



सत्यमेव जयते

**GOVERNMENT OF INDIA**  
**MINISTRY OF PORTS, SHIPPING**  
**& WATERWAYS**  
**NEW DELHI**



**ANNUAL REPORT**  
**2022-23**



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## CHAPTER – 1

### INTRODUCTION



*Hon'ble Minister of Ports, Shipping & Waterways alongwith Hon'ble Ministers of States for PS&W inaugurating the event of 'Sagarmala- Safalta ke Saat Saal' at New Delhi*

1.1 Ministry of Shipping was formed in 2009 by bifurcating the erstwhile Ministry of Shipping, Road Transport and Highways into two independent Ministries. Thereafter, name of the Ministry was changed to Ministry of Ports, Shipping and Waterways on 9<sup>th</sup> November, 2020.

1.2 Maritime Transport is a critical infrastructure for the economic development of a country. It influences the pace, structure and pattern of development. The Ministry of Ports, Shipping & Waterways encompasses within its fold shipping and port sectors which also include shipbuilding and ship repair, major ports and inland water transport. The Ministry has been entrusted with the responsibility to formulate policies and programmes on these sectors and their implementation.

1.3 Comprehensive policy package is necessary to address the diverse issues facing the maritime transport sector. The capacity of the ports in terms of their berths and cargo handling equipment needs to keep pace with the growing requirements of the overseas trade.

1.4 Historically, investments in the transport sector, particularly in the ports, have been made by the State, mainly because of the large resources required, long gestation period, uncertain returns and a number of externalities associated with this infrastructure sector. However, the growing resource requirements and the concern for managerial efficiency and consumer responsiveness have led to the active involvement of the private sector in infrastructure services in recent times. To encourage private sector participation, Ministry of Ports, Shipping & Waterways has laid down comprehensive policy guidelines for private sector participation in the Major ports.

**Functions**

1.5 The subjects allocated to the Ministry of Ports, Shipping & Waterways are listed at **ANNEXURE-I**.

**Organizational set-up**

1.6 Shri Sarbananda Sonowal is the Minister for Ports, Shipping & Waterways. Shri Shripad Naik and Shri Shantanu Thakur are the Ministers of State for Ports, Shipping and Waterways(P,S&W).

1.7 Secretary (P,S&W) is assisted by Additional Secretary(Shipping), Joint Secretary (Ports, PHRD & PPP), Joint Secretary (Sagarmala), Joint Secretary (IWT, Admn., Parl. & Coordination), Economic Adviser, Adviser (Statistics), Development Adviser (Ports), officers at the level of Directors, Deputy Secretaries, Under Secretaries and other Secretariat/Technical Officers.

1.8 The Finance Wing is headed by Additional Secretary & Financial Adviser who assists in formulating and processing of all policies and other proposals having financial implications.

1.9 The Accounts Wing is headed by a Pr. Chief Controller of Accounts who is inter-alia, responsible for accounting, payment, budget, internal audit and cash management.

1.10 Adviser (Statistics) renders necessary data support to various Wings of the Ministry for policy planning, transport coordination, economic & statistical analysis on various modes of transport with which the Ministry is concerned.

1.11 The following Subordinate offices, Autonomous Organisations, Societies/Associations and Public Sector Undertakings etc. are functioning under the administrative control of the Ministry of Ports, Shipping & Waterways:-

**SUBORDINATE OFFICES:**

- ❖ Directorate General of Shipping, Mumbai.
- ❖ Andaman and Lakshadweep Harbour Works, Port Blair.
- ❖ Directorate General of Light houses and Lightships, Noida.

**AUTONOMOUS BODIES:**

- ❖ Major Port Authorities at Deendayal (Kandla), Mumbai, Jawaharlal Nehru (Nhava Seva), Mormugao, New Mangalore, Cochin, V.O. Chidambarnar (Thoothukudi), Chennai, Kamarajar (Chennai), Visakhapatnam, Paradip and Syama Prasad Mookerjee (Kolkata).
- ❖ Haldia Dock Complex and Kolkata Dock System under SMP, Kolkata.
- ❖ Inland Waterways Authority of India, Noida.
- ❖ Seamen's Provident Fund Organization, Mumbai.
- ❖ Tariff Authority for Major Ports, Mumbai.
- ❖ Indian Maritime University (IMU), Chennai

**SOCIETIES/ ASSOCIATIONS:**

- ❖ National Institute of Port Management, Chennai
- ❖ National Ship Design and Research Centre, Visakhapatnam.
- ❖ Seafarers Welfare Fund Society, Mumbai.
- ❖ Indian Ports Association, New Delhi

**PUBLIC SECTOR UNDERTAKINGS:**

- ❖ Shipping Corporation of India, Mumbai.
- ❖ Cochin Shipyard Limited, Kochi.
- ❖ Hooghly Cochin Shipyard Limited, Kolkata
- ❖ Dredging Corporation of India Limited, Visakhapatnam
- ❖ Central Inland Water Transport Corporation Limited, Kolkata.
- ❖ Hooghly-Dock and Ports Engineers Limited, Kolkata.
- ❖ Sagarmala Development Company Limited, New Delhi
- ❖ Indian Port Rail & Ropeway Corporation Limited (IPRCL), Mumbai
- ❖ Indian Port Global Private Limited, Mumbai.

**INTERNATIONAL ASPECTS:**

- ❖ International Maritime Organization, United Kingdom.

1.12 The Organization Chart of the Ministry of Ports, Shipping & Waterways is given at **ANNEXURE-II**.

## CHAPTER – II YEAR AT A GLANCE



*Mechanization of Berth No. 14 at New Mangalore Port*

### BACKGROUND

2.1 The Maritime Sector in India comprises of Ports, Shipping, Shipbuilding, Ship repair and Inland Water Transport Systems. In India, there are total 12 government owned major ports and approximately 200 minor and intermediate ports. These all are administered by the central and the States government respectively. Indian Shipping Industry has over the years played a crucial role in the transport sector of India's economy. Approximately 95% of the country's trade by volume and 68% by value is moved through Maritime Transport. Therefore, shipping and ocean resources, ship design and construction, ports and harbours, issues relating to human resource development, finance, ancillaries and new technologies need to be developed in the light of the emerging scenario. Shipping continues to remain unchallenged as the world's most efficient means of transportation and we need to do all we can to recognize, reward and promote quality within the industry.

### GEOGRAPHICAL FEATURES

2.2 India has a long coastline of about 7517 km, spread on the western and eastern shelves of the mainland and also along the Islands. It is an important natural resource for the country's trade.

### Gross Budgetary Support (GBS) and Internal and Extra Budgetary Resources (IEBR) Outlay for 2022-23

2.3 The Budget Estimate of Gross Budgetary Support (GBS) for FY 2022-23 was Rs. 1709.50 crore for the Ministry. However, at the stage of Revised Estimate (RE), this has been enhanced to Rs. 1793.37 crore. Against the RE allocation of Rs. 1793.37 crore, actual expenditure as on 31.12.2022 was Rs. 1088.14 crore. Summary of GBS and Internal & Extra Budgetary Resources (IEBR) outlay for 2022-23 is given below:

Sector	BE 2022-23		RE 2022-23		Actual Expenditure	
	GBS	IEBR	GBS	IEBR	GBS (2022-23)*	IEBR (2022-23)*
Ports & Light houses	612.49	3980.33	697.11	2494.09	330.80	1209.41
Shipping	181.10	480.00	208.62	620.00	67.13	380.81
IWAI	640.81	0.00	620.54	0.00	476.09	0.00
Others	275.10	0.00	267.10	0.00	214.12	0.00
Total	1709.50	4460.33	1793.37	3114.09	1088.14	1590.22

\* upto 31<sup>st</sup> December, 2022

### Outlay for 2023-24

2.4 The details of GBS and IEBR outlay for 2023-2024 are given below:

Sector	2023-24 (BE)	
	GBS	IEBR
Ports & Light-houses	643.16	3253.21
Shipping	238.02	380.00
IWAI	1007.46	0.00
Others	330.10	0.00
Total	2218.74	3633.21

### Sagarmala Programme

2.5 The vision of Sagarmala is to reduce logistics cost for both domestic and EXIM cargo with minimal infrastructure investment. Studies under Sagarmala have identified opportunities for reducing overall logistics costs, thereby improving the overall efficiency of the economy and increasing competitiveness of exports. At the top of the framework, a National Sagarmala Apex Committee has been formed for overall policy guidance and high-level coordination, and to review aspect of planning and implementation of the plan and projects. The committee has been empowered to provide policy direction, guidance for the initiative implantation and review the progress of implementation of maritime plan.

### Projects of Sagarmala

2.6 There are 802 projects worth investment of Rs. 5.40 Lakh crore for implementation under the Sagarmala Programme by 2035. Out of which, 220 projects worth Rs. 1.12 lakh crore have been completed and 231 projects worth Rs. 2.21 Lakh crore are under implementation. In addition to the above, 351 projects worth Rs. 2.07 Lakh crore are under various stages of development. These projects are being implemented by relevant central ministries, state governments, major ports, and other agencies primarily through the private or PPP mode. Regular monitoring of the projects and interaction with project proponents, various line ministries and implementing agencies is being done with MIS tool.

**Skill Development**

2.7 Phase 2 of Sagarmala Deen Dayal Upadhyaya Grameen Kaushal Yojana (DDUGKY) for convergence for skill development in Port and Maritime Sector is progressive in Gujarat, Kerala, Andhra Pradesh and Tamil Nadu. 2400 candidates have been trained during Phase 2 of the program of which around 1200 candidates have been placed in logistics, ship breaking, tourism and hospitality industries. Multi-skill Development Centers (MSDC) are being setup at all major ports. MSDCs linked to Jawaharlal Nehru Port are operational. Further, more than 39,000 candidates have been trained in the Safety Training Institution at Alang Ship Breaking Yard.

**National Monetization Pipeline (NMP)**

- ❖ The Ministry has a clear and robust pipeline of 81 projects of more than INR 42,400 crore which are going to be awarded on PPP till FY25.
- ❖ 13 projects of value INR 6,944 crore for financial year FY 2021-22 approved by the Government. 7 projects of INR 5,278 crore have already been awarded and others are in various stages of bidding.
- ❖ 24 projects of value ~INR 12,550 crore scheduled for award in FY 2022-23. Out of which approval to 7 projects has been accorded by the Government, 1 project of value Rs. 343 crore has been awarded and other are under tendering/development phase.
- ❖ Balance 44 projects of value more than INR 22,790 crore are identified for PPP mode from FY 2024 and FY 2025.
- ❖ With the cargo volume expected to increase between 1.7 to 2 times (of 2020) by 2030, the percentage of cargo handled at Major Ports by PPP or other operators, is expected to reach 85% by year 2030.

**Development of Multipurpose Cargo Berth off Tuna Tekra**

2.8 Development of Multipurpose Cargo (other than Container/Liquid) Berth Off Tuna Tekra at Gulf of Kutch at Kandla on Build, Operate and Transfer (BOT) basis under Public Private Partnership (PPP) mode with an estimated cost of Rs.2,250.64 crore accorded by the Government through Cabinet Committee on Economic Affairs. Development of Berth will give it a strategic advantage as it will be the closest terminal serving the vast hinterland of northern part of India.

**Development of Container Terminal at Tuna-Tekra,**

2.9 Development of Container Terminal at Tuna-Tekra, Deendayal Port on Build, Operate & Transfer (BOT) basis under Public-Private-Partnership (PPP) mode with an estimated cost of Rs 4,243.64 crore accorded by the Government through Cabinet Committee on Economic Affairs. On commissioning of the Project, it shall cater to the future growth in Container Cargo traffic.

**Ports Sector****Cargo Traffic at Indian Ports**

2.10 During 2021-22, major and non-major ports in India handled a total cargo throughput of around 1323.88 Million Metric Tonne (MMT). The traffic increased by 5.78% over the corresponding period of previous year. The 12 Major Ports handled traffic of 576.63 MMT during April – December 2022, representing increase of about

8.97% against 529.16 MMT during the corresponding period of previous year. Of the 12 Major Ports, cargo handled during April – December 2022, only Mormugao Port registered negative growth of 9.07%.

### Commodity-wise Cargo Traffic at Major Ports

2.11 The composition of the cargo is given below:

(In Million Tonnes)

Year	POL	Iron Ore	F&FRM	Coal	Container (In Million TEUs)	Other Cargo	Total
2017-18	224.82	41.17	15.05	141.23	133.73 (9.14)	123.37	679.37
2018-19	233.70	38.81	15.41	163.67	145.52 (9.88)	101.99	699.10
2019-20	234.86	55.68	16.15	149.04	146.86 (8.79)	102.34	704.93
2020-21	206.77	64.28	17.67	126.75	143.77 (9.61)	113.44	672.68
2021-22	221.27	51.71	15.93	146.80	166.90 (11.22)	117.44	720.05
Apr-Dec 2022	175.08	29.70	12.31	140.72	125.76 (8.45)	93.06	576.63

Source: Update on Indian Port Sector (31.03.2022) and Port Data Management Portal  
 POL includes POL Crude, Products and LPG/LNG  
 Iron Ore includes Fine and Pellets  
 F&FRM (Dry) includes Fertilizers, Fertilizers Raw Material (Dry and Liquid)  
 Coal includes Thermal, Coking and other Coal

2.12 While the commodities viz. POL, Coal, F&FRM and Containers are showing steady growth, there has been steady decrease in traffic of Iron Ore, Other Cargo(es) during the last few years. Jawaharlal Nehru Port (JNP) continued to be the leading container handling port in the country. In terms of container traffic, 39,29,735 TEUs were handled at JNPA during the April to November, 2022 which is 7.59% higher as against 36,52,474 TEUs handled in April to November, 2021. During November, 2022, JNPA handled 559 container rakes and 79,765 TEUs as compared to 515 rakes and 80,704 TEUs in November 2021. During April to November, 2022, JNPA handled 4,352 container rakes and 674,243 TEUs as compared to 4,133 rakes and 651,654 TEUs during corresponding period in previous financial year.

### Digitization

2.13 Major strides have been taken at the major ports towards the digitization of key EXIM processes. The PCS 1x has digitized processes such as Electronic Invoice (e-Invoice), Electronic Payment (e-Payment) and Electronic Delivery Order (e-DO) for physical release of cargo by custodians. Further, the process of generation of electronic Bill of Lading (e-BL) and enabling the Letter of Credit (LC) process to be conducted digitally have already been implemented in the PCS 1x. There is also going to be

complete integration between PCS 1x and Indian Customs EDI Gateway (ICEGATE). Further the process to bootstrap PCS 1x into National Logistics Portal-Marine (NLP-Marine) is already underway which will act as a Unified Digital Platform all maritime stakeholders. NLP Marine + PCS 1x platform is envisaged as the central hub for all interactions with various stakeholders viz. Port, Terminals Shipping Lines/ Agents, CFS and Customs Brokers, Importer / Exporter etc. Now, PCS module of NLP-M has been partially released on 5/12/2022.

### **Conciliation and Settlement Committee for Major Ports**

2.14 Commercial dispute resolution through Arbitration or Courts has been found to be exceedingly time consuming and financially burdensome on commercial entities like Major Ports. An alternate dispute resolution mechanism was set up for Major Ports in October 2021 through appointment of a Conciliation & Settlement Committee (CSC) comprising of independent experts with innovative features like fee to conciliators based on success and specified time limit of 6 months for resolution of dispute. This dispute resolution mechanism will bring finality to a dispute as the parties reach to an agreement and thus do not require to further approach arbitration or court forums.

2.16 The Committee took up a commercial dispute case of Mormugao Port Authority and Roadwings International Private Limited in December 2021. The contract 'Supply, operation, Maintenance of Container handling equipment, Logistics and Yard Management at Berth No. 10 & 11 for a period of 5 years was beset with commercial disputes since start in 2018 which remained unresolved for four years. Both the parties reached a mutually acceptable settlement with the suggestion, aid and advice of the Committee which was authenticated by the conciliators on 01st March, 2022. The dispute was thus mutually resolved in 3 meeting and within 3 months of reference to CSC.

### **JNPA SEZ Investor Conclave 2022**

2.17 Jawaharlal Nehru Port Authority (JNPA), organized 'JNPA SEZ Investor Conclave 2022' on 27.05.2022 in association with the Confederation of Indian Industry (CII) in Mumbai for investors to invest and be a part of country's growing port-led economy. In line with the objective of Port-led Industrialization, this multiproduct Special Economic Zone (SEZ) project is developed on 277.38 Ha of freehold land by JN port, incorporating the Land Use Plan of the Port. This industrial hub is India's first Port-based multi-product operational SEZ.

### **Swachh Sagar Surakshit Sagar campaign**

2.18 All Major Ports actively participated and organized awareness activities under Swachh Sagar Surakshit Sagar campaign involving events like Cleaning Drive at Beaches, along Coastal Roads, Port premises etc. Significant amount of plastic wastes and other litter were collected as a part of campaign.

### **Foundation stone by Hon'ble President of India**

2.19 The Hon'ble President laid the foundation stone of four Projects worth more than Rs.280 crore of Deendayal Port, Kandla, Gujarat on 03.10.2022. These Projects will

enhance Port Infrastructure along with boosting its Logistics performance as well as the overall Economic Growth for its entire hinterland. These projects will also improve the cargo handling capacity of the port along with further improvement in the turnaround time of the Ships and faster evacuation of the cargo.

#### **Hon'ble Prime Minister visit to Visakhapatnam**

2.20 Hon'ble Prime Minister visited Visakhapatnam on 12.11.2022 for laying the foundation stone and inauguration of several projects worth of Rs.10,742 crore and to dedicate the same to the Nation. In this context, Hon'ble Prime Minister laid foundation stone to Port road from Convent Junction to Sheela Nagar worth Rs. 566 crore and Modernization, up-gradation of Visakhapatnam Fishing Harbour with Rs. 152 crore.

#### **Major Port Authorities Act, 2021**

2.21 The Major Port Authorities Act 2021 (1 of 2021) has come into force with effect from 03.11.2021. Five Rules under the Act notified in the Gazette of India on 22nd November 2021. The Sixth Rule i.e. the "Major Port Authorities (Chairperson, Deputy Chairperson and Board Members) Rules, 2022" have been notified on 26.09.2022.

#### **Jawaharlal Nehru Port becomes first 100% Landlord Major Port**

2.22 The PPP mode of investment in Indian ports has made a remarkable progress in the last 25 years, beginning from the Jawaharlal Nehru Port (JNP), resulting in the capacity addition and productivity improvement. Now, JNP has become the first major port of the country to become 100% Landlord port having all berths being operated on PPP model. JNPA has placed Letter of Award (LOA) to J. M. Baxi Ports and Logistics Ltd. and consortium member CMA Terminals on 28.06.2022 and the concession agreement signed on 29.07.2022. The Jawaharlal Nehru Port Container Terminal (JNPCT) has 2 berths with total length of 680 m and 15 m draft which will be handed over under this PPP contract along with backup area of 54.74 hectares for 30 years. The concessioner has to upgrade, operate, maintain and transfer this terminal on PPP basis.

#### **PM Gati Shakti Multimodal Maritime Summit 2022**

2.23 Union Minister of State, MoPSW attended the PM Gati Shakti Multimodal Maritime Summit 2022 on 23.11.2022 at Kolkata, organized by Syama Prasad Mookerjee Port to highlight the need of transformation in Maritime & Logistics Industry. The PM Gati Shakti National Master Plan has ensured efficient logistics and cost reduction for the first and last mile connectivity. Visakhapatnam Port also organized PM Gati Shakti Maritime Summit-2022 on 22.11.2022 and 23.11.2022

#### **Chabahar Port**

2.24 A Memorandum of Understanding (MoU) for development of Chabahar Port by India was signed in Tehran between India and Iran on 06th May 2015 by the then Minister of Shipping Shri Nitin Gadkari from the Indian side and Minister Dr. Abbas Akhouni from the Iranian side, and thereafter the contract was executed on 23rd May, 2016 at Tehran (Iran) during the visit of Hon'ble Prime Minister of India to Iran. The Contract was signed between Aria Banader Iranian Port & Marine Services Company (ABI) of Iran and India Ports Global Ltd. (IPGL) of India for equipping and operating two

terminals at first development phase of Shahid Beheshti-Chabahar Port. The Ports & Maritime Organization of Islamic Republic of Iran (PMO) and this Ministry were the Confirming Parties to the Contract.

2.25 Government of India taken-over the operations of two berths at Shahid Behesti Port, Chabahar, Iran during Chabahar Trilateral Agreement meeting held at Chabahar on 24th December 2018 and thereafter successfully carrying out operations. Port Office of "India Ports Global Chabahar Free Zone" (IPGCFZ), Indian SPV at Chabahar was also inaugurated jointly by the Head of delegations of India, Iran and Afghanistan.

2.26 Ministry in association with IPGL observed 'Chabahar Day' on 30.07.2022 in Mumbai to promote Chabahar Port operated by IPGL as a link to International North-South Transport Corridor (INSTC) - Connecting Central Asian Markets. During the event, the delegates from the Central Asian countries highlighted how Chabahar link with INSTC can play a vital role in boosting EXIM trade in their regions and its potential to further boost development in the landlocked countries. During the day-long event, several presentations and Government to Business sessions took place.

### **Inland Water Transport**

2.27 India is endowed with various Inland Water Transport (IWT) options that comprise rivers, canals, backwaters, creeks, and tidal inlets. These options are not only form a competitive alternative mode of transportation with lower operating cost (30% lower than the railways and 60% lower than road as per the Maritime India Vision 2030), but also an environmentally friendly and sustainable mode in freight logistics and passenger transport. In order to create wide waterways network and to promote inland water transport in the country as an economical, environment friendly supplementary mode of transport to rail and road, 111 inland waterways (including 5 national waterways declared earlier) were declared as National Waterways (NWs) by the National Waterways Act, 2016.

2.28 NW-1, 2, 3 have been developed and vessels are plying on these National Waterways. Development works in Vijayawada – Muktyala stretch of river Krishna (Part of NW-4) have been taken up with fairway maintenance and four floating jetties/pontoons have been completed while land acquisition for three permanent terminals has been taken up with the State Govt. of Andhra Pradesh. Development of NW-5 in Odisha has been initiated by hydrographic surveys and engineering studies through consultants. IWAI invited Expression of Interest (EoI) from eligible /reputed firms to participate and develop select stretches of NW-5 from Padanipal – Paradip and Dhamra (89 km & 50 km) and from Marshaghi – Paradip (35 km) of NW-64 on Design, Built, Finance, Operate & Transfer (DBFOT) basis. Offices have been established on NW-1 to NW 5. Development activities on 10 new NWs in addition to these 5 NWs are in progress.

### **Inland Vessels Act, 2021**

2.29 Parliament passed the Inland Vessels Bill 2021 on 02.08.2021, which aims to replace over 100 years old Inland Vessels Act 1917 (1 of 1917) and usher a new era in the inland water transport sector to make the Legislative framework user friendly and to

promote ease of doing business. The Inland Vessels Act, 2021 (24 of 2021) was notified on 12th August, 2021. Section 1 and Section 106 of the Act have come into force w.e.f. 16th February, 2022. Further, Section 2 to Section 105 and Section 107 to Section 114 of the Act have come into force w.e.f. 7<sup>th</sup> June, 2022.

2.30 09 Rules under the Inland Vessels Act, 2021 were drafted and notified to start a unified regime of inland vessel registration, certification and specifications through the country, instead of State-wise regulations under the previous Inland Vessels Act, 1917.

### **Jal Marg Vikas Project (JMVP) on NW-1**

2.31 Inland Waterways Authority of India is implementing the Jal Marg Vikas Project (JMVP) for capacity augmentation of navigation on NW-1 (Haldia-Varanasi stretch) with the technical assistance and financial support of the World Bank at an estimated cost of Rs. 5,369.18 crore. Jal Marg Vikas Project (JMVP) was approved by the CCEA on 3<sup>rd</sup> January, 2018. Jal Marg Vikas Project (JMVP) is the first major infrastructure project on development of Inland Water Transport sector in India and it is being implemented at a revised cost of Rs. 4634 crores. The project is being implemented from Varanasi to Haldia (1390km) for capacity augmentation of National Waterway-1 (Ganga-Bhagirathi-Hooghly river system) and for navigation of 1500 to 2000 DWT barges. 3 multi modal terminals (MMTs) are being constructed under this project with latest technologies and cargo handling equipment.

2.32 MMTs at Varanasi (Uttar Pradesh), Sahibganj (Jharkhand) and Haldia (West Bengal) have been completed. An Intermodal terminal at Kalughat (Bihar) is also being constructed under this project and is expected to be completed by December 2023. A state of art new Navigational lock at Farakka (West Bengal) is at advanced stage of construction and expected to be completed by March 2023 for smooth and quicker passage of vessels. IWAI has developed Dredging Management Plan for fairway maintenance in National Waterway-1 and the fairway maintenance works are in progress from Farakka to Barh on assured Least Assured Depth (LAD) basis. andAs planned, a depth of 2.5 to 3 m is being maintained in this stretch.

2.33 The fairway maintenance contracts for stretches of Tribeni-Katwa, Katwa-Farakka, Barh-Majhua, Majhua-Ghazipur and Ghazipur-Varanasi are at an advanced stage of tendering. River Information System (RIS) for information dissemination for efficient vessel movement is also provided on National Waterway-1 under JMVP.

2.34 On completion, Jal Marg Vikas Project will provide a supplementary, cost-effective, safe and environment-friendly mode of transport, giving stakeholder a multimodal choice of transport and enable socio-economic growth in the states like Uttar Pradesh, Bihar, Jharkhand and West Bengal.

### **Jal Marg Vikas Project – II (Arth Ganga)**

2.35 Arth Ganga program of Jal Marg Vikas Project (JMVP) is being developed on an approach based on the principles of sustainable development model that focus on economic activities in and around the hinterland of National Waterway (NW) -1.

Accordingly, JMVP-II (Arth Ganga) was envisaged with an estimated cost of Rs.746 crore. A total 62 Community Jetties at a cost of Rs. 150 crore have been taken up in three clusters on the Ganga between Varanasi & Haldia in the States of Uttar Pradesh (15 Nos.), Bihar (21 Nos.), Jharkhand (03 Nos.) and West Bengal (23 Nos.), which will give access to the population living close to the river for cross-river transport. Major sub-projects of JMVP-II (Arth-Ganga) include construction of 5 Pair Ro-Ro terminals, Fairway & Navigation Aids including operation & maintenance of River Information System (RIS), Channel Stabilization works at 17 locations and modernization of existing Navigation Lock at Farakka.

### **Projects for development of NWs in NER**

2.36 A renewed effort has been taken for development of IWT infrastructure in NER by the Government at a total cost of Rs. 1010 cr. Comprehensive development of NW-2 at a cost of Rs. 461 crore approved by SFC for 2020-21 to 2024-2025 has been enhanced for Rs. 461 crore to Rs. 474 crore Comprehensive development of NW-16 (river Barak) and IBP Routes had been approved by SFC at a cost of Rs. 145 crore for 2020-2021 to 2024-2025, which has been enhanced to Rs. 148 crore New DIB memos have been approved for development of elevated approach Road from Pandu Port Terminal to NH-27 (Cost Rs.180 crore) through Govt. of Assam and development of Ship repairing facility at Pandu, Guwahati (Cost Rs. 208 crore).

### **Development of New National Waterways**

2.37 Based on the outcome of techno-economic feasibility and Detailed Project Reports (DPRs) prepared for 106 new NWs, technical interventions have been planned for safe navigation and shipping on technically viable NWs. As per the DPRs completed so far for the new NWs, 26 NWs have been shortlisted on techno-commercial viability and development activities have been initiated on 15 NWs. Phase-I development of new NWs approved at a cost of Rs. 267 crore for 2022-23 to 2025-26 by Government in Nov'2022 in which existing NWs 3, 4, 5 and 13 new NWs have been included.

### **Cargo movement on National Waterways**

2.38 There has been an exponential growth in traffic on the National waterways in the last few years, the total traffic on the waterways was 83.62 Million Metric tonnes (MMT) in the year 2020-21, which was increased to 108.79 MMT in 2021-22 registering a growth of 30 % over the previous year. In the year 2022-23, cargo movement on National Waterways from April to December period was 91.60 MMT in comparison to the same period in 2021-22, which was 76.65 MMT showing a growth of 19.5%. As a result of multiple interventions and cargo promotional efforts carried out by Inland Waterways Authority of India, 22 National Waterways have been made operational. Significant on-ground efforts are underway for connecting River Ganga from Varanasi, Uttar Pradesh to River Brahmaputra in Assam through the Indo-Bangladesh Protocol route, forming a navigable channel of approximately 3,500 km. This will not only connect the hinterlands of North-East Region of India with the rest of India but will also help to bolster transit and trade with our neighboring countries viz. Bangladesh, Nepal and Bhutan, thus, strengthening India's Act East Policy implemented by our Hon'ble

Prime Minister Shri Narendra Modi. Traffic on the Indo Bangladesh Protocol Route has grown from 3.56 MT in 2020-21 to 5.43 MT in 2021-22.

### **PM Gati Shakti Multimodal Waterways Summit**

2.39 PM Gati Shakti Multimodal Waterways Summit held during 11th - 12th November 2022 at Varanasi (Uttar Pradesh) in which –

- ❖ 7 nos. of community jetties were inaugurated and foundation stones for 8 more community jetties were laid by the Honorable Chief Minister of Uttar Pradesh.
- ❖ MoUs signed between IWAI & Cochin Shipyard Ltd. for First Indigenous Hydrogen Fuel-Cell powered Catamaran at Varanasi and for Electric-Battery powered hybrid catamarans for Varanasi, Mathura & Ayodhya in U.P.
- ❖ Also held Special Session with Bihar, Jharkhand and West Bengal: Wish list and Role envisaged for PM Gati Shakti National Master plan: Imperatives and Roadmap

### **Start-up program in Maritime sector – MOU between CSL and IIT (Madras)**

2.40 Cochin Shipyard Limited (CSL) and the Indian Institute of Technology Madras (IIT Madras) signed an agreement on 06.11.2022 to support start-ups in the maritime sector. IIT Madras will act as one of the implementation partners of this initiative and will provide incubation, mentorship, training to start-ups selected under this program. This is part of the start-up engagement program 'USHUS', launched by CSL to augment the Government of India's initiatives to encourage and develop an ecosystem in India for supporting Maritime Start-ups from the technical, regulatory, financial, and marketing points of view by bringing the stakeholders together. This program is expected to provide a platform for young and talented entrepreneurs to develop products/services in the marine space with financial support provided by CSL. Under this initiative, start-ups can get upto Rs.50 lakhs as seed grants, Rs.1 crore as prototyping grants and equity funding for start-ups at the scale up stage.

### **Delivery of Indigenous Aircraft Carrier (IAC) "Vikrant" by CSL to Indian Navy**

2.41 CSL has created maritime history on 28.07.2022 by delivering of the prestigious Indigenous Aircraft Carrier (IAC) 'Vikrant' to Indian Navy. The vessel designed by Indian Navy's in house Directorate of Naval Design (DND) and built by CSL at an overall cost of Rs. 20000 crore, the carrier is christened after illustrious predecessor, India's first Aircraft Carrier which played a vital role in the 1971 war. The 262 meters long carrier has a full displacement of close to 45,000 tonnes which is much larger and advanced than her predecessor. The ship is powered by four Gas Turbines totaling 88 MW power and has a maximum speed of 28 Knots. With the delivery of Vikrant, India has joined a select group of nations having the niche capability to indigenously design and build an Aircraft Carrier.

### **Delivery of 2nd 500 PAX vessel of A&N Administration by CSL**

2.42 The second 500 PAX vessel of Andaman and Nicobar Administration M.V. Nalanda was delivered on 05.07.2022. The vessel built at Cochin Shipyard Ltd, Kochi. Shipping Corporation of India (SCI) as Technical Manager was actively involved during the shipbuilding process and further the Operation and Management (O&M) will also be

done by SCI. M.V. Nalanda sailed on its maiden voyage from Kochi anchorage on 22.07.2022 and reached Port Blair on 26.07.2022.

**All Women Officers' Sailing 2.0 on M.T. Swarna Godavari**

2.43 Celebrating the Inaugural IMO International Day for Women in Maritime, SCI achieved another feat of all Women Merchant Officers' Fleet on M.T. Swarna Godavari. The vessel was flagged off from Jawahar Dweep oil terminal, Mumbai on 14th May, 2022 by the Hon'ble Union Minister of State, Ministry of External Affairs and Union Minister of State, Ministry of Culture, Smt. Meenakashi Lekhi as Chief Guest. This is the second of the exemplary voyages (earlier M.T. Swarna Krishna) that SCI has sailed towards promoting diversity and inclusivity in the Indian Shipping Industry while making global footprints.

**Participation in the 12th Fleet Review by Hon'ble President of India**

2.44 SCI's two owned vessels M.T. Swarna Sindhu and M.V. SCI Sabarmati have participated in the 12th Fleet Review along with Naval Fleet by Hon'ble President of India & Supreme Commander of the Armed Forces on 21st February, 2022 showcasing India's maritime might off the Visakhapatnam coast in Andhra Pradesh.

**Marine Aids to Navigation Act, 2021**

2.45 The Marine Aids to Navigation Bill, 2021 was passed by Lok Sabha on 22.03.2021 and by the Rajya Sabha on 27.07.2021. The Act was notified in the Official Gazette on 2<sup>nd</sup> August, 2021 after getting the President's assent on 31.07.2021. The Act came into force from 31.03.2022. The Act replaces the old Lighthouse Act, 1927 and incorporates the global best practices, technological developments and India's International obligations in the field of Marine Aids to Navigation. The new Act will facilitate harmonized and effective functioning of aids to marine navigation and Vessel Traffic Services along the Indian coastline.

## CHAPTER - III SAGARMALA



*Inauguration of Centre of Excellence in Maritime & Shipbuilding (CEMS) Visakhapatnam Campus on 23<sup>rd</sup> February 2022 by Hon'ble Minister of PS&W*

### Introduction- Sagarmala Programme

3.1 Maritime sector in India has been the backbone of the country's trade and has grown manifold over the years. To harness India's 7,517 km long coastline, 14,500 km of potentially navigable waterways and strategic location on key international maritime trade routes, the Government of India has embarked upon the ambitious Sagarmala Programme which aims to promote port-led development in the country. The concept of Sagarmala was approved by the Union Cabinet on 25th March 2015.

3.2 The vision of Sagarmala is to reduce logistics cost for both domestic and EXIM cargo with minimal infrastructure investment. Studies under Sagarmala have identified opportunities for reducing overall logistics costs, thereby improving the overall efficiency of the economy and increasing competitiveness of exports.

### Synopsis of Projects under Sagarmala

3.3 There are 802 projects worth investment of Rs. 5.40 Lakh crore for implementation under the Sagarmala Programme by 2035, out of which, 220 projects worth Rs. 1.12 lakh crore have been completed and 231 projects worth Rs. 2.21 Lakh Crore are under implementation. In addition to the above, 351 projects worth Rs. 2.07 Lakh crore are under various stages of development. These projects are being implemented by relevant central ministries, state governments, major ports, and other agencies primarily through the private or PPP mode. Regular monitoring of the projects and interaction with project proponents, various line ministries and implementing agencies is being done with MIS tool. These projects are categorized into five pillars – port modernization, port connectivity, port-led industrialization, coastal community development and coastal shipping & inland water transport. Under holistic development

of coastal districts, a total of 567 projects with an estimated cost of around Rs. 58,000 crore have been identified.

Pillar	Completed		Under Implementation		Under Development		Grand Total	
	#	TPC (Rs. Cr.)	#	TPC (Rs. Cr.)	#	TPC (Rs. Cr.)	#	TPC (Rs. Cr.)
Port Modernization	89	31214	63	64063	89	154383	241	249660
Port Connectivity	69	32005	67	76295	73	33926	209	142226
Port led Industrialization	9	45865	21	72706	3	1275	33	119846
Coastal Community Development	20	1482	19	2577	43	7315	82	11375
Coastal Shipping and IWT	33	1705	61	5255	143	10275	237	17235
<b>Grand Total</b>	<b>220</b>	<b>112272</b>	<b>231</b>	<b>220896</b>	<b>351</b>	<b>207173</b>	<b>802</b>	<b>540341</b>

3.4 Over the last few years, Government has taken number of modernization, mechanization, and digital transformation measures to reduce cost and time in international trade and improve ease-of-doing Business. Ministry is planning expansion of Port capacity through the implementation of well-conceived infrastructure development projects, increasing the efficiency of Port operations through the implementation of a package of recommendations to cut time and cost, digitization of processes to reduce and finally eliminate human interface and to strongly address environment related concerns.

3.5 Ever since the first Public Private Partnership (PPP) Project at Major Port was launched in 1997, there has been huge progress in the PPP environment in the Port sector of the country. 91 projects of worth INR 59,200 crore have been granted approval under PPP since the beginning. Currently there are 52 projects for more than Rs. 37,200 crore which are operational and 20 projects of approx. Rs. 9,600 crore are under implementation, whereas 6 projects worth approx. INR 7,200 crore are under various stage of tendering. Rest projects are either under development or restructuring stage. The operational projects have contributed to capacity enhancement to the tune of ~ 550 MTPA. The projects under implementation are likely to add another ~ 115 MTPA. For FY 2022-23, 24 Projects of estimated value of Rs.12,550 crore have been identified. Out of 24 Projects, 4 projects have been awarded and other projects are under various stages of tendering and development. For FY 2023-24 & 2024-25, 44 Projects of the estimated value of Rs.22,940 crore have been identified.

3.6 Under the budget head of Sagarmala, 151 projects worth Rs. 9,627 crore have been sanctioned with a funding support of Rs. 4,257 crore. Out of total 151 projects sanctioned under Sagarmala, 45 projects worth Rs. 2,691 crore have been completed and 55 projects worth Rs. 3,659 crore has been awarded and are under implementation. Remaining projects are under development stages. These projects are focusing on various critical aspects of maritime sector such as capacity enhancement at Indian ports, improving connectivity infrastructure, RO-RO, and tourism jetties along with urban water transportation, fishing harbor and skill development of coastal community.

3.7 Under Sagarmala Programme, there are 17 projects with total investment of Rs. 10,300 crore which has been completed in calendar year 2022. 8 projects are focusing on Port Modernization, 7 projects of port connectivity, 1 project of RORO Passenger Jetty at JNPA and 1 project under the pillar of coastal shipping and IWT. Out of 17 projects, 1 project has been supported financially under the Sagarmala scheme.

3.8 Major projects which have been completed in 2022 includes offshore container terminal at Mumbai Port, New deep draft coal import berth on BOT basis at Paradip, LPG terminal at South oil jetty in Paradip, Extension of existing container terminal at Visakhapatnam on Design, Build, Finance, Operate and Transfer (DBFOT) basis, and Berthing facility for RO-PAX/RO-RO vessel at Jawaharlal Nehru Port.



*Extension of existing container terminal at Visakhapatnam Port*

### **Port Modernization**

3.9 Giving special emphasis to modernization of Indian ports under Sagarmala, a total of 241 projects at cost of Rs.2,49,659 crore have been undertaken for implementation by 2035. Out of which, 89 projects worth Rs. 31,214crore have been completed.63 and 89 projects are under implementation and development stages respectively. These projects under the modernization pillar are further divided into 4 categories – NewPorts, Port Modernization – Major Ports, Port Modernization – Non-Major Ports and Ship Repair projects.

3.10 At Major Ports, 177 projects worth Rs. 1,65,864 crore are being implemented in India. Projects under this category have been largely identified through Detailed Master Planning exercise carried out under Sagarmala Programme. Out of 177 projects, 87 projects worth Rs. 25,974crore have been completed, resulting into port capacity addition for more than 200 MTPA. Further 35 projects worth Rs. 16,858crore have been awarded and currently under implementation. Balance 55 projects worth Rs 1,23,032 crore are under various stages of development.

3.11 While increasing the capacity of major ports, the Ministry has been striving to improve the operational efficiencies through mechanization, digitization, and process simplification. As a result, key efficiency parameters have been improved considerably during the last 5 years. The Average Turnaround Time for containers (excluding SMP & HDC) in 2021-22 has improved to 27.22 hours (27.38 hours during 2020-21) as against

31.43 hours in 2016-17. The Average Output Per Ship Berth-day has increased from 14,576 Tons in 2016-17 to 16,158Tons in 2021-22.

3.12 There are 45 projects worth Rs. 47,165 crore identified under the Sagarmala Programme for implementation at Non-Major Ports. Two projects worth Rs. 5,240 crore have been completed so far whereas 19 projects worth Rs. 27,852 crore are currently under implementation stage. Remaining 24 projects worth Rs 14,074 crore are under various stages of development. 31 projects out of 45 are being implemented in PPP mode with total investment of Rs. 45,973 Crore. Ministry is also financially supporting several projects at non-major ports to enhance their capacity and efficiency during operations. Project of construction of breakwaters and dredging at Cuddalore port is near completion. Dredging at Puducherry port is 100% supported under Sagarmala and coastal berths have been planned at Old Mangaluru Port, Karwar and Diu.

### **Port Connectivity**

3.13 The Sagarmala Programme has identified connectivity between ports and domestic production and consumption centers through rail, road, pipeline, MMLP under the dedicated pillar of port connectivity, consisting of 209 projects of total worth Rs. 1.42 Lakh crore are being undertaken by various implementing agencies. Out of these, 69 projects worth Rs. 32,005 Crore have been completed and 67 projects worth Rs. 76,295 crore have been awarded and currently under implementation stage. Remaining, 73 projects worth Rs. 33,926 crore are under developmental stage.

3.14 There are 90 port-rail connectivity projects worth Rs. 78,210 crore under Sagarmala which are being implemented by Indian Railways, Major Ports, and Maritime Boards, of which 41 are completed and 49 are in various stages of development and implementation. These projects will help in integrating port rail and road connectivity resulting in reduction in logistics cost for the EXIM business.

3.15 There are 101 port-road connectivity projects identified for total estimated investment of Rs. 64,115 crore. Implementations of these projects are being undertaken by Ministry of Road Transport and Highways, Major Ports, Maritime Boards and State Road Development Companies. Of these, 21 projects worth Rs. 8,770 Crore have been completed and 80 projects are at various stages of development and implementation.

3.16 Further, there are 18 MMLPs / pipelines projects worth Rs.16,050 crore of which 7 projects worth Rs. 5,794 crore have been completed.

### **New Connectivity Infrastructure Gaps**

3.17 There are 226 ports along the Indian coastline, out of which 13 are major ports (12 operational, 1 under implementation) and 213 are non-major ports (66 handling cargo, 8 under implementation, and 139 other ports). All major ports (except the upcoming port at Vadhavan, Maharashtra) are connected by rail and by 4 Lane Road or National Highway. Of the 66 non-major ports handling cargo, 16 are connected by rail while 24 are connected by 4 Lane Road / National Highway.

3.18 In line with Gati Shakti, MoPSW carried out an extensive exercise to find the rail and road connectivity infrastructure gaps. Based on the consultation with major ports and state maritime boards, last mile road and rail connectivity projects were identified and conveyed to MoRT&H and M/o Railways respectively for assessment and development.

### **Comprehensive Port Connectivity Plan (CPCP)**

3.19 A Comprehensive Port Connectivity Plan (CPCP) for port connectivity has been compiled and shared by DPIIT in September 2022 after consultation with MoPSW, MoR, MoRTH, and State Maritime Boards / Multimodal Committees. CPCP incorporates 298 connectivity projects, of which 191 are road and rail projects under Sagarmala, and an additional 107 new connectivity infrastructure gaps.

3.20 On completion of Sagarmala rail projects and new identified rail gap projects in CPCP, new rail connectivity will be provided to 13 non-major ports handling cargo, 1 under implementation for major port (Vadhavan) and 7 under implementation for non-major ports. For the remaining 37 non-major ports handling cargo, and 1 under implementation for non-major port, currently there are no requirements / proposals of rail connectivity infrastructure and will be taken up commensurate with port development plan as and when such request is received from respective State Governments.

3.21 Similarly, on completion of Sagarmala road projects and new identified road gap projects, NH / 4 lane road connectivity will be provided to 13 non-major ports handling cargo, 1 under implementation major port (Vadhavan) and 5 under implementation non-major ports. For the remaining 29 non-major ports handling cargo, and 3 under implementation non-major ports, the existing road connectivity is sufficient and currently there are no requirements / proposals of augmentation of road connectivity infrastructure and will be taken up commensurate with port development plan as and when such request is received from respective State Governments.

### **Port Led Industrialization**

3.22 Port-led industrialization focuses on reducing logistics costs by locating industries at the ports. There are overall 33 projects worth Rs. 1.19 Lakh crore have been identified for implementation under Sagarmala. Out of which, 9 projects worth Rs. 45,865 crore have been completed and 21 projects worth Rs. 72,705 crore are under implementation stage. Remaining 3 projects worth Rs 1275 crore are under various stages of development. These projects are further divided into 3 categories – Industrial Cluster, Smart Industrial Port City (SIPC) / Special Economic Zone (SEZ) and Thermal Power Plant. Further, the Ministry is coordinating with National Industrial Corridor Development and Implementation Trust under Department for Promotion of Industry and Internal Trade to develop land available at Major Ports as Industrial Corridor/ Nodes as part of Industrial Corridor Program to avoid duplication of efforts.

### **Coastal Community Development**

3.23 The coastal community is considered as one of the key stakeholders of the Sagarmala Programme and hence, ensuring their socio-economic well-being is

considered as one of the major objectives. 82 projects at cost of Rs. 11,374 crore have been undertaken for implementation. Out of which, 20 projects worth Rs. 1,482 crore have been completed and 19 Projects worth Rs. 2,577 crore are under implementation. Remaining 43 projects worth Rs 7,315 crore are under various stages of development.

3.24 Ministry of Rural Development (MoRD) and MoPSW have renewed the MoU to enable skill development of coastal population under DDU-GKY Sagarmala Convergence Programme. Under this convergence, the entire funding support is being provided by MoPSW and implementation and management is carried out by MoRD. More than 3000 candidates have been trained under this convergence. Multi Skill Development Center (MSDC) is already operational at Jawaharlal Nehru Port Authority (JNPA). More than 1500 candidates have been trained in this centre. Centre of Excellence in Maritime and Shipbuilding (CEMS), a first of its kind in Asia having two campuses with 24 laboratories in total (6 laboratories in IRS Mumbai and 18 in Indian Maritime University campus in Vishakhapatnam). Institute provides ~50 courses at its campuses for engineering, polytechnic, and graduate students. Institute has trained more than 4000 candidates.

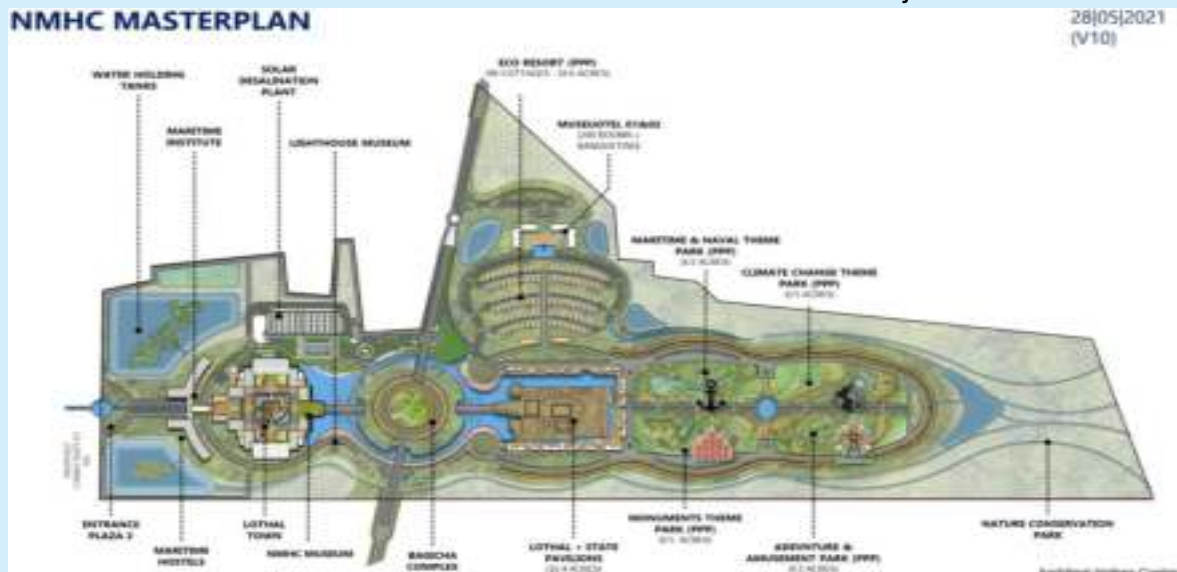
3.25 There are 37 fishing harbour projects worth Rs. 6,306 crore being implemented under the Sagarmala Programme. MoPSW is part-funding 23 fishing harbour projects worth Rs. 2,580 crore and has sanctioned Rs. 845 crore. 9 out of 23 projects with a financial assistance of Rs.144.5 crore have been completed. Additionally, 5 fishing harbours adjacent to Major ports namely Kochi, Chennai, Visakhapatnam, Paradip, and Mallet Bunder have been sanctioned for modernization and up-gradation. Out of 37 fishing harbour projects 10 projects worth Rs 640 crore are completed, 10 projects worth Rs 1318 crore are under implementation stage and balance 17 projects worth Rs 4348 crore are under various stages of development. Further, More than 240+ locations have been identified for the development of floating jetties. National Technology Centre for Ports, Waterways & Coasts (NTCPWC) and IIT Madras has been entrusted to prepare feasibility reports / DPR for these locations in coordination with the state government(s). Further, 50 locations have been identified in Phase I for implementation of floating jetties in the Andhra Pradesh, Tamil Nadu, Puducherry, Karnataka, and Kerala.

#### **National Maritime Heritage Museum, Lothal**

3.26 In order to showcase India's rich and diverse maritime heritage, Ministry is to develop National Maritime Heritage Complex (NMHC) at Lothal, Gujarat. NMHC will be first of its kind in the country comprising of maritime museum, light house museum, maritime theme park, amusement parks centers etc., which will leverage modern technology to showcase maritime history and will be an international/national tourist destination. NMHC will consolidate all diverse and vibrant artifacts from ancient to modern times and provide access to the public to spread awareness about maritime heritage.

3.27 The NMHC project has been taken up under the unique and innovative projects category of the Sagarmala programme. Government of Gujarat (GoG) has transferred 375 acres of land in village named Saragwala on lease for 99 years at token rate for the

project. The Master Plan and Phase – I layout of the proposed NMHC project has been finalized and the tender for Phase 1A has been awarded to Tata Projects Ltd.



NMHC - Master Plan Layout

3.28 As a part of NMHC Museum, 14 galleries have been proposed to exhibit the evolution of India’s Maritime Heritage during various eras.

**Coastal Shipping & IWT**

3.29 Ro-Pax services has a direct positive impact - drastically reduces travel time for passengers and improves delivery time as well. Moreover loading and unloading process is quick and agile. These projects have opened new avenues in coastal shipping & tourism and enhance the socio-economic welfare of its vicinity, fuel efficiency and help reduction of CO2 emissions, reduce traffic on road and rail and prevent loss of human lives caused due to accidents. Since there is no loading and unloading of cargo at the jetty, there is less risk of accidents and cargo damage.

3.30 Ministry in association with Deendayal Port (DPA) has implemented the project “Ro-Pax Ferry service between Ghogha and Hazira in Gulf of Cambay”. Project is resulting in significant saving of cost and transit time between Ghogha & Hazira over road journey. More than 3.5 lakh passengers and more than 1 lakh passenger vehicles have already benefitted from the project.

3.31 Currently, 44 projects worth Rs. 1900 crore for promoting Ro-Ro- Ro-Pax ferry services have been undertaken by the Ministry under the Sagarmala programme, out of which 9 projects worth Rs. 432 crore have already been completed and remaining 35 projects are at different stages of development and implementation.

3.32 In addition, there are 18 projects worth Rs. 1,845 crore which focus on providing infrastructure for coastal handling of cargo. 5 projects worth Rs. 321 crore have been completed, 4 projects are currently under implementation and 9 more projects are under various stages of development. 6 projects are being implemented at major ports whereas 12 projects are for improving coastal infrastructure at non-major ports.

**PM Gati Shakti National Master Plan under MoPSW**

3.33 Under the PM Gati Shakti, Ministry of Ports, Shipping, and Waterways has identified 101 projects worth Rs. 61,020 crore for implementation by 2025. Out of these, 17 projects worth Rs. 7,368 crore have been completed, 38 projects worth Rs 36,880 crore are under implementation stage and remaining 46 projects worth Rs 16,772 crore are under various stages of development. Out of 38, 7 projects worth Rs 652.82 crore are expected to be completed by June 2023. Of the 101 MoPSW Gati Shakti projects, 57 are from the Major ports and 44 projects are from States. These projects have supported faster and efficient movement of cargo, leading to overall reduction in logistics cost.

## CHAPTER-IV PORTS



*Inauguration of Drive Through X-ray Container Scanner at Chennai Port by Hon'ble Minister of PS&W*

### Introduction

4.1 Ports provide an interface between the ocean transport and land-based transport. There are 12 Government Owned Major Ports in India out of which 6 are located on the East Coast and 6 on the West Coast.



*Map showing twelve Major Ports in India*

## MAJOR PORTS IN INDIA

### DEENDAYAL PORT (KANDLA)

4.2 In the year 1950, the Union Government formally took over the minor Port of Kandla for its development as a Major Port of India. The foundation for the New Major Port of Kandla was laid by the Late Pandit Jawaharlal Nehru, the then Prime Minister of India, on January 10, 1952. The Kandla Port was declared as Major Port of India on 8<sup>th</sup> April, 1955 by the then Transport Minister, Late Shri Lal Bahadur Shastri. The Government of India re-named it as Deendayal Port with effect from 25<sup>th</sup> September, 2017.

4.3 The history of Port would be incomplete without a mention of the Off-Shore Oil Terminal at Vadinar situated in the Dev Bhumi Dwarka District about 300 kms from Kandla by road and 50 nautical miles by Sea.

4.4 Deendayal Port is a multi-cargo port. It has 14 dry cargo berths with a total length of 3.15 Km in a straight line and 6 oil jetties for handling of POL and chemicals. Three Single buoy Moorings in Vadinar can handle Very Large Crude Oil vessels with a maximum pumping capacity of 10000 tonnes per hour. Port handled traffic of 127.100 MMT during 2021-22 and 104.441 MMT during the year 2022-23 (upto December, 2022).

### Notable achievements during the year

- ❖ DPA, Kandla commissioned a 45 kW Solar Power Plant as a part of Corporate Social responsibility at St. Joseph Hospital Trust, Gandhidham on 07th July' 2022. This solar power plant will cater to the energy needs of the hospital in a pollution free manner thereby reducing the carbon foot print and is a step taken by DPA towards a greener and cleaner future. The carbon dioxide emission curtailed by this plant is equivalent to the planting of around 40 trees a month.



- ❖ Hon'ble Prime Minister, Shri Narendra Modiji virtually inaugurated Dr. Babasaheb Ambedkar Convention Centre, Gandhidham on 28<sup>th</sup> August' 2022 constructed by Deendayal Port Authority, Kandla at a cost of Rs. 39 crore in the presence of Shri Bhupendra Patel, Hon'ble Chief Minister of Gujarat.



- ❖ The Hon'ble Governor of Gujarat, Shri Acharya Devvrat visited Deendayal Port, Kandla On 13th Feb' 2022. He was briefed about the working of Port, Waterfront & Infrastructure Facilities by the Port Officials.



- ❖ DPA, Kandla bagged the "Best Major Port of the Year-Non Containerised Cargo" award at All India Maritime and Logistics Award (MALA) 2022 and also received the "PORT SUSTAINABILITY AWARD" at the event.



### MUMBAI PORT

4.5 Mumbai Port is the second oldest Major Port in India after Kolkata. The port has long been the principal gateway of India. Strategic location is one factor in its special favour. It lies midway along the West Coast of India and is gifted with a natural deep-water harbour of 400 Sq. Kms. protected by mainland of Konkan on its

east and island of Mumbai on its west. The deep waters in the harbour provide secure and ample shelter for shipping throughout the year.

4.6 Originally a general cargo port, today Mumbai Port is multi-purpose port handling all types of cargo viz break bulk, dry bulk, liquid bulk and containers. The port has extensive wet and dry dock accommodation to meet the normal needs of ships using the port. The port provides services/facilities from pilotage to berthing, storage to delivery of cargo and ancillary services of running Container Freight Station (CFS), Port Railways as also maintenance of crafts, equipment and building.

4.7 The port has 32 berths (including OCT) with an effective rated capacity of 82.85 MMTPA. The port handled traffic of 59.891 MMT during 2021-22 and 47.230 MMT during 2022-23 (upto December, 2022).

#### **Notable achievements during the year**

- ❖ The 1st Incredible India International Cruise Conference 2023 was held on 14th and 15th May 2022 at Hotel Trident, Nariman Point, Mumbai. The 2-day conference was organized by Mumbai Port Authority under the aegis of Ministry of Ports, Shipping and Waterways in association with Federation of Indian Chambers of Commerce and Industry (FICCI).
- ❖ The Conference showcased abundant business opportunities in Cruise Tourism sector in India. This was attended by more than 300 delegates representing stakeholders including Ministers, senior officials from Ministry of Ports, Shipping and Waterways and Ministry of Tourism, Port Authorities, State Tourism and Maritime boards along with International and Indian cruise operators, investors, industry experts and consultants.
- ❖ Domestic Cruise – Cordelia Cruises launched M.V. “Empress” on 27.09.2022 for this season and is Home porting at Mumbai Port.
- ❖ International Cruises - International Cruises for this season started at Mumbai Port on 13.11.2022 and there are 27 International cruises visiting Mumbai.

#### **JAWAHARLAL NEHRU PORT**

4.8 Constructed in the mid 1980's and commissioned on 26th May, 1989, Jawaharlal Nehru Port (JNP) has come a long way by becoming a world-class international container handling port. It is situated in between 18 56'43" North and 72 56'24" East along the eastern shore of Mumbai harbour off Elephanta Island.

4.9 JNP is an all-weather tidal Port having 16 berths with an effective rated capacity of 118.00 MMTPA. The Port handled a Traffic of 75.996 MMT during 2021-22 and 61.197 MMT during 2022-23 (upto December, 2022). The port has 5 fully automated Container Terminals with a total container handling capacity of 7.7 Million TEUs, a Liquid Terminal of 7.2 MMT capacity and a shallow water berth having capacity of 4.5 MMT for handling container, break bulk, dry bulk and liquid cargo. Four of the Container Terminals are operating in PPP format in partnership with major global terminal operators, namely, DP World (2 terminals), AP Moler Terminals (APM terminals), and Port of Singapore Authority (PSA). A new Container Terminal, Bharat Mumbai Container Terminal Pvt. Ltd. (BMCTPL), SPV of Port of Singapore (PSA) with a total capacity of 60 MMT (4.8 million TEUs) was commissioned for

operations under Phase -1 (2.4 million TEUS) on 18th February 2018. Phase-II (2.4 million TEUs) is expected to start in 2025.

**Notable achievements during the year**

- ❖ The port is developing a dedicated costal Berth of capacity 2.5 MMTPA. The jetty work is completed on March 2021. The costal berth along With shallow water berth is taken up on PPP mode for its operation and concession agreement signed on 15.11.2022.
- ❖ The work of development of Additional Liquid Terminal of capacity 4.5 MMTPA is in progress. The port widened all the link roads to the national highways to 6/8 lane and work completed.
- ❖ The Port had initiated major steps under ‘Ease of Doing Business’ in improving infrastructure, simplifying process and enhancing the level of digitization and the results had contributed significantly in improving India’s rank under World Bank evaluation of ‘Trading Across the Border’s from 80 to 68 in WB 2020 report.

**MORMUGAO PORT**

4.10 Port, situated on the west coast of India, is more than 135 year old port. It has modern infrastructure capable of handling a wide variety of cargo. It is a natural harbor protected by a breakwater and also by a mole. The Port has an approach channel of depth 14.4 Meters. The existing rail and road connectivity provides seamless logistic network to the rest of the Country. There is a modern Vessel Traffic Management System installed for providing reliable modern services. The existing VTMS system is being replaced with new System.

4.11 The Port has 2 non cargo berths and 7 cargo berths and 3 Mooring Dolphins for handling cargoes. The effective rated capacity of the port is 63.40 MMTPA. There is a dedicated cruise berth of 450 Meter length alongside of Breakwater for Cruise vessels and for use of Navy and Coast Guard. The port handled traffic of 18.456 MMT during 2021-22 and 12.20 MMT during 2022-23 (upto December, 2022).

**Notable achievements during the year**

- ❖ Foundation stone (Shilanyas) for the development of world class International and Domestic Cruise Terminals and other allied activities laid by Shri Sarbananda Sonowal, Hon’ble Union Minister of PS&W and AYUSH.
- ❖ MPA announced the plan for construction of Up Ramp to Fly over at Port Railway, Baina for facilitating the movement of cargo from storage yards at the estimated cost of Rs.26.13 crore with the financial assistance from Ministry of PSW under Sagarmala scheme.
- ❖ The first International Cruise ship "Viking Mars" arrived at the Cruise Terminal of Mormugao Port on 16 th November, 2022 with 650 passengers and 461 crew members. Mormugao Port handled this first International Cruise ship after a gap of 2.5 years after pandemic.

**NEW MANGALORE PORT**

4.12 New Mangalore Port (NMP) was declared as the 9th Major Port on 4th May 1974 and was formally inaugurated on 11th January 1975. The Port has 16 berths and 1 SPM (Single Point Mooring) with a rated capacity of 105 MTPA. Port handled

traffic of 39.296 MMT during 2021-22 and 29.93 MMT during the year 2022-23 (upto December 2022). NMP Authority has plans for development of one more deep draft multipurpose general cargo berth (Berth No.17) adjacent to the existing berth no.8 for handling general Break Bulk cargo and Ro-Ro consignments.

**Notable achievements during the year**

- ❖ Hon'ble Prime Minister of India inaugurated mechanized container handling berth No.14 (DBFOT) and laid foundation stones for various developmental works at NMP on 2-9-2022.
- ❖ As a part of green initiative the port has inducted electric buses inside the port
- ❖ Received Greentech Environment Award 2022 for outstanding achievements in Environmental protection for the 6th consecutive year.
- ❖ Received ISO 45001:2018 certification w.e.f. 1-11-2022
- ❖ Cruise traffic resumed with the arrival of the first cruise vessel EUROPA 2 on 28-11-2022.
- ❖ Hon'ble Union Minister of PS&W, Shri Sarbananda Sonowal, Hon'ble CM of Goa, Dr. Pramod Sawant and Hon'ble Minister of State for PS&W and Tourism, Shri Shripad Y. Naik along with other dignitaries virtually inaugurated upcoming projects of New Mangalore Port which include Modernization of Mallya Gate, Construction of Solid Waste Management facilities, Design & Development of Bilingual website of NMPA on 13.10.2022.
- ❖ They also virtually laid the foundation stone (Shilanyas) for Construction of PQC Road and Truck Terminal which will help to improve the infrastructure at NMPA.

**COCHIN PORT**

4.13 The Port of Cochin was developed during the period 1920-1940 due to the untiring efforts of Sir Robert Bristow. The port is located on the Willington Island at Latitude 9'58" North and 76'14' East on the South-West coast of India about 930 KM south of Mumbai and 320 KM North of Kanyakumari. With its strategic location on the South-West Coast of India and at a commanding position at the cross roads of the East-West Ocean trade, the port is a natural gateway to the vast industrial and agricultural produce markets of the South-West India. The hinterland of the Port includes the whole of Kerala State and parts of Tamil Nadu and Karnataka States. A study carried out on the traffic flow in the hinterland of the Port indicates that about 97% of the total volume of traffic is accounted for by Kerala State. Cochin with its proximity to the international sea route between Europe and the Far East and Australia can attract a large number of container lines offering immense business opportunities.

4.14 Cochin Port has 22 Berths including 1 SPM with an effective rated capacity of 79.90 MMTPA. The Port handled 34.55 MMT cargo traffic during 2021-22. The cargo handled by the port includes POL, Container, Cement, Fertilizers, Fertilizer Raw Material (Dry) and others.

4.15 Cochin Port registered the total throughput of 25.28 MMT in 2022-23 (April-December, 2022), an increase of 0.16% over the same period of 2021-22. POL throughput registered 15.40 MMT, an increase of 1.68% over the corresponding period of 2021-22. Containers throughput of 5.20 lakh TEUs in 2022-23 (April-December), showed a decline of 6.29% over the corresponding period of 2021-22.

**Notable achievements during the year**

- ❖ Shri Sarbananda Sonowal, Hon'ble Union Minister for PS&W and Ayush laid the foundation stone for the Roll-On/Roll-Off (Ro-Ro) facility at Cochin Port on 30.04.2022.
- ❖ Cochin Port completed the construction of ICG jetty on 04.04.2022 as deposit work for Indian Coast Guard.
- ❖ Reconstruction of South Coal Berth (SCB) was completed on 17.08.2022 with a capacity of 1.30 MTPA.

**V.O. CHIDAMBARANAR PORT (VOCP)**

4.16 V.O.C Port, the 10<sup>th</sup> Major Port of India is located strategically close to the East - West International Sea route on the South Eastern coast of India. The Port is well sheltered from the fury of storms and cyclonic winds and is operational round-the-clock all through the year.

4.17 As a gateway, Port with 15 berths, drafts ranging from 8.60 meters to 14.20 meters is equipped to handle a wide spectrum of container, dry, liquid and break bulk cargoes with an effective rated and re-rated capacity of 95.00 MMTPA and 69.30 MMTPA. Port handled traffic of 34.119 MMT during 2021-22 and 27.714 MMT during the year 2022-23 (upto December, 2022).

4.18 Aided by the state-of-the-art infrastructure, dedicated terminal operators, port user community and efficient human resource, the port which is in close proximity to the main line sea route and excellent rail and road connectivity has been the harbinger of socio-economic development of the southern Tamil Nadu region.

**Notable achievements during the year**

- ❖ On 26.05.2022, the first Cape Size vessel 'Cape Breeze' with Length of 292 meters, beam of 45.05 meters and DWT of 1,80,000 tonne was berthed at the Port. The vessel with 92,300 tonne of Lime Stone from Port of Salalah, Oman with arrival draft of 11.4 meters berthed at Berth-9.



- ❖ On 13.05.2022, VOC Port accommodated the longest container vessel MSC PETRA with LOA 300 meters that ever called at the Port and berthed at M/s. DBGTT terminal at VOC Port surpassing the earlier record of accommodating a 277 meters container vessel MSC VIDHI berthed on 20.03.2022.



- ❖ VOC Port has created a new record by handling 1,93,683 tonne of cargo in a single day on 11.07.2022 surpassing the previous single day cargo handling record of 1,92,658 tonne on 24.06.2022.



- ❖ Shri Sarbananda Sonowal, Hon'ble Minister of PS&W and AYUSH visited V.O. C. Port on 30th September 2022 and laid the foundation stone for the Tuticorin



SPEEDZ (Coastal Employment Unit) land for development of Port-based Industries, spanning 1300 acres, worth Rs. 100 crore, and also laid the foundation stone for inner Harbour development works (Widening the Port Entrance and dredging the widened portion) at a total cost of Rs. 65.53 crore. Further, Hon'ble Minister inaugurated the Upgraded Coal Yard Road and Drainage System at a cost of Rs.16 crore, Fixed Fire Fighting System at Oil Jetty at a cost of Rs. 18.79 crore, Strengthened 22 KV HT Electrical Network at a total Cost of Rs. 1.15 crore.

## CHENNAI PORT

4.19 Chennai Port Trust is an all weather artificial harbour with one Outer Harbour and One Inner Harbour with a wet Dock and a Boat Basin with round the clock navigation facilities. The Port established in 1875 located at 13° 06' N latitude and 80° 18' E longitudes on the Bay of Bengal.

4.20 Chennai Port handled a cargo tonnage of 48.56 MMT during 2021–2022 as against 43.55 MMT handled during the corresponding period of the previous year. During the current year, tonnage handled upto December 2022 is 36.30 MMT which comprises of 23.89 MMT of Imports and 12.41 MMT of Exports.

### Notable achievements during the year

- ❖ Under PM Gati Shakti initiatives, 7 Projects are being executed by Chennai Port at a total cost of Rs. 7605 crore. Under Sagarmala Scheme, Port is implementing 4 projects and also implementing five projects under National Monetization Pipeline.
- ❖ On 24.08.2022 Chennai Port has achieved all time record import of 7,237 Metric Tons of Heavy Melting Scrap on a single day from M.V. ATLANTIC BULKER surpassing the previous record handling of 4,500 Metric Tons from M.V. KAPETAN NONDAS on 26.04.2022.
- ❖ Under the “Go Green” Initiatives, tree plantation drive was held inside the Port area on 17.09.2022 and more than 100 saplings were planted.
- ❖ As part of the 75 day long coastal clean-up Campaign beach cleaning was organized on 14.08.2022.



*Tamil Nadu Chief Minister MK Stalin with Union Minister of State for Road Transport, Highways and Civil Aviation Vijay Kumar Singh at the signing of MoU for the Chennai Port-Maduravoyal Expressway.*

## KAMARAJAR PORT LIMITED (KPL)

4.21 KPL, the 12<sup>th</sup> Major Port under the Ministry of Ports, Shipping and Waterways was commissioned in 2001 primarily as a Coal Port dedicated to handling Thermal Coal requirements of Tamil Nadu Electricity Board (TNEB). KPL has the distinction of being the only corporate port amongst the Major Ports administered by the Central Government. The Port is functioning on landlord model with cargo handling operations either through BOT or captive models. As a part of disinvestment process, the entire Government of India shares have been transferred to Chennai Port Authority on 27.03.2020. KPL has become a subsidiary of Chennai Port Authority.

4.22 Over the years, the Port has developed as a Multi cargo Port and now has eight berths with the capacity of 54.44 MMTPA for handling Coal, POL, LPG, LNG, Automobiles, Containers and General cargoes. The Port handled traffic of 38.742 MMT during 2021-22 and 32.60 MMT during 2022-23 (upto December 2022).

**Notable Achievements during the year**

- ❖ One of the major Automobile manufacturers M/s. Nissan Motor India Pvt. Ltd. has achieved a remarkable milestone of exporting One Million automobiles from Kamarajar Port to 108 countries from Kamarajar Port since September 2010. Nissan India leadership along with Kamarajar Port senior officials flagged off the One millionth export automobile from Port on 28.07.2022.
- ❖ On 13.08.2022, Hon'ble Union Minister of MoPS&W and Ayush during his visit to port inaugurated Amrit Mahotsov Marg at NCTPS Junction for the value of Rs 33.85 crore and the Internal roads, Truck parking bays, Rest shelter, street lighting etc., inside the port area for the value of Rs 49.5 crore.

**VISAKHAPATNAM PORT**

4.23 The Port of Visakhapatnam, located almost midway between Kolkata and Chennai on the East Coast of India at latitude 17<sup>o</sup>41' and longitude 83<sup>o</sup>17' was opened to ocean traffic on 7<sup>th</sup> October, 1933 and has been serving a vast hinterland since then. Re-rated Capacity of Visakhapatnam Port Authority as on 31.12.2022 is 134.18 MMTPA. Port handled traffic of 69.030 MMT during 2021-22 and 55.127 MMT during the year 2022-23 (upto December, 2022).

**Notable achievements during the year**

- ❖ Shri Sarbananda Sonowal, Hon'ble Minister of Ports, Shipping & Waterways and AYUSH, participated in the "Garib Kalyan Sammelan" at Port Kalavani Auditorium on 31.05.2022. Prime Minister Sri Narandra Modi participated as Chief Guest of the Nation-wide "Garib Kalyan Sammelan" at Shimla in Himachal Pradesh. The programme was screened live at the VPA Kalavani Auditorium.
- ❖ M.V. Empress of Cordelia Cruise arrived at EQ-1 berth of Visakhapatnam Port with nearly 1,800 passengers on board on 08.06.2022. Warm welcome extended by Port.
- ❖ VPA organized two day "Maritime Public Private Partnership (PPP) Conclave 2022 to mark the 25<sup>th</sup> Anniversary of the 1<sup>st</sup> PPP Project in the Port sector, began on 17.08.2022.
- ❖ District Administration conducted a massive Beach clean-up programme on 26.08.2022. 40 locations identified and "Mangamaripeta" (south) location allotted to VPA. As per the direction of District Administration, Officers and employees from all departments of the port participated in Beach clean-up programme and the programme was grand success.
- ❖ Shri Sarbananda Sonowal, Hon'ble Minister of PS&W and AYUSH visited to Visakhapatnam on 30.05.2022 and conducted review meeting on projects.



### PARADIP PORT

4.24 Government of India took over the management of the Paradip port from the State Government on 1<sup>st</sup> June 1965 and declared Port as the eighth major port in India on 18th April 1966 making it the first major port on the East Coast commissioned in independent India. Port is situated 210 nautical miles south of Kolkata and 260 nautical miles north of Visakhapatnam at Latitude 20 – 15'58.63 N and Longitude 86' – 40-27".34 E.

4.25 The Port handled 116.13 MMT of traffic in 2021-22 (Provisional 96.812 MMT during 2022-23 upto December, 2022). The port has Eighteen (18) berths/jetties, Three (3) SPMs and One (1) Ro-Ro Jetty for handling different types of cargoes with Rated capacity of 289.55 MMTPA.

### Notable achievements during the year

- ❖ Hon'ble Union Minister Shri Sarbananda Sonwal, Shri Shripad Naik and Shri Shantanu Thakur Hon'ble Ministers of State, Ministry of Ports, Shipping and Waterways (MoPSW) visited Paradip Port stall at Ambedkar International Centre, New Delhi during celebration of 7 years of Sagarmala.



*Hon'ble Ministers visit to Paradip Port*

- ❖ MoU was signed between Shri P.L. Haranadh, Chairman, Paradip Port and Shri Anil Kumar Gupta, MD, (IPRCL) for Upgradation and Modernization of Paradip Fishing Harbour at a cost of Rs. 99.75 crore during 7 Years of Sagarmala Celebration from 25th March - 14th April at Ambedkar International Center, New Delhi



*Signing of MoU in presence of Hon'ble Minister of PS&W*

#### **SYAMA PRASAD MOOKERJEE PORT, KOLKATA (SMPK)**

4.26 SMPK is the only riverine major port in India having an existence of 152 years. It has a vast hinterland comprising the entire Eastern India including West Bengal, Bihar, Jharkhand, Uttar Pradesh, Madhya Pradesh, Assam, North Eastern Hill States and the neighbouring countries of Bangladesh, Nepal and Bhutan, the last two being landlocked. The port has twin dock systems viz. Kolkata Dock System (KDS) on the eastern bank and Haldia Dock Complex (HDC) on the western bank of river Hooghly.

4.27 SMPK handled 58.175 Million Metric Tonne (MMT) of cargo traffic during 2021-22 (4th highest annual throughput) vis-à-vis 61.368 MMT during 2020-21, registering a moderate decline of 5.20%, despite ongoing COVID 19 Pandemic during that time and severe 'Yaas' cyclone unleashing in May 2021. SMPK's traffic handling was pegged at the 6<sup>th</sup> position, vis-à-vis other Major Ports of India. HDC handled 42.877 MMT and KDS 15.298 MMT of cargo during 2021-22. The cargo traffic of 47.802 MMT handled during 2022-23 (upto December, 2022).

#### **Notable Achievements/Developments in 2021-22 despite COVID challenges**

- ❖ A voyage of steel cargo laden barge to Pandu through Indo-Bangla Protocol (IBP) Route was flagged off from Haldia on 16.02.2022 which brought coal on its return journey heralding a new chapter in the river transportation in cost efficient and environment friendly manner. MV Lal Bahadur Shastri, a pilot cargo vessel, reached the IWAI Multimodal Port Pandu from SMPK in IBP route on 06.03.2022, connecting rivers Brahmaputra and Ganga.
- ❖ Installation of 1 Mega Watt solar plant in Haldia to produce renewable energy for port operations.

- ❖ P.S. Bhopal, a paddle steamer, built eight decades ago, resumed its journey on 1.10.2022 after resurrection and facelift as a Heritage Cruise Vessel-cum-Museum after thorough repair, renovation and restoration.

**PERFORMANCE OF MAJOR PORTS**

**(i) Traffic handled at Major Ports**

(In million tonnes)

Sl. No.	Port	Actual 2021-22	Provisional 2022-23 (upto December, 2022)
1	Kolkata	15.298	12.340
2	Haldia	42.877	35.462
3	Paradip	116.133	96.812
4	Visakhapatnam	69.030	55.127
5	Chennai	48.564	36.298
6	V.O. Chidambaranar	34.119	27.714
7	Cochin	34.550	25.275
8	New Mangalore	39.296	29.931
9	Mormugao	18.456	12.204
10	Jawaharlal Nehru	75.996	61.197
11	Mumbai	59.891	47.230
12	Deendayal (Kandla)	127.100	104.441
13	Kamarajar (Ennore)	38.742	32.601
<b>Total</b>		<b>720.052</b>	<b>576.632</b>

**(ii) Cargo Handled at Major Ports**

(In Million tonnes)

Sl. No.	Commodity	Actual 2021-22	Provisional 2022-23 (upto December, 2022)
1	POL	221.266	175.078
2	Iron Ore	51.706	29.703
3	Fert. &Fert. Raw Materials	15.925	12.310
4	Coal	142.422	140.716
5	Containerized Cargo	166.903	125.757
6	Others	121.830	93.068
<b>Total</b>		<b>720.052</b>	<b>576.632</b>

**(iii) Capacity at Major Ports**

(In Million tonnes)

Sl. No.	Year	Port capacity	Traffic Handled
1	2001-02	343.95	287.58
2	2002-03	362.75	313.55
3	2003-04	389.50	344.80
4	2004-05	397.50	383.75

5	2005-06	456.20	423.41
6	2006-07	504.75	463.78
7	2007-08	532.07	519.31
8	2008-09	574.77	530.53
9	2009-10	616.73	561.09
10	2010-11	670.13	570.03
11	2011-12	689.83	560.14
12	2012-13	744.91	545.68
13	2013-14	800.52	555.50
14	2014-15	871.52	581.34
15	2015-16	965.36	606.47
16	2016-17	1065.83	648.40
	Re-rated capacity 2016-17	1359.00*	
1	2017-18	1451.19	679.37
18	2018-19	1514.09	699.10
19	2019-20	1534.91	704.93
20	2020-21	1560.61	672.68
21	2021-22	1597.59	720.05
	2022-23 (Upto December, 2022)		576.63

(\*) The capacities of the Major Ports have been re-rated as per berthing policy 2016.

The details of important performance indicators of the Ports are given below:

(iv) Average Turn Round time

Sl. No	Port	Average Turn round Time/(Hours)#	
		2021-22	2022-23 (upto December, 2022 (*)
1	SMP, Kolkata	66.27	56.42
2	Haldia	51.36	50.18
3	Paradip	53.16	47.74
4	Visakhapatnam	73.83	73.89
5	Chennai	53.19	46.80
6	V.O. Chidambaranar	48.48	48.00
7	Cochin	34.64	34.19
8	New Mangalore	45.99	43.47
9	Mormugao	71.77	64.56
10	Jawaharlal Nehru	28.08	28.28
11	Mumbai	73.00	71.19
12	Deendayal (Kandla)	60.96	57.36
13	Kamarajar (Ennore)	46.38	46.22
<b>Total (All Ports)</b>		<b>52.87</b>	<b>50.01</b>

(\*)Provisional (#) Calculated from Pilot Boarding till Deboarding

The Average Turnaround Time for container ship of Major Sea Ports is 32.39 hours in 2021-22 and 27.29 hours in 2022-23 (upto December, 2022).

(v) Average Output per Ship Berth Day

(In Tonnes)

Sl. No.	Port	Average Output Per Ship Berth Day	
		2021-22	2022-23 (upto November, 2022) (*)
1	SMP, Kolkata	3968	4544
2	Haldia	10428	11341
3	Paradip	27295	30315
4	Visakhapatnam	11923	12256
5	Chennai	15497	16185
6	V.O. Chidambaranar	16811	15583
7	Cochin	24457	24005
8	New Mangalore	16465	18312
9	Mormugao	11824	15040
10	Jawaharlal Nehru	28938	27511
11	Mumbai	9091	9259
12	Deendayal(Kandla)	15501	16276
13	Kamarajar (Ennore)	24292	25470
<b>Total (All Ports)</b>		<b>16068</b>	<b>16991</b>

(\*)Provisional

## **CHAPTER - V SHIPPING**

### **INTRODUCTION**

5.1 Shipping plays an important role in the economic development of the country, especially in India's international trade. The Indian shipping industry also plays an important role in the energy security of the country as energy resources such as coal, crude oil and natural gas are mainly transported by ships. Further, during a crisis situation, Indian shipping contributes to ensure uninterrupted supply of essentials and serves as the second line of defense.

5.2 The salient features of India's shipping policy are the promotion of national shipping to increase self-reliance in the carriage of country's overseas trade and protection of stakeholder's interest in EXIM trade. India's national flag-ships provide an essential means of transport for crude oil and petroleum product imports. The national shipping also contributes to the foreign exchange earnings of the country.

5.3 India has been a founder member of the International Maritime Organization (IMO), a specialized agency set up under the United Nations, primarily dealing with the technical aspects of shipping relating to Maritime Safety, Protection of Marine Environment, Standards of Training and related legal matters. India has been participating in various meetings of the IMO Committees, Sub-Committees, Council and Assembly and has actively contributed towards the development of various Conventions, Protocols, Codes and Guidelines developed by the IMO.

5.4 To promote Indian tonnage and to save precious foreign exchange, the Cabinet on December 10, 1957 had decided that in all negotiations for large contracts involving shipping arrangements by Central Government Departments, State Government Departments and Public Sector Undertakings (PSUs) under them, the Department of Transport would invariably be consulted and all such import contracts were to be finalized on FOB/FAS (Free on Board/Free Alongside Ship) basis and those for exports on C&F/CIF (Cost and Freight/Cost, Insurance and Freight) basis and in case of departure there from, prior permission was required to be obtained from Department of Transport on a case-to-case basis.

5.5 In the changed context of economic liberalization and new thrust on competitiveness and performance improvement of PSUs, the Government on November 15, 2001 decided that while the existing policy for placing import contracts on FOB/FAS basis will continue, the policy was relaxed in case of exports. Government Departments/PSUs were permitted to finalize export contracts on FOB/FAS basis without seeking prior clearance from the Ministry.

5.6 The emerging sectors, where there is a potential for enhancing trade (exports and imports), need to be focused upon and ways to open up sea routes on these sectors need to be considered. Some examples are the International North-South Transport Corridor (INSTC) route, which would considerably shorten the distance from

India to Commonwealth of Independent States (CIS) through Iranian ports; the routes to South East Asian countries, which still have the scope for development, like Thailand, Vietnam etc., akin to the sea routes which were opened up for Bangladesh and Myanmar (as part of Act East Policy of the Government).

5.7 During the years, India's overseas trade has expanded considerably both in terms of composition and direction due to the policy of export promotion being pursued by the Government. At the same time, efforts are being made to provide and improve the trade related infrastructure, especially transport, to facilitate the movement of traffic more efficiently. So far as the movement of traffic by ships to overseas destinations is concerned, both Indian as well as foreign flag ships operating consortium liner shipping services have been providing the services either directly or through transshipment arrangements for the general cargo in break-bulk or containerized form. Similarly, for the bulk cargo moving either as imports or exports, the services of transships, both Indian and foreign, usually engaged on chartering basis, are available to all the destinations.

5.8 Improvement in export related infrastructure has been a consistent endeavour to promote exports. Inadequacies in seamless transport through road, rail, ports and airports are obstacles faced in the infrastructure development for promoting exports. However, it is a fact that in the transport sector, most of the funding in our country has been towards the railways, road and highways sectors. While the importance of roads and railways in the economy is undeniable, there is also a greater need to encourage the maritime sector to enable it to achieve its full potential. Thus there is a strong case for supporting waterway transportation.

### SHIPBUILDING AND SHIP REPAIR

5.9 The Ministry of Ports, Shipping & Waterways is the nodal Ministry for formulating policy measures for the promotion of Indian Shipbuilding and Ship repair Industry. There are 43 Shipyards in the country, 8 under Central Public Sector, 2 under State Governments and 33 under private sector. The breakup of the government owned, controlled shipyards is as under:-

- (a) Ministry of Ports, Shipping & Waterways
  - i. Cochin Shipyard Limited (CSL), Kochi
  - ii. Hooghly Cochin Shipyard Limited (HCSL), Nazirgunge – a wholly owned subsidiary of CSL
  - iii. Udupi Cochin Shipyard Limited (UCSL), Malpe – a wholly owned subsidiary of CSL
  - iv. Hooghly Dock and Port Engineers Limited, Kolkata (Under closure)
- (b) Ministry of Defence
  - i. Mazagaon Dock Limited, Mumbai
  - ii. Garden Reach Shipbuilders and Engineers Limited, Kolkata
  - iii. Goa Shipyard Limited, Goa
  - iv. Hindustan Shipyard Limited, Visakhapatnam

(c) State Governments

(i) Under Government of Gujarat

- Alcock Ashdown Co. Ltd. (Operations closed)

(ii) Under Government of West Bengal

- Shalimar Works Limited, Kolkata.

### **Global Shipbuilding Industry**

5.10 Shipping markets performed moderately in 2021 compared to past year due to trade volume recovery to the pre-COVID levels by mid 2021 and with widespread congestion and modest fleet supply growth, there was 93% increase in Clarkson's sea Index (\$28,700/day). This also supported the highest new build order volumes since 2014 (120m dwt, \$107bn). Despite various risk perceptions such as Chinese "cooling" policies, political instability due to Russia-Ukraine war, inflation, tax increases, regional protection etc., Clarkson's is projecting the trade expectation to reach an encouraging 12.4bn tonnes in 2022 (up 3.5%).

5.11 Disruption to global logistics and supply chains was widespread across 2021, helping "tighten" markets particularly in the container, dry bulk and car carrier markets thus driving the freight costs up. However, the fleet growth continued below 3% by dwt vs. 4.1% ten year average, due to lower order intakes in the past years. The new building investment is skewed towards container (\$42bn) and gas (\$21.6bn) in traditional shipbuilding segments.

5.12 The focus on "Green & Tech" in post-COVID planning intensified, with decarbonisation as the major talk point across maritime segments. With developments at IMO and the EU amongst others, the regulatory and policy framework is evolving which reflects in 34% of new build orders (by GT) is with alternative fuelled technology. Developments in International Maritime Organization (IMO) or EU emissions regulations could affect the medium-term outlook for cost structures or the earnings capacity of some shipping segments. The fillip due to the prospects of large ageing fleet replacements and new regulatory restrictions generated some interest and likely to impact positively on long term basis driving new ship acquisition investments.

5.13 Fitch Ratings maintains its neutral outlook on the global shipping sector due to continued strong market conditions for container shipping (albeit with some downside risk) and dry bulk and expectations that the tanker segment could improve after a weak 2021. A potential increase in trade protectionism during the recovery could limit demand in some segments. The overall new shipbuilding prices rose and is still on the upward trend but at the same time may not result in better profits for the yards as the inflationary levels of various major commodity costs such as power, petroleum products, steel, copper, aluminium etc., persisting and thus eroding the profit margins.

### **Indian Shipbuilding Industry**

5.14 Currently, the maximum size of the vessels, which can be built in India in the public sector is 1,10,000 DWT which is increasing to built vessels up to 3,00,000 DWT by Cochin Shipyard Ltd. Private sector shipyards can build vessels upto cape size

vessels comparable to some of the leading shipyards in the world. Reliance Naval Engg. Ltd. has the capacity to build vessels upto 400,000 DWT and L&T Shipbuilding - Kattupalli 300,000 DWT which includes large LNG Carriers. Smaller size LNG Carriers, Dredgers and other specialized vessels can be built by other shipyards in the Private sector such as Shoft Shipyard Private Ltd., Chowgule & Co. Ltd., Titagarh Wagons Ltd., Vijay Marine Services, Mandovi Dry Docks Ltd., A.C. Roy & Co., Dempo Shipbuilding and Engineering Pvt. Ltd. etc. Positive outlook at global levels have also resulted in build-up of interest and more interest thus increased enquiries to Indian yards. But lack of infrastructure in the country due to collapse of many private shipyards resulted in erosion of capacity and no proper financing mechanism became a big deterrent to attract the attention of the leading ship owners and market players.



*Shipbuilding in an Indian shipyard*

### **Potential in Shipbuilding**

5.15 Under the present depressed prevailing market, the growth in the Industry is likely to be accelerated through the “Atmanirbhar Bharat” initiative under the Make in India Programme of the Government of India. Various support initiatives were taken by the ministry of PS&W such as providing preference to local built Tugs for the employment of services in all the Major ports. The likely growth in demand for shipbuilding in India is expected to emerge from the above schemes for the coastal shipping and inland water. Another potential area of interest is the defence market and deep sea fishing segment. As per a published report, the Indian Navy’s perspective plan aims to increase the Navy’s fleet from the present 137 to 200 nos. by 2027. The vision of GOI as per the Defence Production Policy, circulated recently was “To make India among the Top Five countries of the world in Aerospace and Defence Industries”, with active participation of public and private sector, fulfilling the objective of self-reliance as well as demand of other friendly countries. Another area of interest is in urban transport segment and the Short sea shipping market where environment friendly electric mobility technology is fast catching up and provides new opportunity for Indian Shipbuilders. Envisaging the huge scope in this segment, the private shipyards are upgrading their

capabilities for construction of Hybrid Vessels, so that those also become eligible to be considered for construction of such vessels, with support of the government.

5.16 Maritime clusters are vital for the growth of the ship building & repair industry as they provide ancillary services, manufacturing of ancillary products, maritime services and financial services for the industry. Based on the studies conducted under the Sagarmala Programme, Tamil Nadu has been identified for development of a Maritime cluster as part of the National Perspective Plan of Sagarmala Programme. Factors such as proximity to the major shipping routes between Asia and Europe, presence of steel industry, shipyards and ports in the vicinity favour the development of a Maritime Cluster in Tamil Nadu. Gujarat Maritime Board (GMB) is also working on developing a Marine Shipbuilding Park in Bhavnagar along with a Maritime Services cluster in Ahmadabad or Gujarat International Finance Tec-City (GIFT) City.

#### **Goals for Indian shipbuilding industry**

- ❖ To facilitate construction of River sea vessels, Inland vessels, Barges and Fishing vessels in India.
- ❖ To encourage use of new technology especially construction of vessels which use alternative fuels.
- ❖ To ensure that top global suppliers of advanced equipment stock and/or assemble their products in India.
- ❖ To ensure all government-owned/PSU vessels are built in India.

5.17 Vision 2030 envisions Indian ship building to become competitive with reaching the threshold on volumes by 2025 and then build the momentum in high volumes to reach “Make in India Make for World” levels and be one of the top 10 shipbuilding nations in the world. Major initiatives include channelizing the cargo to improve demand, ecosystem for ancillary industries, generate standardized designs for better productivity with appropriate Governmental interventions to create level playing fields to make the industry competitive in International arena.

5.18 The Maritime India Vision document also advocates creation of a Maritime Development Fund to provide easy access to working capital and long-term finance needs across marine sectors but is yet to be implemented which otherwise can give access to Indian ship owners to improve their capacity and shipyards to improve the infrastructure. However, the objective of propelling India to the forefront of the global maritime sector as per the road map of Ministry of Ports, Shipping and Waterways (MoPSW), formulated and published as per the vision document ‘Maritime India Vision 2030 (MIV 2030)’ indicates co-ordinate and accelerated growth of India’s maritime sector in the next decade. Various government policies listed below are showing positive impacts in the segment and will act as enablers for the growth of the segment:

#### **(a) Financial Assistance Policy on Shipbuilding (2016) :**

To promote shipbuilding in Indian shipyards, the Union Cabinet on December 9, 2015 approved New Shipbuilding Financial Assistance policy for Indian shipyards for contracts signed during a ten year period viz. 2016-2026. The Guidelines for Shipbuilding Financial Assistance Policy have been revised in October 2017 and

updated the web portal during 2017 for processing the online applications by DG(S) submitted by shipyards online. Financial assistance is being granted to Indian Shipyards equal to 20% of the lower of “Contract Price” or the “Fair Price” or actual payments received of each vessel built by them for a period of at least 10 years commencing 2016-17. This rate of 20% will be reduced by 3% every three years. The guidelines have been amended in April, 2022. The amount of financial assistance released so far is as under:

Year	Amount of financial assistance released (in crore)	Number of vessels
2018-19	Rs. 29	12
2019-20	Rs. 27	7
2020-21	Rs. 58	15
2021-22	Rs. 65	17
2022-23 (till Dec, 2022)	Rs. 26	18

**(b) Right of Refusal to Indian Shipyards (2016)**

The Union Cabinet, on 09.12.2015, also approved that all government departments or agencies including CPSUs have to provide Right of First Refusal to Indian shipyards while procuring or repairing vessels meant for governmental or own use till 2025 after which only Indian shipyards would build and repair vessels of these organizations. Guidelines were uploaded on website of the Ministry on 31.05.2016. Subsequently, a few provisions of the guidelines regarding Quay Length and Non-Destructive Testing facilities have been modified by this Ministry to facilitate more Indian shipyards including small shipyards to take advantage of this policy. The modified guidelines have been uploaded on website of the Ministry.

**(c) Grant of Infrastructure Status (2016)**

The Department of Economic Affairs notified the inclusion of standalone ‘Shipyards’ in the Harmonized Master List of Infrastructure Sub-sectors on 13.04.2016. With this inclusion, shipyards will be able to avail flexible structuring of long term project loans, long term funding from Infrastructure Funds at lower rates of interest and for a longer tenure equivalent to the economic life of their assets, relaxed ECB norms, issuance of infrastructure bonds for meeting working capital requirements. Standalone shipyard is defined as a floating or land-based facility with the essential features of waterfront, turning basin, berthing and docking facility, slipways and/or ship lifts and which is self sufficient for carrying on shipbuilding/repair/breaking activities.

**(d) SOP for chartering/procurement of tugs (2020)**

In order to promote small and medium shipyards, in September, 2020, the Ministry issued Standard Operating Procedures pertaining to Procurement/Chartering of Port Crafts by the Major Ports. 5 variants/types of tugs finalized by the Standing Specification Committee (SSC) have been sent to IPA.

**(e) SOP for Procurement of Deep-Sea Fishing Vessels (DSFV) under Pradhan Mantri Matsya Sampada Yojana (2021)**

This Ministry issued Standard Operating Procedure (SOP) in 2021 for Procurement of Deep-Sea Fishing Vessels to assist the state fisheries departments in expeditious implementation of PMMSY. Consolidated Standard Operating Procedure (SOP) for Procurement of Deep-Sea Fishing Vessels for Steel and FRP was issued on 31.01.2022. Further, three variants of Standardized DSFV Design & Specifications for Fishing vessels approved by Nodal authority have been sent to D/o Fisheries for necessary action.

**(f) Granting the Right of First Refusal in chartering of vessels**

The criteria for granting the Right of First Refusal for in chartering of vessels through tender process has been revised, for promoting tonnage under Indian flag and shipbuilding in India, so as to make India an Atmanirbhar/self-reliant Bharat, in terms of tonnage and ship-building in India. The following is the revised hierarchy of RoFR:

- ❖ Indian built, Indian flagged (Indian owned);
- ❖ Foreign built, Indian flagged (Indian owned);
- ❖ Indian built, foreign flagged (foreign owned).

**(g) Public Procurement (Preference to Make in India), Order 2017, revised in 2020**

The revised Make in India order issued by the DPIIT in September, 2020 stipulates that for public procurement of goods and services with estimated value of purchases less than Rs 200 crore, Global tender enquiries shall not be issued. It would help Indian shipyards to get more ship repair orders.

**Ship Repair Industry**

5.19 The global ship repair market is approximately US\$ 12 billion. Global ship repair market is currently dominated by shipyards in China, Singapore and Middle East largely due to the availability of skilled workforce and latest technology. The global market for ship repair and maintenance service is expected to witness significant growth, reaching a market value of USD 40 Billion by 2030 supported by developments in the markets in South East Asia and India. Though India's share in global ship repair is currently less than 1%, the country is favorably located in respect of the major trade routes / shipping routes with 7 to 9 % of the global trade passing within 300 NM of the coastline.

5.20 Additionally, India is poised well to offer repair services to Indian Navy and the allies US Navy for its 5th and 7th fleet deployed in Indian Ocean & Arabian Sea. Ship repair industry being labour intensive, India has got the advantage of having strong work force to cater to the requirement. However, the untapped potential in the Indian ship repair market can be attributed to the presence of competing international ship repair yards on major trade routes and a capability gap of Indian yards in repairing certain kinds of vessels.

5.21 Other reasons of cost disadvantages include high cost of financing, lack of supply of ship spares in India, ancillary support and technology related issues increasing ship repair execution cycle time. To address the above gaps, under MIV

2030, Government of India is giving a strong forward thrust to the industry with multiple initiatives including channelizing of domestic demands leveraging Public Procurement (Preference to Make in India), Order 2020, infrastructure development through better access to financial instruments, providing better opportunities for overall development and enhanced business in the Industry by creating free trade depots, maritime clusters etc. The COVID-19 pandemic had negatively impacted the global economy and thus, disrupted the global trade and allied ship repair and maintenance services industry. Ship repair and maintenance service activities were significantly reduced or suspended for several months. Operations globally, gradually resumed with new safety measures in place. These factors have collectively hampered the growth in global ship repair and maintenance market.

### Indian Ship Repair Capability

5.22 The untapped potential in the Indian ship repair market can be attributed to the presence of competing international ship repair yards in Singapore, Middle East (Dubai, Bahrain) and Colombo on major trade routes and a capability gap of Indian yards in repairing certain kinds of vessels. Due to these disadvantages, only about 5-6 shipyards out of a total of 43 shipyards in the country carry out any significant repair jobs. One of the major deterrents in ship repair is GST which is an additional tax burden and makes Indian ship repairers uncompetitive as compared to foreign ship repairers. Other reasons of cost disadvantages include high cost of financing, lack of supply of ship spares in India and technology related issues increasing ship repair execution cycle time.



*Shiprepair at an Indian shipyard*

5.23 India is located strategically on the international trade route, whereby it can attract ships plying from west to east in the trade route for its ship-repair activity. This represents increasing market potential for the ship-repair business, as ship owners prefer to repair their ships without deviating from their trade routes as much as possible. Ship-repair service, a supplementary service provided by most of the shipyards, is also a labour-intensive activity that utilizes the existing ship-building infrastructure to provide additional returns on the capital invested.

**Recycling of Ships**

5.24 India is a leading destination for recycling of end-of-life ships. 98% of ship recycling in India takes place at Alang-Sosiya in Gujarat which is located along 10 km long sea front on the western coast of the Gulf of Cambay adjoining Alang-Sosiya villages. Around 3.50 MMT of steel is produced per annum at Alang without exploiting natural resources where nearly 100 recycling plots have attained Hong Kong Convention compliant status. Ship recycling is also carried out in a limited manner at Kidderpore Docks, Syama Prasad Mookerjee Port, Kolkata and Mumbai Port. Steel Industrials Kerala Limited in Kerala also carries out recycling of small ships on a limited scale.

5.25 The Recycling of Ships Act, 2019 is aimed at ensuring that ships, when recycled, do not pose risk to human health, safety and to the environment. The Act is not yet in force. It will be enforced, once the Hong Kong Convention (HKC), on the basis of which it has been enacted, comes into force. The HKC will enter into force 24 months after the three conditions required for enforcing the Convention have been met. In anticipation, the Ship Recycling Rules 2021 have been notified in February, 2021 so that the stakeholders of the Indian Ship Recycling Industry are aware about putting in place the required infrastructure/resources/process to comply with internationally applicable standards.

5.26 Ship recycling in the country is currently regulated under the Ship Breaking Code, (Revised), 2013. The Code, which had been formulated based on the directions of the Apex Court, is in some areas more stringent than the HKC.

5.27 An International Conference on Green Ship Recycling and Scrapping Policy was organized on the 12<sup>th</sup> September 2022 at Gandhinagar, Gujarat along with a visit to Alang shipyards on 13<sup>th</sup> September 2022. Ambassadors of the major EU member States were also invited to give them exposure to the green recycling infrastructure installed at Alang. Steps have been initiated to enhance the existing ship recycling capacity as well as expand it from the existing 4.50 MMTPA of LDT to 9.0 MMTPA of LDT by 2024.

**REFORMS****Merchant Shipping Bill, 2020 and Coastal Shipping Bill, 2021 to replace Merchant Shipping Act, 1958**

5.28 In order to meet several challenges being faced by the maritime industry, foster overall development of marine ecosystem and to give impetus to coastal shipping and trade, the Merchant Shipping Act, 1958 is being revamped with contemporaneous provisions keeping in view global best practices to bring in a new Merchant Shipping Act and Coastal Shipping Act to reduce compliance burden, promote ease of doing business and ensure development of Indian shipping. The Merchant Shipping Bill, 2022 and Coastal Shipping Bill 2021 have been forwarded to the Legislative Department of Ministry of Law & Justice for vetting.

### Cruise Shipping

5.29 Cruise shipping is a fast growing component of the leisure industry worldwide. Huge amount of foreign exchange can be earned with sizeable direct & indirect employment can be generated onshore by providing the right policy environment and infrastructure for the growth of cruise shipping and tourism. Cruise tourism leads to significant regional development and also leads to the development of allied services in the vicinity. Currently Indian ports are primarily ports of call for cruise lines at ports in Mumbai, Cochin, Goa, New Mangalore and Chennai. To increase number of vessel calls and passengers arriving in India Ministry has relaxed Cabotage till 5<sup>th</sup> Feb, 2029 for foreign flag passenger/cruise ships to call at more than one Indian Port. Recently, Ministry in order to support the Cruise shipping industry and keeping in view to balance the loss incurred to the cruise industry due to the pandemic situation caused by COVID-19 has rationalized tariff for Cruise Vessels arriving in India and the following tariff made applicable for a period of one year vide order issued in October, 2022:-

- ❖ The port charges for a Cruise Ship to be charged at \$0.085 per GRT for first 12 hours stay ('Fixed Rate') and \$6.00 per passenger ("Head Tax"). The Ports will not charge any other rate like berth hire, port dues, pilotage, passenger fee, etc.
- ❖ For the period exceeding 12 hours stay, the fixed charges on Cruise Ships will be equal to the Berth Hire Charges payable as per SOR (with 40% discount as applicable for cruise ships),
- ❖ Further, cruise ships making
  - 1-50 calls per year to get 10% rebate.
  - 51-100 calls per year to get 20% rebate.
  - Above 100 calls per year to get 30% rebate.
- ❖ The above rationalized tariff is effective for a period of one year i.e. upto 30.09.2023.

5.30 The number of Domestic/International Cruise ships and passengers handled in Indian Ports are given in the Table below:-

Year	2019-20		2020-21		2021-22		2022-23 (Till 31.12.2022)	
	No. of Passenger	No. of Vessel(s)	No. of Passenger	No. of Vessel(s)	No. of Passenger	No. of Vessel(s)	No. of Passenger	No. of Vessel(s)
Chennai	612	2	0	0	70	1	Domestic - 88596	44
Cochin	67907	44	0	0	11608	09	International-1775	5
							Domestic – 24775	12
New Mangalore	24080	21	0	0	0	0	International - 1440	3
Mormugao	International - 57241	38	0	0	40201	18	International - 4397	5
	Domestic – 95634						125	0

**MINISTRY OF PORTS, SHIPPING & WATERWAYS**

Mumbai	222105	221	0	0	98342	47	Domestic / International – 126489*	52*
<b>TOTAL</b>	<b>467579</b>	<b>451</b>	<b>0</b>	<b>0</b>	<b>150221</b>	<b>75</b>	<b>306288</b>	<b>142</b>

\* Includes Domestic and foreign cruise vessel data.

## CHAPTER - VI

### FUNCTIONING OF ORGANIZATIONS



*Commissioning of first IAC by Hon'ble Prime Minister*

#### **DIRECTORATE GENERAL OF SHIPPING**

6.1 The Directorate General of Shipping {DG(S)}, an attached office of the Ministry was established in 1949 as the Maritime Administration of India. It deals with implementation of shipping policy and legislation, so as to ensure the safety of life and ships at sea, prevention of marine pollution and other mandatory regulations of the International Maritime Organizations are effectively implemented including promotion of maritime education and training, examination & certification of seafarers and supervision of other subordinate offices for their effective functioning etc. The Director General of Shipping is appointed under section 7 of the Merchant Shipping Act, 1958.

6.2 The Directorate General of Shipping's administrative secretariat consists of Director General, Additional Director General and Deputy Directors General of Shipping. On the technical side, the Director General is assisted by the Nautical Adviser for Navigational Issues, Chief Surveyor on Marine Engineering Issues and Chief Ship Surveyor on the Naval Architecture issues. The field formation of Directorate General of Shipping is headed by Principal Officers who are assisted by surveyor of Engineering, Nautical and Naval Architecture sides. The Heads of allied offices supported by their subordinate officers also assist the Director General of Shipping in the overall discharge of various statutory functions.

#### **Functions of offices under the administrative control of the DG(S)**

6.3 The Mercantile Marine Departments (MMDs) were set up in 1929 with Headquarters at Mumbai, Kolkata and Chennai. MMD, Kochi was elevated to district level office and a new district level office at Kandla was opened in 2005. These Departments were directly under the Ministry till the establishment of the Directorate General of Shipping at Mumbai in 1949. The main functions of MMDs are to administer

the various Merchant Shipping laws and rules relating to safety of ships and life at sea, registration of ships, tonnage measurement, crew accommodation, survey for load line, safety construction, prevention of pollution, enquiries into shipping casualty and wrecks, surveys of passenger ships, radio equipments on board, inspection and approval of statutory equipment for life saving and fire fighting appliances, wireless telegraphy, global maritime distress and safety systems, navigational aids, pollution prevention equipments, supervision of repairs and construction of ship on behalf of State and Central Government organizations, Flag state implementation, Port State Control inspection, examination and certification of various grades of certificates of competency as per relevant examination rules under Merchant Shipping Act, 1958 etc.

6.4 The additional responsibilities were imposed from time to time in the form of new statutes like Multi-modal Transportation of Goods Act, Admiralty Act, Recruitment and Placement of Seafarers Rules, Majority of Surveys, Inspections & Certification as required under various International conventions, notified by India, relating to safety of ships pollution prevention have been delegated to some of the Classification societies of IACS who acts as Recognized Organization of the Directorate with selective supervisory role for the DGS on important surveys.

#### **Passengers Ship Survey**

6.5 All passenger ships are subjected to survey of hull, Machinery, equipment etc. during construction and there after annually. On completion of survey, Certificates such as Passengers Ship Safety Certificate, Space Certificate, Special Trade Ship Safety Certificate, Exemption Certificate, 'A' Certificate and Certificate of Survey are issued. Cargo Ship Safety Construction (CSSC) Surveys. Under the requirements of SOLAS 74 Convention as amended, administration is responsible for conduct of CSSC Surveys of various types of Cargo Ships under construction and periodical and annual surveys thereafter. The task of surveys of Cargo Ships under construction/reconstruction abroad and subsequent periodical/annual surveys and issuance of certificate have been delegated to recognize Classification Societies. All Sea going vessels over 300 G.T. are required to be surveyed and issued with a Safety Radio Certificate in compliance with the M.S. (Radio) Rules, 1983 and Chapter IV of SOLAS 74 as amended from time to time. The survey consists of checking of Radio equipment for distress, safety and normal communication on board. With the harmonization of Certificates, the Safety Radio Certificate is issued.

#### **Online written and Oral Examination System**

6.6 Directorate General of Shipping (DGS) in line with STCW Convention and Digital India has initiated digitalization of examination system. In its endeavor during the COVID pandemic the Oral examination system were migrated to online mode. Further an online written examination system has been developed as a contingency option by DGS through Applied Research International Pvt. Ltd. (ARI) (who has currently developed and supports the DGS E-Governance system). This online written examination system is under pilot testing for assessing its suitability for adoption. Competency exams were conducted at lesser interval in order to clear the backlog. Since the COVID-19 situation was improved, the frequency of the examination has been resumed to pre-COVID-19 time.

**SEAMEN'S PROVIDENT FUND ORGANIZATION, MUMBAI**

6.7 The Seamen's Provident Fund Scheme, the first social security scheme for Indian Merchant Navy Seamen, brought under statute by enactment of the Seamen's Provident Fund Act, 1966 (4 of 1966) was introduced retrospectively with effect from 1st July, 1964, to provide for the institution of a provident fund for seamen as old age retirement benefit and their family members in the event of death of seamen members. The Seamen's Provident Fund is vested in and administered by the Board of Trustees consisting of the Chairman and three representatives each of the Government, Employers and Employees. The Director General of Shipping is an ex-officio Chairman of the Board of Trustees and the Commissioner is the Chief Executive Officer and the Secretary to the Board. SPFO maintaining the PF account of approximately 88,000 Indian seafarers.

**NATIONAL WELFARE BOARD FOR SEAFARERS**

6.8 As provided under Section 218 of Merchant Shipping Act, 1958 the Government of India has constituted a National Welfare Board for Seafarers headed by the Union Minister of Port, Shipping and waterways for advising the Government on the measure to be taken for promoting the welfare of Seamen whether on shore or aboard. The Board functions with Minister of Ports, Shipping and waterways as the chairman. It comprises of 2 Members of Parliament (one from Lok Sabha and one from Rajya Sabha), 4 representatives from Central Government, 3 representatives each of Ship-owners and Seafarers, 2 representatives from Port Trusts, 1 non-official Member from the field of Seamen's Welfare of Public, representative from Society interested in Seamen's Welfare.

**SEAFARERS' WELFARE FUND SOCIETY (SWFS)**

6.9 The SWF Society set up as a Central Organization for the Welfare of Indian Seafarers and their families. The Society is registered under the Societies Registration Act 1860 and as a Trust under the Bombay Public Trust Act 1950. The Society represents various interests connected with Indian Shipping which includes representatives of Indian and Foreign Ship-owners and also of Seafarers' Unions separately for officers and seamen. The control of business and affairs of the Society is vested with the Committee of Management of which the Director General of Shipping is the ex-officio Chairman. SWFS manages the gratuity of approximately 75000 Indian seafarers. The SWFS is the Central Organization of the Government of India to ensure the compliance of the Regulations 4.5 of Maritime Labour Conventions, 2006 and to comply the same. Steps have already been taken by the SWFS by implementing various welfare schemes to the seafarers and their families. The Welfare schemes so far implemented by the SWFS are (i) Survival Benefit Scheme (ii) Invalidity Benefit Scheme (ii) Maternity Benefit Scheme (Only for women seafarers) (iv) Old Age Benefit Scheme and (v) Family Benefit Scheme. It is established as per section 4 of Merchant Shipping Act, 1958 to advice the Central Government on matters relating to Indian Shipping and on such other matters arising out of this Act as the Central Government may refer to it for advice.

**NATIONAL SHIPPING BOARD**

6.10 The National Shipping Board established as per section 4 of the MS Act, 1958 to advise the Central Government on matters relating to Indian Shipping and on such matters arising out of this act as the Central Government may refer to it for advice.

**DIRECTORATE GENERAL OF LIGHTHOUSES AND LIGHTSHIPS**

6.11 The Directorate General of Lighthouses and Lightships establishes and maintains Aids to Marine Navigation along the coastline of India as per Lighthouse Act, 1927 which has been now repealed and replaced by the newly enacted Marine Aids to Navigation Act, 2021.

6.12 The International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA), having its headquarters at St. Germain en Laye (France), is an Association bringing together the organizations responsible for provision and maintenance of Aids to Marine Navigation. The aim of the Association is to encourage continuous improvement of Aids to Marine Navigation. The IALA is the only world body for Aids to Marine Navigation having more than 100-National members responsible for management of AtoNs within their countries. The Directorate General of Lighthouses and Lightships represents India. The IALA promotes co-operation and assistance between various member countries by collection and dissemination of information so as to take up development of multipurpose navigational systems for enhancing maritime safety.

**Organizational Structure**

6.13 The Directorate General of Lighthouses and Lightships is headed by the Director General at Headquarters situated at Noida and having 09 Directorates at Gandhidham, Jamnagar, Mumbai, Goa, Cochin, Chennai, Vishakhapatnam, Kolkata and Port Blair.

**Aids to Navigation**

6.14 There were 17 lighthouses at the time of Independence. As on date, the details of Aids to Navigation maintained by the DGLL are as shown below:

Sl. No.	Aid to Navigation	Nos.
1.	Lighthouses	203
2.	Lightship	01
3.	DGPS Stations	23
4.	Racons	64
5.	Deep Sea Lighted Buoys	22
6.	National Automatic Identification System (AIS) 87 Physical Shore Stations (PSS)	1
7.	Vessel Traffic Service - Gulf of Kachchh (9 Radar + 4 AIS Base Stations & 2 Direction finder)	01
8.	Lighthouse Tender Vessels	02
9.	National Navtex Chain (7 Tx. Stations, 7 Monitoring Stations & Navtex Control Centre at Mumbai & Vizag.)	01

### Lighthouses

6.15 A Lighthouse is a structure on land close to the shore line or in the water. The Lighthouse tower serve as a day mark with its colour scheme and a powerful light with a specific character serve the mariners during the night. A lighthouse may be used to indicate dangerous Shoals, Sand Bank, Rock etc. to obtain a Line of Position and to indicate Landfalls, Headlands, entrance to estuaries/ports etc.



*Lighthouse*

### Lightship

6.16 A Lightship serves the same purpose as lighthouse and is positioned in the sea, where it is not feasible to construct a lighthouse. DGLL maintains a lightship “PERIGEE” off the Bhavnagar coast, in Gujarat.



*Lightship*

### National Navtex Network

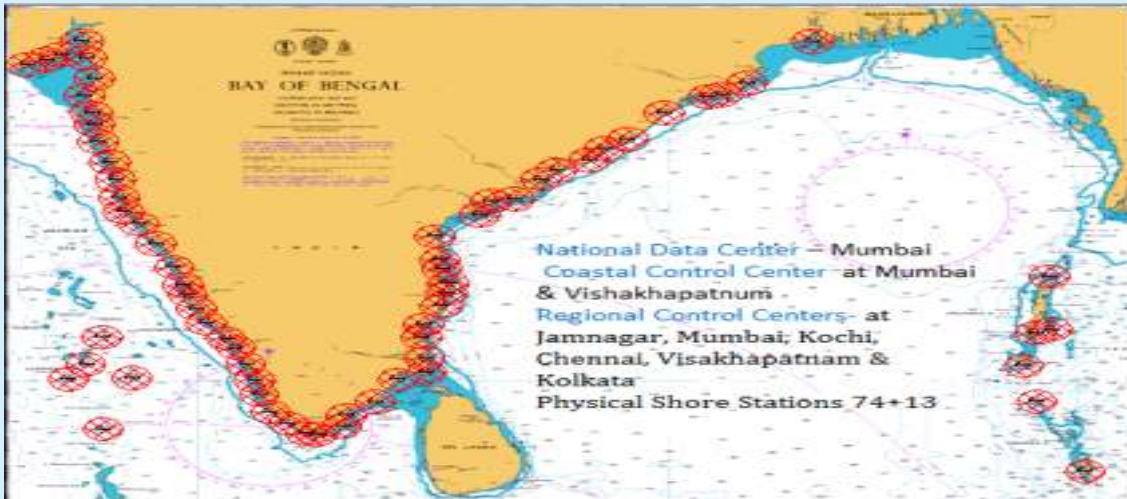
6.17 The Directorate General of Lighthouses & Lightships has established a National NAVTEX Network along the coastline of India in order to meet the International Maritime Organization (IMO), Global Maritime Distress and Safety System (GMDSS) requirement by establishing 07 Transmitting Stations on West Coast, East Coast and in Andaman and Nicobar Islands.

6.18 The NAVTEX Network broadcasts Maritime Safety Information (i.e. Weather Forecast, Weather Warning, Navigation warnings & SAR messages). The data are provided at NAVTEX Centre by the Indian Metrological Department (IMD), National

Hydrographic Office, Indian Coast Guard (ICG) and Directorate General of Shipping at Mumbai from where it is relayed to various transmitting stations.

### National AIS Network

6.19 Automatic Identification System (AIS) is a ship to ship and ship to shore based data broadcast system, for maritime safety and collision avoidance. DGLL has established National AIS Network with 87 Physical Shore Stations (PSS), which seamlessly provides radio coverage up to a minimum distance of 25 Nautical Miles from the coast including Islands of Andaman & Nicobar and Lakshadweep thus all SOLAS and other vessels equipped with AIS Transponders are tracked. Two Coastal Control Centers at Mumbai and Vishakhapatnam have been established, in addition, to a National Data Centre at Mumbai. For coastal safety and security, terminals are also provided at Directorate General of Shipping, Joint Operation Centre (JOC) Mumbai, Joint Operation Centre (JOC) Vishakhapatnam, Indian Navy Delhi and Indian Coast Guard Delhi.



Map showing NAIS coverage



Physical Shore Stations

### Lighthouse Tender Vessels

6.20 To cater to the need of maintenance of Lighthouses in the islands and for maintaining the channel marking buoys in the Gulf of Kachchh and Gulf of Khambat, the Directorate is maintaining two ocean-going vessels: (1) M.V. Sagardeep-II and (2) Indira Point. These vessels are also used for monitoring the performance of AtoNs established by the Directorate General.



MV Sagardeep II



MV Indira Point

**Establishment of new Lighthouses at Dhanushkodi and Kelshi**

6.21 To enhance the safety of mariners and fishermen and to provide seamless coverage along the Indian Coast, two new Lighthouses have been established. Hon'ble Minister for PS&W inaugurated two new Lighthouses at Dhanuskhodi (Tamil Nadu) and Kelshi (Maharashtra) on 14th May, 2022 through video conferencing during the Incredible India International Cruise Conference held on 14-15 May, 2022 at Mumbai.



*Kelshi Lighthouse*



*Dhanushkodi Lighthouse*

**COCHIN SHIPYARD LIMITED**

6.22 Cochin Shipyard achieved a net profit of Rs. 586.57 crore for the financial year 2021-22 as compared to Rs. 610.10 crore for the year 2020-21. The Company achieved a turnover of Rs. 3190.00 crore for the year 2021-22 as compared to Rs.2818.90 crore for the year 2020-21. Turnover for the half year ended September, 2022 was Rs. 1122.63 crore as against Rs. 1025.72 crore for the half year ended September, 2021. Company achieved a net profit of Rs. 168.74 crore for the half year ended September, 2022 as compared to Rs. 168.11 crore for the half year ended September, 2021.

**Order Book Position**

6.23 As on September 30, 2022, CSL has 41 vessels on order including Phase III post delivery works of Indigenous Aircraft Carrier for the Indian Navy, 2 Nos. 1200 Pax cum 1000 Ton Cargo Vessel for A&N Administration, 8 Nos. of Anti-Submarine Warfare Shallow Water Crafts (ASW SWC) for the Indian Navy. 19 nos. of battery operated passenger ferry for the Kochi Water Metro Project, 1 No. of Dredger for Dredging Corporation of India (DCI), 8 Nos. of 7K Multipurpose Vessel (HS Eco Freighter) for HS Service GmbH & Co. KG, Germany and 2 Nos. of Commissioning Service Operation Vessels for Windfinity Maritime Ltd. and Windlight Maritime Ltd.



*CSL delivered battery operated passenger ferry for the Kochi Water Metro Project to Kochi Metro Rail Limited*

6.24 Cochin Shipyard Limited (CSL) had signed a contract during FY 2020-21 with Kochi Metro Rail Corporation for building 23 nos. passenger boats using hybrid battery powered propulsion. CSL delivered two Autonomous Electric Barges viz. “Marit” & “Theres”, for Norway based ASKO Maritime AS during FY 2021-22. The 67 meters long vessels are delivered as Full-Electric Transport Ferries powered by 1846 kWh capacity battery. CSL signed two MoUs with Inland Waterways Authority of India (IWAI) for building Hybrid Electric Catamaran Passenger Vessels (50 PAX) and country’s first Hydrogen Fuel Cell Catamaran Passenger Vessel (100 PAX) for Uttar Pradesh. Additionally CSL has also signed a MoU with IWAI for building Hybrid Electric Catamaran Passenger Vessels (50 PAX) for deployment in NW-2 in Guwahati, Assam.



*CSL and DCI signed agreement for building of first-ever Trailing Suction Hopper Dredger in presence of Hon’ble Minister and Hon’ble Minister of State*



**CSL signed MoU with IWAI for building country's first Hydrogen Fuel Cell Catamaran Passenger Vessel (100 PAX) for Uttar Pradesh in presence of Hon'ble Minister, Hon'ble Minister of State and Hon'ble CM of Uttar Pradesh**

6.25 Amongst public sector shipyards, Cochin Shipyard Ltd has the highest capacity for ship repairing (125,000 DWT). In the private sector, L&T Shipbuilding Ltd. has the maximum capacity for ship repairing (300,000 DWT). Cochin Shipyard Limited (CSL) is developing International Ship Repair Facility (ISRF) within the premises of Cochin Port by installing a ship lift facility of 130m x 25m x 6000T capacity with 6 workstations and allied facilities at the cost of Rs. 970 crore. CSL continued to operate the dry-dock and existing facilities in the leased area (first phase) at Cochin Port premises. CSL completed repairs of twelve ships during the year 2021-22. The construction works of ISRF project, which commenced on November 17, 2017 was progressing till February 04, 2022. However, the construction contractor appointed for ISRF project, Simplex Infrastructures Limited, Kolkata has been facing severe financial crisis due to which construction activities at the project site was severely affected and eventually CSL had to terminate the contract on February 04, 2022. Physical progress of construction works reported till the termination of contract is 78%. CSL is presently in the process of appointing alternate contractors by retendering for completing the balance works within the minimum possible time. Meanwhile, CSL received all components pertaining to the transfer system supplied by M/s. IMG, Germany. For the ship lift system from M/s. Syncrolift AS Norway, CSL is in receipt of all components except the platform sections. The Indian Register of Shipping (third party inspection agency) had completed the pre-dispatch inspection of 10 tonne crane ordered on M/s. CJSC SMM, Russia in mid February 2022 and the crane is expected to be delivered soon at CSL. 3 nos. of tower cranes for which order was placed on M/s. Liebherr, Germany are in the advanced stages of manufacturing. Ten globally renowned firms in the maritime industry have already partnered with CSL for setting up their units in the Maritime Park in first phase. CSL expects to position Kochi as a major ship repair hub with major operations in the present ship repair dock coupled with increased capacities that would be available when the ISRF is commissioned.

**HOOGHLY COCHIN SHIPYARD LIMITED (HCSL)**

6.26 Hooghly Cochin Shipyard Limited (HCSL) was initially set up as a joint venture between CSL and Hooghly Dock & Port Engineers Limited (HDPEL). Pursuant to the approval of the Union Cabinet, HCSL became a wholly owned subsidiary of CSL with effect from November 01, 2019. Subsequently, pursuant to the approval of the shareholders, the Registered Office of HCSL was changed to ‘Administrative Building, HCSL Premises, Satyen Bose Road, P.O. Danesh Shaikh Lane, Nazirgunge, Howrah, West Bengal – 711 109’ with effect from June 01, 2021. In line with the thought process of the Govt. of India to develop the National Waterways being piloted by the Ministry of Ports, Shipping and Waterways through the Jal Marg Vikas project of IWAI, the Nazirgunge unit of HCSL has been refurbished and restructured into a modern shipbuilding facility. HCSL completed the project phase and its new facility for shipbuilding and ship repair at Nazirgunge was dedicated to the nation on August 16, 2022 by Shri Sarbananda Sonowal, Hon’ble Union Minister for Ports, Shipping & Waterways. Besides, the Company has obtained IMS Certification including ISO 9001-2015 – Quality, ISO 14001-2015 – Environment and ISO 45001-2018 – Health & Safety, from the Indian Register of Shipping (IRS). Moreover, in April 2022, the Company has implemented one of the best available ERP solutions, the SAP S/4HANA, which is expected to improve the efficiency of business transactions considerably.

6.27 HCSL aspires to establish itself as one of the leading shipbuilding yards in east coast for quality inland and coastal vessels construction. The Yard is very well poised to contribute to CSL group’s long term strategy, CRUISE 2030, by capitalising the vast opportunity in the small vessels segment especially inland barges and vessels, passenger ferries, RO-RO/ RO-PAX, ship repairs etc. primarily in the North East region of the country. HCSL being a Yard with its access to the National Waterways 1 and 2, envisaged by the Government of India can be best utilized for building small vessels at the least possible cost. This will help the Company to penetrate the high volume low margin small vessels segment both in domestic as well as international markets.



*Hon’ble Minister and Hon’ble Minister of State inaugurated Hooghly Cochin Shipyard Limited (HCSL)*

**UDUPI COCHIN SHIPYARD LIMITED (UCSL)**

6.28 Consequent to the takeover of the Company Tebma Shipyards Limited by Cochin Shipyard Limited (CSL) in September 2020, through the statutory insolvency resolution process, various activities were carried out for revamping the Company's infrastructure facilities. UCSL has two facilities; one in Udupi, Karnataka and the other in Chengalpet, Tamil Nadu. The facilities at Udupi is spread across three units viz., Malpe Harbour Complex, Hangarkatta and Babuthotta. The revamping activities were streamlined despite COVID-19 related difficulties and the Company made operational the warehousing facility in Babuthotta and commenced its shipbuilding operations at its Hangarkatta facility. Consequent to the takeover of the Company by CSL, the name of the Company was changed from Tebma Shipyards Limited to Udupi Cochin Shipyard Limited (UCSL) on April 22, 2022.

6.29 The Company has reported a loss of Rs. 12.94 crore for the year ended March 31, 2022 as against the loss of Rs. 1.36 crore for the previous year. Further, the Company has reported total income of Rs. 10.08 crore for the year ended March 31, 2022 as against Rs. 0.75 crore for the previous year.

**SHIPPING CORPORATION OF INDIA LIMITED (SCI)**

6.30 During the last 60 years, SCI has been providing yeoman service to the country's economy by meeting its ocean transportation requirements. Starting out as a Liner Shipping Company with 19 vessels with a capacity of mere 0.19 Million Dead Weight Tonnage (DWT) in 1961, SCI as on 01.01.2023 owns 59 vessels of 5.311 Million DWT, 2.94 Million GT and constitutes about 26% (in terms of DWT) of Indian tonnage.

**Crude Transportation**

6.31 India has one of the world's fastest growing energy markets. Energy security is of paramount importance. Looking at nation's immense energy needs for growth, SCI gradually shifted its focus from liner business to energy transportation starting with crude oil transportation in 1964. SCI ordered several crude and product tankers in 1970s to exclusively meet the needs of the Indian Oil Industry.

**Commodity & Product Transportation**

6.32 SCI took fullest advantage of the recession in the shipping industry in early 1980 and did massive fleet acquisition (tankers as well as dry bulk vessels) to meet nations growing EXIM trade. In 1991, SCI diversified into cryogenic operations. As of date, SCI has mix fleet of 13 Crude Carriers, 5 VLCC, 13 Product Carriers, 1 Gas Carrier, 15 dry bulk carriers, 2 liner vessels in various sizes and is employed on a mix of Time Charter & Voyage Charter and is trading India centric as well as cross trade market. SCI also have 10 offshore supply vessels.

**INDIAN MARITIME UNIVERSITY (IMU)**

6.33 IMU is a teaching-cum-affiliating University established on 14<sup>th</sup> November, 2008 to provide quality maritime education, training and research. The admission cycle was affected due to the prevalent pandemic. A total of 21 training programmes were conducted by IMU in 2022, for Port personnel and Officers from Tamil Nadu State Archaeological Department. The IMO Mock Competition was successfully conducted

during the period from 01.06.2022 to 29.09.2022 by IMU. It received appreciation & accolades from International Association of Maritime Universities (IAMU) in its Annual General Assembly held in Batumi, Georgia in October 2022.

### **TARIFF AUTHORITY FOR MAJOR PORTS (TAMP)**

6.34 The Tariff Authority for Major Ports (TAMP) was created in 1997 by an amendment to the Major Port Trusts Act, 1963 and was constituted by the Government of India through a Gazette Notification on 10.04.1997. The Authority consists of a Chairman and two Members. Tariff Authority for Major Ports is an ISO 9001:2015 and ISO 27001:2013 certified organization. As per the Major Port Authorities (MPA) Act, 2021, which has come into force with effect from 3<sup>rd</sup> November 2021 the MPT Act, 1963 stands repealed. Thereby, the tariff fixation mandate of TAMP stands withdrawn and it shall discharge the functions of the Adjudicatory Board till its constitution.

### **ANDAMAN LAKSHADWEEP HARBOUR WORKS**

6.35 Andaman Lakshadweep Harbour Works (ALHW) a sub-ordinate office under Ministry was established during 1965 for the service of Andaman & Nicobar Islands and Lakshadweep Islands. The ALHW is entrusted with the responsibilities of formulating and implementing the programs of Ministry for providing Port and Harbour facilities in Andaman & Nicobar and Lakshadweep Islands. From its inception, ALHW has been implementing the Port development schemes from the funds provided by Ministry under Central Sector Plan schemes starting from the Third Five Year Plan onwards. Apart from the creation of Port infrastructures, ALHW is also entrusted with maintenance of Port structures & Cargo Handling equipments under the funds provided by Andaman & Nicobar Administration and Lakshadweep Administration.

### **DREDGING CORPORATION OF INDIA LIMITED**

6.36 Dredging Corporation of India Limited (DCI) is owned by four major ports namely Visakhapatnam, Jawaharlal Nehru, Paradip and Deendayal Port. The DCI is specialized in the field of Dredging and Land Reclamation of Maritime Sector. Besides Dredging Projects' execution, DCI also provides solution for project management consultancy for development of ports, inland waterways, reservoirs, dams and flood control management. Dredging Corporation of India is celebrating 45 years of rendering service to National Ports. The Hon'ble Minister for PS&W Shri Sarbananda Sonowal inaugurated Nikarshan Sadan, the Dredging Corporation Museum in Visakhapatnam.



*Inauguration of Nikarshan Sadan by Shri. Sarbananda Sonowal, Honourable Minister for Ports Shipping and Waterways*

6.37 The DCI based on the requirements of maintenance dredging at Major Ports and to upgrade the technology and capacity of dredging has initiated the process for procurement of TSHD of 12000 m3 capacity to be constructed at Cochin Shipyard Limited under the Atma Nirbhar Bharat Program. The agreement between Dredging Corporation of India Limited and Cochin Shipyard Limited has been signed on 17.03.2022 and tripartite agreement between DCI-CSL-IHC has been signed on 13.04.2022. The Cost of the dredger is 104.59 million Euros.

6.38 DCI with more than 45 years of experience with 850 highly skilled professionals and a fleet of more than 10 Dredgers strives to contribute to the development of port sector to maintain navigational channels and other operational water fronts. DCI works towards sustainable, eco-friendly future and offer solution in dredging for coastal protection and beneficial uses of dredged material and natural resources. DCI also signed an MOU with Numaligarh Refinery Limited for dredging & reclamation work at crude oil import terminal of NRL at Paradip.

#### **SAGARMALA DEVELOPMENT COMPANY LIMITED**

6.39 The Union Cabinet, after approval of Cabinet Note on Sagarmala Programme, Concept and Implementation on 25th March 2015, gave approval for incorporation of Sagarmala Development Company (SDC) on 20th July 2016 with following decisions:

- ❖ Formation and incorporation, of the Sagarmala Development Company (SDC), under the Companies Act, 2013 and appointing Secretary (MoPSW) as the ex-officio Chairman and a Board of Directors comprising of the Managing Director, two Functional Directors, one Government Director and two Non-Official (Independent) Directors of the SDCL.
- ❖ Selection of the initial set of Managing Director and the two Functional Directors of the Company, through a Search-cum-Selection Committee to be headed by the Chairman, Public Enterprises Selection Board (PESB) with Secretary (MoPSW), Secretary (DOPT) and an expert (to be nominated by the Ministry) as members. The Government Director and two Non-Official (Independent) Directors, on the Company Board, shall be appointed by the Ministry after taking prior approval of the Competent Authority.
- ❖ To set-up the SDC with an Initial Authorized Share Capital of Rs. 1,000 crore and a Subscribed Share Capital of Rs. 90 crore with the provision of increasing it in future if the need arises.
- ❖ A budgetary allocation of Rs. 250 crore for FY 2016-17 and an equal amount for each of the subsequent 4 years solicited.
- ❖ Sagarmala Development Company Limited (SDCL) incorporated on 31st August, 2016 will raise funds as debt/equity (as long term capital), as per the project requirement, by leveraging resources provided by the Government of India and from multi-lateral and bilateral funding agencies. As per the approved structure of Sagarmala Programme, the implementation of the projects shall be done by the line ministries, State Governments/State Maritime Boards (SMBs) and SPVs and the SDCL will provide a funding window and/or implement only those residual projects that cannot be funded by any other means/mode.

6.40 SDCL endeavors to provide a framework and funding for ensuring integrated development of Indian maritime sector. These include Green field port/brown field port development, last mile connectivity to the ports and other relevant activities under Sagarmala Programme. With SDCL being a common equity investor and project development agency, it can lead to better communications and coordination among the different implementing agencies. The Company acts as a patient investor providing long-term equity as well as aims to provide residual capital to cover up equity short-fall in specific projects. SDCL also acts as the facilitator for pre-development tasks by providing support in project studies, DPRs, financing arrangements, facilitating approvals and clearances.

6.41 So, far SDCL has invested around Rs. 541.78 crore as an equity investment in the five Project SPVs, the details of the same is as under:

S. No	Project SPV	Equity Investment by SDCL (in Rs. Cr)	Year of Investment	Status of the Project
1	Krishnapatnam Rail Company Ltd	125	2018-19	Operational
2	Indian Ports Global Limited	10	2018-19	Operational
3	Calcutta Haldia Port Road Company Limited	50	2019-20	Operational
4	Visakhapatnam Port Road Company Ltd	20	2019-20	Operational
5	Haridaspur Paradip Railway Company Ltd*	284.50	2019-20	Operational
	-do-	52.28	2020-21	Operational
<b>Total Equity Investment by SDCL</b>		<b>541.78</b>		

\* Rs. 336.76 Lakhs from Haridaspur Paradip Railway Company Limited has been received as dividend for FY 2021-22

#### INDIAN PORT RAIL & ROPEWAY CORPORATION LIMITED (IPRCL)

6.42 In order to provide efficient rail evacuation systems to Major Ports and thereby enhance their handling capacity and efficiency, a Special Purpose Vehicle (SPV) namely Indian Port Rail Corporation Ltd. was formed on 10<sup>th</sup> July 2015 with the approval of Cabinet under Companies Act, 2013, in which the subscribed share capital of Rs.100 crore contributed by 11 Major Ports and Rail Vikas Nigam Limited (RVNL). The authorized share capital of the company is Rs.500 crore. The company has subsequently further diversified into Ropeways and the name has accordingly been changed to "Indian Port Rail & Ropeway Corporation Limited".

#### Objectives of IPRCL

- ❖ To provide efficient and competitive rail evacuation systems to Ports in India by way of creating last mile connectivity of the ports.

- ❖ Modernization of the rail infrastructure at ports; creating and managing the internal port railway system.
- ❖ Creation of new and enhancement of capacity in embedded hinterland connectivity.
- ❖ To create railway infrastructure at Major Ports and other designated areas including land, building, locomotives and maintenance facilities for achieving the main objectives mentioned above.
- ❖ To carry on the business of development, operations & maintenance of Ropeways and other modern transit systems.
- ❖ To provide consultative and management services in all matters derived from domain expertise relating to all aspects of port infrastructure including railway, multimodal transport & port, railway siding, locomotives, conveyor belts, land management etc.
- ❖ To enter either alone or jointly with any other companies or persons in India or outside India, into contracts (on turnkey basis or otherwise) for the design, erection, construction, maintenance, alteration, repair, and restoration works of all descriptions including railways, tramways, waterways, road bridges, warehouses, factories, museums, ships and buildings of every description in India or outside India.

### **IPRCL Operations**

6.43 During the year 2021-22, major thrust of the management continued in team and organization building in taking up direct execution of railway projects at locations in various parts of India. IPRCL has directly executed projects for JN Port Authority, DPA, SMPA, PPA, VPA, NMPA, VoCPA and KPL and this included DPR preparation, PMC and Construction. An important project of planning and development of National Maritime Heritage Complex (NMHC) at Lothal, Gujarat was awarded to IPRCL and work is in progress in full swing. Signing of contract for NMHC Phase-1A project between IPRCL and M/s. TATA Projects Ltd. was held at 7th Anniversary function of Sagarmala on 25.03.2022 held at Dr. Ambedkar International Center, New Delhi in presence of Hon'ble Cabinet Minister & Ministers of States for Ports, Shipping & Waterways and Secretary, MoPSW. Similarly, an MOU was signed between Paradip Port Authority and IPRCL for upgradation and modernisation of Paradip Fishing Harbour on 25.03.2022 at the 7th Anniversary function of Sagarmala. Paradip Port Authority has also awarded the work of operations and maintenance of 12 locomotives to IPRCL. Inland Waterways Authority of India (IWAI) awarded the work of design, construction and development of Tourist-cum-Cargo IWT Terminal at Bogibeel, Assam on EPC mode on 27.05.2022 to IPRCL. The company is also undertaking another assignment for IWAI for preparation of Feasibility Report on IWT between Hemnagar and Khedapara, feasibility of notifying stretch as IBP route to envisage cross boundary trade between India and Bangladesh and identify measures for de-congestion of cargo movement through Petrapole (India) ICP.

6.44 IPRCL also continued to get business opportunities by entering into long term MOU with M/s. Coal India Limited by providing consultancy for preparation of FSR/DPR and PMC for rail connectivity to mines for evacuation of coal besides the maintenance of its railway track. Construction Industry Development Council (CIDC) has enlisted IPRCL as an Approved Vendor on 01.02.2022 for providing services of "Port Infra,

Railways, Ropeways, ROBs, Freight Terminals & Port Mechanisation”. Besides, efforts to rope in major clients viz. NTPC, oil companies through participation in competitive bidding were made. It is envisaged that award of rail/road connectivity and related infrastructure projects by PSUs and other major industries to IPRCL will add to profitability in ensuing years in-spite of the current challenges.

The Company strives to remain engaged in upcoming domestic mega projects, especially emerging out of MIV-2030, PM Gati Shakti National Master Plan and Vision India @ 2047. IPRCL has entered into new business of upgradation and modernization of Fishing Harbours, operation and maintenance of locomotives at ports, consultancy of development of waterways and tourist-cum-cargo terminal for Inland Waterways Authority of India. In Ropeway segment, IPRCL has been awarded the work of preparation of 7 DPRs, 4 Bid Process Management and one PMC work of ropeway projects in FY 2021-22.

**Important Projects completed during the Year 2021-22:**

Sl. No.	Name of Project	Port
1	AMC of S&T gears at Haldia Dock Complex Railway Yard (3 cabins)	HDC
2	IE for Dhamra Port	Dhamra
3	Renovation and upgradation of existing track at Coal yard	VoCPA
4	Construction of Helipad	PPA

**Important projects under implementation by IPRCL during the year 2021-22:**

Sl. No.	Name of Project	Port	Project Cost in
			Cr. (Rs.)
1	Augmentation / Doubling of Southern connectivity to KPL: Ph.1: Major Bridges work	KPL	86.70
	Augmentation / Doubling of Southern connectivity to KPL: Ph.2: Earthwork & minor bridges and track linking work		
2	Upgradation and modification work in KPL	KPL	33.52
3	S & T Maintenance work in KPL for three years (Dec-19 to Dec-22)	KPL	7.96
4	3rd Line between Jasai and JNPA	JNPA	126.02
5	Development of DFC compliant Common Rail Yard with ROB including modification work	JNPA	330
6	Rail Connectivity to Jalna Dry Port including construction of ROB	JNPA	110.9
7	Rail Connectivity to Wardha Dry Port	JNPA	73.00
8	Construction of ROB under Setu-Bharatam at Km 183+700 & Setu-Bharatam at Km 170+400 in the	MoRTH	188.70

	state of AP		
9	Construction of interchange-cum-ROB at Kutch Salt Jn in the state of Gujarat	DPA	254.92
10	Second exit road cum flyover at Paradip Port as part of additional port connectivity from NH	PPA	92.92
11	Construction of a Road cum Flyover crossing the BOT rail tracks to have unobstructed access to the MCHP areas.	PPA	33.94
12	Project Development & Consultancy	NMHC	573.12
	<b>Total Cost in INR (Cr)</b>		<b>1911.70</b>



*Hon'ble Minister PS&W inaugurated the DFC Compliant Common Rail Yard at JNPA on 15.05.2022*

### INDIAN PORT GLOBAL PRIVATE LIMITED

6.45 In view of strategic interest of gaining reliable sea / land access route to Afghanistan and other Central Asian Countries, Ministry of External Affairs moved a Cabinet Note dated 5th September, 2014. As per para 12 of the said Note, it was proposed to establish a Joint Venture Company, comprising of Jawaharlal Nehru Port and Deendayal (erstwhile Kandla) Port to enter into Contract with Iran's Port & Maritime Organization (P&MO) to participate in development of Phase 1 of Chabahar Port. Cabinet approved the Indian participation in Chabahar Port Development on 18.10.2014. Accordingly India Ports Global Private Limited (IPGPL) was incorporated on 22<sup>nd</sup> January 2015. Authorized capital and Paid up capital of IPGL is Rs.10 crore. The two promoters were Jawaharlal Nehru Port and Deendayal Port, holding equity in the ratio of 60:40 respectively.

6.46 A Memorandum of Understanding (MoU) for development of Chabahar Port by India was signed in Tehran between India and Iran on 06<sup>th</sup> May 2015 by the then Minister from the Indian side and Minister from the Iranian side and thereafter the contract was signed on 23<sup>rd</sup> May, 2016 at Tehran (Iran) during the visit of Hon'ble Prime Minister of India to Iran. The Contract was signed between Aria Banader Iranian Port & Marine Services Company (ABI) of Iran and India Ports Global Ltd. (IPGL) of India for equipping and operating two terminals at first development phase of Shahid Beheshti-Chabahar Port. The Ports & Maritime Organization of Islamic Republic of Iran (PMO)

and the then Ministry of Shipping, Government of India were the Confirming Parties to the Contract.

6.47 Since there were challenges in activation of the Main Contract, the foundation of a short period Contract was laid during the visit of His Excellency President of Islamic Republic of Iran to New Delhi in February 2018. Resultantly a formal Short Lease Contract between the two sides was signed on 6th May 2018. For implementation of the same, an SPV India Ports Global Chabahar Free Zone (IPGCFZ) with 98% share holding by IPGL and 1% each by Jawaharlal Nehru Port and Deendayal Port was incorporated in Iran. In order to insulate JNPT and DPT from possible impact of United State sanctions after US withdrew from the Joint Comprehensive Plan of Action, 100% equity shares of Jawaharlal Nehru Port and Deendayal Port in IPGL purchased by Sagarmala Development Company Ltd. (SDCL) (a company under Administrative control of Ministry). Currently 100% shares of IPGCFZ are held by IPGL.

**CENTRAL INLAND WATER TRANSPORT CORPORATION LIMITED (CIWTC)**

6.48 CIWTC was incorporated on 22nd February 1967 incorporated in May 1967 as a Govt. of India Undertaking, when it took over all the assets and liabilities of the erstwhile River Steam Navigation Company Limited under a Scheme approved by the Calcutta High Court on 03.05.1967. However, due to inherent limitations and infrastructure bottlenecks in the water transport sector, the operations of CIWTC could never become viable and the company incurred operational losses in each Financial Year since its inception and surviving on the support/Grants-in-aid on Govt. of India for payment of salary/wages and other statutory dues of its employees. The Cabinet on 31st August, 2016 approved a proposal for Dissolution of CIWTC including Disposal of movable and immovable assets, improved Voluntary Retirement Scheme (VRS) for the remaining five employees with provision of Compulsory Retirement (CR) in case of unwillingness and Winding up of CIWTC as per provision of Companies Act, 1956. All the land parcels of CIWTC have been transferred/handed over to Central Government, CPSEs etc. and all the movable assets have been disposed. Tentative timelines for closure of CIWTC are as under:-

Sl. No.	Particulars	Date	Status
1.	Settlement of dues of employees <b>completed</b> except for 04 nos. retrenched employees, who have filed legal cases against retrenchment in the High Courts of Guwahati & Calcutta.	(Completed)	(Completed)
2.	Disposal of movable & immovable assets <b>completed</b>	(Completed)	(Completed)
3.	Audited Accounts for FYs 2017-18 to 2021-22 have been submitted to CAG. CAG Audit have been completed for F.Y. 2017-18 and for F.Y. 2018-19, replies to CAG observations have been submitted on 20.01.2023 by Statutory Auditor. CAG Audit for F.Y. 2021-22 would	(Completed)	(Completed)

	commence from 24.01.2023 to 03.02.2023.		
4.	Approval of GoI for transfer of Assets & Liabilities and court cases to Syama Prasad Mookerjee Port Authority (SMPA) has been accorded.	(Completed)	(Completed)
5.	SMPA has constituted a Cell for taking over the assets, liabilities & Court cases of CIWTC. The process of handing over and taking over will be completed by 10.02.2023.	10.02.2023	(To be done)
6.	Application for withdrawal of Voluntary Liquidation proceeding from NCLT, Kolkata filed. First hearing held and the next date of hearing by NCLT is on 10.02.2023. On obtaining Order of withdrawal from NCLT, application to RoC/MCA for changing the status of CIWTC as "Active". On approval of status of CIWTC to "Active" application to RoC/MCA for condonation of delay for holding AGMs will be submitted immediately and on obtaining approval of MCA, AGMS for F.Y. 2017-18 to 2021-22 will be held by shorter notice and preferably all AGMs will be done within two days.	16.02.2023 (tentative- subject to approval by NCLT)	(To be done)
7.	CIWTC/SMPA will approach the Registrar of Companies for closure under section 248 of Companies Act, 2013 after receipt of CAG Audit Report and withdrawal of Voluntary Liquidation under I&BC by NCLT and on completion of statutory compliances. Filing of application to remove name from Register of Companies before ROC.	31.03.2023 (Tentative)	(To be done)

#### HOOGHLY DOCK & PORT ENGINEERS LIMITED

6.49 Hooghly Docking & Engineering Limited (HDPEL) situated at Kolkata, is one of the oldest shipyards in India. It was established in 1819 in the private sector known as Hooghly Docking & Engineering Company Limited. On merger of the Port Engineering Works with Hooghly Docking & Engineering Limited, the Hooghly Dock & Port Engineers Limited was formed by an Act of Parliament titled "The Hooghly Docking and Engineering Company Limited (Acquisition and Transfer of Undertakings) Act, 1984". Government of India nationalized the ailing company, so as to utilize the available infrastructure through adequate investment for modernization and increase the capacity for Ship Building and Ship Repair in the country. The nationalized Company had remained with the Ministry of Industry till 27.07.1986 and was thereafter transferred to erstwhile Ministry of Surface Transport and now it is under the administrative control of Ministry of Ports, Shipping & Waterways.

**Rehabilitation-cum-restructuring of HDPEL**

6.50 The Union Cabinet on 03<sup>rd</sup> October, 2019 approved the proposal for Liquidation & Restructuring of HDPEL and providing improved Voluntary Retirement Scheme (VRS) for the employees of HDPEL. In view with the decision of the Union Cabinet, Improved VRS successfully implemented in HDPEL. Out of 43 employees in HDPEL, 42 employees opted for improved VRS and 1 employee retrenched who did not opt for improved VRS. Cochin Shipyard Limited (CSL) on 01.11.2019 transferred the book value to HDPEL towards the consideration for the transfer of 26% equity shares of Hooghly Cochin Shipyard Ltd. (HCSL) held by HDPEL and the amount has been transferred to PAO, DIPAM on 28.11.2019 made HCSL 100% subsidiary of CSL. Ownership of the land assets of HDPEL has been transferred to Ministry, as per extant guidelines of Department of Public Enterprises dated 14.06.2018. Outright liquidation and winding up of HDPEL has been initiated, in view with the recommendation of NITI Aayog and Department of Public Enterprises (DPE) regarding HDPEL to ensure the completion of process of closure and filing the application u/s 248 of the Company Act. Ministry on 9<sup>th</sup> June, 2021 with the approval of Competent Authority has directed CMD, HDPEL that the services of Conciliation and Settlement Committee (CSC), Indian Port Association (IPA) may be taken to dispose-off the outstanding cases and efforts may be made to close the same after settlement with parties for early closure of HDPEL.

6.51 The CSC after detailed consultations with the stakeholders has formulated a 'Framework of Way forward for the Closure of HDPEL' viz. transfer of assets, liabilities, litigations etc. to Syama Prasad Mookherjee Port (SMPK) which will be the basis of taking steps for striking off the name of the company from the Register of ROC and submitted it for in-principle approval of the Ministry.

**SETHUSAMUDRAM CORPORATION LIMITED**

6.52 Sethusamudram Corporation Limited (SCL) is an SPV set up under the Companies Act in the year 2004, with the approval of Cabinet, to implement the Sethusamudram Ship Channel Project (SSCP). Due to various litigations against the SSCP, the work has been stalled by an order of Hon'ble Supreme Court in August, 2007 and since July, 2009 all work has been stopped at the project site.

## CHAPTER – VII INLAND WATER TRANSPORT



*View of Over Dimensional Cargo Movement along National Waterways*

### Introduction

7.1 The Inland Water Transport (IWT) mode is widely recognized as a fuel efficient, environment friendly and cost effective mode, especially for bulk goods, over dimensional cargo and hazardous goods. The primary requirement for making this mode commercially viable is development of IWT infrastructure (fairway, terminals and navigation aids) and at the same time creating an enabling environment for augmentation of IWT fleet, primarily by the private sector. Inland Waterways Authority of India (IWAI) is now focused on developing the technically and economically viable National Waterways under the National Waterways Act, 2016 in order to create IWT network across the country to supplement already congested road and rail networks.

7.2 The IWAI was set up on 27th October, 1986 vide Inland Waterways Authority of India Act, 1985, for regulation and development of inland waterways for the purposes of shipping and navigation and is inter-alia responsible for development, maintenance and regulation of National Waterways (NWs). The development and regulation of waterways which are not declared as NWs remain under the domain of the respective State Governments.

7.3 The Cargo movement on National Waterways achieved all time high of 108.79 Million Metric Ton (MMT) from April 2021- March 2022 against 83.61 MMT last year for the same period recording 30.12 % growth. In IWT cargo movement an increased growth rate of 19.5% recorded during April-December 2022 over the corresponding period of April-December 2021.

7.4 Parliament passed the Inland Vessels Bill, 2021 on 02.08.2021, which aims to replace over 100 years old Inland Vessels Act, 1917 (1 of 1917) and usher a new era in the inland water transport sector to make the Legislative framework user friendly and

promote ease of doing business. The Inland Vessels Act, 2021 (24 of 2021) was notified on 12th August, 2021. Section 1 and Section 106 of the Act have come into force w.e.f. 16th February, 2022. Further, Section 2 to Section 105 and Section 107 to Section 114 of the Act have come into force w.e.f. 7<sup>th</sup> June, 2022. 09 Rules under the Inland Vessels Act, 2021 have been drafted and notified to start a unified regime of inland vessel registration, certification and specifications through the country, instead of State-wise regulations under the previous Inland Vessels Act, 1917.

### **National Waterways- 1, 2, 3, 4 & 5**

7.5 National Waterway-1 (Ganga-Bhagirathi-Hooghly river system 1620 Km from Allahabad to Haldia), National Waterway-2 (River Brahmaputra from Dhubri to Sadiya), National Waterway-3 (West Coast Canal from Kottapuram to Kollam along with Udyogmandal and Champakara Canals) have already been developed with fairway, navigational aids, jetties and terminals with mechanized equipment handling facilities for loading and unloading of cargo. These waterways have been developed and vessels are plying on these National Waterways. Fairway development works and fabrication of 4 floating jetties completed and land acquisition for 3 permanent terminals is in progress in Vijayawada – Muktyala stretch of river Krishna (part of NW-4) under Phase-I. Development of NW-5 has been initiated with Monthly Longitudinal Thalweg Survey in Pankapal-Dhamra Port – Mangalgadi-Paradip Port stretches and consultancy work for studies including environmental impact assessment (EIA) and environmental management plan (EMP) is underway. Further, Expression of Interest (EoI) for Business proposal for Operationalization of select stretches of NW-5 and NW-64 in Odisha on Design, Build, Finance, Operate and Transfer basis" was published for participating of bidders.

### **National Waterway- 1**

7.6 The Ganga–Bhagirathi–Hooghly River system between Haldia (Sagar) and Allahabad (1620 km) was declared as National Waterway-1 (NW-1) in 1986. Since then, IWAI is carrying out various developmental works on the waterway for improvement of its navigability and its development and maintenance of infrastructure such as navigation aids and terminal facilities as laid down in the IWAI Act, 1985 (82 of 1985).

7.7 During 2021-2022, the important measures like River Conservancy works (dredging & Bandalling) was carried out for the development & maintenance of fairway along with navigational aids and construction of terminal facilities along NW-1 hinterlands.

### **Jal Marg Vikas Project -I**

7.8 IWAI is implementing Jal Marg Vikas Project (JMVP) for capacity augmentation of navigation on NW-1 (Haldia-Varanasi stretch) with technical assistance and financial support from the World Bank.

7.9 The Jal Marg Vikas Project (JMVP) on NW-1 from Haldia to Varanasi was approved by the CCEA on 3<sup>rd</sup> January, 2018 at a cost of Rs. 5369.18 crore (US\$ 800.00 million). The loan agreement with the World Bank was signed on 2nd February, 2018

and project cost has been revised to 4633.81 crore which has been utilized as per the following funding pattern:

- (i) International Bank for Reconstruction and Development (IBRD) Loan – Rs. 2,512.00 crore (US\$ 375.00 million);
- (ii) Government of India Counterpart Funds (budgetary allocation and proceeds from issue of infrastructure bonds: Rs. 2,556.00 crore (US\$ 380.00 million); and
- (iii) Private sector participation under PPP mode: Rs. 301.00 crore (US\$ 45.00 million).

7.10 The implementation activities are on-going and the project has achieved 48.58% of overall physical progress as on 31.12.2022.

7.11 Under Jal Marg Vikas Project, the major Engineering, Procurement and Construction (EPC) contracts are near completion. MMT Varanasi inaugurated on 12.11.2018, MMT Sahibganj was inaugurated on 12.09.2019. Now MMT Haldia inaugurated by Hon'ble Prime Minister of India on 13.01.2023 including 4 floating community jetties located at Saidpur (Ghazipur) Uttar Pradesh, Chochakpur (Ghazipur) Uttar Pradesh, Zamania (Ghazipur) Uttar Pradesh, Kanspur (Ballia) Uttar Pradesh and laid foundation stone for five community jetties located at Digha (Patna, Bihar), Naktadiyara (Patna, Bihar), Panapur (Patna, Bihar), Barh (Patna, Bihar), Hasanpur (Samastipur, Bihar). During that event MV Ganga Vilas world's longest river cruise covering distance of 3200 Kilometer (from Varanasi to Dibrugarh) was also flagged off. The nation created landmark history by recording world longest river cruise journey by cruise vessel built in India and strengthening the vision of Self-Reliant Bharat.



*(Hon'ble Prime Minister Flagged off MV Ganga Vilas World Longest River Cruise)*

#### **Multimodal Terminal at Varanasi**

7.12 The Multimodal terminal, with a capacity of 1.26 MTPA was inaugurated by the Hon'ble Prime Minister on 12.11.2018. The construction of a 650 Meter-long two lane road connecting the Multi-Modal Terminal with NH-7 and a 35 Meter-long and 5.8 Meter wide Truss Bridge was completed and operationalized on 11.01.2019. Rail connectivity

from the IWT Terminal to Jeonathpur railway station on the Eastern Dedicated Freight Corridor (EDFC) has been planned. DPR approved by North Central Railway & Dedicated Freight Corridor Corporation of India Ltd (DFCCIL). Engineering Scale Plan and Signal Interlocking Plan are under approval of DFCCIL. One multi-lane ROB crossing on NH-7 required. NHAI was requested to take up the works on deposit basis. Meetings held with NHAI and the required clearances and comments on design conveyed to them. Thereafter NHAI initiated the tendering process for engagement of contractor to construct RoB and have invited bids.



*Multimodal Terminal at Varanasi*

7.13 The efforts for Operationalization of MMT Varanasi undertaken by Project Management Unit of Jal Marg Vikas Project with assistance of Asset Management consultant in development of Model Concession Agreement and bidding documents for PPP tenders etc. Tender has been floated by IWAI for inviting bids to engage private concessionaire for O&M services on PPP model.

#### **Multimodal Terminal at Sahibganj**

7.14 The Multimodal terminal, with a terminal capacity of 3.03 MTPA, is constructed in two phases in Samdanala Village of Sahibganj. Hon'ble Prime Minister inaugurated the terminal on 12.09.2019. The Rail connectivity proposed for the terminal to Sakrigali railway station. The rail alignment is under finalization. The Project Management Unit of Jal Marg Vikas Project made efforts for Operationalisation of MMT Sahibganj with the assistance of Asset Management consultant for the development of draft concession agreement and tender documents under PPP model. IWAI has floated global tender for inviting bids to engage private concessionaire for O&M services on PPP model.



*Multimodal Terminal at Sahibganj*

### **Multimodal Terminal at Haldia**

7.15 The Multimodal terminal at Haldia, with a terminal capacity of 3.08 MMTPA in first phase, is being constructed in two Phases on a 61 acres land in the Haldia Dock Complex leased from the Kolkata Port (SMPA) on 30 years tenure. The work on Phase-I was awarded to M/s. ITD Cementation at a cost of Rs. 517.36 crore on 30.06.2017. The Cost has since been revised to Rs. 503.16 crore. The physical progress as on December 2022 is 99.5% and financial progress of 94.67%. The Rail alignment for connectivity from the terminal is under finalization in consultation with the Haldia Dock Complex.



*Multimodal Terminal at Haldia*

7.16 To operationalise MMT Haldia on Equip, Operate and Transfer (EOT) Model of PPP, the Letter of Award has been issued to M/s. IRC Natural Resource Private Ltd on 17.12.2021. The concession agreement is expected to be signed soon.

### **Navigational Lock at Farakka**

7.17 The new navigational lock is being constructed on 14.86 hac. land of Farakka Barrage Project (FBP) taken on transfer basis on 02.03.2016. The construction work of this lock, awarded to M/s. Larsen & Toubro Ltd. on 24.11.2016 at a cost of Rs. 359.19 crore has achieved physical progress of 95.79% and financial progress of 91.21% as on 30.12.2022,



**Navigational Lock at Farakka**

### **Intermodal terminal at Kalughat**

7.18 The Intermodal Terminal, Kalughat is being planned to handle mostly container traffic destined to Nepal. An intermodal terminal is being constructed on 13.17 acres of land located at Kalughat, Saran district of Bihar with road connectivity to NH-19. The Social Impact Assessment (SIA) study of the proposed land completed and possession Certificate of 13.17 acres of land received. The EPC contract with M/s. Sanjay Construction was signed at a cost of Rs. 78.28 crore and project cost was revised to 82.48 crore. The construction activity on site is on-going and achieved physical progress of 28% and financial progress of 14.90% as on December, 2022. The contractor has completed site survey, geo technical investigation and work for construction of approach trestle, berth, buildings, bank protection works, erection of boundary wall etc. is in progress.



**Intermodal terminal at Kalughat**

**Jal Marg Vikas Project – II (Arth Ganga)**

7.19 The Hon'ble Prime Minister during the first meeting of the National Ganga Council in Kanpur (Uttar Pradesh) on December 14, 2019 urged for a holistic thinking process where 'Namami Gange' evolves to 'Arth Ganga'.

7.20 Arth Ganga program of Jal Marg Vikas Project (JMVP) is being developed on an approach based on the principles of sustainable development model that focus on economic activities in and around the hinterland of National Waterway - 1 by providing opportunity to local communities to transport their goods and passenger (including tourist) movements through waterways as well as skill development and public / private sector capability developments.

7.21 A sustainable economic development model project JMVP-II (Arth Ganga) was envisaged with an estimated cost of Rs. 746 crore. Arth Ganga focuses on generating sustainable income streams for the stakeholders living along the river hinterlands.

7.22 JMVP-II (Arth Ganga) is being developed on an approach based on the principles of sustainable development model that focus on economic activities in and around the hinterland of NW-1 by providing opportunity to local communities to transport their goods and passenger (including tourist) movements through waterways as well as skill development and public / private sector capability developments.

7.23 The progress plan of Arth Ganga includes development of 62 Nos. of community jetties and 5 pairs of Ro-Ro terminals that facilitates connectivity to support farmers, traders, small-scale industries, cultural integration through passengers and tourist movements. The community jetty would facilitate transport of passenger, local goods and farmer produce thereby connecting human settlements living alongside hinterland of river Ganga.

7.24 Since efficient logistics and transport systems are a critical enabler for sustaining and accelerating the economic growth along river Ganga, the overall JMVP has the potential to channelize economic activities along river Ganga, thus aligning to the objective of Arth Ganga.

**National Waterway–2**

7.25 National Waterway – 2 comprises of river Brahmaputra from Dhubri to Sadiya of 891 Km in the state of Assam. A navigable fairway of minimum 45 m width and 2.5 m Least Available Depth (LAD) was maintained by the IWAI in Dhubri-Pandu (255 km) and Pandu-Neamati (374 km) stretch. In Neamati-Dibrugarh stretch, 2.0 m LAD was maintained for 350 days. In Dibrugarh-Sadiya (Oriumghat) stretch, LAD of 1.5 m was maintained for 365 days. Night navigation facilities provided between Dhubri and Silghat can be extended in a short period of time depending upon demand.



Map of National Waterways – 2

7.26 As a renewed effort for development of IWT infrastructure in NER, Government has approved revised cost estimate to Rs. 474 crore for development of NW-2 (the Brahmaputra), Rs. 148 crore for NW-16 (the Barak) & Indian portion of Indo-Bangladesh Protocol Routes, Rs. 208 crore for development of Ship Repair Facility and Rs. 180 crore for Elevated Connecting Road construction for Multi-Modal Terminal (MMT) Pandu (Guwahati). Works are under implementation at initial stages with the target for completion before March 2025.

7.27 Currently, there are three road bridges across river the Brahmaputra at Guwahati, Tezpur, Sadiya and three rail cum road bridges at Jogighopa, Guwahati and Bogibeel for connectivity between southern and northern parts of Assam. People residing on either side of the river need to cross the river using conventional ferry service at various locations for their day to day needs.

7.28 IWAI started Ro-Pax services by deployment of 4 Nos. of Ro-Pax vessels (at a cost of Rs. 10.40 crore each) which were inaugurated by Hon'ble Prime Minister on the following routes across the Brahmaputra (NW-2) :-

- ❖ Dhubri-Hatsingimari - MV Bob Khathing,
- ❖ South Guwahati – North Guwahati – MV JFR Jacob,
- ❖ Neamati - Kamalabri – MV Rani Gaidinliu & MV Sachin Dev Barman.

7.29 Ro-Ro terminals also proposed at Maijan (Dibrugarh) to Sengajan for which DPR has been prepared. IWAI has deployed 4 nos. of Departmental Dredgers and 5 nos. of Survey Launches in NW-2 and one survey vessel is being operated in NW-16 (River Barak).



*M.V. Rani Gaidinliu plying on National Waterway*

#### **Developmental works on NW-16 (river Barak)**

7.30 Comprehensive development of NW-16 and IBP route has been taken up at a cost of Rs. 145 crore (revised to Rs. 148 crore in December, 2022) to be completed by March, 2025. The project includes (i) fairway development of NW-16 & IBP route of Indian portion (ii) upgradation of Badarpur and Karimganj terminals (iii) terminal at Sonamura on Gumti river in Tripura including land acquisition and terminal and Maia on Ganga river in West Bengal. Work for upgradation of Badarpur & Karimganj terminal is in process with 70% progress. A floating terminal has been placed at Sonamura and DPR is being prepared for construction of terminal at Maia.

#### **Developmental works in North East India**

7.31 As per decision in the 19<sup>th</sup> meeting of Standing Committee of PIWT&T, Bangladesh portion of Gomti River (i.e., Sonamura to Daudkandi/Satnal stretch was included as part of the Indo-Bangladesh Protocol routes 9 & 10 respectively. An amount of Rs. 23.15 crore envisaged in the SFC for construction of a permanent terminal at Sonamura. IWAI has established a temporary floating jetty at Sonamura to facilitate merchants of both the countries. Land for construction of terminal is available with Land Ports Authority of India (LPAI). The inauguration of the Maritime skill developmental Centre for North East at Guwahati and laying of foundation stone ceremonies for Ship repair facility at Pandu and Elevated Road Corridor connecting from IWAI Pandu Terminal to NH-27 was done virtually by the Hon'ble Prime Minister of India on 13.01.2023.

#### **National Waterway (NW) -3**

7.32 On NW-3 in Kerala, the important works carried out during FY 2022-23 (up to Dec'22) were providing bank protection in navigation channel of Udyogmandal canal stretch and dredging work undertaken departmentally at Ambalamughal in Champakara canal stretch and at Thottapally site in order to maintain a depth of 2.0 meters in Alappuzha- Kayamkulam stretch.



7.33 The progress of capital dredging and widening of narrow sections in NW-3 as well as maintenance dredging has been experiencing delay over the years due to various local issues related to disposal of dredged material, demand for extra bank protection and dredged spoil, frequent stoppage of works and litigation's by the local people and objection by the fishermen. With new regulations regarding protection of wet lands etc., identifying disposal sites for material dredged from National Waterway has become extremely difficult. To resolve such problems and to take the works forward, IWAI is regularly interacting with the State Government, but still, the long-drawn process for allotting dumping sites is causing considerable underutilization of IWAI's dredging capacity in NW-3.

7.34 The Irrigation Department of Govt. of Kerala was entrusted with reconstruction of new navigational lock at Thrikkunnapuzha (with dimensions of 61m long, 14.75m wide and 6m (above HFL) vertical clearances), at a cost of Rs.38 crore on deposit basis. IWAI has deposited a total amount of Rs. 38 crore to Govt. of Kerala. The physical progress of construction of lock-gate is 57% and same is in progress by Irrigation Department, Govt. of Kerala on deposit basis and expected to complete in the 2024.

7.35 Total cargo moved in NW.3 by barges during the FY 2021-22 was 16.95 lakh tonnes, which mainly consists of Sulphur, Phosphoric Acid, Liquified Ammonia Gas, Rock Phosphate. The cargo transportation during the FY 2022-23 (till December) increased to 22.87 lakh tonne.

7.36 A total number of 312 nos. Solar powered lighted FRP buoys and 17 nos. Beacon lamp posts maintained by IWAI along Champakkara & Udyogmandal Canals and Kottapuram – Kollam (West Coast Canal) stretches of NW-3 to facilitate round the clock safe navigation.



**Solar Powered FRP Buoy installed in NW-3 and Beacon lamp in NW-3**

### **Construction of Cargo Terminals**

7.37 Cargo terminals have been constructed at 9 places (viz. Kottappuram, Aluva, Maradu, Vaikom, Thanneermukkom, Alappuzha, Thrikkunnapuzha, Kayamkulam, and Kollam). The above terminals are not attracting expected cargo mainly due to reluctance on the part of consigners and consignees to accept a modal shift to IWT mode. Hence 3 terminals handed over (Kottappuram, Aluva and Kollam) to Kerala State Warehousing Corporation (KSWC) for utilization of terminals on lease basis. Further a study on Transaction Advisory Consultancy services for selection of O&M operators for 3 IWT terminals namely Aluva, Maradu and Allapuzha in NW-3 entrusted to M/s. KITCO, Kochi and draft report accepted by IWAI.



### **National Waterways (NW-4)**

7.38 Development work has been initiated on NW-4 between Vijayawada and Muktyala stretch of Krishna River at a cost of Rs. 96 crore. Fairway development and fabrication of 4 nos. of floating terminals completed. Land acquisition for the construction of 3 permanent Ro-Ro terminals is in progress in consultation with the Government of Andhra Pradesh.

**National Waterway (NW)-5**

7.39 Govt. of India declared National Waterway-5 (NW-5) in Mahanadi / Brahmani delta, Matai River & East Coast Canal (ECC) in November 2008 for total length of about 588 km. The lengthwise distribution of NW-5 in 3 different stretches, as per the DPR is given below:

(i)	Stretch I :	Talcher to Mangalgadi	:	237 km
(ii)	Stretch II :	Dhamra to Paradip	:	95 km
(iii)	Stretch III :	Dhamra to Geonkhali	:	<u>256 km</u>
		Total	:	<u>588 km</u>

7.40 Based on the feasibility studies conducted and DPR submitted in 2016 and also keeping in view the potential of cargo movements as emanated through various studies, it was decided to initially develop 332 km of economically & commercially viable stretches of NW-5 between Paradip / Dhamra and Talcher in following 2 phases and balance length of the waterway from Dhamra to Geonkhali is not considered feasible for development:

- i. Phase-I : Between Paradip / Dhamra and Pankapal : 212 Km.
- ii. Phase-II : Pankapal to Talcher : 120 Km.

7.41 Phase-I development covering 212 Km between Paradip / Dhamra and Pankapal is taken up initially, such as (i) Monthly Thalweg survey, (ii) Studies on the modification of existing cross structures / bridges – 9 nos. (Study completed and reports submitted to Govt. of Odisha) (iii) Construction of weirs / barrages / locks (for ponding of water to create LAD - presently entrusted to Central Water Commission for vetting of designs) and (iv) Hydrographic Survey in Phase-II covering 120 Km. from Pankapal to Talcher (Study completed in October, 2020). Shifting / Relocation of HT / LT Power lines entrusted with Govt. of Odisha on deposit basis at a cost of Rs.45.08 crore is in progress and expected to be completed by March, 2023.

**National Waterway no. 8**

7.42 In this stretch from Alappuzha to Chenganassery covering 28 km, a regular monthly longitudinal survey is being undertaken to monitor depths and 15 nos. of navigational aid system is provided for safe navigation.

**National Waterway no.9**

7.43 In the stretch of NW9, from Alappuzha to Kodimatha (Kottayam) covering 28 km, a regular monthly longitudinal \ survey is being conducted to monitor depths and 25 nos. of navigational aid system is provided for safe navigation. The shoal and water hyacinth observed at Pallom site was cleared using departmental dredger to maintain 2.0m depth.

**National Inland Navigation Institute (NINI) at Patna**

7.44 The National Inland Navigation Institute (NINI) was set up by Inland Waterways Authority of India (IWAI) at Patna, Bihar in February 2004 with a view to Develop Human Resource for the Inland Water Transport Sector. The Institute is managed by

Inland Waterways Authority of India (IWAI) under the Ministry. The major achievements during the year 2022-23 were as below:-

- (i) The following training activities were carried out:
  - ❖ Induction Training GP Rating Course (35th, 36th & 37th Batch)
  - ❖ The GP Rating (Inland Vessel) trainees were imparted practical training on board training ship Hydraulic Suction Dredger (HSD) Sone.
  - ❖ A course was conducted successfully for Bihar Government personnel for Refresher Training of Master Trainer for “Safe Swim” Programme.
  - ❖ Workshop on Boat & Navigational Safety with special reference to Hydro-Meteorological Disaster by NIDM.
  - ❖ Hydrographic & Vessel Crew Training.
- (ii) Preparatory Course for Inland Vessel Certificate of Competency.
  - ❖ Serang
  - ❖ Master Class II
  - ❖ Master Class I
  - ❖ Second Class Engine Driver
  - ❖ First Class Engine Driver
  - ❖ Inland Vessel Engineer
  - ❖ Inland Vessel Manoeuvring Simulator Course

### International Cooperation

#### Indo Bangladesh Protocol on Inland Water Transit & Trade (PIWTT)

7.45 Protocol on Inland Water Transit and Trade (PIWTT) exists between India and Bangladesh under which the two Governments have made mutually beneficial arrangements for the use of their waterways for movement of cargo between the two countries for passage of goods between two places in one country through the territory of the other in accordance with the laws of the country through the territory of which goods are moving. The Protocol is valid up to June 2025. Under this Protocol, Inland vessels of both the countries can ply on the designated protocol route and dock at Ports of Call in each country notified for loading/unloading of cargo. There has been significant improvement in the movement of cargo vessels in an organized manner on the Protocol route carrying both the transit cargo to NE region of India and vice-versa and export-cargo to Bangladesh. The Indian transit cargo is mainly coal, fly-ash, POL and ODC for power projects in NE region. The other cargo being moved are wheat, rice, sponge iron, maize and stone chips etc. 5.43 million tonne of traffic moved on the IBP route during FY 2022-23 and displayed a growth of approx. 51% over 3.60 million tonne of FY 2021-22. Around 638 inland vessels (including 600 Bangladeshi flag vessels) completed approximately 4000 loaded voyages annually on IBP routes.



*Secretary Shipping Level Talks (SSLT) between India and Bangladesh held on 21<sup>st</sup> October 2021, in New Delhi*

### **Development of fairway from Sirajganj to Daikhowa and Ashuganj to Zakiganjon Indo-Bangladesh Protocol route**

7.46 India and Bangladesh have signed an MoU for development of fairway from Sirajganj to Daikhowa (175km) and Ashuganj to Zakiganj (295 km) on Indo-Bangladesh Protocol route for dredging and to develop and maintain fairway of 2.5 m depth and 30 meter width for 07 years wherein the cost of dredging is to be borne in a 80:20 ratio between India and Bangladesh. The estimated cost of the project is Rs. 305.84 crore. Out of which Rs. 244.67 crore is to be borne by India. Initial dredging completed and maintenance dredging to continue till March/April, 2026.

### **Transportation of transit cargo from Bhutan to Bangladesh**

7.47 Transit transportation of Bhutanese bulk cargo (Stone aggregates) to Bangladesh via NW-2 and IBP routes commenced on 11<sup>th</sup> July 2019. The IWAI vessel “AAI” carrying stone aggregates was digitally flagged off from Dhubri on NW-2 by the then Hon'ble Minister of State (Independent Charge) for Shipping. After that, 15 movements took place with Bhutanese cargo to Bangladesh via IBP route during FY2020-2021 (4369 MT). The route has the potential to become a popular mode of choice for trade between Bhutan & Bangladesh. During FY 2022-23 up to December 2022 movement of 908 vessels took place between Dhubri (India) – Chilmari (Bangladesh) and total cargo moved is 1,91,544 MT.

### **Myanmar**

7.48 The Kaladan Multimodal Transit Transport Project (KMTTP) was conceptualized by the Ministry of External Affairs (MEA) to provide an alternative connectivity to Mizoram with Haldia/Kolkata ports through Kaladan River in Myanmar. The project envisages road transport from Mizoram to Paletwa (Myanmar), thereafter from Paletwa to Sittwe (Myanmar) by IWT and from Sittwe to Haldia/Indian Ports by maritime

shipping. The project piloted and funded by MEA. IWAI appointed by MEA as their Project Development Consultant (PDC) for Port and IWT components of the project. The Phase-I work of Port & IWT component in KMTTP completed. Operation and maintenance of the Phase-I of Port & IWT components of KMTTP commenced on 01.02.2020. Sittwe Port constructed under this project has been designated on 29.11.2022 as International Multi-Modal customs transit jetty by Govt. of Myanmar and is ready for operation.

## CHAPTER - VIII

### TRANSPORT RESEARCH & DEVELOPMENT WING

#### TRANSPORT RESEARCH

8.1 The Transport Research Wing (TRW) provides research and data support to the Ministry for policy planning and formulation. TRW is the nodal agency for collection, compilation and dissemination of information and data on Ports, Shipping, Ship-building & Ship-repairing industry and Inland Water Transport (IWT) at the National level. Apart from above it also scrutinizes and validates data received from various primary/secondary sources for consistency and comparability. TRW is also associated with review meetings on policy issues pertaining to Port, Shipping and IWT Sectors.

8.2 Apart from publications, Transport Research Wing coordinates with various other Ministries/ Department/ States/ UTs Governments like Ministry of Finance, Ministry of Commerce, NITI AAYOG, Central Statistical Office (CSO) and National Sample Survey Office (NSSO), of Ministry of Statistics & Programme Implementation etc.

8.3 The following publications have been released during the year 2021-22:-

- a) Basic port Statistics of India – 2020-21
- b) Half-Yearly update on Indian Port Sector for period ending 30<sup>th</sup> September, 2021 and 31<sup>st</sup> March, 2022
- c) Indian Shipping Statistics 2021
- d) Statistics of India's Ship-building & Ship-repairing Industry 2020-21
- e) Statistics of Inland Water Transport 2020-21

8.4 The publications are on the website of the Ministry: [www.shipmin.gov.in](http://www.shipmin.gov.in) under the head, "Transport Research Wing". The work relating to the preparation of publications "Basic Port Statistics- 2021-22", "Half-Yearly update on Indian Port Sector for period ending 30<sup>th</sup> September, 2022", "Indian Shipping Statistics 2022", "Statistics of Inland Water Transport 2021-22" and "Statistics of India's Ship-building & Ship-repairing Industry 2021-22" is under progress.

8.5 In addition, TRW also prepare monthly cargo traffic handled at Major ports and Non-Major Ports on the basis of information received from Major and Non-Major Ports in Port Data Management Portal (PDMP) which is also uploaded on Ministry's website. TRW prepare a monthly progress report of the Central Sector Infrastructure projects under Ministry costing Rs. 150 crore and above and updates on OCMS (Online Computerized Monitoring System) of Ministry of Statistics & Programme Implementation. Further, TRW has also taken initiative for compilation of service price indices for Port Sector and providing data for compilation of Global Indices like Liner Shipping Connectivity Index to Ministry of Commerce and Industry.

**DEVELOPMENT WING**

8.6 The Development Wing is Apex Technical Organization of the Ministry headed by Development Advisor (Ports). This Wing deals with the subject on port development and renders technical advice on matters relating to the development of Major Port Projects, Andaman & Lakshadweep Harbour Works (ALHW), the Dredging Corporation of India Limited etc. This Wing also renders technical advice to other Ministries in case of Fishing Harbour and Maritime State Governments as and when requested regarding Non Major Ports and advice on techno-commercial dispute between ports and the contracting firms as and when required. The Wing is associated with Bureau of Indian Standards (BIS) for formulation/upgradation of Indian Standards on Port & Harbour Engineering and also on equipments and floating craft.

8.7 The Development Wing is associated with processing matters related to the Indian National Section – Permanent International Association for Navigational Congress, (INA–PIANC). The Government of India is a member country of PIANC. The Development Wing is assisting the Indian Coast Guard for implementation of “National oil spill Disaster contingency plan” at the Major Ports. This Wing also coordinates the Research Committee Works related to Port Sector of the Ministry.

CHAPTER - IX  
INTERNATIONAL COOPERATION



*Hon'ble Minister Ports, Shipping and Waterways interacting with Iranian Officials during his visit to Iran in August 2022*

**High Level Visit**

9.1 Hon'ble Minister of Ports, Shipping and waterways visited Iran and UAE in August 2022 to strengthen ties and maritime relationship between the countries. In addition to taking part in the bilateral meetings with the Ministers of Road & Urban Development and Health & Medical education, he visited the Shahid Beheshti Port of Chabahar, Iran to assess the progress of the Chabahar port. During his visit, a Memorandum of Understanding concerning mutual recognition of seafarers' Certificate of Competency (CoC) between the Government of India and the Government of the Islamic Republic of Iran was also signed. The Minister also met the Ambassadors of CIS countries based in Tehran. During his visit to Jebel Ali Port in UAE, round table meetings with Heads of Shipping / freight companies in UAE were also attended by him.

9.2 Sea Tech Week India participated as the featured "Country of Honour" at the 13<sup>th</sup> edition of the Sea Tech Week, held in Brest, France from 26 to 30 September 2022. The event finds a mention under the Economic Pillar of the India- France Roadmap for Blue Economy and Ocean Governance, signed between India and France on 20 February 2022. JS (Ports) and Chairman Paradeep Ports, represented the MoPSW in the event. The 2022 edition was themed "Maritime transport: towards smarter and greener solutions", with special focus on "women in marine science and technology. Possibilities of collaboration in port infrastructure towards building smart ports and green ports, collaboration in Green hydrogen and Inland Waterways were the key takeaways of the event.

**Cooperation with Multilateral Organizations**

9.3 India became a member of the International Maritime Organization (IMO) in 1959 which is the global standard setting authority for the safety, security and environmental performance of shipping and ensures that such standards are fair and effective and are universally adopted and implemented. India has been an active participant at the IMO. In fact, participation of India in the functioning of IMO has helped India to voice its developmental concerns to the international maritime community. India has been a member of the IMO Council and has been re-elected as Member of the IMO Council for biennial 2022-2023 under Category 'B', representing nations with the largest interest in international seaborne trade during the IMO Council election held during 32 regular session of the Assembly of IMO on December 10, 2021 at IMO Headquarters, London. The next IMO elections are scheduled on 1<sup>st</sup> December 2023.

9.4 IMO adopts and implements various treaties in the form of conventions/protocols. From time to time, keeping in mind our national interests and the international standards evolved by IMO through its treaties, India has been becoming party to the treaties adopted by IMO. As on date, IMO has adopted 59 treaties which are open for countries to become parties. Out of these 59 treaties, India is a party to 35 treaties (conventions/protocols) which have been suitably incorporated into the Indian domestic legislation i.e. the Merchant Shipping Act, 1958.

9.5 India has become a prime destination for green ship recycling with the passing and enactment of the landmark Recycling of Ships Act, 2019. The new Act provides a legislative framework for implementation of the provisions of the Hong Kong Convention. It also contains provisions of the Convention which are not covered in the Ship breaking Code (Revised), 2013. With enactment of this Act, ship recycling volume is expected to double by 2024. Further, Recycling of Ships Rules, 2021 have been notified under this Act. Director General of Shipping, Government of India, has been notified as the national authority for the purposes of this Act.

9.6 India has also acceded to IMO's Hong Kong international convention for safe and environmentally sound recycling of ships in November, 2019. Accession to IMO's Hong Kong international convention will provide a fillip to the domestic ship recycling industry in India which is one of the world's five major ship recycling countries. In 2022, India has submitted 16 papers at Marine Environment Protection Committee (MEPC) of IMO on various issues (8 papers at 78<sup>th</sup> session of MEPC and another 8 at 79<sup>th</sup> session of MEPC).

9.7 India is also a party to two important conventions of the International Labour Organization (ILO) meant for welfare of seafarers, namely the Maritime Labour Convention and the Seafarer's Identity Document Convention. India contributes approximately 12 percent of the total workforce in the shipping industry. India is home to the second largest number of seafarers after the Philippines. The International Labour Organization (ILO) has mandated standards for the maritime industry too. The Maritime Labour Convention is a single, coherent instrument which replaces and consolidates 37 separate ILO maritime labour conventions adopted since 1920.

9.8 Apart from IMO, India has been contributing significantly to the other multilateral organizations/agreements such as ASEAN (Association of South East Asia Nations); Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC); India, Brazil and South Africa (IBSA); Indian Ocean Rim-Association for Regional Cooperation (IORA); International North South Transport Corridor (INSTC), etc.

**Bilateral Cooperation Agreements on Shipping**

9.9 India has entered into cooperation instruments/Agreements with the following 31 maritime countries and regional groupings by way of Agreements or MoUs to foster growth of the Indian maritime sector as well as to safeguard India’s maritime interests:-

Sweden	Jordan	China
Maldives	Iran	Russian Federation
Denmark	Vietnam	Singapore
Malta	Austria	Turkey
Republic of Korea	Sri Lanka	Germany
Cyprus	Qatar	Finland
Bangladesh	Pakistan	Poland
United Arab Emirates	South Africa	Trilateral Transit Transport Agreement with Iran and Afghanistan (Chabahar Agreement)
Egypt	United States of America	IBSA (Trilateral Agreement with Brazil and South Africa).
Belgium	Morocco	Portugal
Oman		

**Mutual and Unilateral Agreements on Recognition of Certificates of Seafarers**

9.10 India has signed agreements for mutual recognition of Certificates of Competence (CoC) of Seafarers with Malaysia, UK, Sweden, Iran, UAE, and Republic of Korea. The mutual recognition of CoCs with Iran is the latest one to be signed in August 2022, during Hon’ble Minister (PSW)’s official visit to Tehran. India’s CoC is unilaterally recognized by the following 34 countries:-

1. Saint Vincent / the Grenadines	18. Luxembourg
2. Dominica	19. Cyprus
3. Hellenic Republic	20. Malta
4. Georgia	21. Norway
5. Vanuatu	22. France
6. Thailand	23. Denmark
7. Liberia	24. Ireland
8. Marshal Islands	25. Bangladesh
9. Kuwait	26. Ghana
10. Bahamas	27. Latvia
11. Qatar	28. Antigua and Barbuda
12. Barbados	29. Vietnam

13. Netherlands	30. Australia
14. Japan	31. Singapore
15. Belize	32. Hong Kong
16. Jamaica	33. Panama
17. Isle of man	34. Cook Islands

**Centre of Excellence on Green Shipping**

9.11 A Letter of Intent (LoI) for establishing Centre of Excellence in Green Shipping and Ports was signed with Denmark in May, 2022. Accordingly, a MoA was signed between MoPSW and DG TERI on 18 November, 2022 for establishing this Centre of Excellence in Gurugram campus of TERI.



*Signing of the Letter of Intent (LoI) between India and Denmark to establish Centre of Excellence on Green Shipping*

**Joint Meetings Held During the Year 2022**

- ❖ India – Oman maiden JMC meeting on Marine Transport was held on 23<sup>rd</sup> February, 2022.
- ❖ India-Greece 2<sup>nd</sup> Joint Working Group (JWG) on Maritime and Shipping Issues was held on 20<sup>th</sup> April, 2022.
- ❖ India-Denmark 4<sup>th</sup> JWG on Shipping was held on 25<sup>th</sup> April, 2022.
- ❖ India-Norway 8<sup>th</sup> JWG Maritime was held on 17<sup>th</sup> November, 2022.
- ❖ India-Norway meeting to discuss cooperation in areas of Green Maritime technology was held on 26<sup>th</sup> August, 2022.
- ❖ India-Denmark meetings in August and December 2022 were held to discuss modalities for setting up of Centre of Excellence in Green Shipping and Ports.

CHAPTER - X  
ADMINISTRATION AND FINANCE



*Raktdaan Amrit Mahotsav held in Ministry on 29<sup>th</sup> September, 2022*

**Administration**

10.1 Administration Wing of the Ministry of Ports, Shipping & Waterways is headed by Joint Secretary (Administration) who is assisted by Director (Administration), Under Secretary (Administration) supervising the work of Establishment Section, General Administration Section and Cash Section. The Establishment Section is entrusted with the service and administrative matters of 295 regular employees of (Group A, B, and C) (sanctioned strength) of the Ministry. This includes the management of the various Cadres such as Central Secretariat Service (CSS), Central Secretariat Stenographers Service (CSSS), Central Secretariat Clerical Service (CSCS), Development Wing and Chartering Wing. Establishment Section implements all administrative orders issued by Department of Personnel & Training, Department of Pension & Pensioners' Welfare, Ministry of Finance, Union Public Service Commission, Central Information Commission, Central Vigilance Commission etc.

10.2 Special efforts have been made by the Ministry to ensure compliance of the orders issued from time to time regarding reservation for SC/ ST/ OBC in filling up vacant posts in the Chartering Wing and the Development Wing of this Ministry. Information with regard to the total number of Government Servants, separately for Secretariat and Non-Secretariat side (Group-wise) and representation of SC/ST employees in the Ministry is given at **ANNEXURE- III.**

### **Welfare**

10.3 Several welfare measures for all employees including the women employees of the Ministry were undertaken. There is an Internal Complaints Committee on sexual harassment to look after the grievances of women employees relating to sexual/ Gender based harassment. Further, as part of the welfare measure for employees in the Ministry, a new initiative has been started to greet the employees on their birthday by giving a card, bouquet and a token gift, so as to keep their morale and motivation high.

10.4 To oversee the implementation of the Prohibition of Smoking in Public Places Rules, 2008 in the Central Govt. Offices/ Buildings, the Ministry has constituted a Committee for surprise checking in the premises of the Ministry. The Ministry is one of the few Ministries, which have successfully completed online APARs of all the officers of Ministry through SPARROW. The Biometric Attendance System has also been implemented in this Ministry.

10.5 Important Days of national importance viz. Anti – Terrorism Day, Communal Harmony Day, Sadbhavana Diwas, Swachhta Diwas, Constitution Day, International Yoga Day, Vigilance Awareness Week, Red Cross Day, Red Cross Raffle Draw, etc. were observed and “Pledge” taken by the employees of the Ministry. Contributions were also raised and collected towards “Flag Day”. Essay competitions both in Hindi and English were conducted during Communal Harmony Week / Vigilance Awareness Week. The Participants were rewarded for participating in these events.

### **E-Office**

10.6 E-Office system has been implemented fully for all the officers and their supporting staff in the Ministry. The Ministry has also migrated to e-file system w.e.f. 1<sup>st</sup> January, 2017 and is one of those Ministries which have switched over to e-filing system completely. All the existing physical files/ records have been digitized. Scanners have been provided to all the Sections/Officers for scanning of daily routine papers/receipts/dak etc.

### **Right to Information Act**

- ❖ Detailed information relating to obligations listed in Section 4 of the RTI (Publications of Manuals) has been uploaded / hosted in the websites of the concerned organizations.
- ❖ For the implementation of the RTI Act, the Ministry has exclusively created a new cell and an Information and Facilitation Counter (IFC) at the Reception for the convenience of the general public who visit personally.
- ❖ In the Ministry appointed/designated 17 CPIOs and 16 Appellate Authorities based on the Divisions, who are in the rank of Under Secretary and Deputy Secretary/Director and equivalent respectively. Notifications/ Orders indicating the appointment of CPIOs/ Appellate Authorities under the Act have been published and uploaded /hosted on the website of the Ministry i.e. [www.shipmin.gov.in](http://www.shipmin.gov.in).
- ❖ Whenever a request is received from the public/citizen by the CPIO/IFC, the same is passed/transferred to the RTI Cell, where the application is registered after ensuring that fee has been deposited. Thereafter the request is sent to the concerned

- CPIOs/Appellate Authorities to provide desired information to the applicants for disposal of First Appeal. A monthly statement in this regard is sent to DoP&T.
- ❖ Copies of the RTI Act and circulars received from DOPT on RTI are circulated promptly to all the organizations for compliance.
  - ❖ Useful guidance material/instructions are also circulated to all CPIOs/ Appellate Authorities.
  - ❖ An internal procedure has been established and circulated to all the concerned CPIOs/ Appellate Authorities and all Sections for guidance, while dealing with the requests/appeals from public seeking information.
  - ❖ All the useful records are duly maintained.
  - ❖ The Quarterly details of RTI Applications and RTI Appeals received and disposed of by this Ministry during the period from 01.01.2022 to 31.12.2022 are as under:-

Sl. No.	Period	RTI Applications received and disposed of	RTI Appeals received and disposed of
1	January – March	122	2
2	April – June	138	2
3	July – September	100	3
4	October – December	121	10
	<b>Total</b>	<b>432</b>	<b>17</b>

### Accounts and Budget

10.7 The Secretary is the Chief Accounting Authority of the Ministry. He discharges his responsibilities through the Financial Advisor and the Pr. Chief Controller of Accounts (Pr.CCA). The Accounts and Budget Wings of the Ministry are functioning under the Pr. Chief Controller of Accounts.

10.8 The office of the Pr. Chief Controller of Accounts is inter-alia responsible for making all authorized payments of the Ministry, compilation of Monthly and Annual Accounts, conducting Internal Audit of all the units under the Ministry to ensure compliance of the prescribed rules, preparation of Receipt Budget, Statement of Central Transactions, Finance Accounts and Appropriation Accounts, making payments of bills, expenditure monitoring and PFMS implementation till agency level. Pr. CCA also renders Technical advice to the Ministry on financial and accounting matters, cash management and coordinates with the Controller General of Accounts, Comptroller & Auditor General of India, Finance Ministry and other related agencies for accounting and pension related work.

10.9 The office of the Pr. Chief Controller of Accounts comprises of Pr. Chief Controller of Accounts, one Controller of Accounts and one Dy. Controller of Accounts and two Assistant Controller of Accounts. The Budget Section consists of one Deputy Secretary (Budget). There are 6 PAO'S/RPAO's under the administrative control of Pr. CCA located at New Delhi (two), Noida, Mumbai, Kolkata and Port Blair. The detailed responsibilities assigned to the office of the Pr. Chief Controller of Accounts of the Ministry and its offices are:

### Payments

- ❖ Making payments on behalf of the Ministry after conducting pre-check of the presented bills as per approved budget.
- ❖ Making payments to the subordinate attached offices, Autonomous Bodies, Societies, Associations, Public Sector Undertaking and State Governments.
- ❖ Release of authorisation to other Ministries to incur expenditure on behalf of the Ministry.

### Receipts

- ❖ Accepting, budgeting and accounting the receipts of the Ministry.
- ❖ Monitoring the repayment of loans and interest thereon received from State Governments and Public Sector Undertakings.
- ❖ Receipt & Payment under New Pension Scheme.
- ❖ Submission of Accounts & Statements
- ❖ Preparation of Monthly Accounts of the Ministry, Statement of Central Transaction, Statements of Finance Accounts, Head wise and stage wise Appropriation Accounts and their submission to the Controller General of Accounts, Ministry of Finance, Department of Expenditure and the Director General of Audit, Central Revenues.
- ❖ Preparation of Annual Budget including the Outcome Budget and coordination with the Ministry of Finance in the Budget process during the financial year.
- ❖ Monitoring of Internal Extra Budgetary Resources (IEBR) and its submission to the office of the CGA.
- ❖ Monitoring and submission of mandatory information as per Fiscal Responsibility and Budget Management (FRBM) Act and Rules.
- ❖ Preparation of Management Information Reports based on accounting, budget & audit data for submission to various authorities.
- ❖ Preparation of financial statistics on monthly basis regarding receipts and expenditure for uploading on Ministry's website.
- ❖ Preparation of Monthly expenditure/Weekly expenditure based on BE/RE and submission to various authorities viz. AS & FA, Secretary etc. for monitoring the expenditure.
- ❖ Preparation of material for Annual Report for submission to Ministry, flash figure of expenditure and to submit to CGA and preparation of provisional Accounts and to submit to the Ministry.

### Budget

- ❖ Preparation and submission of Annual Budget Estimates and Revised Estimates re-appropriation proposals and Supplementary Demands for Grants of the Ministry and Coordination with the Ministry of Finance and other Departments in all budget related matters.
- ❖ Vetting of Demands for Grants yearly after incorporating actual expenditure preparing and printing of Detailed Demands for Grants of the Ministry,
- ❖ Preparation of Annual Estimates of Revenue Receipts, Interest Receipt & Public Accounts for submission to Ministry of Finance.

**Internal Audit**

10.10 The Internal Audit Wing (IAW) of the Pr.CCA organization of the Ministry has been established as an effective tool for identifying the systematic errors/lapses in the functioning of various departments in the Ministry and advising the management for necessary action/ rectification. This has proved to be of immense management tool to bring about objectivity and financial propriety in day to day functioning for ensuring financial prudence. The officers of the Internal Audit Wing have been imparted various trainings related to use of Internal Audit tools in the past. Consequent upon the effective utilization of Internal Audit mechanism during the past few years, there has been a significant improvement in maintenance of accounts in all the offices of the Ministry. Internal Audit paras and CGA's audit paras which involve major irregularities/deficiencies are reviewed by the Secretary through Standing Audit Committee (SAC) which has AS&FA and Pr.CCA as members. The details of the outstanding paras raised by the IAW are as under:-

	Number of paras outstanding at the beginning of the year	Number of paras settled during the year	Number of paras raised during the year	Number of paras outstanding at the end of the year
Internal Audit paras	538	36	41	543
CGA's Audit paras (Pr.AO/PAO)	6	0	0	6

10.11 Summary of important audit observations made during recent audit reports are enclosed at **ANNEXURE-IV.**

**COMPUTERIZATION OF ACCOUNTS**

**E-Lekha**

10.12 E-Lekha is a web-based application for generating daily/monthly MIS/ Expenditure of accounting information. All the PAO's/RPAO's have been fully integrated with the accounting portal E-Lekha. PAO's are required to upload their daily transactions in this portal so that the data of expenditure and receipts are available on daily basis. This has enabled availability of real time data on expenditure and receipt which is crucial for effective monitoring of expenditure/receipts and budgetary controls. The reports generated from the Management Information System of this portal are important managerial tools and are being used by various Departments of the Ministry.

**PFMS**

10.13 Public Finance Management System (PFMS) was initially started as a tool for release of funds under plan schemes of Govt. of India. Now the scope of PFMS has been expanded to integrate various existing standalone systems being used by DDO's and PAO's for online processing of sanctions, bills and payments of all types of

expenditure. All the Modules of PFMS have been successfully implemented in PAOs and DDOs of the Ministry.

#### **Grant No. 78 – Ministry of Ports, Shipping and Waterways**

10.14 The position of savings/excess in respect of above mentioned Grant No. 78 for the year 2022-23 and actual expenditure for the year 2022-23 (upto 31<sup>st</sup> December, 2022) has been reflected in **ANNEXURE-V**. The Head-wise Details of Receipts as per the Statement of Central Transaction (SCT) for the last three years have been reflected in **ANNEXURE-VI**. Head wise details of expenditure for 2020-21 to 2022-23 (upto 31<sup>st</sup> December, 2022) are given in **ANNEXURE-VII**. Profile of actual Expenditure in 2022-23 (upto 31<sup>st</sup> December, 2022) is at **ANNEXURE-VIII**. The Ministry is maintaining two funds viz. Depreciation Reserve Fund and General Reserve Fund for providing certain services required to develop transportation facilities in the country. Details are at **ANNEXURE-XI**.

#### **Vigilance**

10.15 The Vigilance Wing of the Ministry coordinates and supervises the vigilance activities within the Ministry as well as the PSUs and autonomous bodies under its administrative control. The Wing is headed by the Chief Vigilance Officer (CVO) of the rank of Joint Secretary appointed with the approval of Chief Vigilance Commission.

10.16 Each organization under the Ministry has either a part-time or full-time CVO. The part-time CVOs are appointed from amongst the officers of the concerned organization in consultation/ concurrence with the CVC. The full-time posts of CVOs, wherever such posts exist, are filled-up by officers of organized services through DoP&T.

10.17 The emphasis has been laid on the role of preventive vigilance by taking prompt administrative actions and ensuring transparency including simplification of procedures and use of e-technology etc. Special emphasis was laid on the strengthening of vigilance machinery in various organizations under the Ministry particularly the Port Trusts. Punitive action has been taken wherever required in consultation with CVC against the delinquent officials.

10.18 During the Vigilance Awareness Week, a pledge was administered to the staff and officers of the Ministry. Vigilance Awareness Week was also observed in the organisations under the Ministry.

10.19 Vigilance activities in various organizations under the Ministry are being reviewed periodically through their reports/returns and also through interactions with CVOs/Head of the Organizations during periodical meetings. Minister of Ports, Shipping and Waterways took a review meeting of all the CVOs on 04.05.2022 to review the working of Vigilance Wings of all organisations under the Ministry.

## CHAPTER - XI USE OF OFFICIAL LANGUAGE



*Hindi Pakhwada in Directorate General of Lighthouse and Lightships*

11.1 Hindi Division established in the Ministry for implementation of the Official Language Policy of the Union Government. Presently it is under the administrative control of the Economic Advisor. The Hindi Division has posts of one Joint Director (OL)-(Currently vacant), one Assistant Director (OL), two Senior Translation Officers and one Junior Translation Officer. Hindi Division monitors the implementation of Official Language (Hindi) Policy in the Ministry as well as in all the offices under its administrative control.

11.2 In accordance with the Annual Programme issued by the Department of Official Language, Ministry of Home Affairs, each year, Ministry continues with its efforts to do majority of the official work in Hindi for implementation of the Official Language Policy of the Union Government.

### **Compliance of Section 3(3) of the Official Language Act, 1963 (as amended 1967)**

11.3 In pursuance of the Official Language Policy of the Government of India, all documents covered under section 3(3) of the Official Language Act, 1963 (as amended 1967) in Ministry were issued both in English and Hindi during the reporting period.

### **Hindi Advisory Committee**

11.4 The Resolution regarding the constitution of the Hindi Advisory Committee of this ministry was published in the Gazette of Govt. of India on 1<sup>st</sup> January, 2022 with the approval of Hon'ble Minister of Ports Shipping and Waterways. The tenure of this committee is three years from the date of the Resolution. Hon'ble Minister of Ports Shipping and Waterways is the Chairman of this committee and the two Ministers of State are Vice Chairmen. There are total 35 members in this committee including official and non-official members. The function of this committee is to advise on the matters relating to the progressive use of Hindi in Official work of the Ministry in accordance with

the policies laid down and the guidelines issued from time to time by the Kendriya Hindi Samiti and Department of Official Language in this regard.

### Official Language Implementation Committee (OLIC)

11.5 There is an Official Language Implementation Committee (OLIC) constituted in the Ministry under the Chairmanship of the Economic Advisor. The Committee reviews the progress made regarding the use of Hindi in the Ministry on a quarterly basis. It gives appropriate suggestions and recommends measures to be taken for the effective implementation of the Official Language Policy of the Union. Two meetings of the Committee, including a combined meeting for the quarters ending 30<sup>th</sup> June and 30<sup>th</sup> September were held during the year 2022-23 (upto 31-12-2022).

### Inspections carried out to assess the progressive use of Hindi

11.6 During the year 2022 (upto 31<sup>st</sup> December, 2022) ten (10) offices have been inspected by the officials of the Ministry. The details of the inspections carried out by the First Sub Committee of Parliament on Official Language and by the Officials of this Ministry during the reporting period to assess the progress of implementation of the Official Language Policy of the Union Government are given below:

### Inspections of the Committee of Parliament on Official Language:

11.7 Hindi Division reviews the questionnaires of the offices under its control during the inspection by First Sub Committee of Parliament on Official Language and imparts necessary guidance to them. The said committee inspected Offices of ALHW, Port Blair on 20.04.2022, O/o the Regional Director, DGLL, Port Blair on 21.04.2022, Deendayal Port Authority, Gandhidham on 23.08.2022, O/o the Regional Director, DGLL, Jamnagar on 23.08.2022, Cochin Port Authority, Cochin on 15.10.2022, O/o the Deputy Chief Engineer (Lakshdweep), ALHW, Kawaratti on 17.10.2022 and Mormugao Port Authority, Goa on 15.11.2022 during the year 2022-23 (Upto 31-12-2022).



*Rajbhasha Samiti Inspection Meeting*

**Hindi Pakhwada (fortnight)**

11.8 In order to encourage progressive use of Hindi in official work and to propagate Hindi, 'Hindi Pakhwada' was organized in the Ministry from 14 - 28<sup>th</sup> September, 2022. During Hindi Pakhwada, various competitions were held. This year a total of 70 officers and staff participated in 6 competitions and participants won a total of 42 Prizes.

**Hindi workshops**

11.9 Two Hindi workshops (on 30<sup>th</sup> August, 2022 & 24<sup>th</sup> November, 2022) were organized during the reporting period. A total of 32 participants were trained on 'Introduction of Official Language policy and practical usage of Official Language' in the Hindi workshop organized on 30<sup>th</sup> August, 2022 and 17 participants were trained on 'Filling of Hindi Quarterly Report regarding progressive use of official language accurately and practical use of Hindi in official work' in the Hindi Workshop organized on 24<sup>th</sup> November, 2022. Both of these workshops were conducted by Shri Suresh Chandra Chaturvedi, Retired Assistant Director (Official Language), Ministry of Housing and Urban Affairs.

**Award scheme for the books written originally in Hindi and translated into Hindi from other languages on the subjects relating to Indian ports, Shipping and Inland Water Transport:**

11.10 The Ministry implements an Award Scheme on annual basis with an objective to promote original book writing in Hindi as well as translation of books from other languages into Hindi on subjects related to Indian Ports, Shipping and Inland Water Transport, under which first, second and third prizes are given in both categories separately.

**Rajbhasha Shield Scheme:**

11.11 To promote use of Hindi in the headquarters of offices under the control of the Ministry, a Rajbhasha Shield scheme is being operated on annual basis under which region wise offices are awarded with a shield and certificate.

**Incentive scheme for doing official work in Hindi**

11.12 The Ministry is implementing a cash incentive scheme of Department of Official Language on yearly basis in order to encourage officials for doing their official work in Hindi. Under this scheme, a total of ten prizes (cash awards) are given namely, two First prizes of ₹5000/- each, three Second prizes of ₹3000/- each and Five Third Prizes of ₹2000/- each. Any official, who writes a minimum of 20,000 or more Hindi words in a financial year in his official work, is eligible to participate under this scheme. The word limit for non-Hindi speaking officials is a minimum of 10,000 words per year and they are given 20% weight-age as regards number of words. For the year 2021-22, a total of 03 officials of this ministry participated under this scheme.

**Quarterly Reward Scheme to encourage Sections/Divisions to progressively increase their official work in Hindi**

11.13 A new incentive scheme has been instituted in the Ministry in compliance with the decision taken in the meeting of the Official Language Implementation Committee of the Ministry held on 20<sup>th</sup> July, 2021. With a view to encourage various Sections/Divisions of

the Ministry to progressively increase their official work output in Hindi, top three Sections/Divisions of the Ministry in terms of quantum of their official work output in Hindi are awarded with First, Second and Third Prize worth Rs. 5000/-, Rs. 3000/- and Rs. 2000/- in cash respectively on a quarterly basis under this scheme. TRW, Sagarmala, PD-I and PD-II Sections/Divisions have been awarded with cash prizes during the reporting period (upto 31.12.2022).

MINISTRY OF PORTS, SHIPPING & WATERWAYS

**I. The following subjects which fall within List I of the Seventh Schedule to the Constitution of India:**

1. Maritime shipping and navigation; provision of education and training, training for the mercantile marines.
2. Lighthouses and lightships.
3. Administration of the Indian Ports Act, 1908 (15 of 1908) and the Major Ports Authority Act, 2021 (01 of 2021) and ports declared as major ports.
4. Shipping and navigation including carriage of passengers and goods on inland waterways declared by Parliament by law to be national waterways as regards mechanically propelled vessels, the rule of the road on such waterways.
5. Shipbuilding and ship-repair industry.
6. Fishing vessels industry.
7. Floating craft industry.

**II. In respect of the Union Territories:**

8. Inland waterways and traffic thereon.

**III. In respect of the union territories of the Andaman and Nicobar Islands and the Lakshadweep:**

9. Organization and maintenance of mainland, islands and inter-island shipping services.

**IV. Other subjects which have not been included under the previous parts:**

10. Legislation relating to shipping and navigation on inland waterways as regards mechanically propelled vessels and the carriage of passengers and goods on inland waterways.
11. Promotion of Transport Cooperatives in the field of inland water transport.
12. Legislation relating to and coordination of the development of minor and major ports.
13. Administration of the Dock Workers (Regulation of Employment) Act, 1948 (9 of 1948) and the Schemes framed thereunder other than the Dock Workers (Safety, Health and Welfare) Scheme, 1961.
14. To make shipping arrangements for and on behalf of the Government of India/ Public Sector Undertakings/ State Governments/ State Government Public Sector Undertakings and autonomous bodies in respect of import of cargo on FOB/FAS and export on C&F/CIF basis.

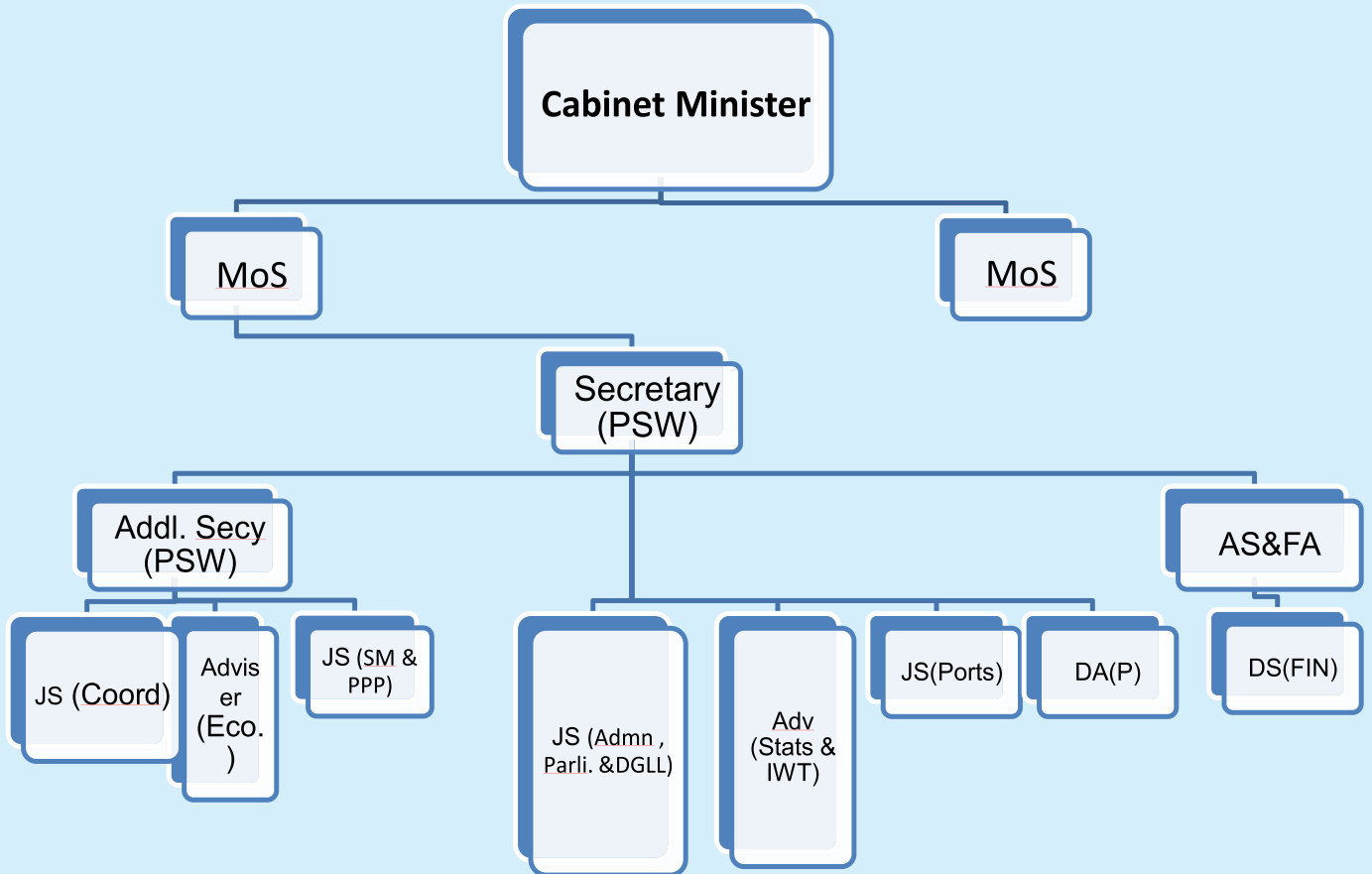
15. Formulation of the privatization policy in the infrastructure areas of ports, shipping and inland water

**V. ACTS: (As may be amended from time to time)**

- ❖ The Northern Indian Ferries Act, 1878 (17 of 1878)
- ❖ The Obstructions in Fairways Act, 1881 (16 of 1881)
- ❖ The Indian Ports Act, 1908 (15 of 1908)
- ❖ The Inland Vessels Act, 1917 (1 of 1917)
- ❖ The Indian Carriage of Goods by Sea Act, 1925 (26 of 1925)
- ❖ The Dock Workers (Regulation of Employment) Act, 1948
- ❖ The Calcutta Port (Pilotage) Act, 1948 (33 of 1948)
- ❖ The Merchant Shipping Act, 1958 (44 of 1958)
- ❖ The Seamen's Provident Fund Act, 1966 (4 of 1966)
- ❖ The Hooghly Docking and Engineering Company Limited (Acquisition and Transfer of Undertakings) Act, 1984 (55 of 1984)
- ❖ The Inland Waterways Authority of India Act, 1985 (82 of 1985)
- ❖ The Multi Modal Transportation of Goods Act, 1993 (28 of 1993)
- ❖ The Dock Workers (Regulation of Employment) (Inapplicability to Major Ports) Act, 1997 (31 of 1997)
- ❖ The Suppression of Unlawful Acts against Safety of Maritime Navigation and Fixed Platforms on Continental Shelf Act, 2002 (69 of 2002)
- ❖ Indian Maritime University Act, 2008 (22 of 2008)
- ❖ The National Waterways Act, 2016 (17 of 2016)
- ❖ The Admiralty (Jurisdiction and Settlement of Maritime Claims) Act, 2017 (22 of 2017)
- ❖ The Recycling of Ships Act, 2019 (49 of 2019)
- ❖ The Major Ports Authority Act, 2021 (01 of 2021)
- ❖ The Marine Aids to Navigation Bill, 2021
- ❖ The Inland Vessels Act, 2021

ANNEXURE-II  
(para 1.12 refer)

Organization Chart - Ministry of Ports, Shipping and Waterways



Annexure- III  
(Para 10.2 refer)

Annual Statement Showing the Representation of SCs, STs and OBCs as on 1<sup>st</sup> January, 2023 and Number of appointments made during the Preceding Calendar year 2021:

Ministry/Department/Attached/Subordinate Office: Shipping  
Representation of SCs/STs/OBCs/EWSs (As on 01.01.2023)

Group	Total Employee	SCs	STs	OBCs	EWS	Total
A	52	04	02	07	-	13
B	84	15	06	23	-	44
C (Excluding Safai Karamchari)	40	08	03	04	-	15
C (Safai Karamchari)	-	-	-	-	-	-
Total	176	27	11	34	-	72

Number of Appointments made during the Calendar Year 2022

BY DIRECT RECRUITMENT

Group	SCs	STs	OBCs	EWS	Total
A	-	-	-	-	-
B	-	-	-	-	-
C (Excluding Safai Karamchari)	01	01	-	-	02
C (Safai Karamchari)	-	-	-	-	-
Total	01	01	-	-	02

By Promotion

Group	SCs	STs	OBCs	Total
A	-	-	-	-
B	-	-	-	-
C (Excluding Safai Karamchari)	-	-	-	-
C (Safai Karamchari)	-	-	-	-
Total	-	-	-	-

By Deputation

Group	VH	HH	OH	Total
A	-	-	-	-
B	-	-	-	-
C (Excluding Safai Karamchari)	-	-	-	-
C (Safai Karamchari)	-	-	-	-
Total	-	-	-	-

Annexure-IV  
(para 10.11 refer)

(SUMMARY REPORT OF INTERNAL AUDIT PARAS)

(Including Schemes/Banks/PSUs/Grantee Institutions)

S. No.	Nature of irregularities	No of paras	Total amount involved (Rs. in lakhs)
1.	Non-recovery of Government dues from Central Govt. Department/ State Govt./Private Parties	1	2.10
2.	Over payments	0	-
3.	Non-adjustment of advances- Contingency Advance- T. A. Advance LTC Advance Long Term Advances	1 1 2	3.93 1.01 1.66
4.	Blocking of Govt. money	-	-
5.	Non accounted of costly stores/Govt. money	-	-
6.	Items of special nature	1	139.15
	<b>Total</b>	<b>6</b>	<b>147.85</b>

ANNEXURE-V  
(para 10.14 refer)

GRANT FOR THE FINANCIAL YEAR 2022-  
2023 (upto 31/12/2022)

(Rs in crore)

Grant No. & Name		Original	Supplementary	Total Budget	Actual Expenditure	Saving
Grant No. 78	Revenue Account	1135.19	0.00	1135.19	677.20	NA
	Capital Account	574.31	0.00	574.31	410.44	
Total		1709.50	0.00	1709.50	1088.14	

Source: E lekha.

Annexure-VI  
(para 10.14 refer)

HEADWISE DETAILS OF RECEIPTS AS PER THE STATEMENT OF  
CENTRAL TRANSACTION (SCT) FOR THE LAST THREE YEARS

(Rs. in crore)

REVENUE RECEIPTS

Sl. No.	MAJOR HEAD	2020-21	2021-22	2022-23 up to (31-12-2022)
1.	0021-Taxes on Income other than Corporation Tax	19.00	22.03	15.87
2.	0045-Other Taxes & Duties on Commodities & Services	0.00	0.00	0.00
3.	0049- Interest Receipts	144.98	9.01	5.57
4.	0050-Dividends & Profits	290.63	155.98	112.86
5.	0070-Other Administrative Services	0.00	0.00	0.00
6.	0071-Contribution & Recoveries towards Pension & Other Retirements Benefits	10.03	13.03	13.30
7.	0075-Miscellaneous General Services	0.00	0.00	0.00
8.	0210-Medical & Public Health	0.39	0.40	0.33
9.	0216-Housing	0.47	0.55	0.59
10.	1051-Ports and Light Houses	384.07	371.30	300.32
11.	1052-Shipping	112.39	86.71	74.90
12.	1054-Roads and Bridges	0.00	0.00	0.00
13.	1056-Inland Water Transport	29.96	19.50	0.00
14.	1475 - Other General Economic Services	0.00	0.00	0.00
<b>A</b>	<b>REVENUE RECEIPTS *</b>	<b>991.92</b>	<b>678.51</b>	<b>523.74</b>

CAPITAL RECEIPTS

Sl. No.	MAJOR HEAD	2020-21	2021-22	2022-23 up to (31-12-2022)
1.	4000- Miscellaneous Capital Receipts	0.00	0.00	0.00
2.	6858- Loans for Engineering Indst.	0.00	0.00	0.00
3.	7051- Loans for Port & Light Houses	190.31	15.67	0.00
4.	7056-Loans for Inland Water Transport	0.00	0.00	0.00
5.	7601-Loans & Advances to State Govt.	0.00	0.00	0.00
6.	7610- Loans to Govt. Servants	0.26	0.19	0.17
	<b>CAPITAL RECEIPTS **</b>	<b>190.57</b>	<b>15.86</b>	<b>0.17</b>

Annexure-VII  
(para 10.14 refer)

HEADWISE DETAILS OF EXPENDITURE FOR THE LAST THREE YEARS i.e.  
FROM 2020-21 TO 2022-23 (upto 31/12/2022)

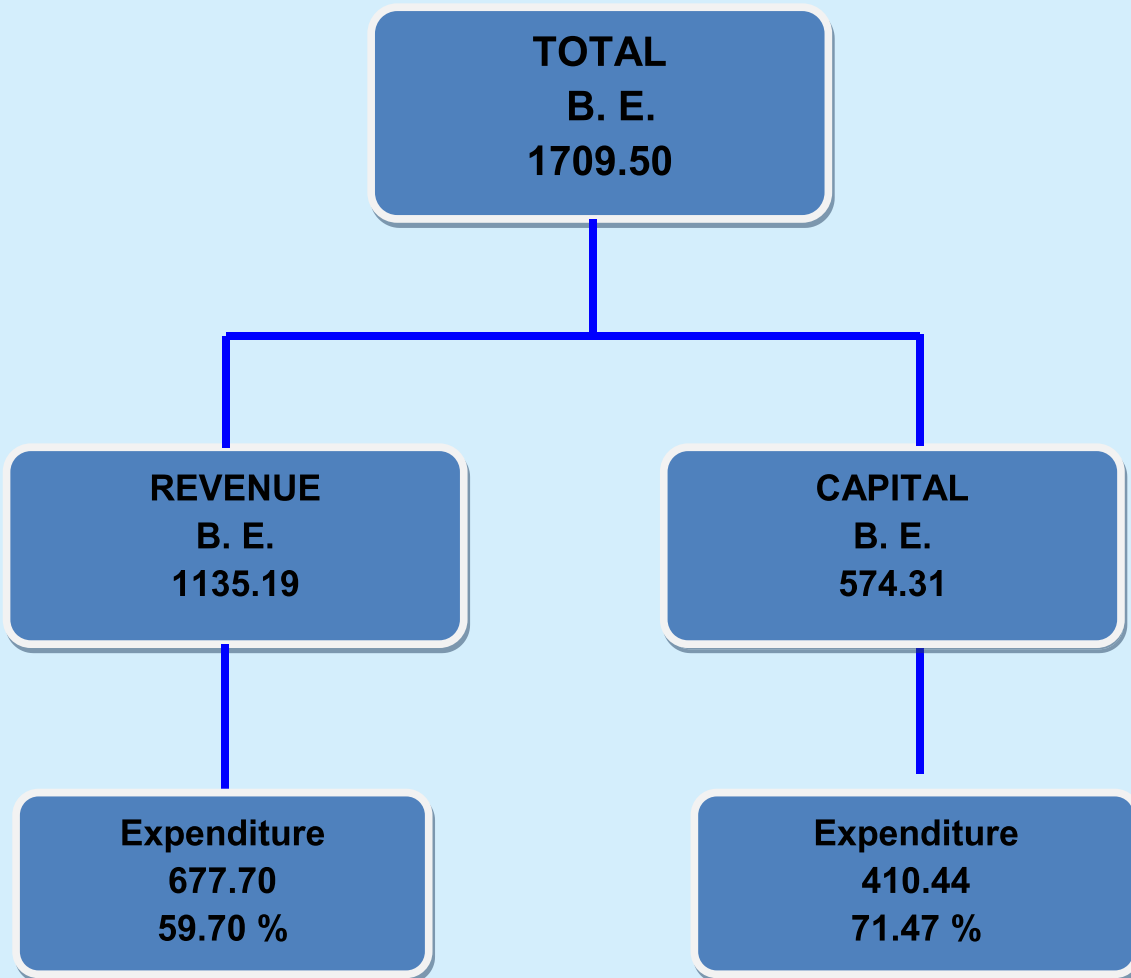
(Rs. in Crores)

PARTICULARS	2020-21	2021-22	2022-23 (upto 31 <sup>st</sup> December, 2022)
2049-Interest Payment	11.84	10.63	0.26
2071-Pension Payment	38.32	35.12	28.78
2235-Social, Security & Welfare	0.04	0.08	0.04
2801- Power	0.07	0.00	0.00
2852-Industries	151.48	106.38	26.59
3051-Ports&Lighthouses (Gr.No.78)	700.36	921.82	732.04
3051-Port and Lighthouses Andaman & Nicobar administration Lakshadweep	10.33 2.94	7.64 2.45	1.44 0.62
3052-Shipping	116.36	97.89	64.90
3056-Inland Water Transport	531.36	23.50	62.94
3451-Economic Services	52.45	46.97	37.97
3475- Other General Economic Services	0	0	0
3601-Grant-in-aid to State Government	35.31	39.63	4.91
3605- Technical & Economical Co-operation with other Countries	0.00	0.00	0.00
<b>TOTAL (Revenue Exp.)</b>	<b>1650.62</b>	<b>1292.11</b>	<b>960.49</b>
4405-Capital outlay on fisheries	4.94	2.21	0.47
4406-Capital outlay on forestry & wildlife	0.00	0.00	0.00
4801-Capital outlay on Power Proj	0	0	0
5051- Capital outlay on Ports & Lighthouses (Gr.No. 78)	159.99	137.81	6.46
5051- Capital outlay on Ports & Lighthouses Andaman & Nicobar administration	7.91	5.50	0.06
5052-Capital outlay on Shipping Andaman & Nicobar administration Lakshadweep	1.69 0.15	1.09 0.00	0.23 0.01
5052-Capital outlay on Shipping (Gr.No.78)	6.25	4.18	2.20
5053-Capital Outlay on Civil Aviation	0.00	0.00	0.00
5056 – Capital outlay on Inland Water Transport	0.00	467.54	408.24
5054 – Capital Outlay on Roads and Bridges	39.29	47.82	52.28
5075-Other Transport Services	0	0	0
5452-Capital outlay on tourism Andaman & Nicobar administration	1.42	0.00	0.21
6858-Loans for Engineering Industries	0.00	0.00	0.00
7051-Loans for Ports & Light Houses	0.00	0.00	0.00
7610-Loans to Govt. servants	0.15	0.38	0.17
<b>TOTAL (Capital Exp.)</b>	<b>221.79</b>	<b>666.53</b>	<b>470.33</b>
<b>Grand Total (Rev.+Cap.)</b>	<b>1872.41</b>	<b>1958.64</b>	<b>1430.82</b>

Annexure-VIII  
(para 10.14 refer)

PROFILE OF ACTUAL EXPENDITURE (NET) IN 2022-23  
(upto 31/12/2022)

(Rs. in crore)



Source:- Consolidated  
Classified Abstract

B.E. – Budget Estimate

Annexure-IX  
(para 10.14 refer)

MINISTRY OF PORTS, SHIPPING & WATERWAYS

	(` Rs. in crore)
<b>DEPRECIATION RESERVE FUND (8115)</b>	
Opening Balance as on 01.04.2022	285.90
Receipt during Apr-December -2022	13.50
Payment during Apr-December- 2022	1.25
Closing Balance as on 31.12.2022	298.15
<b>GENERAL RESERVE FUND (8121)</b>	
Opening Balance as on 01.04.2022	1055.28
Receipt during Apr-December- 2022	96.43
Payment during Apr-December- 2022	21.01
Closing Balance as on 31.12.2022	1130.70

Source: Classified Consolidated abstract Account





