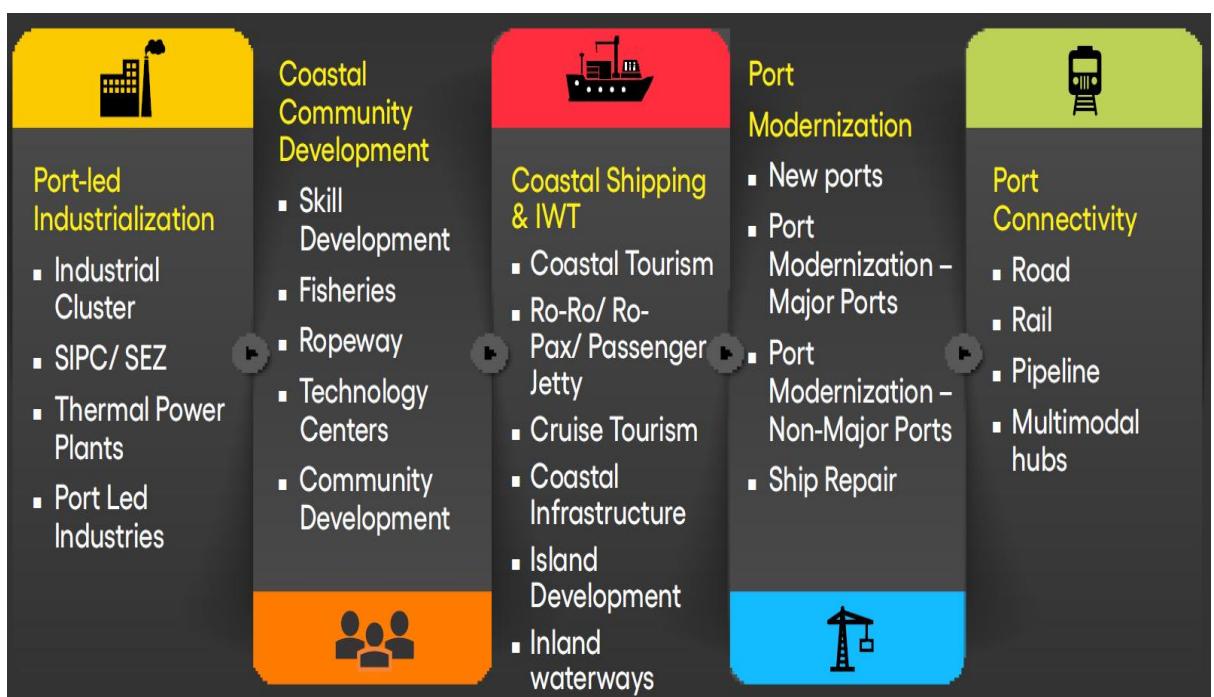


Government Initiatives:

SAGARMALA:

- The Sagarmala Programme, a flagship initiative of the Ministry of Ports, Shipping and Waterways, represents a visionary approach by the Government of India to transform the country's maritime sector.
- Approved by the Union Cabinet in March 2015, Sagarmala seeks to enhance the performance of the logistics sector by reducing logistics costs for both domestic and international trade. By leveraging coastal and waterway transportation, the program aims to minimize the need for extensive infrastructure investments, thus making logistics more efficient and improving the competitiveness of Indian exports.
- Overall set of projects are divided into **5 pillars and 24 categories** as below:



The Sagarmala Programme is broad in scope and includes four main pillars:

1. Port Modernization & New Port Development
2. Port-Linked Industrialization
3. Port Connectivity Enhancement
4. Coastal Community Development
5. Coastal Shipping and IWT

Port Modernization:

Giving special emphasis to modernization of Indian ports under Sagarmala, 234 projects at cost of Rs. 2,91,622 Cr. have been undertaken for implementation. Out of total 234 projects, 94 projects worth Rs. 31,517 Cr. have been completed and 65 projects worth Rs. 79,958 Cr are under implementation.

Port-Linked Industrialization:

Port-led industrialization refers to the strategy of developing industrial and economic zones near ports to leverage their connectivity for import/export of raw materials and finished goods. It focuses on reducing logistics costs by locating industries at the ports. There are overall **14 projects worth Rs. 55,887 Cr.** have been identified for implementation under Sagarmala. Out of which, **9 projects worth Rs. 45,865 Cr.** have been completed and **3 projects worth Rs. 9,247 Cr.** are under implementation.

Port Connectivity Enhancement:

The Sagarmala Programme has identified connectivity between ports and domestic production and consumption centers, through Rail, Road, Pipeline, Multi Modal Logistics Parks (MMLP) under the pillar of port connectivity. In view of above, the Sagarmala Programme has a dedicated pillar **consisting of 279 projects in total worth Rs. 2,06,363 Cr.** and are being undertaken by various implementation agencies. Out of these **279 projects, 82 projects worth Rs. 41,780 Cr.** have been completed and **67 projects worth Rs. 81,191 Cr.** have been awarded and currently under implementation.

Coastal Community Development:

Under Sagarmala Programme, an integrated approach is being adopted for improvement in quality of life with focus on skill building and training, upgrading of technology in traditional professions, specific and time bound action plan for improving physical and social infrastructure in collaboration with the coastal states. Main features of Coastal Community Development plan consists of below:

- Skill development
- Coastal tourism
- Development of fishing harbours
- R&D in Port and Maritime Sector

Coastal Shipping & IWT:

- Sagarmala Programme encourages shifting cargo from land to water-based transport. **231 projects with a total investment of ₹14,526 Cr.** have been undertaken. **Completed: 35 projects worth ₹1,834 Cr. Under Implementation: 67 projects worth ₹5,617 Cr.**

1. RoPax Services (Roll-on/Roll-off + Passenger):

- Reduces travel time, road congestion, and vehicular emissions.
- Utilizes India's vast coastline and riverine network.
- Cruise passenger transport, Ro-Ro ferry, and RoPax movement.
- **75 projects** identified under Sagarmala for RoPax and passenger jetties.
- Includes development of RoRo jetties, terminal buildings, dredging, and passenger jetties.

- **Completed:** 12 projects ,**Under Implementation:** 18 projects.
2. MoPSW under Sagarmala Scheme has extended financial assistance to 58 projects. Total funds sanctioned are Rs. 1025 Cr. and 399.08 Cr. have been released already.

3. Coastal Shipping Projects:

- Fuel-efficient, low-cost, and safer than road/rail.
- Helps reduce traffic and accidents.
- **Challenges:**
 - Lack of return cargo
 - Limited dedicated infrastructure
 - Weak first/last-mile connectivity
 - Small parcel sizes unsuitable for vessel transport
- **25 projects** worth ₹2,906 Cr. focused on coastal cargo infrastructure.
 - **Completed:** 5 projects worth ₹321 Cr.
 - **Under Implementation:** 8 projects
 - **In Development:** 12 projects
 - **6 projects** at major ports; **19 at non-major ports**

4. Seaplane Projects:

- Aim to initiate seaplane services using water aerodromes.
- Seaplanes will take off and land on water bodies.
- Pilot model based on the Ahmedabad–Kevadia route.
- Infrastructure development at both origin and destination points.

5. Cruise Shipping Projects

- **13 projects** worth ₹1,141 Cr. to develop cruise infrastructure.
- Majority at Major Ports with allied facilities.
- **Key Projects:**
 - Domestic Cruise Terminal at Mumbai Port – ₹139 Cr. (**Completed**)

- International Terminal at Ernakulam Wharf – ₹25.72 Cr. (Completed)
- Cruise Passenger Centre at Chennai Port – ₹18 Cr. (Completed)
- Upgrading International Terminal at Indira Dock – ₹303 Cr. (Ongoing)
- Cruise Terminals at Mormugao Port, Goa – ₹153 Cr. (Ongoing)
- Marina at Prince Dock, Mumbai – ₹365 Cr. (Planned)
- **Impact:** Rise in cruise ship calls and passengers along India's coastline.

6. Inland Waterways Development

- 38 projects under Sagarmala with total investment of ₹4,899 Cr.
 - Completed: 6 projects
 - Under Implementation: 18 projects
- Projects executed by:
 - Inland Waterways Authority of India (IWAI)
 - State Agencies

Scope for Startups

Startups have significant opportunities to engage and innovate in the maritime ecosystem under Sagarmala. Key areas include:

1. **Logistics Tech**
 - AI/ML-based cargo tracking, fleet optimization, and predictive analytics.
 - Warehouse automation and smart inventory solutions.
2. **Green Technologies**
 - Clean energy (solar/wind) at ports.
 - Electric or hybrid transport fleets for cargo handling.
3. **PortTech / Maritime IoT**
 - IoT sensors for port equipment, smart monitoring of port operations.
 - Blockchain-based supply chain management.
4. **Marine Engineering**
 - Innovations in shipbuilding, repairs, recycling, and dredging tech.
5. **Fisheries Tech**
 - Cold chain logistics, quality monitoring of catch, marine farming tech.
6. **Tourism & Mobility**
 - Cruise booking platforms, VR/AR port tourism experiences, water taxi startups.
7. **Skill Development**
 - EdTech platforms for training port workers, seafarers, and coastal youth.
8. **Waste Management & Circular Economy**
 - Port waste recycling, oil spill response solutions, eco-friendly ship recycling.

Projects under Sagarmala:

PPP:

As per the cabinet note of the Sagarmala Programme, “All efforts would be made to implement those projects through the private sector, and through Public Private Participation (PPP) wherever feasible.”

Accordingly, there are 121 projects worth Rs. 2.4 Lakh Cr. under Sagarmala Programme, which have been undertaken in PPP mode. 32 PPP projects with investment of ~Rs. 45 Thousand Cr. have been completed and remaining projects are under various stages of implementation and development.

Equity:

As a part of institutional mechanism under the Sagarmala Programme, Sagarmala Development Company Limited (SDCL) was incorporated in August, 2016 to assist project SPVs set up by the Central Ministries / State Government / Ports / State Maritime Board etc. through equity participation. So far, SDCL has already invested an amount of Rs. 542 Cr. in 5 projects through equity participation. All the projects have been successfully completed.

Internal Resources:

A significant number of projects under the Sagarmala Programme are executed using the Internal and Extra Budgetary Resources (IEBR). Projects focussing on various pillars of Sagarmala Programme are being executed by MoPSW Agencies including Major Ports, utilizing their internal resources and expertise to drive economic growth and maritime infrastructure development in the country. Under the Sagarmala Programme, there are 167 projects worth ~Rs. 36 Thousand Cr. which are being implemented by Major Ports through IEBR, out of which, 109 projects worth ~Rs. 12 Thousand Cr. have been completed and remaining projects are under various stages of implementation and development.

Grant in aid:

Projects with high social impact but lacking in financial returns, as well as those where Public-Private Partnership (PPP) funding is not viable, are funded through the Sagarmala Scheme of the Ministry.

Under Sagarmala Scheme for grant in aid, MoPSW till date has funded 176 projects worth Rs. 11,700 Cr. Ministry has sanctioned ~Rs. 4,700 Cr. for these projects. Out of total projects, 59 projects worth ~Rs. 3,500 Cr. have been completed and remaining projects are under various stages of implementation and development.