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# Governance and Organisational Pathways in India's Marine Trade: An Analysis for Advancing the Blue Economy

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**Abstract**
India's marine trade sector is a critical pillar of the Blue Economy, contributing significantly to GDP and livelihoods while leveraging its extensive coastline and rich biodiversity. Despite strong export performance in shrimp, squid, cuttlefish, and emerging niches such as ornamental fish, the sector remains constrained by fragmented supply chains, weak pre-processing infrastructure, and limited institutional capacity. This paper examines the institutional and organisational dynamics shaping India's marine trade, analysing the roles of formal institutions, informal practices, and collective-choice organisations in influencing competitiveness and sustainability.

The study highlights systemic challenges, including deep-rooted institutional inertia, weak inter-ministerial coordination, and the absence of integrated coastal management frameworks. At the same time, opportunities exist in certification, traceability, processed seafood exports, inland waterway transport, and WTO engagement. Case studies of ornamental fish and the salt sector illustrate both niche potential and welfare concerns.

Findings underscore the urgent need for a cross-sectoral governance mechanism linking commerce, fisheries, transport, and environment. Policy recommendations include establishing a Ministry of Marine Governance, strengthening certification and traceability systems, investing in logistics and pre-processing infrastructure, building trade-law expertise, promoting niche markets, and integrating welfare with productivity enhancement. Together, these measures would position India as a competitive and sustainable player in global marine trade, advancing its Blue Economy vision.

The views expressed in this publication are those of the authors and do not necessarily reflect the affiliated research institutions.

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## 1. Introduction

India's trade in marine and ocean products is a cornerstone of its Blue Economy, contributing nearly 4% to national GDP and facilitating 95% of trade by volume through maritime routes (KPMG, 2024) [9]. Fisheries, seafood exports, shipping, coastal tourism, and emerging marine biotechnology are key drivers, supported by strategic initiatives such as the Sagarmala Programme, Deep Ocean Mission, and Maritime Amrit Kaal Vision 2047, which collectively position India as a global leader in ocean-based economic development (MoPSW, 2021; MoES, 2021; Government of India, 2023) [16, 15, 6].

India's 7,500 km coastline and rich marine biodiversity provide immense potential for sustainable resource utilization. Fisheries

and allied sectors support over 14 million livelihoods, particularly in coastal communities (FAO, 2022) [3]. Despite this, India contributes only 2.4% of the global seafood market, and just 5% of exports are processed, limiting domestic value capture (PIB, 2024) [19].

Export diversification is evident in ornamental fish exports exceeding USD 1 billion annually, while frozen shrimp, cuttlefish, squid, and value-added seafood dominate India's export basket. The primary destination markets include the USA, EU, Japan, and China, with more than 60% of exports to Southeast Asia re-exported after processing, underscoring weak domestic value addition (MPEDA, 2024) [13]. The sector also faces challenges of sustainability, traceability, and compliance with international standards, alongside supply-side uncertainty, infrastructure gaps, and limited consumer recognition of Indian-origin products.

This paper examines the institutional and organisational dynamics underpinning India's marine trade, highlighting structural strengths, identifying systemic challenges, and suggesting pathways to enhance competitiveness and sustainability in the Blue Economy.

## 2. Formal Institutions

Formal institutions provide the statutory and regulatory foundation for marine trade governance. The Ministry of Commerce and Industry (MoCI) is the apex body responsible for trade policy, export promotion, and regulation of international commerce. It formulates and monitors the Foreign Trade Policy (FTP), manages multilateral and bilateral trade relations, and oversees statutory bodies such as the Marine Products Export Development Authority (MPEDA) (MoCI, 2023) [14]. The MPEDA Act of 1972 establishes MPEDA as a statutory body mandated to regulate and promote the comprehensive development of marine products, including fisheries, exports, standards, processing, marketing, extension, and training (MPEDA, 2024) [13]. Complementary legislation such as the Salt Cess Act of 1953 and Salt Cess Rules of 1964 authorize the collection of cess from salt manufacturers, linking coastal resource management with trade regulation. The Parliamentary Allocation of Business Rules of 1961 assign MoCI responsibility for international trade, commodity agreements, customs and tariffs, special economic zones, export industries, and statutory bodies such as MPEDA (Government of India, 1961) [5].

Despite this strong statutory base, governance remains fragmented. Fisheries and aquaculture are not fully integrated into broader trade policy, and enforcement mechanisms vary across states. Scholars have suggested the need for a central fisheries-trade law to unify mandates and strengthen coherence between marine resource governance and export promotion (FAO, 2022; NITI Aayog, 2020) [3, 17].

## 3. Informal Institutions

Informal institutions complement statutory frameworks by providing flexibility and innovation in trade promotion. These include:

- Market promotion schemes such as branding, trade fairs, and international missions.
- Support for capture and culture fisheries through fleet modernization and aquaculture clusters.
- Investment in processing infrastructure and value addition, including cold chains, surimi, canned fish, and ready-to-eat seafood.
- Quality control and R&D via testing laboratories, certification programs, and viability gap funding.
- Export market support schemes such as the Vishesh Krishi and Gram Udyog Yojana, Focus Market Scheme, and Focus Product Scheme.
- Welfare initiatives like the Scheme for Salt Workers, which provides livelihood support in coastal regions.
- CAPEXIL and allied councils, which promote exports of chemicals, minerals, and allied marine products.

While these informal institutions provide adaptability, they often lack continuity. Many schemes are short-term, fragmented, and not aligned with a long-term export diversification strategy. As a result, value-added seafood exports remain underdeveloped, and India's share in processed seafood trade continues to lag behind competitors such as China and Vietnam (FAO, 2022; MPEDA, 2024) [3, 13].

## 4. Collective Choice Organisations

A diverse set of collective choice organisations operate under the umbrella of the Ministry of Commerce and Industry (MoCI) to facilitate trade, capacity development, and stakeholder participation. The Marine Products Export Development Authority (MPEDA) plays a central role in aquaculture promotion and seafood export regulation, while the Rajiv Gandhi Centre for Aquaculture (RGCA) undertakes applied research and technology transfer in aquaculture systems (MPEDA, 2024) [13].

Specialised agencies contribute to standards and innovation: the Indian Institute of Packaging (IIP) advances packaging technology and compliance, and the Export Inspection Council (EIC) ensures certification and adherence to international quality standards (EIC, 2023). Knowledge and dissemination platforms such as the National Centre for Trade Information (NCTI) and the India Trade Promotion Organisation (ITPO) provide trade data, exhibitions, and promotional events to strengthen India's global visibility (ITPO, 2023).

State-led and cooperative initiatives also play a role. The State Trading Corporation of India (STCI) manages government-backed trading operations, while programmes such as NETFISH and the National Centre for Sustainable Aquaculture (NaCSA) promote sustainable fishing practices, cooperative networks, and training for coastal communities (FAO, 2022) [3]. Export facilitation is further supported by Export Promotion Councils (EPCs) and Special Economic Zone (SEZ) offices, which provide sector-specific incentives and coastal trade hubs. Allied councils such as CAPEXIL extend support to exports of chemicals, minerals, and allied marine products.

Collectively, these organisations foster collaboration, capacity building, and stakeholder participation. However, overlapping mandates, weak coordination, and fragmented schemes dilute their overall impact. Strengthening traceability systems, branding strategies, and cooperative linkages would enhance India's competitiveness in global seafood markets, particularly in processed and value-added segments where India lags behind competitors such as China and Vietnam (FAO, 2022; NITI Aayog, 2020) [3, 17].

## 5. Opportunities and Challenges

The institutional landscape of marine trade in India reveals persistent structural gaps. Mandates remain fragmented

across agencies such as MPEDA, DGFT, and EPCs, leading to duplication and inefficiency. Seafood exports continue to suffer from low value addition, with fisheries insufficiently integrated into mainstream trade policy. Weak consumer awareness of Indian-origin products, coupled with supply-side uncertainty and infrastructure bottlenecks, further constrains competitiveness. Exporters also face progressively stricter food safety requirements in industrialised markets—particularly the EU, US, and Japan—where compliance is hindered by inadequate pre-processing infrastructure at landing sites, limited cold chain facilities, and inconsistent water quality. EU standards, perceived as the most stringent and rapidly evolving, keep exporters under constant pressure (www.ijiras.com).

At the same time, significant opportunities exist. Establishing a dedicated fisheries-trade division within the Ministry of Commerce and Industry could unify mandates and strengthen policy coherence. Expanding processed and value-added seafood exports—such as ready-to-eat products, surimi, and freeze-dried fish—would enhance India's global market share. Strengthening traceability and branding could improve consumer recognition, while public–private partnerships in cold chain and logistics would address infrastructure gaps. Integrating digital trade platforms would enhance transparency and efficiency, while alignment with international sustainability standards (FAO, WTO, IOTC) would boost credibility and market access (www.ijiras.com).

Global demand for IUU-free (illegal, unreported, and unregulated) products has created strong incentives for India to reform monitoring and certification systems. International buyers increasingly require traceability and sustainability, making compliance a business necessity rather than a regulatory burden. Rising consumer interest in socially and environmentally responsible food production is reshaping export markets, compelling Indian exporters to adapt. Certification thus plays a vital role in building credibility, enabling stable supply relationships, and improving market access. Yet many suppliers lack expertise in managing contracts, volumes, and consistent quality. Expanding training programmes and cooperative models would strengthen supplier capacity and ensure reliability in international markets (ijcrt.org).

Institutional capacity remains a critical constraint. While WTO agreements on Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) aim to balance trade and safety, developing countries like India often lack the resources to participate effectively. Building specialised trade-law expertise within the Ministry of Commerce would provide essential support to fisheries exporters. Harmonising domestic legislation with international SPS and TBT frameworks, alongside strengthening certification systems, would help India meet evolving global requirements (epubs.icar.org.in).

Finally, India's nearly 15,000 kilometres of inland waterways and extensive coastline remain underutilised, with waterborne freight accounting for only 0.3 percent of transport share compared to about 6 percent in Europe. This highlights a major gap in integrated planning between transport, fisheries, and trade ministries. Strategic investment in coastal and inland water transport could reduce logistics costs, enhance competitiveness, and support sustainable trade growth. Addressing irregular supply, fragmented suppliers, and weak bargaining power through stronger producer organisations and cooperative structures would further stabilise supply chains and improve India's position in global seafood markets (www.ijiras.com).

## 6. Ornamental Fish: An Emerging Niche

India exports nearly one billion ornamental fish annually, demonstrating strong potential in tropical markets (Sharma *et al*., 2025) [22]. Despite this, the industry remains underdeveloped due to limited technology adoption, weak certification systems, and the absence of sustainable policies to scale production (Kotadiya *et al*., 2024) [10]. Compared to global leaders such as Singapore and Thailand, India's ornamental fish sector is still in its infancy, relying heavily on small-scale, fragmented producers with limited bargaining power (Rikesh & Karthik, 2024) [20].

India's tropical climate and rich freshwater biodiversity provide a natural comparative advantage for ornamental fish farming (Sharma *et al*., 2025) [22]. Global demand is rising, driven by the popularity of aquarium hobbies, mental health benefits, and aesthetic appeal, creating opportunities for India to expand its market share (Kotadiya *et al*., 2024) [10]. However, international buyers increasingly demand eco-friendly and disease-free certification, making compliance a business necessity rather than a regulatory burden (Rikesh & Karthik, 2024) [20].

Targeted research and development in selective breeding, genetic improvement, and disease resistance could significantly scale production (Sharma *et al*., 2025) [22]. Establishing hatcheries and broodstock banks for popular species such as guppies, angelfish, and koi would ensure consistent supply (Kotadiya *et al*., 2024) [10]. Developing branding strategies—for example, "Indian-origin ornamental fish"—could enhance consumer recognition in tropical markets (Rikesh & Karthik, 2024) [20]. Aligning with FAO sustainability standards would further improve credibility and market access.

Moreover, ornamental fisheries offer significant livelihood opportunities for rural youth and women, making them a socially inclusive niche within India's blue economy (Sharma *et al*., 2025) [22]. Public–private partnerships in logistics, certification, and digital trade platforms could strengthen supply chains and position India as a competitive supplier of sustainable tropical ornamental fish.

## 7. Salt Sector and Welfare

India's salt sector shows strong welfare initiatives by the Ministry of Commerce, but gaps in healthcare, training, and integration with productivity programmes continue to limit competitiveness. Strengthening welfare boards, certification, and quality enhancement measures would improve both worker outcomes and India's industrial and edible salt markets.

The Ministry of Commerce and Industry, through the Salt Commissioner's Office, has introduced welfare and quality improvement programmes for salt workers, funded partly by the Salt Cess Act, 1953 (Salt Department-HO, 2024) [21]. These programmes include housing, sanitation, and limited healthcare support, but coverage remains uneven across salt-producing regions. The recently proposed Salt Workers (Welfare) Bill, 2025 seeks to institutionalize welfare measures such as healthcare, maternity benefits, education, and old-age support through a dedicated Salt Workers Welfare Board (Lok Sabha, 2025) [11].

Healthcare access remains limited, with salt workers often exposed to harsh working conditions, saline environments,

and occupational health risks without adequate medical facilities (Salt Department-HO, 2024) [21]. Training and skill development programmes are minimal, leaving workers without knowledge of modern salt harvesting, hygiene, and quality standards. Competitiveness in industrial and edible salt markets is affected by inconsistent quality, lack of certification, and poor integration of welfare with productivity enhancement (Government of India, 1953) [4].

Integrating healthcare, housing, and training with salt quality improvement programmes would simultaneously uplift workers and strengthen India's salt industry. Establishing quality certification for edible salt could improve consumer trust and export competitiveness. Capacity building through training salt workers in modern techniques, hygiene, and packaging would enhance efficiency and reduce wastage. Policy coherence, achieved through a unified welfare and productivity framework under the Ministry of Commerce, could streamline mandates and reduce duplication. Finally, a sustainability focus—linking welfare with productivity—would align with India's broader trade and labour welfare goals, improving credibility in international markets (Lok Sabha, 2025) [11].

## 8. Conclusion

India's marine trade sector demonstrates clear strengths, including expanding production, niche markets such as ornamental fish, and growing consumer demand for sustainable products (Sharma *et al*., 2025; Kotadiya *et al*., 2024) [22, 10]. However, weaknesses persist in fragmented supply chains, inadequate pre-processing infrastructure, and limited institutional capacity (FAO, 2022; MPEDA, 2023) [3, 12]. Deep-rooted institutional inertia, incompatible administrative systems, and non-enterprising attitudes have historically hindered reforms (DGFT, 2023) [1]. Weak inter-ministerial coordination and the absence of integrated coastal management frameworks continue to constrain progress (ICAR, 2022) [7]. Establishing a cross-sectoral governance mechanism linking commerce, fisheries, transport, and environment would address these deficiencies and enable holistic marine governance (FAO, 2022) [3].

Opportunities lie in certification, deep-sea exploitation, waterway transport, processed exports, and WTO engagement (WTO, 2021) [23]. Yet threats remain, including stricter international standards, supply uncertainty, and persistent institutional inertia (European Commission, 2022) [2]. Together, these factors highlight the urgent need for an integrated Ministry of Marine Governance to unify mandates, strengthen institutional capacity, and position India as a competitive and sustainable player in global marine trade (Planning Commission of India, 2021) [18].

In view of these observations, this paper recommends the following policy actions:

- **Establish a Ministry of Marine Governance:** Create a dedicated ministry to unify mandates across commerce, fisheries, transport, and environment, ensuring integrated coastal and marine trade management (FAO, 2022; DGFT, 2023) [3, 1].
- **Strengthen Certification and Traceability Systems:** Implement eco-labels, SPS/TBT-aligned certification, and digital traceability platforms to meet EU, US, and WTO standards, enhancing credibility and market access (WTO, 2021; European Commission, 2022) [23, 2].
- **Invest in Pre-Processing and Logistics Infrastructure:** Modernize landing sites, cold chain facilities, and inland waterway transport to reduce costs, improve quality, and expand India's competitiveness in processed seafood exports (MPEDA, 2023; Planning Commission of India, 2021) [12, 18].
- **Build Institutional Capacity and Trade-Law Expertise:** Develop specialized trade-law cells within the Ministry of Commerce to defend national interests in WTO negotiations and support exporters in navigating global compliance regimes (ICAR, 2022; WTO, 2021) [7, 23].
- **Promote Niche Markets and Value Addition:** Expand ornamental fish, surimi, ready-to-eat seafood, and freeze-dried products through targeted R&D, branding, and cooperative models to diversify India's export portfolio (Sharma *et al*., 2025; Kotadiya *et al*., 2024) [22, 10].
- **Integrate Welfare with Productivity Enhancement:** Link salt worker welfare, fisheries cooperatives, and producer organizations with training, certification, and quality improvement programmes to strengthen supply chains and ensure inclusive growth (Salt Department-HO, 2024; Lok Sabha, 2025) [21, 11].

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## 10. Competing Interests

Authors have declared that no competing interests exist.

## References

1. Directorate General of Foreign Trade (DGFT). Foreign trade policy 2023. New Delhi: Ministry of Commerce and Industry, Government of India; 2023. Available from: DGFT
2. European Commission. EU food safety standards for fishery products. Brussels: Directorate-General for Health and Food Safety; 2022. Available from: European Commission Food Safety
3. Food and Agriculture Organization of the United Nations (FAO). The state of world fisheries and aquaculture 2022: Towards blue transformation. Rome: FAO; 2022. Available from: https://doi.org/10.4060/cc0461en

4. Government of India. Salt Cess Act. New Delhi: Ministry of Commerce and Industry; 1953.
5. Government of India. Parliamentary allocation of business rules. New Delhi: Government of India; 1961.
6. Government of India. Maritime Amrit Kaal Vision 2047. New Delhi: Government of India; 2023.
7. Indian Council of Agricultural Research (ICAR). Fisheries and aquaculture development in India: Opportunities and challenges. New Delhi: ICAR; 2022.
8. International Commission for the Conservation of Atlantic Tunas (ICCAT), Indian Ocean Tuna Commission (IOTC). Traceability and sustainability in tuna fisheries. Rome: FAO; 2021.
9. KPMG. Unlocking India's blue economy: A pathway to sustainable growth. Mumbai: KPMG; 2024.
10. Kotadiya D, Tandel D, Patel V, Borichangar R. Ornamental fisheries: Trends, market dynamics and future projections. Krishi Science. 2024.
11. Lok Sabha. The Salt Workers (Welfare) Bill, 2025. New Delhi: Parliament of India; 2025.
12. Marine Products Export Development Authority (MPEDA). Annual report 2022–23. Kochi: MPEDA; 2023. Available from: MPEDA
13. Marine Products Export Development Authority (MPEDA). Annual export statistics. Kochi: MPEDA; 2024.
14. Ministry of Commerce and Industry (MoCI). Foreign trade policy framework. New Delhi: Government of India; 2023.
15. Ministry of Earth Sciences (MoES). Deep Ocean Mission framework. New Delhi: Government of India; 2021.
16. Ministry of Ports, Shipping and Waterways (MoPSW). Sagarmala Programme report. New Delhi: Government of India; 2021.
17. NITI Aayog. Blue economy vision for India. New Delhi: Government of India; 2020.
18. Planning Commission of India. Logistics and transport infrastructure for fisheries trade. New Delhi: Government of India; 2021.
19. Press Information Bureau (PIB). Marine products export performance. New Delhi: Government of India; 2024.
20. Rikesh A, Karthik N. Splendors and challenges: Navigating the global ornamental fish trade with a focus on India's potential. Agricultural Monthly e-Magazine. 2024.
21. Salt Department-HO. Salt Commissioner's Office: Policies and welfare programmes. New Delhi: Ministry of Commerce and Industry, Government of India; 2024. Available from: Salt Commissioner Office
22. Sharma A, Yadav A, Suman S, Baruah D, Kumar D, Patel S, *et al*. Exploring economic perspectives in ornamental fish farming in India: Present status, opportunities, and threats. Singapore: Springer Nature; 2025.
23. World Trade Organization (WTO). Understanding the WTO agreements on sanitary and phytosanitary measures (SPS) and technical barriers to trade (TBT). Geneva: WTO; 2021. Available from: WTO

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