

Evolution of Indian Shipping Industry: Post-Independence

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1. INTRODUCTION

The logistics sector in India is considered crucial to boosting international commerce as it contributes immensely to the growth of the economy. Since it ensures quick, inexpensive, and efficient transportation of goods throughout India, and as other commercial sectors depend on it, the industry is rapidly evolving and has evolved as the backbone of the Indian economy. Another indicator of the growth of the logistics industry is the fact that India achieved a remarkable improvement in its score from 78.5% in 2019 to 90.3% in the 2021 United UNESCAP Global Survey on Digital and Sustainable Trade Facilitation. Almost 95 percent of the nation's commerce by volume and 70 percent by value is transported by sea. The expansive 7,500 km of coastline is just one of two geographical variables that favourably position India's maritime industry. India is a potential location for shipping and transshipment in the future due to its nearly 7517 km of coastline, 12 main ports, and 187 minor ports. This is how the shipping and logistics industry has significantly contributed to the Indian Economy.

Keywords – Shipping, Maritime, Coastal

Brief status of Indian shipping at the time of independence (1947).

In 1947, the Indian commercial shipping industry was largely dependent on foreign, particularly British, vessels. The Indian fleet was relatively small, with only 1.92 lakh Gross Tonnage (GT). The Indian Merchant Shipping Law was also considered sketchy, with revisions and new legislation needed after independence.

Key points about Indian commercial shipping in 1947:

Dominance of Foreign Ships:

The Indian fleet was a small fraction of the total shipping in the Indian Ocean, with most trade being carried out by British-owned ships.

Small Indian Fleet:

The Indian shipping tonnage was only 1.92 lakh GT on the eve of independence.

Need for Development:

The Government of India recognized the importance of developing a national shipping industry after independence and announced a National Policy on Shipping in 1947.

Inadequate Legal Framework:

The existing Merchant Shipping Law was outdated and required modernization. The Merchant Shipping Act, 1958 was later enacted to address these shortcomings.

2. HISTORICAL BACKGROUND (1947–1960S)

2.1 Initial challenges: limited fleet, dependence on foreign carriers.

In the immediate post-independence period (1947-1960), the Indian commercial shipping industry faced significant challenges stemming from a lack of investment, outdated infrastructure, and heavy reliance on foreign

shipping lines for trade. These issues hampered the growth and competitiveness of the nascent Indian shipping sector.

Key Challenges:

- **Limited Investment:**

Following independence, India's shipping industry struggled with inadequate investment in infrastructure, including ports, and fleet modernization. This limited the country's ability to handle increasing trade volumes and compete with foreign shipping lines.

- **Outdated Infrastructure:**

Indian ports were poorly equipped and lacked the capacity to handle modern cargo handling techniques and increasing trade volumes. This resulted in inefficiencies, congestion, and delays.

- **Reliance on Foreign Shipping Lines:**

India was heavily dependent on foreign shipping companies for a large portion of its export and import trade. This dependence created a vulnerability and limited India's control over its trade routes and freight rates.

- **Regulatory Issues:**

Inadequate or restrictive shipping laws and regulations further hindered the development of the Indian shipping industry. The Indian Merchant Shipping Law was initially vague and required further development.

- **Lack of Skilled Workforce:**

A shortage of skilled manpower in the shipping sector, including seafarers and port personnel, also posed a challenge.

- **Competition:**

Established foreign shipping lines offered competitive rates and technologies, making it difficult for nascent Indian shipping companies to compete effectively.

2.2 Formation of Shipping Corporation of India (SCI) and nationalization moves.

The Shipping Corporation of India (SCI) was formed in 1961 through the amalgamation of Eastern Shipping Corporation and Western Shipping Corporation. This was done by the Government of India to improve coordination, efficiency, and economy of operations. Later, other shipping companies, like Jayanti Shipping Company (1973) and Mogul Line (1986), were merged into SCI to further enhance these objectives.

Formation of SCI:

- **1961:** SCI was established as the first public sector company in Indian shipping by merging Eastern and Western Shipping Corporations.
- **1973:** Jayanti Shipping Company was merged with SCI to improve coordination and efficiency.
- **1986:** Mogul Line Limited was also merged into SCI.

Nationalization Moves:

- The formation of SCI itself was a nationalization move, as the government took control of key shipping assets.
- The merger of Jayanti Shipping Company and Mogul Line were also part of the broader nationalization efforts to consolidate and control the shipping industry.

Role of public sector in early shipping development.

In early shipping development, the public sector played a crucial role by establishing national shipping lines, investing in infrastructure like ports and harbors, and providing subsidies for shipbuilding. This support helped establish and grow the shipping industry, especially in nations aiming for economic independence and global trade.

Here's a more detailed look at the public sector's role:

- **National Shipping Lines:**

Governments established or supported national shipping lines to ensure a presence in global trade, carry essential goods, and protect domestic interests.

- **Infrastructure Development:**

Public investment was vital for building and maintaining ports and harbors, essential for the flow of goods and ships.

- **Subsidies and Support:**

Governments provided financial support, including subsidies for shipbuilding, to encourage domestic shipyards and reduce costs for shipping companies.

- **Regulations and Standards:**

The public sector set regulations and standards for maritime safety, navigation, and environmental protection, crucial for the industry's responsible growth.

- **Supporting Private Sector:**

Public sector involvement in infrastructure and regulation created a favourable environment for private shipping companies to thrive.

- **Promoting Indigenous Shipbuilding:**

Governments often prioritized the development of domestic shipyards to reduce reliance on foreign shipbuilding.

- **Research and Development:**

Public sector institutions played a role in research and development related to shipbuilding, maritime technology, and efficient shipping practices.

3. EXPANSION AND POLICY INTERVENTIONS (1970S–1980S)

3.1 Growth in tonnage and routes.

In the 1970s and 1980s, India's shipping industry witnessed a period of growth in vessel tonnage and maritime routes. While there's no specific data pinpointing exact tonnage increases within those decades, it's evident that India's fleet was expanding. This growth was accompanied by an increase in the volume of cargo handled by major ports, indicating a rise in both domestic and international trade.

Elaboration:

- **Increasing Tonnage:**

The Indian-flagged fleet saw a steady increase in gross tonnage (GT), signifying the larger size and capacity of the vessels in the fleet.

- **Growth in Maritime Routes:**

India's maritime routes expanded to support the growing international trade.

- **Increased Port Traffic:**

Major ports experienced a substantial increase in the volume of cargo handled, reflecting the expansion of trade and the growth of India's shipping industry.

- **Economic Factors:**

The growth in shipping was also influenced by broader economic trends, including the increase in global seaborne trade and the increasing demand for Indian exports.

3.2 Emergence of private players and cooperative shipping societies.

In India, cooperative shipping societies are organizations where members jointly own and control shipping-related businesses, often focusing on freight forwarding, logistics, or maritime activities. These societies offer a democratic approach to business, where members have a say in how the organization is run.

Key aspects of cooperative shipping societies in India:

- **Ownership and Control:**

Members, who are often individuals or other businesses, own and control the society, making it a democratic model of business.

- **Joint Ventures:**

These societies often facilitate collaboration and joint ventures among members, pooling resources and expertise for efficient shipping operations.

- **Variety of Activities:**

Cooperative shipping societies may engage in various activities, including freight forwarding, logistics, maritime services, and even shipbuilding.

- **Examples:**

While not explicitly listed as “cooperative shipping societies,” organizations like the Indian National Shipowners’ Association (INSA) and the Federation of Freight Forwarders’ Associations in India (FFFAI) may include cooperative models or members that operate within a cooperative framework.

4. LIBERALIZATION AND GLOBAL INTEGRATION (1990S–2000S)

4.1 FDI in port infrastructure (e.g., JNPT, Adani Ports).

In the 1990s, India saw a significant increase in Foreign Direct Investment (FDI) inflows, including in the infrastructure sector, with a focus on port development. This was partly due to the economic reforms initiated in 1991, which aimed to create a more conducive environment for foreign investment. Port infrastructure was a key area where FDI played a crucial role in modernization and expansion.

Elaboration:

- **FDI Growth:**

During the 1990s, India's annual average FDI inflows more than doubled, reaching \$2.7 billion in 1995-98 and peaking at \$3.6 billion in 1997.

- **Port Infrastructure:**

FDI played a significant role in modernizing and expanding port infrastructure in India during the 1990s.

- **Economic Reforms:**

The economic reforms of 1991, including the liberalization of foreign investment policies, played a key role in attracting FDI, including in the port sector.

- **Policy Changes:**

The removal of various controls, like delicensing and import quotas, as well as the liberalization of foreign investment policies, created a more favorable environment for foreign investors.

- **Attraction of FDI:**

The focus on attracting FDI aimed to modernize India's industrial base and improve its export competitiveness.

- **Examples of FDI in Ports:**

One example of FDI in ports is the concession of bulk cargo and container terminals to transnational corporations (TNCs), as noted by the [UNCTAD](#).

4.2 Emergence of containerization and logistics chains.

The 1990s and early 2000s saw a significant surge in containerization and the development of sophisticated logistics chains, building upon the foundational advancements of container shipping in the mid-20th century. This period was marked by accelerated growth in container volume, especially on key trade routes, and the increasing integration of diverse modes of transportation into seamless global supply chains.

Key Developments:

- **Increased Container Volume:**

Container volumes experienced dramatic growth, particularly on routes like Transpacific, Transatlantic, and Asia/Europe, as well as north-south routes.

- **Intermodal Connectivity:**

The adoption of shipping containers facilitated the smooth transfer of goods between different transportation modes, enhancing the flexibility and reliability of supply chain networks.

- **Development of Logistics Chains:**

The 1990s and 2000s witnessed the evolution of logistics chains, moving beyond simple transportation to include warehousing, inventory management, and the use of technology for planning and collaboration.

- **Specialization and Outsourcing:**

The supply chain became more specialized, with the emergence of transportation brokerages and non-asset-based carriers. Outsourcing logistics functions became increasingly common.

- **Technological Advancements:**

The integration of computers and technology improved supply chain management, enabling more efficient planning, execution, and performance monitoring.

- **Global Trade Impact:**

Containerization and the development of efficient logistics chains significantly lowered barriers to international trade, stimulating economic growth and driving trillions of dollars in annual trade worldwide.

5. MAJOR CHALLENGES FACED

5.1 Rising fuel costs and global freight competition.

The shipping industry faces numerous challenges, with rising fuel costs and intense global freight competition being among the most significant. These challenges are exacerbated by factors like supply chain disruptions, fluctuating market conditions, and the need for compliance with various regulations.

Here's a more detailed look at the major challenges:

- **Fuel Price Fluctuations:**

The global oil market's volatility directly impacts shipping costs, making it difficult for companies to predict and manage their expenses.

- **Impact on Operational Costs:**

Higher fuel prices translate to increased operational expenses for shipping companies, potentially impacting their profitability.

- **Freight Rate Increases:**

To cover increased fuel costs, shipping companies often raise freight rates, which can negatively affect businesses relying on international trade.

- **Increased Competition:**

The shipping industry is highly competitive, with numerous players vying for market share.

- **Pressure on Pricing:**

Competition can put pressure on shipping companies to offer competitive prices, potentially reducing profit margins.

- **Market Volatility:**

Fluctuations in demand and supply can lead to unstable freight rates and make it challenging to plan long-term strategies.

- **Natural Disasters and Geopolitical Events:**

Supply chains are vulnerable to disruptions caused by natural disasters, geopolitical tensions, and pandemics, leading to delays and increased costs.

- **Port Congestion:**

Congestion at major ports can cause delays in shipping and increase transportation costs.

- **Container Shortages:**

Shortages of shipping containers have also contributed to supply chain disruptions and increased costs.

- **Environmental Impact:**

The shipping industry is a significant source of environmental pollution, leading to stricter regulations and increased pressure on companies to adopt sustainable practices.

- **Compliance Costs:**

Adhering to environmental regulations can add to the cost of shipping, further impacting competitiveness.

- **Lack of Employees:**

The industry faces challenges in attracting and retaining skilled maritime professionals.

- **Impact on Operations:**

Labor shortages can lead to operational disruptions, delays, and increased costs.

- **Need for Adaptation:**

The industry is constantly evolving, with new technologies and regulations requiring companies to adapt and invest in new infrastructure.

- **Cybersecurity Risks:**

Increased reliance on technology also poses cybersecurity risks, which need to be addressed.

- **Changing Regulations:** The shipping industry is subject to numerous regulations, including those related to safety, security, and environmental protection.

- **Compliance Costs:** Ensuring compliance with regulations can be costly and complex.

- **Global Recession:**

Economic downturns can lead to reduced shipping volumes and lower freight rates, putting pressure on shipping companies.

- **Currency Fluctuations:**

Changes in exchange rates can impact the cost of shipping and affect trade patterns.

- **Infrastructure Limitations:** Inadequate port infrastructure and hinterland connectivity can hinder efficient movement of cargo.

- **Security Threats:** Piracy and cyberattacks pose security threats to the shipping industry.

- **Increased Warehousing Costs:** Rising storage costs can add to the overall cost of shipping.

6. RECENT DEVELOPMENTS (2010S–PRESENT)

6.1 Sagarmala and Bharatmala initiatives.

The Bharatmala Pariyojana and the Sagarmala Programme are both major infrastructure initiatives in India, but they focus on different aspects of connectivity. Bharatmala primarily focuses on enhancing road connectivity, while Sagarmala aims to develop port infrastructure and promote maritime trade.

Bharatmala Pariyojana:

- **Focus:**

Primarily on road infrastructure development, including expressways and economic corridors.

- **Goal:**

To improve freight and passenger movement, reduce travel time, and boost economic growth by creating seamless connectivity across the country.

- **Key Features:**

- Construction of 34,800 km of national highways.
- Expansion of existing national highway network.
- Emphasis on economic corridors to connect major industrial hubs.
- Integration with other infrastructure projects, such as PM Gati-Shakti Plan.

Sagarmala Programme:

- **Focus:** Port-led development, coastal shipping, and maritime trade.

- **Goal:** To modernize ports, enhance maritime connectivity, and boost economic activity by leveraging India's coastline and river network.

- **Key Features:**

- Modernization and mechanization of port operations.

- Development of new ports and expansion of existing ones.
- Improvement of coastal shipping and inland waterways.
- Promotion of coastal community development.
- Incorporation of projects like Sagartat Samriddhi Yojana to address challenges in coastal areas.

6.2 Growth of coastal shipping and inland waterways.

In India, both coastal shipping and inland waterway transport have seen significant growth, driven by government initiatives like the Sagarmala Programme and the National Waterways Act, 2016. Coastal shipping has grown by 118% in a decade, while inland waterway cargo has seen a 700% increase. This growth is attributed to factors like increased cargo movement, improved infrastructure, and the government's focus on promoting these modes of transport.

Coastal Shipping:

- **Growth:**

Coastal shipping has witnessed an impressive 118% growth in a decade, significantly increasing the movement of goods and passengers along the Indian coastline.

- **Initiatives:**

The Sagarmala Programme has played a key role in promoting coastal shipping by developing infrastructure like coastal berths and Ro-Ro/Ro-Pax jetties.

- **Benefits:**

Coastal shipping offers cost-effective and eco-friendly transportation, reducing logistics costs and emissions compared to road and rail.

- **Examples:**

The development of new ports and the introduction of Ro-Pax ferries are examples of initiatives that have boosted coastal shipping.

Inland Waterway Transport:

- **Growth:**

Inland waterway cargo movement has increased by 700%, demonstrating the potential of this mode of transport.

- **Initiatives:**

The National Waterways Act, 2016, has recognized 111 inland waterways as National Waterways, facilitating shipping and navigation on these routes.

- **Examples:**

National Waterway 1 (NW1), which is the longest waterway in India, has seen significant cargo movement.

- **Benefits:**

Inland waterways provide an efficient and sustainable means of transportation, particularly for bulk commodities.

Overall Growth Factors:

- **Government Initiatives:**

The government has been actively promoting coastal shipping and inland waterways through various schemes and policies.

- **Infrastructure Development:**

Investments in port infrastructure, Ro-Pax services, and the development of National Waterways have facilitated the growth of these modes of transport.

- **Cost Efficiency:**

Coastal shipping and inland waterways offer cost-effective and environmentally friendly alternatives to road and rail transport.

- **Economic Benefits:**

Increased cargo movement and improved connectivity contribute to the growth of the economy, particularly in coastal and riverine regions.

7. FUTURE OUTLOOK

7.1 Vision India@2047 for shipping.

- Two new Major Mega Ports -Vadhavan and Galathea Bay,
- Deep draft ports – Deendayal Port Authority (Kandla), Vadhavan, V.O Chidambaranar Port Authority (Tuticorin), Galathea Bay, Paradip Port Authority would enable handling bigger vessels (Panamax, Cape size), and Transshipment Hubs at Galathea would lead to substantial capacity addition.
- Modernization and digitalization of Port operations planned to improve Vessel TAT and Ship Berth Day productivity enabling throughput enhancement.
- Augment multimodal port connectivity under the Comprehensive Port Connectivity Plan
- Operationalization of six new National Waterways
- Opportunities in blue economy and maritime startups.
- Key policy suggestions for sustainable and competitive growth.

Shipbuilding and Repair Enhancement:

- A revamped Shipbuilding and Ship Repair Policy under formulation to improve domestic capacity.
- 4 Shipbuilding and Ship Repair Clusters planned: This includes fostering an integrated approach for modernizing shipyards to attract investment and generate employment.

Green Initiatives and Sustainability:

- “Harit Sagar” Green Port Guidelines launched to reduce carbon intensity and develop an environment friendly ecosystem at Major Ports.
- 3 Major Ports-Deendayal Port Authority, Paradip Port Authority and V.O. Chidambaranar Port Authority are being developed as Green Hydrogen/Ammonia Hubs under National Hydrogen Mission.
- Green Tug Transition Programme (GTTP) for transition from conventional fuel-based harbour tugs to greener, more sustainable alternatives.
- Harit Nauka Guidelines for Green transition of Inland Waterways based transportation ecosystem.

Cruise Tourism:

- Cruise Bharat Mission, launched in September 2024, aims to double cruise passenger traffic in the country by 2029.

- Development of six new international cruise terminals to boost tourism and position India as a major global cruise destination.

Skill Development and Collaboration:

- Focus on skilling initiatives and support MSMEs in shipbuilding
- Attract seafarers for academic positions in Maritime Universities and Training Institutes

7.2 Details of technological advancements and other initiatives**Technological Advancements and Digital Transformation:**

- Use of Very High Frequency (VHF) channels for different activities such as marine navigation and traffic control.
- Centralized Project Management System to monitor all Capex projects
- Implementation of Smart Communication Systems
- National Logistics Portal (NLP) Marine 2.0 and Maritime Single Window (“MSW”) (by 2026)
- E-Samudra project for vessel registration, survey and certification
- National River Navigation and Traffic System (by 2027)
- IT platform for National inland vessels and crew registry (by 2026)
- Automated allotment of berths using Artificial Intelligence and Machine Learning and advanced analytics-based yard management (by 2025)

Green Shipping and Sustainability Initiatives:

- Support to shipyards for being compliant with Hong Kong Convention (on environmentally sustainable recycling) by 2026.
- Development of 5 Green Hydrogen/Ammonia hubs and 1000+ Green Vessel in the country by 2029

CONCLUSION

In conclusion, India's maritime sector is poised for significant growth, underscored by its strategic initiatives and government schemes. The first edition of *Sagarmanthan: The Great Oceans Dialogue* has further cemented India's commitment to becoming a global maritime leader, bringing together stakeholders to discuss key themes such as sustainability, connectivity, and governance. With programs like the Sagarmala Programme, Maritime India Vision 2030, and the Green Tug Transition Program, the nation is taking decisive steps to modernize its infrastructure, promote green shipping, and enhance port connectivity. These efforts, coupled with the insights shared at *Sagarmanthan*, will propel India's maritime sector toward a sustainable, innovative, and future-ready ecosystem, ensuring its place as a central player in the global maritime landscape.

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