo up to 230 million metric tonnes by 2030".

Sarbananda Sonowal

"National Coastal and Inland Shipping Strategic Plan to Steer Future Infrastructure and Policy Under new Act": Sarbananda Sonowal

- In a landmark move to strengthen India's coastal economy, the Coastal Shipping
 Bill, 2025 was passed by the Rajya Sabha, marking a significant step toward
 unlocking the vast potential of India's 11,098 km coastline, which spans nine
 coastal states and four union territories.
- The bill was introduced by **Sarbananda Sonowal**, Union Minister of Ports, Shipping & Waterways.
- Previously approved by the Lok Sabha on April 3, 2025, the legislation aims to modernize and simplify the legal framework governing coastal shipping.
- It replaces Part XIV of the Merchant Shipping Act, 1958 with a progressive, globally aligned law that reflects contemporary cabotage standards and supports the growth of coastal trade.

Directorate General of Shipping | Ministry of Ports, Shipping, and Waterways



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Coastal Shipping and Possibilities

The Coastal Shipping Act, 2025 marks a landmark reform designed to unlock the full potential of India's 11,098 km coastline, which spans nine coastal states and four union territories. Passed by the Rajya Sabha following approval in the Lok Sabha on April 3, 2025, this legislation aims to boost coastal cargo volumes up to 230 million metric tonnes by 2030.

The Act was introduced by Sarbananda Sonowal, Union Minister of Ports, Shipping & Waterways, and lays the foundation for a secure, robust regulatory framework governing commercial coastal trade. It initiates the National Coastal and Inland Shipping Strategic Plan to guide infrastructure and future policy, aligning domestic regulations with international standards.

The new law replaces Part XIV of the Merchant Shipping Act, 1958 with a progressive, globally harmonized regime that supports the growth of coastal trade. Key features include the elimination of voyage-wise licensing requirements for Indian vessels, modernization and simplification of legal procedures, and the establishment of the National Database of Coastal Shipping to provide transparent information regarding issued licenses. This Act reflects a forward-looking approach and positions India strongly in the global maritime sector.



Coastal Shipping and possibilities



- ▶ The Coastal Shipping Bill, 2025, passed by both Houses of Parliament, marks a major reform in India's maritime sector.
- It replaces outdated provisions of the Merchant Shipping Act, 1958, introducing a modern legal framework aligned with global cabotage standards.
- The Bill includes 6 chapters and 42 clauses, simplifying licensing and regulating foreign vessels in coastal trade.
- It mandates a National Coastal and Inland Shipping Strategic Plan to guide infrastructure and policy development.
- A National Database for Coastal Shipping will provide real-time, transparent data to support investment and planning.
- The legislation aims to boost **Indian ship participation**, reduce reliance on foreign vessels, and curb foreign exchange outflow.
- It supports the vision of **Atmanirbhar Bharat** and **Viksit Bharat**, promoting local economic growth and employment in coastal regions.
- With this Bill, India completes a trio of key maritime reforms alongside the Merchant Shipping Bill and Carriage of Goods by Sea Bill, paving the way for a modern, efficient, and self-reliant maritime ecosystem.

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Coastal Shipping and Possibilities

The Coastal Shipping Bill, 2025, enacted by both Houses of Parliament, constitutes a significant reform in India's maritime sector. It replaces outdated provisions of the Merchant Shipping Act, 1958 by introducing a contemporary legal framework that aligns with global cabotage standards. The Bill is structured into six chapters and forty-two clauses, streamlining the process for licensing and regulating foreign vessels engaged in coastal trade.

A key mandate of this legislation is the establishment of the National Coastal and Inland Shipping Strategic Plan, intended to guide infrastructure creation and policy development. To ensure transparency and support informed investment and planning, the Bill also provides for a National Database for Coastal Shipping, offering real-time sector data.

The Bill is designed to bolster Indian ship participation, thereby reducing dependence on foreign vessels and curbing foreign exchange outflows. It advances the vision of Atmanirbhar Bharat and Viksit Bharat, promoting local economic development and job creation in coastal regions. With this reform, India completes a trio of major maritime legislative changes alongside the Merchant Shipping Bill and the Carriage of Goods by Sea Bill, paving the way for a modern, efficient, and self-reliant maritime ecosystem.



Success Stories - Cochin Shipyard



International Ship Lift Facility



One of the largest ship-lift facilities in Asia, enabling multiple ship repairs simultaneously.

Cochin Water Metro



- Built a first-of-its-kind electric-hybrid ferry system in India.
- Provides eco-friendly urban transport across Kochi backwaters.
- A model for sustainable public transport in coastal cities

Hybrid & Green Vessels



Designed and built hybrid-electric vessels, supporting India's green shipping agenda.

Promotion of Innovation and R&D



- Collaborated with global players (e.g., HD Hyundai, Fincantieri).
- Exported specialized vessels to Norway, Germany, and other European markets.
- Expanding footprint in offshore support vessels and fishing vessels

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Success Stories – Cochin Shipyard

Cochin Shipyard Ltd. (CSL), located in Kochi, Kerala, is India's largest public sector shipbuilding and maintenance facility. Established in 1972, CSL has played a pivotal role in strengthening India's shipbuilding, ship repair, and maritime technology ecosystem. Over the decades, it has built an impressive portfolio that spans commercial vessels, defense ships, passenger ferries, green vessels, and repair services for both domestic and international clients. CSL is also a key contributor to the Government of India's Atmanirbhar Bharat (self-reliant India) initiative in the maritime sector.

1. International Ship Lift Facility

- CSL developed one of the largest ship-lift and transfer systems in Asia, with a
 capacity of 6,000 tonnes.
- This facility enables simultaneous docking and repair of multiple ships, enhancing throughput and efficiency.
- It has positioned Kochi as a major ship repair hub in the Indian Ocean Region (IOR).
- The ship-lift has made CSL a preferred choice for international customers seeking quick and cost-effective repair services.

2. Building Hybrid and Green Vessels

 CSL has been at the forefront of building hybrid-electric and green vessels, aligning with global climate goals.

- It delivered **two Autonomous Zero-Emission Electric Vessels** for Norway the first Indian shipyard to export such advanced green vessels.
- CSL also built India's first fleet of electric-hybrid ferries for the Cochin Water Metro.
- By adopting cutting-edge propulsion technologies (hybrid, LNG, hydrogen-ready), CSL has gained international recognition as a **future-ready shipbuilder**.

3. Cochin Water Metro Project

- CSL designed and built **78 state-of-the-art hybrid-electric ferries** for India's first Water Metro system in Kochi.
- The project, inaugurated in 2023, offers **eco-friendly**, **efficient**, **and affordable urban transport** across Kochi's backwaters.
- The Water Metro has become a **national and international model** for sustainable urban mobility, combining maritime technology with public transportation.
- CSL's execution of the project demonstrates its ability to blend innovation with social impact.

4. International Tie-ups and Export of Vessels

- CSL has successfully exported vessels to Norway, Germany, and other European nations, showcasing India's capability in building high-value, specialized ships.
- The shippard signed partnerships with global leaders like Fincantieri (Italy) for technology transfer in shipbuilding and with HD Hyundai (South Korea) for green energy solutions.
- These collaborations open doors for CSL to enter **new global markets** and upgrade its technological capabilities.
- Exports of fishing vessels, offshore support vessels, and tugs have enhanced CSL's presence in **Europe**, the Middle East, and Asia-Pacific regions.

5. Contribution to Defense and National Projects

- CSL constructed India's first Indigenous Aircraft Carrier (INS Vikrant), commissioned in 2022, a symbol of India's maritime self-reliance.
- It continues to support the Indian Navy and Coast Guard with patrol vessels, tugs, and auxiliary ships.
- This success demonstrates CSL's capability to handle complex, hightechnology defense projects.

6. Expanding Ship Repair Ecosystem

- CSL is expanding into **international ship repair operations**, with facilities at Mumbai, Kolkata, Port Blair, and soon in Malpe.
- With the International Ship Repair Facility (ISRF) in Kochi, CSL caters to large numbers of foreign-flagged vessels transiting the Arabian Sea.
- This strengthens India's position in the global ship repair and maintenance market, which is estimated at \$30+ billion annually.



Role of DGMA and stakeholders cooperation solicited





Regulatory Oversight:

DGS ensures maritime safety, security, and compliance with international regulations an standards.



Policy Implementation:

DGS facilitates the execution of national maritime policies and supports modernization of the sector.



Industry Collaboration:

Private shipyards and maritime industries are encouraged to partner with DGS to drive innovation and improve operational efficiency.



Institutional Support:

Industrial and financial institutions play a key role in funding maritime infrastructure and promoting sustainable development



Academic Engagement:

Academia supports the sector through research, skill development, and specialized traini for maritime professionals.

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Role of DGMA and Stakeholders cooperation solicited

The Director General of Maritime Administration (DGMA) serves as the central coordinating authority in India's maritime ecosystem, orchestrating a complex network of stakeholders to drive sector growth, safety, and innovation. This comprehensive framework demonstrates how effective maritime governance requires seamless integration between regulatory bodies, industry players, financial institutions, and academic organizations. The multi-stakeholder approach outlined represents a best practice model for emerging maritime nations seeking to develop robust, competitive, and sustainable maritime industries.

Regulatory Oversight: Foundation of Maritime Excellence

Ensuring Maritime Safety and Security

The DGMA's primary responsibility centers on maintaining the highest standards of maritime safety and security across India's vast coastline and inland waterways. This encompasses comprehensive oversight of vessel construction, operation, and maintenance standards that align with international maritime regulations. The regulatory framework ensures that all maritime activities—from shipbuilding to port operations—adhere to stringent safety protocols that protect human life, marine environment, and economic assets.

International Standards Compliance

Maritime trade operates within a global regulatory framework established by the International Maritime Organization (IMO) and other international bodies. The DGMA's

role in ensuring compliance with these standards is crucial for India's integration into global shipping networks. This includes implementation of:

- SOLAS (Safety of Life at Sea) Convention requirements for vessel construction and operation
- MARPOL (Marine Pollution Prevention) standards for environmental protection
- STCW (Standards of Training, Certification and Watchkeeping) for maritime personnel
- Port State Control measures to ensure foreign vessels meet international standards

The regulatory oversight function also involves continuous monitoring of emerging international standards and their timely adoption into national maritime law, ensuring India's maritime sector remains globally competitive and compliant.

Policy Implementation: Translating Vision into Action

National Maritime Policy Execution

The DGMA serves as the primary implementation arm for India's ambitious maritime policies, including the Maritime India Vision 2030 and the Maritime Amrit Kaal Vision 2047. This role involves translating high-level policy objectives into actionable programs, coordinating with multiple government agencies, and ensuring consistent implementation across different maritime subsectors.

Sector Modernization Support

Modernization of India's maritime sector requires coordinated efforts across multiple dimensions—technological advancement, infrastructure development, and operational efficiency improvements. The DGMA facilitates this modernization by:

- Technology Adoption: Encouraging shipyards and maritime companies to adopt cutting-edge technologies
- Digital Transformation: Supporting the implementation of digital systems for vessel tracking, port management, and regulatory compliance
- Green Transition: Facilitating the adoption of environmentally sustainable practices and technologies
- Capacity Building: Ensuring that modernization efforts are supported by adequate human resource development

Industry Collaboration: Fostering Public-Private Partnerships

Private Sector Engagement

The maritime industry's growth depends heavily on private sector investment and innovation. The DGMA's collaborative approach with private shipyards and maritime industries creates an enabling environment for business growth while maintaining regulatory standards. This partnership model includes:

Innovation Incentives: Encouraging private companies to invest in research and development of new maritime technologies, including green propulsion systems, advanced materials, and digital navigation systems.

Operational Efficiency Programs: Working with industry players to identify bottlenecks in maritime operations and develop solutions that improve efficiency while maintaining safety standards.

Regulatory Sandbox Approach: Providing controlled environments where innovative maritime technologies and business models can be tested without full regulatory compliance, allowing for iterative development and refinement.

Shipyard Development Support

Private shipyards represent the backbone of India's shipbuilding ambitions. The DGMA's collaboration with these facilities focuses on:

- Capacity Enhancement: Supporting shipyards in expanding their construction capabilities
- Quality Assurance: Ensuring shipyards meet international quality standards
- Technology Transfer: Facilitating partnerships between Indian and international shipyards for knowledge and technology transfer
- Market Access: Helping Indian shipyards access global markets through compliance certification and international partnerships

Institutional Support: Financial and Infrastructure Foundation

Industrial Institution Partnership

The development of maritime infrastructure requires substantial capital investment that often exceeds the capacity of individual private players. Industrial institutions play a crucial role in providing the financial foundation for sector growth through:

Infrastructure Financing: Supporting the development of ports, shipyards, and maritime logistics facilities through long-term financing arrangements that account for the extended payback periods typical in maritime infrastructure projects.

Risk Mitigation: Providing insurance and guarantee mechanisms that reduce the financial risks associated with maritime investments, particularly for innovative technologies and new market ventures.

Financial Institution Engagement

Banks and financial institutions are essential partners in maritime sector development, providing the capital necessary for vessel acquisition, shipyard expansion, and technology upgrades. The DGMA's coordination with these institutions ensures:

- Specialized Maritime Financing: Development of financial products tailored to maritime industry needs
- Risk Assessment Capabilities: Building institutional capacity to evaluate maritime investment risks
- Government Guarantee Programs: Facilitating government-backed financing programs for strategic maritime investments

Sustainable Development Focus

The institutional support framework emphasizes sustainable development principles, ensuring that maritime growth aligns with environmental protection and social responsibility objectives. This includes financing mechanisms that prioritize green technologies and sustainable practices.

Academic Engagement: Building Human Capital and Innovation

Research and Development Support

Academic institutions serve as the intellectual foundation for maritime sector advancement, conducting research that drives innovation and solves industry challenges. The DGMA's engagement with academia focuses on:

Applied Research Programs: Supporting research projects that address specific maritime industry challenges, from ship design optimization to port operational efficiency.

Technology Development: Encouraging academic institutions to develop new maritime technologies in partnership with industry players.

Policy Research: Providing analytical support for maritime policy development through evidence-based research on sector trends, challenges, and opportunities.

Skill Development and Training

The maritime sector's growth requires a skilled workforce capable of operating advanced technologies and managing complex maritime operations. Academic engagement includes:

Specialized Training Programs: Developing curriculum and training programs that address specific skill gaps in the maritime industry, from naval architecture to maritime law.

Professional Certification: Establishing certification programs that ensure maritime professionals meet international competency standards.

Continuous Learning: Creating mechanisms for ongoing professional development that keep maritime professionals current with evolving technologies and regulations.

Maritime Education Infrastructure

Building world-class maritime education facilities requires coordination between academic institutions, government agencies, and industry players. The DGMA's role includes:

- Curriculum Development: Ensuring maritime education programs align with industry needs and international standards
- Faculty Development: Supporting the training of qualified maritime educators
- Research Facilities: Facilitating the development of maritime research infrastructure, including testing facilities and simulation centers





सागरा: सुपन्थान: सन्तु ।

"Let the oceans have safe passages"

Closing Note

As we conclude this insightful session, I extend my heartfelt gratitude to all participants, experts, and stakeholders who have contributed to today's deliberations. The discussions around shipbuilding, repair, maritime infrastructure, and policy interventions have reaffirmed our shared commitment to transforming India into a global maritime powerhouse.

India's shipbuilding and repair industry is at a pivotal juncture. With over 40 shipyards and a growing ecosystem of public and private players, we are building everything from naval vessels to green ferries. Yet, we currently rank just above 16th globally in shipbuilding capacity. This gap is not a limitation — it is an opportunity. Through targeted policy support, financial assistance schemes, and infrastructure development, we are laying the foundation for exponential growth.

Our ship repair and recycling sectors also hold immense promise. India already commands a 25% share of the global ship recycling market and is emerging as a cost-effective alternative for ship repair. With strategic investments, skill development, and digital transformation, we can unlock the full potential of these sectors.

And in the timeless wisdom of the Rigveda, which resonates so deeply with the spirit of this gathering:

May this spirit guide our dialogue today and our collective efforts to transform India's shipbuilding industry into a globally competitive, sustainable, and strategically vital sector in the years to come. Thank you.