



सत्यमेव जयते

भारत सरकार
पत्तन, पोत परिवहन और
जलमार्ग मंत्रालय
नई दिल्ली



वार्षिक रिपोर्ट
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CHAPTER – 1

INTRODUCTION



Hon'ble Minister of Ports, Shipping & Waterways and AYUSH Shri Sarbananda Sonowal taking charge as Minister

- 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 (P, S&W) on 9th 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 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. The shipping industry must be enabled to carry higher shares of the sea-borne trade in indigenous bottoms.
- 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, Joint Secretary (Shipping), Joint Secretary (Ports), Joint Secretary (Sagarmala & PPP), Joint Secretary (Admn., Parl. & DGLL), Economic Adviser(Coord.), Adviser Statistics(IWT and Stats.), 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 Attached/Subordinate offices, Autonomous Organisations, Societies/ Associations and Public Sector Undertakings are functioning under the administrative control of the Ministry:-

Attached/Subordinate Offices

1. Director General of Shipping
2. Andaman Lakshadweep Harbour Works
3. Directorate General of Lighthouses and Lightships

Autonomous Bodies

1. Tariff Authority of Major Ports (TAMP)
2. Port Authorities at Mumbai, SMP, Kolkata, Cochin, Kandla (Deendayal), Chennai, Mormugao, Nhava Sheva (Jawaharlal Nehru), Paradip, Tuticorin (V.O Chidambarnar) , Visakhapatnam and New Mangalore
3. Calcutta Dock Labour Board
4. Inland Waterways Authority of India
5. Seamen's Provident Fund Organization
6. Indian Maritime University

Societies/ Associations

1. Seafarer's Welfare Fund Society.
2. Indian Port Association.

Public Sector Undertakings

1. Shipping Corporation of India
2. Cochin Shipyard Limited
3. Sagarmala Development Company
4. Indian Port Rail and Ropeway Corporation Limited
5. Indian Ports Global Limited(IPGL)
6. Sethusamundram Corporation Limited.
7. Hooghly Cochin Shipyard Limited

8. Central Inland Water Transport Corporation Limited
9. Hooghly Dock and Ports Engineers Limited

Companies owned by Port Authorities

1. Dredging Corporation of India
 2. Kamaragar Port Limited
- 1.12 The Organization Chart of the Ministry is given at **ANNEXURE-II**.

CHAPTER – 2

YEAR AT A GLANCE



Hon'ble Minister Meeting Inland Waterways Authority of India Officials on successfully engaging concessionaire under PPP mode through open global Tendering process, for Equip, Operate and Transfer of Multimodal Terminal Haldia

BACKGROUND

2.1 The Maritime Sector in India comprises of Ports, Shipping, Shipbuilding and 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. 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 2021-22

2.3 The Budget Estimate of Gross Budgetary Support (GBS) for FY 2021-22 was Rs.1702.35 crore for the Ministry.

However, at the stage of Revised Estimate (RE), this has been reduced to Rs. 1585.37 crore. Against the RE allocation of Rs. 1585.37 crore, actual expenditure as on 31.12.2021 was Rs.1095.64 crore. Summary of GBS and Internal & Extra Budgetary Resources (IEBR) outlay for 2021-22 are given below:

Sector	BE 2021-22		RE 2021-22		Actual Expenditure	
	GBS	IEBR	GBS	IEB	RGBS (2021-22)*	IEBR (20-21)
Ports & Light houses	647.50	4337.12	580.37	3233.92	447.42	1974.24
Shipping	171.25	480.00	166.56	450.00	66.55	678.24
IWAI	623.60	0.00	580.30	0.00	382.07	0.00
Others	260.00	0.00	258.14	0.00	199.60	0.00
Total	1702.35	4817.12	1585.37	3683.92	1095.64	2652.48

*upto 31st December, 2021

OUTLAY FOR 2022-23

2.4 The details of total GBS and IEBR outlay details for 2022-2023 are given below:-

Sector	2022-23 (BE)	
	GBS	IEBR
Ports & Light-houses	612.49	3980.33
Shipping	181.10	480.00
IWAI	640.81	0.00
Others	275.10	0.00
Total	1709.50	4460.33

PORT SECTOR

Cargo Traffic at Indian Ports

2.6 During 2020-21, major and non-major ports in India handled a total cargo

throughput of around 1251.38 Million Tonnes. The traffic decreased by 5.2% over the corresponding period of previous year. The 12 Major Ports handled traffic of 529.34 Million Tonnes during April - December 2021, representing increase of about 10.3% over the corresponding period of previous year. Of the 12 Major Ports, cargo handled during April - December 2021 Mormugao Port registered negative growth of 7.6% following SMP Haldia Dock System 48% over the corresponding period of previous year.

Commodity-wise Cargo Traffic at Major Ports

2.7 During 2020-21 upto December, 12 Major Ports handled 529.34 Million Tonnes of traffic as against 479.56 Million Tonnes over the corresponding

period of previous year. The composition of the cargo is given below:

(In Million Tonnes)

Year	POL	Iron Ore	F&FRM (Dry)	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
Apr-Dec 2021	162.52	37.18	11.69	109.25	124.53 (8.34)	84.17	529.34

Source: Update on Indian Port Sector (31.03.2021) 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

2.8 While the commodities viz. POL, Coal, Iron Ore, F&FRM (Dry) and Containers are showing steady growth, there has been steady decrease in traffic of Other Cargo(es) during the last few years. Jawaharlal Nehru Port (JNP) continued to be the leading container handling port in the country with a share of about 40.1% followed by Chennai (18.6%) and the remaining share of 41.3% handled by other major ports during 2020-21.

Cargo Traffic at Non-major Ports

2.9 The traffic handled at non-major ports which was 529.1 Million Tonnes during 2017-18 increased to 578.9 Million Tonnes during 2020-21 which was 46.3% of the total maritime traffic of the country. The Maritime States namely Gujarat, Andhra Pradesh and Maharashtra accounted for 89.31% of

the traffic handled by non-major ports. The cargo traffic handled by non-major ports during April-December, 2021 was around 441.25 Million Tonnes recording an increase of 5.4% over corresponding period of previous year.

Port Efficiency

2.10 Efficiency at ports has an important bearing on the transaction cost. Ministry has been striving to improve the operational efficiencies through mechanization, digitization and process simplification. As a result, Major ports have improved their efficiency of operation particularly in terms of turnaround time. The Average Turnaround Time improved from 107.29 hours in 2011-12 to 55.99 hours during 2020-21 and 54.07 hours during 2021-22 (upto December, 2021). The

Average Turnaround Time for container ship of Major Sea Ports has been reduced from 36.94 hours in 2019-20 to 27.38 hours in 2020-21.

Port Capacity

2.11 Infrastructure development and capacity augmentation of major ports is an ongoing process. Cargo handling capacity of major ports has increased from 1065.83 MTPA as on 31.03.2017 to 1560.61 MTPA as on 31.03.2021. Similarly, Cargo handling capacity of non-major ports has increased from 788.61 MTPA as on 31.03.2017 to 994.21 MTPA as on 31.03.2021. There is adequate capacity build up in Indian ports to cater to the requirement of trade

Recent reforms/initiatives

2.12 Recent policy reforms and initiatives: The following initiatives have been taken for improving the efficiency and productivity of Major Ports:

Major Port Authorities Act

2.13 The Act intends to repeal the Major Port Trusts Act, 1963 so as to revamp the administration, control and management of Major Ports in India. The powers of the Board are limited and there is excessive need for directions on policy matters from the Central Government. The current model of the Board of Trustees has operational restrictions and in the modern economic scenario, the Major Ports are already facing challenges in keeping up with the growth and development in the Ports sector and increased competition from private ports. The Major Port Authorities Act, 2021 was enacted by parliament in 2021 after being passed by both the houses.

2.14 With a view to provide greater autonomy, flexibility and to

professionalize the governance of the Major Ports, the above new legislation was introduced to enable the Major Ports to adopt a competitive business model and implement changes in the evolving market. With the proposed changes in the Major Port Authorities Act, 2021; the administration of Major Ports shall significantly improve and decisions will be taken expeditiously. The Major Ports shall gain autonomy on many key matters including tariffs, development of port assets, master planning of infrastructure within port limits and powers to make regulations for operations of the Major Ports. The Act also provides for formulation of an Adjudicatory Board that will adjudicate disputes among Major Ports, Public Private Partnership concessionaires and captive users. The Act also delegates the power of fixation of Schedule of Rates for ports and fixation of tariff to the concessionaire in PPP projects.

2.15 The Major Port Authorities Act, 2021 is expected to usher in a new era for administration of Major Ports in India in which the Major Ports will contribute significantly to the economic growth and provide world-class port infrastructure by adopting Landlord Model of development where the core infrastructure is developed by the Port Authority and the commercial operation are bid out to private players.

Chabahar Port

2.16 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 Akhoundi 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 Ministry of Shipping, Government of India were the Confirming Parties to the Contract.

- 2.17 In its meeting held on 24.02.2016, the Govt. also approved the proposal of this Ministry for the provision and operationalization of credit of USD 150 Million from EXIM Bank for Chabahar Port Development.
- 2.18 In order to implement Chabahar project, an SPV, India ports Global Ltd was incorporated in January 2015, which was promoted by Jawaharlal Nehru Port Trust (JNPT) and Kandla Port Trust [(now Deendayal Port Trust) DPT].
- 2.19 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 JNPT & DPT was incorporated in Iran. Later, 100% equity shares of JNPT & DPT in IPGL have been purchased by Sagarmala Development Company Ltd. (SDCL) (a company under Administrative control of Ministry of Ports, Shipping and Waterways).
- 2.20 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 successfully completed one year of operation. 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.
- 2.21 With this first step a long journey commenced. By its engagement in Chabahar, India has written a history and is leading the regional cooperation and joint efforts to support land locked Afghanistan. This also fulfils India's long cherished dream of its engagement at Chabahar Port. Cabinet vide its meeting held on 26.02.2020 approved this Ministry's note for the exemption from applicability of DPE Guidelines to India Ports Global Limited. The first consignment of India's humanitarian aid to Afghanistan reached Chabahar on 15th April 2020. Total 888 containers of wheat (about 22,800 tons out of total of 75000 tons) have been sent to Afghanistan in three shipments.
- 2.22 The first Trilateral Working Group Meeting between India, Iran and Uzbekistan on joint use of Chabahar Port was held virtually on December 14, 2020 to open up economic opportunities for the traders and business community of the region. During the said virtual meeting, besides Uzbekistan, other Central Asian countries also had shown interest in using the port. India welcomed the interest of Uzbekistan to use the Chabahar port as a transit port. Further, all sides also welcomed India's decision to hold "Chabahar Day" which

was held on the sidelines of the International Maritime Summit hosted by India during 2-4 March, 2021.

- 2.23 A consignment of two Mobile Harbour Cranes (MHC) to Iran's Chabahar port has been supplied, with a total contract value of over USD 25 Million for supply of 6 MHC. The consignment of cranes arrived from Marghera port, Italy unloaded successfully on 18th January, 2021 at Chabahar port.

Major Initiatives/Achievements

2.24 An upgraded Port Community System (PCS) (PCS 1x version) has been implemented. The system enables seamless data flow between the various stakeholders through common interface. Main Objectives of PCS1x are:

- a) Develop a centralized web based application which act as SINGLE WINDOW for secure electronic message exchanges between all stakeholders
- b) Reduce transaction time and cost in Port's business & overall Logistics cost of the country
- c) Achieve paperless regime in Port sector
- d) Implement an e-commerce portal for Port Community

Facilities:

- a) Towards complete Paperless regime, it facilitates e-DO, e-Payment & e-Invoicing which has already been made mandatory
- b) It has latch-on facility with all other trade party portals which can be evolved to National Maritime Single Window (NSW) which will reduce delays in physical movement of cargo & transaction time of EXIM trade apart from just being online
- c) Providing facilities like vehicle booking option, advance notice of traffic to ports,

etc. Transportation module (e-Vahan& e-Sarthi) is also an integral part of PCS

- 2.25 Policy Guidelines for Land Management (PGLM) 2014 were issued to all Major Ports for implementation w.e.f. 2.1.2014. Later, some of the provisions of the Land Policy Guidelines, 2014 were further clarified to ease the implementation of the Policy Guidelines by the Major Ports on 17th July, 2015. Many Major Ports had, however, raised various difficulties in implementing some of the provisions of PGLM, 2015 and requested for further clarifications on the same. To accommodate the various difficulties arising with regard to implementation of the guidelines so as to meet the practical exigencies & requirements in public interest, clarifications on these were issued by the Ministry from time to time and all the clarifications issued have been compiled and have been issued afresh on 29.4.2019. With the objective of further promoting port led industrialization and 'Ease of Doing Business' and the vision of 'Atmanirbhar Bharat', new Policy Guidelines for Land Management by Major Ports, 2020 (PGLM 2020) has been prepared and awaiting the approval of the cabinet.

2.26 Cabotage Relaxation - Cabotage relaxation of coastal movement of EXIM transshipment containers and Empty Containers, introduced in May, 2018. Order has been issued by the Ministry for relaxation of coastal movement of EXIM transshipment containers and Empty Containers

2.27 An Enterprise Business System (EBS) is being implemented at 5 Major Ports (Mumbai, Chennai, Deendayal, Paradip, and Kolkata (including Haldia) Port with project cost of approx. 323 crore) to provide a digital port ecosystem that will

adopt leading International Practices without losing its alignment to existing local needs. A total of 2474 processes (ChPT – 671, DPT – 376, KoPT – 501, HDC – 374, MbPT – 278 and PPT – 274) were rationalized, harmonized, optimized and standardized to arrive at a final reengineered process count of 162 processes. All the reengineered processes will be KPI driven and performance of each department and process at higher level will be tracked against defined Key Performance Indicators for each department and process. The proposed EBS will comprise of three core solution components - Port Operations Solution, standard ERP solutions, and auxiliary solutions, and would tightly integrate with Port Community System (PCS) and other retained applications of ports. This will completely digitize most processes at ports thus making ports better trade facilitator. Trial Run has been successfully done at Chennai Port and other remaining ports under progress.

2.28 The Union Cabinet has accorded its 'in-principle' approval on February 05, 2020 for setting up a Major Port at Vadhavan near Dahanu in Maharashtra. The total estimated cost of the project is Rs.65,544.54 crore. Vadhavan port will be developed on the "Landlord model". A Special Purpose Vehicle (SPV) will be formed with Jawaharlal Nehru Port Trust (JNPT) as the lead partner with equity participation equal to or more than 50% to implement the project. The SPV will develop the port infrastructure including reclamation, construction of breakwater, besides establishing connectivity to the hinterland. All business activities would be undertaken under PPP mode by private developers.

2.29 A new dispute redressal institutional mechanism in the form of SAROD-Ports has been constituted jointly by Indian Private Ports & Terminals Association (IPPTA) and Indian Ports Association (IPA)

2.30 A new MCA 2021 has been notified after revising the existing Model Concession Agreement 2018, considering the change in policy environment due to enactment of Major Ports Authorities Act 2021 and exploring provision of further flexibility to respond to dynamic market and regulatory conditions, many provisions have been provided or modified to cater to changing environment and develop a conducive atmosphere around PPP to boost investment

2.31 New Tariff Guidelines, 2021 for framing of Scale of Rates for PPP projects approved by the Government but are still under bidding stage and all future concession agreements, to be entered by Major Ports as per MPA Act 2021 has been notified on 21st December, 2021. PPP Concessionaires for projects after commencement of the MPA Act are free to fix the tariff based on market conditions and on such other conditions as may be notified by the Government.

2.32 Ministry has also issued a Policy to the Major Ports Authorities on 3rd November, 2021 as a policy direction under Section 53 of the MPA Act 2021 for fixation of rates for assets and services offered by the Major Ports. New Tariff Policy for Major Ports empowers the board of the ports and provides flexibility to fix tariff for assets and services operated by Major Ports themselves as per the market conditions.

2.33 With the objective of propelling India to the forefront of the Global Maritime Sector, the Ministry has recently released Maritime India Vision 2030 (MIV 2030), a blueprint to ensure coordinated and accelerated growth of India's maritime sector in the next decade. To develop global standard ports in India, Maritime India Vision (MIV) 2030 has identified initiatives such as developing world-class Mega Ports, transshipment hubs and infrastructure modernization of ports. These initiatives would help in lowering overall operational costs of ports, reducing turnaround time for vessels, increasing efficiency and throughput, providing ability to handle larger ships and developing Indian Port's strategic importance in the South Asian region. MIV 2030 estimates the development of Indian Ports to drive cost savings to the tune of INR 6,000-7,000 Crore per annum for EXIM clients and help unlock INR 70,000 – 75,000 Crore worth of potential revenue. Further, the augmented operations are estimated to create an additional ~700,000-1,000,000 jobs in the sector. MIV 2030 estimates the investments to the tune of INR 1,00,000–1,25,000 Crore for capacity augmentation and development of world class infrastructure at Indian Ports.

2.34 Formulation of a new Green Ports Policy is under progress. The Green Ports Policy (GPP) aims to expand on the initiatives under the MIV 2030 and provide guidance on potential implementation model and incentive framework. Green Ports Policy will be applicable for all major and non-major ports in India. In case of non-major ports, green initiatives may be implemented by State Maritime Boards and/or through Maritime State Development Council.

2.35 A new PPP based Port Industrialization policy is also under the process of formulation, which aims to realize the port led industrialization under MIV 2030 and attract investments of more than INR 45,000 crore at Major Ports

Deep draft berth at Major Ports

2.36 With a view to enable Major Ports to handle larger vessels the Ministry has prepared an action plan for increasing the draft in Major Ports. Most of the Ports now already have a minimum draft of 14 meters and the other Ports are striving to achieve this level. Some of the ports like Paradip, Kamarajar and Mormugao have plans in hand to increase their drafts well beyond existing drafts.

Ease of Doing Business

2.37 The Ease of Doing Business (EoDB) index is a ranking system established by the World Bank Group. Ministry of Ports, Shipping and Waterways is one of the stake holder Ministries in the area of business regulation, "Trading Across Borders" under EoDB. Towards facilitating 'Ease of Doing Business (EoDB)', Ministry identified various parameters for reducing dwell time and transaction costs in the Major Ports. These include elimination of manual forms, accommodation for laboratories to Participating Government Agencies (PGAs), facilitation of Direct Port Delivery & Entry, Installation of Container Scanners, E-delivery orders, invoice, payments, RFID based Gate-automation System, etc. These initiatives have already been implemented at Jawaharlal Nehru Port (JNP) as well as at other Major Ports.

2.38 The efforts by JNP in the earlier years have contributed significantly in improvement of India's rank in World

Bank evaluation in the parameter of 'Trading Across Border' from 146 in 2018 to 80 in 2019, which has further been reduced to 68 in 2020. This ultimately helped in improving India's

rank in overall EoDB from 100 in 2018 to 77 in 2019 and further to 63 in 2020. Continuous efforts are going on to bring India's position among the top 50 nations in EoDB.

Doing Business Report "Year"	Overall EoDB Ranking	Trading Across Border Ranking
2020	63	68
2019	77	80
2018	100	146
2017	130	143
2016	130	133
2015	142	126
2014	134	132

Project Unnati

2.39 An international consultant (BCG) was engaged to prepare a Quantitative Benchmarking Module which covered the operational, financial, human resources and efficiency related parameters for benchmarking of efficiency and productivity of Major Ports in India against international standards and define Key Performance Indicators for the ports and terminals. The study covered marine operations, stevedoring, jetty operations, vessel operations Yard performance, Labor productivity, Cargo storage (containers & dry bulk only), rake operations (loading/unloading of rakes), maintenance (Equipment uptime and breakdowns), Gate-In and Gate-out operations, safety, customs and penetration of IT.

2.40 The benchmarking study focused on identifying how efficiently capacity is utilized and underlying operational performance metrics across

commodities. The low berth productivity and crane productivity across container terminals at Major Ports along with potential to drive 15-20% higher volumes of coal across ports, just by replicating 'best demonstrated performance' consistently was studied. Potential to double volumes of POL by replicating BDP and reducing non working time and high costs of labour and maintenance dredging across ports was also analyzed.

INLAND WATER TRANSPORT (IWT)

2.41 To create a country 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. NW-1, 2, 3 are operational and vessels are plying on these National Waterways. Fairway

development works in Vijayawada – Muktyala stretch of river Krishna (Part of NW-4) have commenced. Development of NW-5 has been initiated by hydrographic surveys and engineering studies through consultants. Offices have been established on NW-1 to 5. The major initiatives for development of IWT in 2021-22 are produced below:

Jal Marg Vikas Project (JMVP) on NW-1

2.42 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 3rd January, 2018. The loan agreement with the World Bank was signed on 2nd February 2018. The estimated cost of JMVP of Rs. 5,369.18 crore (US\$ 800.00 million) was to be utilized as per the following funding pattern:

- (i) 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 (UD\$ 45.00 million).

2.43 Consequent to the review held on 10.06.2020 through teleconferencing by the Ministry under the chair of Secretary with the IWAI, the estimated cost of JMVP was revised to Rs. 4,633.81 crore from the original estimated cost of Rs. 5,369.18 crore approved by the CCEA on 03.01.2018, thereby effecting a saving of

Rs. 735.51 crore (USD 109.78 million) in the project cost. The savings comprise of Rs. 387.10 crore (USD 57.78 million) from the IBRD loan component and Rs. 348.41 crore from the counterpart fund component. The revised cost estimate also includes several activities aligned to the Arth Ganga Concept estimated to cost Rs. 746.00 crore. Consequently, on the request of IWAI/Ministry, Department of Economic Affairs (DEA) has requested the World Bank on 17.06.2020 for cancellation of USD 57.78 million from the overall IBRD loan for the JMVP. As a result, the IBRD loan component will get reduced to USD 317.22 million.

2.44 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)

2.45 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’.

2.46 Developing community jetty under Arth Ganga may impact on the economic ecosystem along both banks of the river; under envisaged vision and leadership of our Hon’ble Prime Minister of India has conceptualized “Arth Ganga” under Jal Marg Vikas Project that Plans afoot to energize economic activity along river banks to offers IWT benefits to the society at large.

2.47 A sustainable economic development model project JMVP-II (Arth Ganga) was envisaged with an estimate cost of INR 746 crore, Arth Ganga focuses on generating sustainable income streams for the stakeholders living along the river hinterlands. The JMVP I & II together offers sustainable, commercially viable and safe navigation for efficient management of logistics and Inland Water transport system. The project becomes critical enabler for sustaining, channelizing and accelerating economic growth along the hinterland of river Ganga.

SAGARMALA SECTOR

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

2.49 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.

2.50 As of December, 2021, 802 projects worth Rs. 5.54 Lakh crore have been identified for implementation by 2035 under the Sagarmala Programme. Out of

which, 185 projects worth Rs. 94,788 crore have been completed and 211 projects worth Rs. 2.09 Lakh crore are under implementation. In addition to the above, 406 projects worth Rs. 2.49 Lakh crore are under various stages of development.

2.51 Under the budget head of Sagarmala, 124 projects worth Rs. 7,690 crore have been sanctioned with a contribution of Rs. 3,113 crore, funds in tune of Rs. 1545 crore already released by December, 2021.

2.52 In year 2021, 19 projects with total investment of Rs. 8,862 crore have been completed. 7 projects worth Rs. 6280 crore implemented by Central Ministries, 8 projects costing Rs. 2543 completed at major ports and 4 projects amounting to Rs. 40 crore executed by State Maritime Boards. 3 projects are focusing on Port Modernisation, 10 projects of port connectivity, 1 project of SEZ at JNPT and 5 projects under the pillar of coastal shipping and IWT.

2.53 Out of all completed projects, 7 projects worth Rs. 341.52 crore have been supported financially for Rs. 84.86 crore under the Sagarmala scheme. Major projects completed in 2021 include widening of Korampallam bridge at VoC Port, 2nd railway line from Durgachak to Haldia Dock Complex, Coastal berth at JNPT, Mechanisation of EQ1-EQ2 and EQ3 on BOT basis at Paradip Port, Special Economic Zone (SEZ) at JNPT, RORO jetties at Bhayander, Malvan, Belapur and Narangi in Maharashtra for promotion of RORO and passenger services etc.

SHIPPING SECTOR

2.54 Shipping is an important indicator of, both, commodity and services trade of

any country. It plays an important role in Indian economy and share of sea borne trade to total foreign trade is 64.9%. India's shipping tonnage was only 0.19 Million Gross Tonnage (GT) on the eve of independence. Indian shipping tonnage is 13.01 million G.T. as on December 31,

2020, with the public-sector Shipping Corporation of India Ltd. (3.09 million GT) having the largest share of 23.75%.

2.55 As on December 31, 2020, 43.2% of the Indian fleet was over 20 years of age and 11.6% in the age group of 16-20 years as per Indian Shipping Statistics 2020.

Size and average age of the Indian fleet previous years

As on	Number of vessels	GT	DWT	Increase (%) (In terms of GT)
31.12.2016	1301	11425049	17105292	8.7
31.12.2017	1371	12352441	18792107	8.1
31.12.2018	1400	12683450	19174627	2.7
31.12.2019	1429	12746362	19372122	0.5
31.12.2020	1463	13010391	19685869	2.1

Source: D.G. Shipping

Public-Private-Partnership (PPP)

Maritime India Vision, 2030 (MIV-2030)

2.56 Ministry of Ports, Shipping & Waterways has prepared 'Maritime India Vision, 2030' (MIV-2030), a blueprint to accelerate the growth of our maritime sector over the next decade. Maritime India Vision, 2030 (MIV-2030) has been defined after extensive consultations with public and private sector stakeholders. 14 (fourteen) thrust areas across various maritime sector topics were constituted at the start of the exercise to discuss and identify initiatives and targets that would be targeted as part of Maritime India Vision, 2030. MIV-2030 constitutes over 150 initiatives across various maritime sub-sectors like ports, shipping & waterways. A detailed phasing and implementation roadmap has also been created for

various initiatives to ensure tracking and monitoring. Policy & regulatory measures required to support identified initiatives have also been defined as part of this exercise. Key targets under major initiatives were defined to improve performance and efficiency of Indian maritime sector to the best in class levels. Ports related initiatives focus on capacity augmentation, operational efficiency improvement, port-driven industrialization and creating safe and sustainable world class ports to address growing trade volume needs while reducing logistics cost through better evacuation and cost effective processes. Shipping related initiatives focus on growing sectors related to ship building, recycling & repair as well as growing India's global stature as a maritime power. Several initiatives have also been identified to grow Indian flagged fleet, number of Indian seafarers through quality maritime education as well as

supporting growth of nascent sectors like cruise tourism in the country. Inland waterways has been growing rapidly in the country and MIV-2030 builds on this growth trajectory to increase multi-modality and share of inland waterway borne freight movement and passenger movement in the country. MIV-2030 is a holistic exercise and a blueprint for sector stakeholders to work towards growing Indian maritime sector in the upcoming decade.

Revision of the existing Model Concession Agreement, 2021 for Public-Private-Partnership (PPP) Projects in Major Ports

2.57 The Ministry of Ports, Shipping & Waterways (MoPSW), considering the changes in policy environment due to enactment of Major Port Authorities Act, 2021 and based on ports experiences and also to provide further flexibility to respond to dynamic market and regulatory conditions, has revised the Model Concession Agreement (MCA), 2018 for Public-Private-Partnership (PPP) Projects in Major Ports. The new Model Concession Agreement, 2021 would bring more flexibility and address the key challenges faced by the Private Developers and Port Authorities in PPP Projects as well as enhance efficiency and improve ease of doing business in the Port Sector.

2.58 The MCA governing the PPP Projects in Ports sector was first introduced in the year 2008 and subsequently revised in 2018. The lack of flexibility and clarity in the earlier MCAs has led to disputes and arbitrations in a few port projects. Some of these issues include lack of provisions or course of action in case of requirement for change in cargo due to change in law or any unforeseen

circumstances.

2.59 The salient features of the Model Concession Agreement (MCA), 2021 are as under:

Flexibility for change in cargo if base cargo is impacted due to change in law or unforeseen events.

- i. Freedom provided for levying tariff based on market conditions. Levy and recovery of tariff revised will align with Major Port Authorities Act, 2021 enabling concessionaire to fix tariff based on market conditions.
- ii. Addition of provisions of compensation to concessionaire in case of termination of agreement before Commercial Operation Date (COD) due to concessionaire default prior to COD, provided expenditure has exceeded 30% of Total Project Cost (TPC).
- iii. No need for bank guarantee as performance security post 6 months of COD. Provision included for deemed performance guarantee for entire duration of concession period.
- iv. Flexibility provided to extend the timelines of financial closure from 180 to 270 days as per the requirement of the project.
- v. Government mandated discounts adjusted on calculation of royalty. Enabling concessionaire to adjust discounts mandated by Government in calculation of Royalty payable to the Port Authority.
- vi. Flexibility for Concessionaire to invest in additional assets with corresponding additional termination payment has been introduced in Model Concession Agreement, 2021.
- vii. Clarifications added for protecting concessionaire against damages and

claims not attributable to concessionaire.

- viii. Firm (instead of individual) to be appointed as Independent Engineer. Appointment for entire duration of concession (in every 3 year period) with the cost to be equally divided between Authority and the Concessionaire.
- ix. Lowering the burden of the Concessionaire during the construction phase when the cash flows have not started generating via diluting the license fee. License fees diluted to Re 1. Revenues to Authority entirely from Royalty.

2.60 The Model Concession Agreement, 2021 would bring more flexibility, uniformity, transparency and clarity in the provisions of Concession Agreement of Port Projects and address the key challenges faced by the Private Developers and Port Authority in PPP Projects as well as enhance efficiency and improve ease of doing business in the Port Sector. The new MCA would also help in reducing the disputes, arbitrations and litigations on port projects and bring clarity of course of action in case of requirement for change in cargo due to change in law or any unforeseen circumstances, compensation in case of termination before COD due to concessionaire default and providing support infrastructure. It will also enhance the confidence of private investors to invest in the Ports Projects and as a result business and revenue in the Port sector

will grow in the time to come.

National Monetization Pipeline (NMP)

2.61 In order to promoting investment led growth at par with global standards in Indian Port sector, to increase private investment in infrastructure by unlocking value from public investment and tapping private sector efficiencies in delivering ports infrastructure, the Ministry of Ports, Shipping & Waterways has identified 31 projects with a total projects cost of around Rs.14,500 crore during FY 2021-25. Of these, 13 projects for more than Rs. 6,900 Crore are at various stages of award in the FY 2021-22.

Tariff Guidelines for future PPP Concessionaires

2.62 Tariff Guidelines 2021 for future PPP Concessionaires have been finalized for framing scale of rates for the Concession Agreements entered into by the Major Port Authorities with PPP Concessionaires. PPP Concessionaires have been authorized by the Concessioning Authorities to discharge functions and provide services as set forth in their respective Concession Agreements and also have the liberty to frame their own scale of rates for any/all services (including combination of services) they perform/provide to their users/customers. This will provide level playing field to the concessionaires/terminal operators in Major Ports vis-a-vis private ports thereby facilitating improved business environment and revenue generation for concessionaire and Port Authority.

CHAPTER – 3

SAGARMALA



Hon'ble Minister Shri Sarbananda Sonowal visited Zonal Conference on PMGATISHAKTI in Gandhinagar, Gujarat

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 on 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. 5.54 Lakh crore for implementation under the Sagarmala Programme by 2035. Out of which, 185 projects worth Rs. 94,789 crore have been completed and 211 projects worth Rs. 2.09 Lakh Crore are under implementation. In addition to the above, 406 projects worth Rs. 2.49 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.

Project Theme	Total		Completed		Under Implementation	
	#	TPC (Rs. Cr)	#	TPC (Rs. Cr)	#	TPC (Rs. Cr)
Port Modernization	241	260419	78	27019	56	35471
Port Connectivity Enhancement	208	136331	56	19489	69	84410
Port Led Industrialization	33	119846	9	45865	21	72706
Coastal Community Development	76	8434	18	1423	15	1373
Coastal Shipping & IWT	244	28918	24	993	50	15869
Total	802	553948	185	94789	211	209829

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. Currently there are 58 projects for more than Rs. 40,000 Crore under various stages of implementation. Of these, 33 projects of approx. Rs. 27,000 Crore are operational whereas 25 projects for over Rs.13,000 Crore are under implementation.

3.6 Under the budget head of Sagarmala, 124 projects worth Rs. 7,690 crore have been sanctioned with a contribution of Rs. 3,113 crore. Out of total 124 projects sanctioned under Sagarmala, 44 projects worth Rs. 2,833 crore have been completed and 38 projects worth Rs. 2,092 crore awarded and under implementation. These projects are focusing on various critical aspects of

maritime sector such as capacity enhancement at Indian ports, improving connectivity infrastructure, RORO and tourism jetties along with urban water transportation, fishing harbour and skill development of coastal community.

3.7 There are 19 projects with total investment of Rs. 8,862 crore have been completed in calendar year 2021. 3 projects are focusing on Port Modernisation, 10 projects of port connectivity, 1 project of SEZ at JNPT and 5 projects under the pillar of coastal

shipping and IWT. Out of 19 projects, 7 projects have been supported financially under the Sagarmala scheme.

3.8 Major projects completed in 2021 includes widening of Korampallam bridge at VoCPT, 2nd railway line from Durgachak to Haldia Dock Complex, Coastal berth at JNPT, Mechanisation of EQ1-EQ2 and EQ3 on BOT basis at Paradip Port, Special Economic Zone (SEZ) at JNPT, RORO jetties at Bhayander, Malvan, Belapur and Narangi in Maharashtra, etc.



Passenger Jetty at Belapur, Navi Mumbai



Widening of Korampallam Bridge at VoCPT

Pillar wise classification of Sagarmala Projects

Port Modernization

- 3.9 Giving special emphasis to modernization of Indian ports under Sagarmala, a total of 241 projects at cost of Rs.2,60,419 Crore have been undertaken for implementation by 2035. Out of total 241 projects, 78 projects worth Rs. 27,019 Crore have been completed. These projects under the modernization pillar are further divided into 4 categories – New Ports, Port Modernization – Major Ports, Port Modernization – Non-Major Ports and Ship Repair projects.
- 3.10 There are 174 projects worth Rs. 74,430 Crore being implemented at Major Ports in India. Projects under the category have been largely identified through Detailed Master Planning exercise carried out under Sagarmala Programme. Out of 174 projects, 77 projects worth Rs. 21,979 Crore have been completed already resulting into port capacity addition for >200 MTPA. Further 34 projects worth Rs. 11,116 Crore have been awarded and currently under implementation. 15 projects related to development of new ports with estimated investment of Rs.1,34,544 Cr have been identified.
- 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 improved considerably during the last 5 years. The Average Turnaround Time in 2020-21 improved to 55.99 hours (54.07 hours during 2021-22 upto December, 2021)

as against 82.32 hours in 2016-17. The Average Output Per Ship Berth-day has increased from 14,576 Tonnes in 2016-17 to 15,373 Tonnes in 2020-21 and 15,855 Tonnes in 2021-22 (upto December, 2021). There are 44 projects worth Rs. 47,162 Crore identified under the Sagarmala Programme for implementation at Non-Major Ports. One project worth Rs. 5040 Crore has been completed so far whereas 15 projects worth Rs. 15,392 Crore are currently under implementation. 31 projects out of 44 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

- 3.12 The Sagarmala Programme, the key initiative by the Ministry has identified connectivity between ports and domestic production and consumption centers through rail, road, pipeline, MMLP under the pillar of port connectivity. In view of above, the Sagarmala Programme has a dedicated pillar consisting of 208 projects in total worth Rs. 1.36 Lakh crore and is being undertaken by various implementation agencies. Out of these 208 projects, 56 projects worth Rs. 19,489 Crore have been completed and 69 projects worth Rs. 84,410 crore have been awarded and currently under implementation.

3.13 There are 91 port-rail connectivity projects worth Rs. 75,215 Crore have been taken up by the Ministry with Indian Railways, Major Ports, and Maritime Boards. Out of which, 34 projects worth Rs. 10,393 crore have been completed and 57 projects are at 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.

3.14 There are 99 port-road connectivity projects identified for total estimated investment of Rs. 45,066 crore. Implementation of these projects is being undertaken by Ministry of Road Transport and Highways, Major Ports, Maritime Boards and State Road Development Companies. Of total projects, 15 projects worth Rs. 3,301 Crore have been completed and 84 projects are at various stages of development and implementation.

Initiatives to expedite implementation of Port Connectivity Projects

3.15 To expedite the implementation connectivity projects, the Ministry under Sagarmala has taken the following actions

- ❖ Identified 68 port road and 14 port rail connectivity projects and requested Ministry of Road Transport & Highways and Ministry of Railways respectively to prioritize and expedite the same. Out of which, 12 road projects expected to be awarded in FY2021-22.
- ❖ An SPV under NHAI named 'National Highways Logistics Management Limited' (NHLML) has been incorporated in 2020 to carry out the

development of Multimodal Logistics parks (MMLP) and works related to National Highway connectivity for ports.

3.16 In order to address the issues relating to funding, various modes of implementation were proposed to States during the 18th MSDC meeting held on 24th June 2021. SPV were allowed between Centre, State and PPP operators for providing CAPEX & OPEX support for the road/rail connectivity projects and may also run the services with profits utilized for making the SPV self-sufficient. Further, SPV may also explore suitable cost recovery options to make the project self-sustainable in long term.

3.17 It is very much necessary to create capacity in hinterland which provides efficient transportation channel with seaports for movement of cargoes and containers. There are 13 MMLP worth Rs. 2,624 crore being implemented across India. Out of which, MMLP at Pantnagar in Uttrakhand, Naya Raipur in Chhattisgarh, Jharsuguda in Odisha are completed and in operation by CONCOR. Besides this, Phase II of Multi Model Logistics Hub at Visakhapatnam Port has been completed. Further, three projects at Darjeeling in West Bengal, Paradip Port in Odisha and Swarupganj in Rajasthan are under implementation.

3.18 In addition to the above, 5 projects of MMLP are being developed by Major Ports. JNPT is developing MMLP at 4 locations, namely at Niphad, Wardha, Jalna and Ranjani in Maharashtra; Project at Wardha and Jalna is in advance phase of development. Chennai Port Trust is implementing MMLP project at Jolarpet.

Port Led Industrialization

3.19 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 24 projects worth Rs. 73,981 crore are under development/implementation stage. These projects are further divided into 4 categories – Industrial Cluster, Maritime Cluster, Smart Industrial Port City (SIPC) / Special Economic Zone (SEZ) and Thermal Power Plant.

Special Economic Zone at JN Port in Maharashtra

3.20 It is one-of-a-kind 277 hectares multi-sector SEZ project located next to Jawaharlal Nehru Port, India's leading container port. This industrial hub, inaugurated by Hon'ble Prime Minister of India in 2014, is meticulously designed with state-of-the-art infrastructure to boost export-oriented industries in India. Being close to JNPT, the project promises ready availability of raw material, access to global markets and strong multi-modal connectivity. Access to upcoming multi-modal infrastructure projects including New Mumbai airport, DFC rail corridor and Trans-harbour road link further increases the attractiveness of JNPT SEZ as a manufacturing destination.



SEZ overview map

3.21 The SEZ has a geocentric advantage of being well-connected locally and globally. It has the location advantage of being near Mumbai, the economic capital of India. Being less than 5 km away from the JN Port, this industrial zone has direct access to global markets via JN Port's Container Terminals.

3.22 The SEZ is directly connected to state and national highways. Road transportation

will be facilitated further with the up-gradation of state and national highways to 6-8 lane roads and with the upcoming Sewri - Nhava road connecting the SEZ area to Eastern Mumbai. The Alibaug-Virar multimodal transport corridor having approach at Khopta junction shall add transportation advantage. JN Port is on the Western Dedicated Freight Corridor offering ready access to markets in the north.

3.23 The SEZ aims to set a new benchmark in port-led industrialization and thus play a key role in the Ministry's Sagarmala vision of 'Port led Industrialisation'. The SEZ has investment opportunity for MSME sector like food processing, engineering, cosmetics, auto

components, pharmaceuticals, warehousing and cold storage amongst others. There is also a Free Trade Warehousing Zone (FTWZ) being developed which will further accentuate the value of this project.



Bridge network on internal road within SEZ at JN Port

3.24 JN Port so far has allotted 28 plots at the SEZ which includes 26 MSME units and 1 Free Trade Warehousing Zone (FTWZ) is being developed by the Co-developer. 12 units amongst these allottees have started their construction activities. 6 units namely, M/s. OWS LLP, M/s. Oil Field Warehouse Services Pvt. Ltd., M/s. Krish Food Industry (India), M/s. Sarveshwar Logistics and M/s. Simosis International have completed their first phase of operational activity since June 2020 and are declared operational units by Development Commissioner, SEEPZ, SEZ.

Smart Industrial Port City (SIPC) at Kandla, Gandhidham in Gujarat

3.25 Deendayal Port Trust (DPT) is developing SIPC in two green field sites of Kandla & Adipur Complex. Location 1 is at Gandhidham-Adipur measuring 580 acres, is being developed for residential, commercial, institutional, recreational. Location 2 at Kandla measuring 850 acres is being developed as industrial park. Master plan for both the locations of SIPC was prepared and approved by the Board of DPT in December 2016. Gandhidham Development Authority is the approving authority for location 1 and Master Plan

for the said location was approved in May 2017. Master plan for location 2 was revised and approved by Board of DPT in August 2018.

- 3.26 Revised master plan layout for location 1 was approved by Board of DPT in February 2019 which conditionally approved by Gandhidham Development Authority in same month subject to DPT shall allocate a strategically located piece of land, around 25000 square meter area for the establishment of Angadwadi, Health Centre, Civil Centre, Jan Seva Kendra, City Survey Office etc. Location 2, Kandla have plots of different sizes from 2 acres to 55 acres. One plot measuring 53.13 acres has been allotted to a party for edible oil refinery.

Smart Industrial Port City (SIPC) at Paradip in Odisha

- 3.27 SIPC at Paradip is planned over 700 Acres of land and to include Multi Modal Logistics Park (MMLP), Wood Park, Food Processing, Pellet Plant planned. MMLP is being planned over 100 acres with the cost of Rs. 200 crore Project by CONCOR. Land handed over to CONCOR in 04.12.2017. For 177 acres for captive intensive industries M/s. Thriveni Earthmovers Pvt Ltd. has emerged as the successful bidder. Land allotment in favour of Thriveni completed. The company will be setting up a pellet plant with 4 MTPA capacity - planning to go up to 12 MTPA for which they will submit formal proposal. 200 acres allotted to Numaligarh Refinery and land handed over in 2019. 100 acres land allotted for palettization plant, 20 acres for timber processing and 50 acres for food park. Statutory Clearances are under process by the concerned agencies.

Coastal Employment Unit (CEU) at VoCPT

- 3.28 The Government of India, under Sagarmala programme, intends to develop Coastal Employment Unit in proximity to major ports. Feasibility report for CEU at V.O. Chidambaranar Port (VoCP) prepared in 2018. These industrial developments are envisaged to be large scale integrated multi-product industrial zone catering to both domestic and export-oriented manufacturing.
- 3.29 VoC Port has identified 965 Acres for promoting industries under CEU, effective leasable land is 745 Acres. Tenders have been floated in 3 phases and so far land has been allotted to M/s. Kaleesuvari Refinery Private Limited, M/s. Naage Private Ltd. and M/s. KSE Privatge Ltd.

Coastal Economic Zone (CEZ)

- 3.30 The Coastal Economic Zone (CEZ) has been envisaged to facilitate port led industrialization and / or Export Import (EXIM) / coastal trade of goods & commodities. CEZ is an spatial economic region comprising a large area in a single district or in a group of coastal districts or in district(s) with strong linkage to ports in that region/vicinity with an intent to reduce the logistics costs from demand/supply center to port and vice versa.
- 3.31 It has a dual focus – direct contribution of port traffic coupled with employment generation and reduction of logistics costs. Such a zone is envisaged to comprise industrial areas / estates, housing & urban infrastructure, and logistics / transport infrastructure within itself to be a self-contained region with a direct or a strong port linkage.

3.32 The aim is to achieve the following objectives:

- a) Creating large scale employment opportunities in the coastal regions across identified sectors to promote development in coastal regions.
- b) Increasing competitiveness of India's EXIM trade by reducing logistics costs through proximity and connectivity to ports.
- c) Increasing freight traffic through the ports in proximity to the industries, on account of trade generated by these manufacturing capacities
- d) Provide an impetus to coastal shipping by creating supply and demand centers close to the coastline for domestic movement of goods and passengers

3.33 As per the minutes of meeting of EFC held on 9th July 2019, it was recommended that Ministry should explore possibility of Industrialization at land available with Major Ports. So far, more than 8000 Acres of land has been used for Industrialization by Major Ports which has generated more than 2 Lakh direct and indirect employment.

Coastal Community Development

3.34 There are more than 60 coastal districts in India, which spreads across the coastal states/union territories of our country. The coastal community is considered as one of the key stakeholders of the Sagarmala Programme and hence ensuring their socio-economic well-being is one of the major objectives.

3.35 To identify existing skilled manpower base, availability of training infrastructure, expected skilled

manpower requirement for the implementation of various projects and the skill gap, Human Resource and Skill Requirement Study for 21 coastal districts of India was carried out. Ministry of Rural Development (MoRD) and MoPSW have signed a MoU during May 2017 for up-skilling of coastal population under DDU-GKY Sagarmala Convergence Programme. Under this convergence, the entire funding support is being provided by the Ministry whereas implementation and management is being carried out by MoRD.

3.36 Phase I of this convergence was implemented on pilot basis between 2016-2018 in 5 States viz. Andhra Pradesh, Karnataka, Maharashtra, Odisha and Tamil Nadu. 1978 candidates have been trained out of whom 1143 have been given placement. Phase II of the above project is under implementation in 22 coastal districts of 9 States and 3 UTs. Training has commenced for 836 candidates in 4 states. Out of which, 435 candidates have been trained and 166 have been given placement. Ministry sanctioned fund of Rs. 58.98 Crore for the purpose. Out of which Rs. 22.62 Crore has already been released under Sagarmala Programme.

3.37 An MoU signed between MoPSW and MSDE on 20th August 2020 establishes a framework of collaboration for creating and implementing efficient and effective training, assessment and certification process and platform for skill development and placement of skilled and certified workforce in the job market.

Fishing Harbour and Floating jetties for marine operations

3.38 Since fishing is a major economic activity, various projects have been taken under Sagarmala Programme in convergence with Department of Fisheries, Ministry of Fisheries, Animal Husbandry & Dairying (MoFAH&D). There are 30 fishing harbour projects worth Rs. 2,894 Crore being implemented under the Sagarmala Programme. Ministry, in convergence with the MoFAH&D, is part-funding 17 fishing harbour projects worth Rs. 1,740 crore and has sanctioned Rs. 470 crore of which Rs. 332 crore has been released so far. 9 out of 17 projects with a project cost Rs. 619 crore have been completed. 6 fishing harbour adjacent to Kochi, Chennai, Visakhapatnam, Paradip, Mumbai and Petuaghat have been identified for modernization and up-gradation.

3.39 Floating jetties is an alternate solution to India's over-crowded fishing harbours. Several advantages of floating jetties are:

- ❖ Cost effective
- ❖ Faster installation
- ❖ Eases the disembarkation/embarkation
- ❖ Require no permanent construction offshore
- ❖ Easy expansion & relocation due to modular construction
- ❖ 25+ Years of life with minimal environmental impact

National Maritime Heritage Museum, Lothal

3.40 Maritime heritage is generally defined as the evolution of human with the ocean and coastal lands. Irrespective of the fact that India has rich maritime heritage at present we do not have any world class

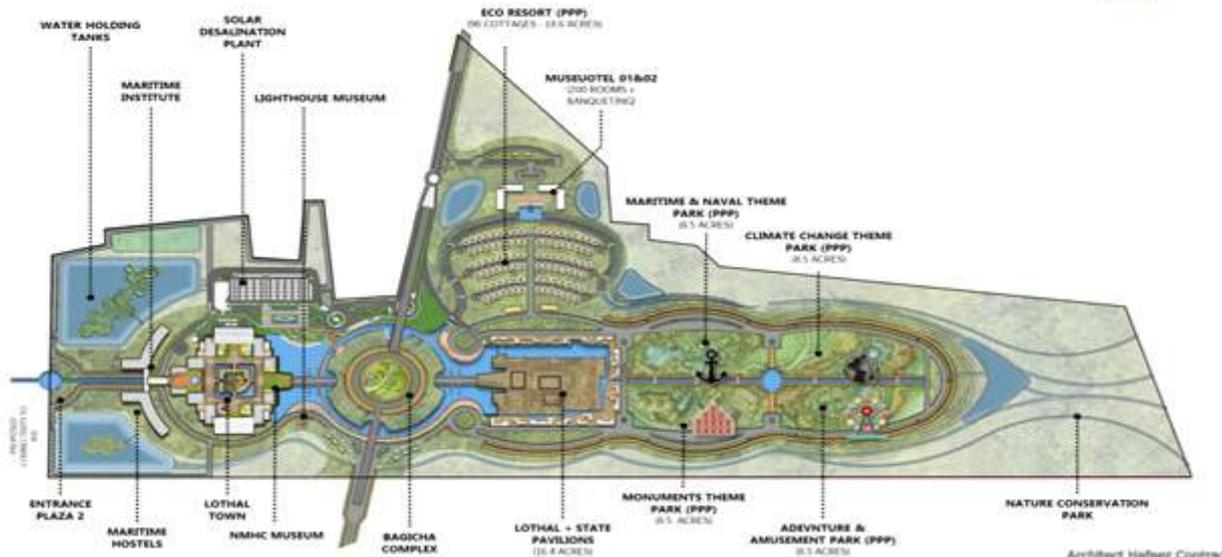
museum dedicated to the legacy of Maritime Heritage of India. Lothal is one of the prominent cities of the ancient Indus valley civilization dating to 2400 BC located in Gujarat. Archaeological excavations have discovered the oldest man-made dockyard over 5000 years old in Lothal. Setting up a maritime heritage complex at such an important location will befit the historical importance of Lothal and help it develop into a place of extraordinary and unparalleled maritime heritage.

3.41 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.

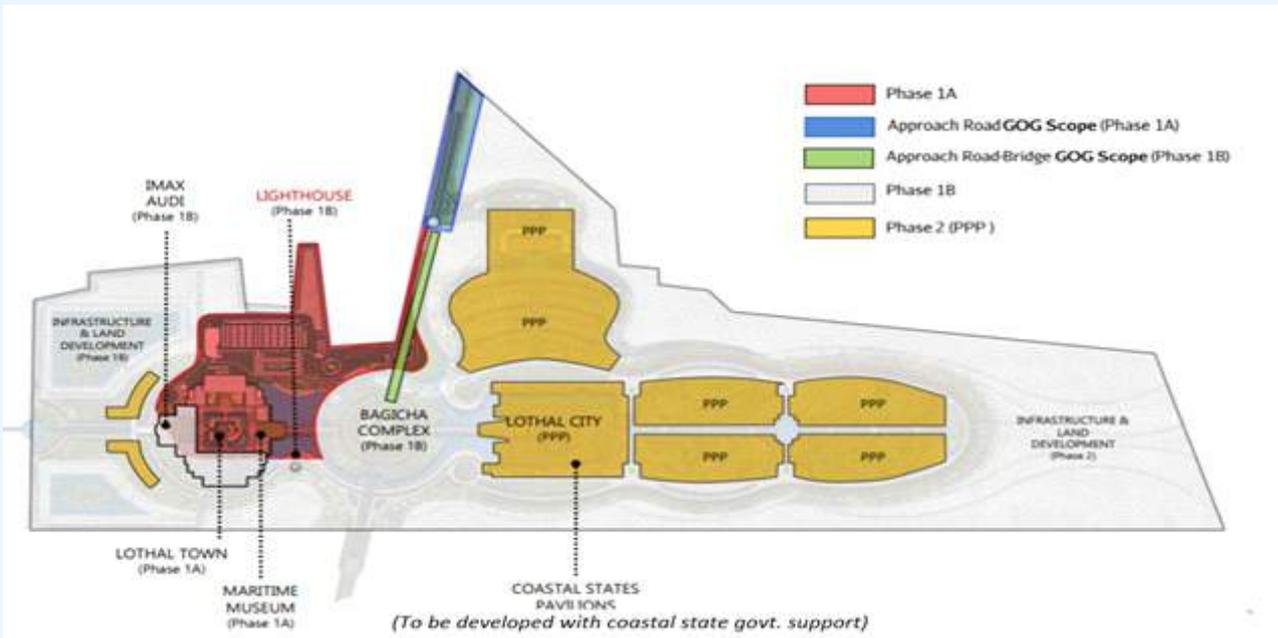
3.42 The NMHC project has been taken up under the unique and innovative projects category of the Sagarmala programme. Government of Gujarat (GoG) has transferred 375 acres of land in village Saragvada on lease for 99 years at token rate for project. The Master Plan and Phase - I layout of the proposed NMHC project has been finalized and the tender for Phase 1A was floated in September 2021 and expected to be commissioned by Q4 2023-24.

NMHC MASTERPLAN

28/05/2021
(V10)



NMHC - Master Plan Layout



NMHC - Development Phasing Layout

3.43 As a part of NMHC Museum, 14 galleries have been proposed to exhibit the evolution of India’s Maritime Heritage during various eras. Key galleries planned are as below:

- i. Key gallery (To showcase brief introduction of NMHC and 14 galleries, Marine Archaeology, Science of Sea, Pre-historic Movements from Paleolithic to Neolithic)

- ii. Mythologies & Wilderness of Indian Ocean
- iii. Harappans: The Pioneer Master Seafarers
- iv. Indian Ocean: an Interactive Sphere
- v. India’s contact with the Roman World: The Quest for the Spice
- vi. Trade, Commerce & Cultural Interaction with China & South-East Asia.
- vii. Age of Emporia Contact

- viii. Landing of Vasco da Gama/ The Arrival of the Europeans
- ix. Maratha Naval Power
- x. Emergence of Indian Navy
- xi. Maritime Traditions of Gujarat
- xii. Traditional Ship Building and Navigation Techniques of India
- xiii. Heritage of the Coastal Communities of India
- xiv. Indian Shipping: Post Independence (Shipping Industries, Sagarmala, contemporary Ports, Port Association of India)

Coastal Shipping & IWT

- 3.44 RORO, this way of cargo shipping comes from the expression “roll-on/roll-off”, which describes a vessel transporting wheeled cargo. The ships have built-in ramps to make loading and unloading wheeled cargo easier than if it was done with a crane. RoPax, are vessels built for freight vehicle transport along with passenger accommodation. Furthermore, RORO gives land transport a bigger action radius as it makes possible to shorten their route through ship instead of having to divert to a longer route.
- 3.45 RoPax services has a direct positive impact - drastically reduces travel time

for passengers and improves delivery time as well, loading and unloading process is quick and agile, these projects have opened new avenues in coastal shipping & tourism and enhances the socio-economic welfare of it’s vicinity, fuel efficient and helps reduce CO2 emissions, reduces traffic on road and rail and prevents loss of human lives caused due to accidents and since there is no loading and unloading at the port, there is less risk of accidents and cargo damage.

- 3.46 Ministry in association with Deendayal Port (DP) is implementing the project “RoPax Ferry services 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.
- 3.47 Maharashtra with the support of Sagarmala, started ROPAX service from Bhaucha Dhakka (Ferry Wharf) i.e. Mumbai to Mandwa. Mumbai Port has developed ROPAX jetty and terminal facilities at Bhaucha Dhakka (Ferry Wharf) at the cost of Rs 31 crore. Maharashtra Maritime Board has developed Breakwater, ROPAX jetty and terminal facilities at Mandwa at the cost of Rs 135 crore.



Ferry in operation between Mumbai Ferry Wharf and Mandwa in Maharashtra

3.48 Overall, there are 79 projects related to development of RoPax and Passenger jetties identified under Sagarmala Programme and being implemented across country. List consists of projects for development of RORO jetties, terminal buildings, dredging, construction of passenger jetties etc. Out

of 79, 10 projects have been completed, 12 projects are currently under implementation and 57 projects are under development stage. Ministry under Sagarmala Scheme has extended financial assistance to 41 projects. Total funds sanctioned Rs. 726 crore and Rs. 286 crore have already been released.



Ferry in operation between Mumbai Ferry Wharf and Mandwa in Maharashtra

3.49 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.



Coastal berth at JNPT

Seaplane Projects

3.50 Ministry has initiated the process for commencing operations of the Seaplane services on newer routes under a Special Purpose Vehicle (SPV) framework through prospective airline operators. The operational methodology adopted is of constructing water aerodromes at the origin & destination points where the seaplanes will utilize the water bodies for taking off and landing like the current operational model of the Ahmedabad-Kevadia sector in Gujarat.

The seaplanes services advantages are as below:

- ❖ Improve connectivity across the nation
- ❖ Make India as an attractive destination for the tourists
- ❖ Generate employment opportunities
- ❖ Stimulate tourism and associated business activities

3.51 Out of various sites being contemplated, MoCA and MoPSW has finalised 4 sites in the first phase of seaplane operations including Brahmaputra riverside and Umrangso reservoir in Assam, Junglighat (Port Blair) in Andamans and Surat in Gujarat. Additional 78 routes identified for further development as per the Udan 4.1 for which bids are invited by MoCA.

Cruise Shipping

3.52 13 projects amounting to Rs. 1122 Crore

are being undertaken to improve infrastructure related to cruise shipping in India. In respect of majority of these projects, infrastructure is being developed with the allied facility at Major ports. Cruise-cum-coastal cargo terminal at Visakhapatnam port with investment of Rs. 77 crore, domestic terminal at Mumbai Port implemented with investment of Rs. 15 crore which is currently in operations and upgradation and modernization of International Cruise Terminal at Indira Dock costing Rs. 303 crore is currently under construction. Goa being destination for tourism, development of international and domestic cruise terminal and allied facilities at Mormugao Port underway with investment of Rs. 153 crore. Project of development of Marina at Prince Dock in Mumbai Port is also under planning stage with total investment of Rs. 365 crore.

Inland Waterways

3.53 There are 40 projects of Inland Waterways with total estimated investment of Rs.16,871 crore are part of Sagarmala Programme. One project of NW9 in Kerala completed, 10 projects currently under implementation at NW1 (Jal Marg Vikas Project of Rs. 5369 crore connecting Allahabad with Haldia), NW2 (Rs. 461 crore), NW16 (Rs. 76 crore) etc. These projects are being executed by Inland Waterways Authority of India (IWAI).

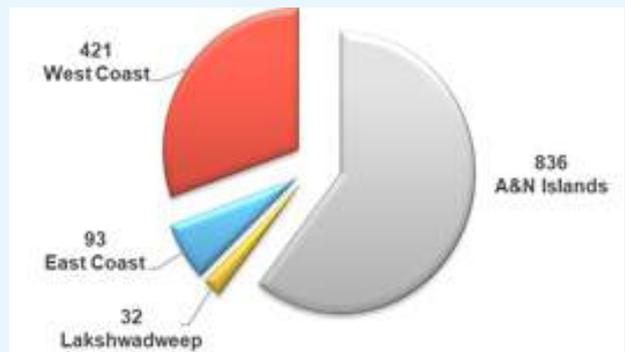


Hon'ble Minister of MoPSW reviewing IWAI Projects

Island Development

3.54 India has a total of 1,382 offshore identified islands consisting of 1,093 shapes (islands) and 289 Points (Rocky/Rocky Islets) under database finalized by Surveyor General of India (SGI) in 2016. Island development can be across various uses cases related to maritime activities (e.g., bunkering, ship breaking etc.), tourism, energy generation, fisheries, agriculture, etc. Globally maritime nations have utilized their islands to drive some of these activities in a sustainable manner.

3.55 Currently there are 61 projects identified for implementation in Andaman & Nicobar Islands and 17 projects have been identified for implementation in



Region wise Classification of 1,382 Islands (Source: Surveyor General of India)

Lakshadweep Islands under the Sagarmala Programme. 7 projects at A&N Islands are being financially supported under the scheme with total assistance of Rs. 203.94 crore. Other projects in Karnataka, Gujarat and Tamil Nadu are under active consideration.

CHAPTER – 4

PORTS



Planting by Hon'ble Minister of State(MoPSW) at Visakhapatnam Port

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.



MAJOR PORTS IN INDIA

SYAMA PRASAD MOOKERJEE PORT, KOLKATA (SMPK)

4.2 SMPK is the only riverine major port in India having an existence of 150 years. It has a vast hinterland comprising the entire Eastern India including West Bengal, Bihar, Jharkhand, Uttar Pradesh, Madhya Pradesh, Assam, North East Hill States and the two landlocked neighbouring countries namely, Nepal and Bhutan. 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.

- 4.3 SMP, Kolkata handled 61.368 million metric tonnes (MMT) of cargo traffic during 2020-21 (3rd highest annual throughput) and 42.143 MMT during 2021-22 (upto December, 2021) vis-à-vis 63.983 MMT during 2019-20, registering a nominal decline of 4.09%, despite the outbreak of Pandemic COVID-19 and severe 'Amphan' cyclone unleashing in May 2020. SMPK ranked 5th in traffic handling in 2020-21, vis-à-vis other Major Ports of India. HDC handled 45.468 MMT of cargo during 2020-21 (Provisional 31.032 MMT



during 2021-22 upto December, 2021) and KDS handled 15.90 MMT of cargo in 2020-21 (Provisional 11.111 MMT during 2021-22 upto December, 2021).

Notable Achievements/Developments in 2020-21

- ❖ SMP, Kolkata has signed a slew of MoUs with an economic investment of around Rs 29,000 crore ahead of the Maritime India Summit 2021 in March 2021 in areas of ship repair, ship building, creation of a digital port framework, transloading operations, inland waterway services, logistics operations etc. which will lend a

major boost to the whole maritime ecosystem of the hinterland.

- ❖ For the first time in the history of Major Ports of India, Ship-to-Ship (STS) operation of LPG was undertaken by SMPK and BPCL Limited at Sandheads on 15.10.2021. The Mother vessel YUSHAN with a parcel load of 44551 MT cargo carried out operation with daughter vessel HAMPSHIRE and within a short span of around 17 hours a quantity of 23051 MT of cargo was transferred to the daughter vessel.
- ❖ SMP, Kolkata continued its Ship-To-Ship (STS) transfer of Carbon Black Feed Stock (CBFS) for Chemical Industry on 20.12.2021 between vessel BW Tagus with



55576 MT on board & MT PGC Companion and 27846 MT of CBFS was offloaded within a span of 10.5 hrs.

- ❖ SMPK is the first Major Port to adopt ROIP System (Radio over Internet Protocol) as Effective Long Range Marine communication, covering the River Hugli estuary [with 4 base stations at Kolkata, Hugli Point, Haldia & Sagar Pilot Station] from Kolkata to Sandheads, inaugurated on 25.10.2021. Vessels at Sandheads can directly communicate via Radio, especially during storms and inclement weather.

PARADIP PORT

4.4 Paradip Port is one of the major ports in India. Government of India took over the management of the port from the State Government on 1st June, 1965, and declared Paradip Port as the eighth major port in India on 18th April, 1966 making it the first major port in the East Coast commissioned in independent India. Paradip 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.

4.5 The Port handled 114.55 MMT of traffic in 2020-21(Provisional 83.604 MMT during 2021-22 upto December, 2021). The port has Seventeen (17) berths/jetties + Three (3) SPMs& One (1) Ro-Ro Jetty) for handling different types of cargoes with an effective Rated capacity of 302 MTPA and Desired capacity of 182.25 MTPA.

Notable achievements during the year

- ❖ Presently port is the 2nd largest cargo handling Major Port in India. The port has been clocking over 100 MMT of cargo volume handling in a financial year since last 4 years.
- ❖ During 2020-21, port handled an all-time-high cargo volume of 114.55 MMT despite Covid challenges registering a cargo growth of 1.86 MMT over previous FY 2019-20.
- ❖ Highest number of vessels 2051 handled at at port during 2020-21, which is 38 more than the vessels handled during 2019-20.
- ❖ Highest number of railway rakes 14,371 handled during 2020-21 compared to 13,216 akes in 2019-2020 i.e. an increase

of 8.73%.

- ❖ Average Vessel Turn Round Time (TRT) reduced to 54.74 hrs during 2021-22 (upto December, 2022) from 58.10 hrs during 2020-21.
- ❖ Average Pre-Berthing Delays (PBD) reduced by roughly 60% from 15.32 hrs during 2019-20 to 6.20 hrs during 2020-21.
- ❖ Mechanised Coal handling plant achieved highest loading output of 6080 TPH / 1,45,921 TPD, completing 1,36,294 tonnes in 22.25 hrs in Cape size vessel Orion I.
- ❖ The port handled the highest ever Average Rakes per day i.e. 51.82 Nos. in February’ 2021. Wherein, the Average of Incoming & Outgoing Rakes are 29.93 & 21.89 respectively.
- ❖ Edible oil carrying vessels with very low discharge rate are being handled through Mediterranean mooring pattern at the unused waterfront off FB-I berth. Thereby avoiding occupancy of other commercial berth for longer period due to slow rate of cargo operation.
- ❖ Despite draft challenges for handling Cape-size vessels, Baby Cape-size vessels are handled at port berths.

NEW MANGALORE PORT

4.6 New Mangalore Port 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 112.51 MTPA. It handled traffic of 27.455 MMT (Provisional) during the year 2021-22 (upto December 2021). NMPT has plans for development of one more deep draft



Mechanised Coal handling plant

multipurpose general cargo berth (Berth No.17) adjacent to the existing berth no.8 for handling general break bulk cargo and Ro-Ro consignments.

This is the highest parcel ever handled at the berths of the port surpassing the earlier record of 1,07,102 MT handled in April 2013.

Notable achievements during the year

- ❖ Highest parcel size of 1,13,642 MT of steam coal handled at B.16 for Mangalore Coal Terminal Pvt. Ltd.(JSW) from vessel GREAT QIN which berthed on 10-5--2021.

- ❖ During May 2021 the port handled 5 Naval vessels carrying 370 MT of Liquid Medical Oxygen in containers as donation from Kingdom of Bahrain/Kuwait and Indian Community from Kuwait to Indian Red



Newly constructed Business Development Center Building officially inaugurated by Shri Sarbananda Sonowal, Hon'ble Minister of Ports, Shipping & Waterways on 24-9-2021

Cross Society under Operation Samudrasetu-II launched by Indian Navy

- ❖ Container vessel SSL BRAHMAPUTRA-V.084 with an LOA of 260 Mtrs. called at the port on 15-6-2021 and unloaded 1521 TEUs (25,864 tonnes) of raw cashew from Africa and loaded 300 TEUs of export containers. This is the highest parcel size of containers ever handled at the Port.
- ❖ Record container traffic of 17,258 TEUS handled in June 2021 surpassing the earlier record of 16,066 TEUs handled in March 2020.
- ❖ The port handled the first bulk import of Ammonium Sulphate for MCF from the vessel Majestic Maria which called at the Port on 8-8-2021(11,000 tonnes)
- ❖ The port handled new chemical cargo – 2 Ethylhexyl Acrylic for IMC in vessel Ginger Hawk on 27-7-2021
- ❖ Container vessel Mogral, a new CCG service commenced operation on 14-8-

2021. This service will cover East Coast(Mundra-Mangalore-Cochin-Colombo-Chennai-Vizag-Krishnapatnam-Katupalli-Colombo-Cochin-Mundra).

- ❖ Port bagged First Prize for outstanding performance in the implementation of the Official Language Policy of the Union for the year 2020-21 from the Town Official Language Implementation Committee(TOLIC)-Mangalore.

COCHIN PORT

4.7 The modern Port of Cochin was developed during the period 1920-1940 due to the untiring efforts of Sir Robert Bristow. The port of Cochin 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



Container scanner commissioned at New Mangalore Port for operation on 17-12-2021

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.

- 4.8 Cochin Port has 21 Berths including 1 SPM with an effective rated capacity of 73.67 MTPA. The Port handled 31.50 MMT cargo traffic during 2020-21. The cargo handled by the port includes POL, Cement, Fertilizers, Fertilizer Raw Material (Dry) and others.
- 4.9 Cochin Port registered the total throughput of 25.24 MMT in 2021-22 (April-December, 2021), an increase of 17.99% over the same period of 2020-21. POL throughput registered 15.15 MMT, an increase of 22.47% over the corresponding period of 2020-21. Containers that led the recovery trend over the past few months reached the throughput of 5.55 lakh TEUs in 2021-22 (April-December), registering the growth of 16.11% over the corresponding period of 2020-21.

Notable achievements during the year

- ❖ Kochi-Mangaluru natural Gas Pipeline was dedicated to Nation by Hon'ble Prime Minister at GAIL Terminal on 05.01.2021.
- ❖ Hon'ble Prime Minister of India inaugurated "Sagarika' International

Cruise Terminal, Jetty for Ro-Ro vessels of IWAI & foundation stone laid for reconstruction of South Coal Berth (SCB) at Wellington Island on 14.02.2021.

JAWAHARLAL NEHRU PORT

- 4.10 Constructed in the mid 1980's and commissioned on 26th May, 1989, Jawaharlal Nehru Port 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.
- 4.11 Jawaharlal Nehru Port is an all-weather tidal Port having 16 berths with an effective rated capacity of 118.00 MTPA. The Port handled a Traffic of 56.07 MMT during 2021-22 (upto December-2021) of which containers cargo account for 51.01 MMT which is 90.98% of total traffic. 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

- ❖ During the calendar year 2021(Jan.-Dec., 2021), JN Port handled total traffic of 76.14 MMT (22.17% growth) and container traffic of 5.63 million TEUs (25.86% growth), highest ever traffic handled in a year since inception of the port.
- ❖ Nhava Sheva International Gateway Terminal (NSIGT) and the newly commissioned BMCT for first time crossed 1 million TEUs mark in a year (12 months period). NSIGT handled 1.17 Million TEUs (1,166,019) and BMCT handled 1.17 Million TEUs (1,170,502) during calendar year 2021.
- ❖ In order to give momentum to coastal shipping, JNPT has constructed the 250 m long Coastal Berth with backup area reclamation of 11 hectares.



- ❖ JN Port commenced the handling of dwarf containers from September, 2021. The first lot of 20 laden Dwarf containers with import cargo transfer from ISO container handled in the Dwarf Container Depot was moved by train to ICD Kanpur which was virtually inaugurated by Hon'ble Union Minister of Ports, Shipping, Waterways & Ayush. The cargo moved in the first lot of 20 dwarf containers consisted of PVC Resin suspension (Grade TC1000) imported from Japan by M/s. Supreme Industries.



MUMBAI PORT

4.12 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.

- 4.13 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.
- 4.14 The port has 32 berths (including OCT) with an effective rated capacity of 82.85 MTPA. The port handled traffic of 44.32 MMT during 2021-22 (upto December, 2021). The major cargo commodity handled is POL (61.32% of the total traffic).

Notable achievements during the year

- ❖ Financial Year 2020-21, was the year of the “COVID-19” Pandemic affecting the entire EXIM trade globally. Despite the Pandemic, Mumbai Port Trust acquitted itself creditably by handling 53.32 MMT cargo.
- ❖ During the lock down, in spite of non-availability of sufficient staff, Mumbai Port continued to handle a large range of cargo such as steel, sugar, pulses, fertilizers, cement, calcite chips, lube/base oil, bitumen, motor vehicles, crude oil, POL products and chemicals at its berths in Indira Dock, Marine Oil Terminal-Jawahar Dweep, Chemical Terminal – Pir Pau and Mid-stream. The cargo operation in the docks was carried out, despite bare minimum labour due to lockdown and by hiring private labour by arranging bus services for essential staff. This was done by scrupulously following the instructions from the Central and State Governments in relation to the lockdown, following COVID protocols meticulously and with precautionary measures to curb the spread of COVID-19.



First vessel Ice Transporter berthed at Jawahar Dweep-5 on 30.01.2021

- ❖ Mumbai Port achieved the rare feat of simultaneous sign-off of 912 crew from the Cruise Ship “Anthem of Seas” and sign-on of equal number on another Cruise Ship “Celebrity Infinity” in a single day on 16th June 2020 with advance planning of the Port, various Government authorities and the Shipping Agents.
- ❖ At Jawahar Dweep Oil Terminal, there are 4 existing berths. For handling large crude oil vessels, the project of constructing new berth Jawahar Dweep-5 (JD-5) was taken up and completed in December 2020. First vessel “Ice Transporter” berthed on 30.1.2021. Total of 27 tankers were handled till 31st March 2021. The vessel “Barbarosa” which berthed on 29th March 2021 with the largest parcel size of 1,42,236 tonnes of Crude Oil was discharged in just 35 hours.
- ❖ At 8th International Samudra Manthan Awards 2021, held on 16.12.2021 Mumbai Port was awarded Terminal of the year (Non-specific) for its Car Terminal.

KAMARAJAR PORT LIMITED (ENNORE)

4.15 Kamarajar Port Limited (KPL), the 12th Major Port under the Ministry 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 Trust on 27.03.2020. KPL has become a subsidiary of Chennai Port Trust.

4.16 Over the years, the port, which was primarily handling coal at initial stage, has developed as a multi cargo port and now has seven berths with handling capacity of 54.44 MTPA for handling



Shri Sarbananda Sonowal, Hon'ble Minister of Ports, Shipping & Waterways, lighting the ceremonial lamp, inaugurating the programme on Patriotic Songs organized in connection with Azadi Ka Amrut Mahotsav programmes in Mumbai Port.

coal, POL, LPG, LNG, automobile units, Containers and general cargoes. The Port handled traffic of 27.995 MMT during 2020-21 (upto December).

Notable Achievements during the year

- ❖ KPL handled the largest Cape size Coal vessel at Common User Coal Terminal operated by M/s Ennore Coal Terminal Pvt. Ltd. on 12.06.2021. The vessel Emperor Pampero was having a parcel size of 1,37,989 MT of Steam Coal imported from Australia for M/s. OPG Power Generation Pvt. Ltd. The highest DWT 1,82,567 MT vessel with a draft of 15 m and the length & beam of 292 m & 45m respectively and the above parcel size ever handled at this terminal.
- ❖ The Mobile X-Ray Container Scanner system installed at Kamarajar Port was commissioned on 01.07.2021. The Mobile X-Ray Container Scanner system is operated by the Container Scanner division of Chennai Customs. The Principal Commissioner of Customs, Chennai-III, has issued a Public Notice No. 43/2021-22 dated 30.06.2021 regarding the commencement of regular operations of Mobile X-Ray Container Scanner (MXCS) system at Kamarajar Port with effect from 30.06.2021.
- ❖ Director General of Foreign Trade (DGFT) vide its Public Notice No. 15/2015-2020 dated 20.07.2021 has issued a notification enlisting Kamarajar Port as the 18th Port for import of un-shredded metallic scrap consequent to the installation and operationalization of Mobile X-Ray Container Scanner system and Radiation Portal Monitors.
- ❖ Container Shipping Line M/s. Maersk Line India operating at Kamarajar Port has upgraded their existing Container weekly

services viz. (i) Shuttle service to ME7 service (directly connecting to Europe) and (ii) Chennai Express service to FI4 service (connecting Southeast Asia with India and Pakistan) with effect from 03.08.2021 and 13.08.2021 respectively. Kamarajar Port handled the highest Container volume of 4,958 TEU's in the vessel Santa Rita berthed at Container Terminal on 24.08.2021.

- ❖ Kamarajar Port handled the largest Gypsum vessel at Multi Cargo Terminal operated by M/s. Ennore Bulk Terminal Pvt. Ltd. on 02.09.2021. The vessel Birte Oldendorff (DWT 1,13,921 MT, length 250M and beam 43M) with parcel size of 1,05,215 MT of Gypsum imported from Oman for M/s Saint Gobain India Pvt Ltd and M/s Eastern Bulk Trading & Shipping Pvt Ltd. arrived with a draft of 14.50 M.
- ❖ Kamarajar Port handled the highest Container volume of 46,513 TEUs in December 2021.
- ❖ Kamarajar Port has awarded the work for Construction of Automobile Export/ Import Terminal-II to M/s. L&T Geostucture Pvt. Ltd., Chennai on 12.11.2021 for an amount of Rs.149.36 Cr. (excl. GST).

CHENNAI PORT

- 4.17 Chennai Port 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 was established in 1875 located at 130 06' N latitude and 800 18' E-longitudes on the Bay of Bengal.
- 4.18 Chennai Port handled a cargo tonnage of 43.55 MMT during 2020-2021. During 2021-22 tonnage handled upto

December 2021 is 35.62 MMT which comprises of 21.80 MMT of Import and 13.82 MMT of Exports. During 2020-2021, 1,386,926 TEUs of containers were handled, whereas in the previous year 1,383,971 TEUs were handled. During the current year 2021-2022, 1,206,956 TEUs with a cargo of 23,294,251 tonnes have been handled upto December 2021.

Notable achievements during the year

- ❖ The Second Very Large Crude Carrier (VLCC) on account of Chennai Petroleum Corporation Ltd., M.T. Bright Pioneer with a length of 333 M, Beam of 60 M and DWT of 3,00,000 MT was berthed at Bharathi Dock III on 09.04.2021 for discharge of Crude Oil. It may be noted that the Chennai Port was the 1st Major Port in India to berth a VLCC vessel at alongside berth, when it berthed M.T. New Diamond on 31.08.2018.
- ❖ Chennai Port recorded landmark single day performance of overall cargo handling of 3,12,549 Tonnes on 30.04.2021 surpassing the previous record of 2,92,745 Tonnes on 17.11.2008.
- ❖ Container Vessel CMA CGM BERLIOZ berthed at Chennai Port's second container Terminal M/s. Chennai International Terminal Pvt. Ltd., on 19.05.2021 recorded landmark performance by handling Containers of 8819 TEUS comprising of Import 4645 TEUs and Export 4174 TEUs and sailed on 22.05.2021. The above noteworthy achievement surpassing the previous record of 8397 TEUS per vessel APL ENGLAND on 08.12.2020.
- ❖ Chennai Port recorded handling of 9,283 TEUs in a single day on 23.07.2021

surpassing the previous record handling of 9,064 TEUs on 30.04.2021.

- ❖ On 11th December 2021, Chennai Port created a new record by loading 38,079 Tonnes of Barytes on a single day at JD 4 from the vessel RB EDEN surpassing the earlier record of 35,671 Tonnes of Barytes at JD 4 from the vessel FYLA on 04.10.2021.

MORMUGAO PORT

- 4.19 Mormugao 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 harbour 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.
- 4.20 The Mormugao Port has 3 Nos. non cargo berths and 7 Nos. cargo berths, in addition 3 Nos. Mooring Dolphins for handling cargoes. The effective rated capacity of the port is 62.50 MTPA. There is a dedicated cruise berth of 450 m length alongside of Breakwater for Cruise vessels and for use of Navy and Coast Guard. The port handled traffic of 13.42 MMT during 2021-22 (upto December, 2021). The project relating to Redevelopment of Berth no. 9 and three Jetties for handling of dry bulk cargo with mechanized system on PPP basis is in process.

Notable achievements during the year

- ❖ Shri Sarbananda Sonowal, Hon'ble Union Minister, of Ports, Shipping and Waterways (MoPSW) along with Shri Shripad Naik, Hon'ble Union Minister of State for Ports, Shipping & Waterways and Tourism, visited Mormugao Port on 11th December, 2021 and in the presence Shri Rajiv Jalota, IAS, Chairman - MPT and Shri Guruprasad Rai, Dy. Chairman - MPT inaugurated The "River Cruise Services", operated by M/s. Vijai Marine Services Pvt. Ltd. at Mormugao Port, which is first in South Goa. The inaugural was followed by a Goan cultural dance highlighting the rich culture of Goa.
- ❖ In order to contain dust pollution due to handling of dusty cargo, Port has commissioned Two nos. Automatic Truck Wheel Washing units at a cost of Rs.

38,56,761/-. Thus this initiative will curb the air pollution caused due to continuous movement of trucks.

V.O. CHIDAMBARANAR PORT

- 4.21 V. O. Chidambaranar Port, the 10th Major Port of India is situated 540 kms. South West of Chennai. As a gateway Port with 15 berths, drafts ranging from 8.60 metres to 14.20 metres is equipped to handle a wide spectrum of Container, Dry, Liquid and Break bulk Cargoes.
- 4.22 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 & road connectivity has been the harbinger of socio-economic development of the southern Tamilnadu region.



Inauguration ceremony of River Cruise services at Mormugao Port by Shri Sarbananda Sonowal, Hon'ble Union Minister, of Ports, Shipping and Waterways on 11th December, 2021

4.23 V.O. Chidambaranar Port is located strategically close to the East- West International sea routes on the South Eastern coast of India at latitude 80 45'N and longitude 780 13'E located in the Gulf of Mannar, with Sri Lanka on the South East and the large land mass of India on the West. The Port is well sheltered from the fury of storms and cyclonic winds and is operational round-the-clock all through the year.

4.24 The Port has 15 berths with an effective rated and re-rated capacity of 95.00 MMTPA and 69.30 MMTPA. It handled traffic of 26.06 MT during the year 2021-22 (upto December, 2021).

Notable achievements

❖ On 14.05.2021, V.O. Chidambaranar Port created a new record for handling a coal vessel with highest parcel size. The Panama flagged vessel 'MV BASTIONS' arrived from the Port of Muara Berau, Indonesia, with 92,935 Tonnes of Coal consigned for Tamilnadu Newsprint and

Papers Ltd., bettering the previous handling of highest parcel size for vessel 'MV Star Sirius', with 92,028 Tonnes of Coal handled at the Port on 11.04.2021.

- ❖ On 10.06.2021, the Port handled a single export consignment of 24 windmill blades of length 77.50 metres, the longest of its kind handled through VOC Port. The vessel PAC ALCOR with length overall (LOA) of 199.9 metres, was berthed at the Port on 10.06.2021 and the loading of the 77.50 metres long wind blades were carried out diligently, using Ship's Hydraulic cranes and Harbour Mobile Cranes of the Port. The Windmill blades were safely transported using specialized wind blade and tower transportation flat bed trucks all the way from Sriperumbudur to Tuticorin. The long wind blades were stacked three high, conforming to the safety standards and the vessel sailed from the Port on 13th June 2021 for the Port of Aransas, USA.
- ❖ On 29.08.2021, the Port created a new record for handling a vessel with highest



New record of handling a coal vessel with highest parcel size of 92935 tonnes



On 10.06.2021, V.O. Chidambaranar Port handled a single export consignment of 24 windmill blades of length 77.50 metres, the longest of its kind handled through VOC Port.

parcel size of 93,719 Tonnes (Limestone), bettering the previous record for handling the vessel with highest parcel size of 92,935 Tonnes, (Coal) by the vessel Bastions on 14.05.2021.

- ❖ The Kani Tribes residing in the interior forest of the Western Ghats are socially and economically backward and they sustain their livelihood on their forest produce. Among these 33 students who visited the Port, 10 students are doing their class X, 11 students class XII, 9 are Under graduates and 3 are Post graduates. On reaching the Port, they were taken to the Port's Information Centre and were briefed on the Port operations through a video presentation. Later, they were taken to tugboats in which they sailed up to the entrance channel of the Port to understand the entry / exit of ships in the Port.

- ❖ On 04.12.2021, V.O. Chidambaranar Port

contributed Rs. 18.00 Lakhs to the District Administration, as a Corporate Social Responsibility (CSR) initiative, for procurement of high power pumps. The high power pumps would be used to expedite dewatering of waterlogged areas of Thoothukudi city and other areas on a war footing basis and restore normalcy at the earliest. Shri T.K. Ramachandran, I.A.S., Chairman, V.O. Chidambaranar Port, handed over a Cheque for Rs. 18 Lakhs to Dr. K. Senthil Raj, I.A.S., District Collector, Thoothukudi District, in the presence of Shri Bimal Kumar Jha, Deputy Chairman, VOC Port, and other senior officials of the Port, at the Port's Administrative Office.



Chairman, V.O. Chidambaranar Port Trust, handed over a cheque for Rs.18 Lakhs to District Collector, Thoothukudi District, as a Corporate Social Responsibility

DEENDAYAL PORT (KANDLA)

4.25 Deendayal Port (erstwhile Kandla Port) was established in the year 1950 as a Central Government Project and Union Government took over Kandla for its development as a Major Port. Kandla Port has 34 berths including SPM, Oil Jetties and Dry Cargo with an optimum-rated capacity of 261.10 MTPA. The Port handled 96.51 MMT of traffic during 2021-22 (upto December 2021). The Cargo handled comprises POL, Iron Ore, Fertilizers, Coal (Thermal/coking) etc.

Notable achievements during the year

- ❖ Port retains Numero Uno position handled 117.57 MMT cargo during 2020-21 under leadership of Shri SK Mehta, Chairman & Shri Nandeesh Shukla Dy Chairman.
- ❖ Port won the "India Maritime Award" under "Best Major Port of the Year Award-(Non Containerised) category" organized by Daily Shipping Times.



- ❖ On 07th July' 2021, the Union Minister Shri Mansukh Mandviyaji virtually inaugurated Oxygen Plant, set up by the port at Rambaug Hospital Adipur.



- ❖ Oxygen Generator Plant of capacity 2000 LPM, at Sir T. Hospital Bhavnagar, got Inaugurated on 12th July' 2021 by the Hon'ble Union Minister for Health & Family Welfare, Chemicals & Fertilizer, Shri Mansukh Mandaviya. The Hon'ble Union Minister for P, S & W and AYUSH, Shri Sarbananda Sonowal also joined the inaugural function virtually & expressed his happiness on the Initiatives of DPT to contain Covid 19 Pandemic.
- ❖ On 11th August' 2021, the Quality Mark Award(10th Edition) was organized at Ahmedabad, where Deendayal Port, the No. 1 Major Port of India has been recognised and honoured as "Pioneer Industry in Maritime Services" for its outstanding cargo handling of 117.57 MMT during the Year 2020-21.
- ❖ Union Minister of State(IC) for Ports, Shipping & Waterways Shri Mansukh Mandviya virtually inaugurated Medical Oxygen Generator unit with Medical oxygen copper piping network & firefighting system and automatic oxygen source changeover system through oxygen cylinder bank at Deendayal Port hospital, Gopalpuri virtually on 2nd June' 2021.

VISAKHAPATNAM PORT

- 4.26 The Port of Visakhapatnam, located almost midway between Kolkata and Chennai on the East Coast of India at latitude 17°04'1" and longitude 83°01'7" was opened to ocean traffic on 7th October, 1933 and has been serving a vast hinterland since then. Capacity of the Port as on 31.12.2021 is 126.89 MMT.
- 4.27 The Port has a total of 27 berths and one SPM for cargo handling. The inner harbour has 21 berths and the outer harbour has 6 berths and one SPM. The inner harbour can accommodate fully

laden Panamax vessels of draft up to 14.5 meters and the outer harbour can accommodate vessels of 200,000 DWT with a draft upto 18.10 meters. Port of Visakhapatnam has the distinction of possessing Supercapex handling facility and the deepest Container terminal among Major Ports of India. The Port handled 50.91 MMT of traffic during 2021-22 (upto December 2021).



USA Delegation visited Visakhapatnam Port on 03.09.2021

Notable achievements during the year

- ❖ MoU signed during the month of May 2021 with M/s. HPCL (exclusive Capital user) for up-gradation of Fire Fighting system at OSTT berth as deposit work by port for HPCL at a cost of Rs.37.00 crore.
- ❖ On 26th June, 2021 Shri M. Venkaiah Naidu, Hon'ble Vice-President of India visited Visakhapatnam Port and reviewed the Port activities by having an interaction session with Chairman and other officials. The Hon'ble Vice-President of India appreciated port in running the entire port activities with Solar Energy.



Hon'ble Vice President of India Shri M. Venkaiah Naidu Visit to VPT from 26-06-2021 to 29-06-2021

- ❖ A 24 hour automated payment gateway with auto receipt and status report made available for trade and all port users.
- ❖ USA delegation headed by Mr. Andrew Edelfsen, Principal Commercial Services visited port on 3.9.2021. Chairman, Visakhapatnam port briefed on the business opportunities in port.
- ❖ Parliamentary Standing Committee on 'Empowerment of Women' headed by Dr. Heena Vijay Kumar Gavit, M.P & Chairperson along with other Parliamentarians visited port on 17.9.2021. The Committee reviewed the CSR activities undertaken in connection with Women Empowerment in port.
- ❖ Shri V. Shantanu Thakur, Hon'ble Minister of State for Ports, Shipping & Waterways visited port on 23.9.2021. The Hon'ble Minister inaugurated "Grade Separator from H-7 to Convent Junction" and laid Foundation stone for "Development of Cruise Terminal" and participated in Swatchh Pakawada Programme.
- ❖ A supplementary agreement reached on 29th October 2021 between M/s. VGCBPL and port to utilise the facility for other compatible cargoes by port when the VGCBPL berth is free from handling operations under the main agreement.
- ❖ Shri M. Venkaiah Naidu, Hon'ble Vice-President of India attended various programmes in Visakhapatnam from 2.11.2021 to 6.11.2021. Shri K. Rama Mohana Rao, IAS, Chairman extended warm welcome to the Hon'ble Vice President.
- ❖ Vessels upto 43 mtrs. beam and LOA 260 mtrs. handled in Inner harbour (Northern

arm) during day light and calm weather conditions on trail basis from 11.11.2021.

- ❖ The Hon'ble Vice-President flagged off the upgraded Visakhapatnam – Kirandul train,

Linke Hofmann Busch and vista dome coaches on 22.11.2021 during his subsequent stay at Visakhapatnam from 21.11.2021 to 24.11.2021.

PERFORMANCE OF MAJOR PORTS

Traffic handled at Major Ports

(In million tonnes)

Sl. No.	Port	Actual 2020-21	Provisional 2021-22 (upto December, 2021)
1	Kolkata	15.900	11.111
2	Haldia	45.468	31.032
3	Paradip	114.549	83.604
4	Visakhapatnam	69.843	50.912
5	Chennai	43.552	35.622
6	V.O. Chidambaranar	31.790	26.056
7	Cochin	31.503	25.241
8	New Mangalore	36.500	27.455
9	Mormugao	21.988	13.419
10	Jawaharlal Nehru	64.809	56.066
11	Mumbai	53.324	44.317
12	Deendayal (Kandla)	117.566	96.514
13	Kamarajar (Ennore)	25.888	27.995
	Total	672.680	529.344

Cargo Handled at Major Ports

(In Million tonnes)

Sl. No.	Commodity	Actual 2020-21	Provisional 2021-22 (upto December, 2021)
1	POL	206.764	162.524
2	Iron Ore	64.282	37.182
3	Fert. &Fert. Raw Materials	17.671	11.690
4	Coal	126.750	109.246
5	Containerized Cargo	143.773	124.535
6	Others	113.440	84.167
	Total	672.680	529.344

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*	
17	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
	2021-22		
	(Upto December, 2021)		529.34

(*) 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:

(i) Average Turn Round time

Sl. No.	Port	Average Turn round Time/(Hours)#	
		2020-21	2021-22 (upto December, 2021(*)
1	Kolkata	76.22	68.81
2	Haldia	74.16	58.96
3	Paradip	58.10	54.74
4	Visakhapatnam	66.09	75.71
5	Chennai	51.38	53.68
6	V.O.Chidambaranar	46.08	48.48
7	Cochin	35.83	34.55
8	New Mangalore	45.89	46.67
9	Mormugao	75.66	75.70
10	Jawaharlal Nehru	28.56	27.84
11	Mumbai	59.07	74.29
12	Deendayal (Kandla)	67.92	59.52
13	Kamarajar (Ennore)	42.97	46.83
	Total (All Ports)	55.99	54.07

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

The Average Turnaround Time for container ship of Major Sea Ports has been reduced from 36.94 hours in 2019-20 to 27.38 hours in 2020-21.

(ii) Average Output per Ship Berth Day

(In Tonnes)

Sl. No.	Port	Average Output Per Ship Berth Day	
		2020-21	2021-22 (upto December, 2021(*)
1	Kolkata	3948	3839
2	Haldia	9153	10261
3	Paradip	23943	26232
4	Visakhapatnam	12865	11423
5	Chennai	15928	15294
6	V.O.Chidambaranar	15696	16568
7	Cochin	22513	23570
8	New Mangalore	15690	15670
9	Mormugao	12431	11794
10	Jawaharlal Nehru	26875	29119
11	Mumbai	10694	9115
12	Deendayal(Kandla)	14497	16440
13	Kamarajar (Ennore)	21326	23646
	Total (All Ports)	15373	15855

(*)Provisional

CHAPTER – 5

SHIPPING



River cruise service at Mormugao Port

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 24 Shipyards in the country, 8 under Central Public Sector, 2 under State Governments and 14 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, Nazirgunge – a wholly owned subsidiary of CSL
- iii. Tebma Shipyards Limited, Malpe – a wholly owned subsidiary of CSL
- iv. Hooghly Dock and Port Engineers Limited, Kolkata

(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 in July 2019)

- (ii) Under Government of West Bangal
 - Shalimar Works Limited, Kolkata.

5.10 The global shipbuilding industry continued to be under extended downturn for the past few years, with world's leading shipyards facing financial troubles due to lack of orders and the total order book coming down. The effects are felt in all segments such as bulk cargo vessel segments (Bulkers, Containers, Crude Tankers). The major reason for the lack of demand could be attributed to the widening disparity between new building prices and earnings, growing uncertainty within the shipping industry as it prepared for the introduction of the global 0.5% sulphur cap on marine fuels, geopolitical instability and fear of a further escalation in the trade dispute between major countries. Adding to the above, the pandemic due to COVID 19 created more depression in the market due to slow down of trade across the globe and thus impacting the cargo movement. The cruise shipbuilding which was otherwise growing also went into depression due to the pandemic and negative outlook of the tourism industry.

5.11 Keeping in view that India has a coastline of 7517 km, 14,500 km of potentially navigable waterways, shipbuilding has been identified as one of the key sectors under the 'Make in India' initiative. There is huge potential for the improvement of water transport share in the inland and Coastal space which can translate to more activity in the Shipbuilding and Ship repair segment.

Shipbuilding

5.12 Key characteristic feature of shipbuilding is that unlike other

manufacturing industries which predominantly follow make-to-stock inventory model, shipbuilding is an order-driven industry where each vessel is custom built on receipt of the shipbuilding order. Thus, building an order book is essential for growth and sustenance of the shipbuilding industry. Order book growth for commercial ships is largely driven by the growth in world trade and commerce, which spurs demand for new ships. The evolving environment-friendly international regulations also trigger demands for replacement of old ships. Shipbuilding also provides opportunity for ancillary industries to grow thus providing multiplier effect to the marine manufacturing segment boosting economy and employment.

Indian Shipbuilding capability

5.13 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, Chowgule & Co., Vijai Marine Shipyard, Mandovi Dry Docks, A.C. Roy & Co., Dempo Shipbuilding etc.

Order Book Position

5.14 As on September 30, 2021, CSL has 49 ships on order including 1 No. Indigenous Aircraft Carrier for the Indian Navy, 1 No. Technology Demonstration Vessel for DRDO, 1 No. 500 Pax cum 150 Ton Cargo Vessel for A&N Administration, 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. 9 Nos. Floating Border Outpost for Ministry of Home Affairs, 2 Nos. of mini bulk carrier for JSW group, 23 nos. of battery operated passenger ferry for the Kochi Water Metro Project and 2 Nos. of Autonomous Electric Ferry for ASKO Maritime AS, Norway.

Potential in Shipbuilding

5.15 Under the present depressed prevailing market, the growth in the Industry is likely to be accelerated through the "Atmanirbhar Bharath" initiative under the Make In India Programme of the GOI. Various support initiatives were taken by the ministry 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. Cochin Shipyard has signed a contract with Kochi Metro Rail Corporation for building 23 nos. passenger boats using hybrid battery powered propulsion. Another major contract was clinching a contract to export two (2) nos Electric powered autonomous Ro-Ro ferry for Norwegian customer.

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 Ahmedabad 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.

Ship Repair

5.17 The global ship repair market is approximately US\$ 12 billion. Shipyards in China, Singapore, Bahrain, Dubai and Middle East account for a major share of this market. These locations have achieved a dominant position despite higher cost of ship repair services compared to other Asian countries, largely due to the availability of a skilled workforce and the latest technology which allows these shipyards to attract demand from other low cost locations like India, Malaysia and Indonesia. Ship repair and maintenance services market is estimated to reach \$ 40 billion by 2028 supported by developments in the markets in South East Asia and India. Though India’s share in global ship repair is less than 1%, the country’s location is favourable with 7-9% of the global trade passing within 300 NM of the coastline.

Indian Ship Repair Capability

5.18 Amongst public sector shipyards, Cochin Shipyard Ltd has the highest capacity for ship repairing (125 thousand DWT). In the private sector, L&T Shipbuilding Ltd. has the maximum capacity for ship repairing (300,000 DWT).

5.19 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 24 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.

Potential of ship-repair industry

5.20 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.

Strengths of Indian ship repair industry

Geostrategic location of India

5.21 A long coast line with number of all weather ports which are not subjected to severe weather conditions and naturally protected is the primary advantage. With

strategic location in the trade route of tanker/bulk carrier traffic on east & west and ready availability of trained workforce, there are tremendous opportunities for huge revenue generation.

Abundance of labour

5.22 All the resources required for the Ship Repair Units to function efficiently are available and there is a huge untapped potential. The ship repair industry promises relatively continuous flow of revenue and employment for all segments of labour class (from highly skilled to unskilled). Most of the existing and new ship repair yards in India concentrate on new building and providing services to naval and coastal vessels.

Competitive labour rates

5.23 The subcontract labour rates for steel work, pipe work, blasting and painting, mechanical and electrical works are very cheap in India and are comparable to labour rates in Indonesia and Vietnam. In fact it is 10 to 15% lower than subcontract labour rates of Indonesia and 25% lower than Philippines.

Quality of work

5.24 The speed of execution and quality of work is comparable to that of Indonesia, Philippines and Vietnam who have a significant presence in the world ship repair industry.

Financial Assistance Policy on Shipbuilding

5.25 To promote shipbuilding in Indian shipyards, the Union Cabinet has 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 has been revised in October 2017 and the updated the web portal for processing the online applications by DG(S) submitted by shipyards online, has been rolled out on 31.10.2017. 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 December, 2021.

Right of Refusal to Indian Shipyards

5.26 The Union Cabinet has also approved on 09.12.2015 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 this 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 Ministry of Ports, Shipping & Waterways.

Grant of Infrastructure Status

5.27 The Department of Economic Affairs has 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.

SOP for charter/procurement of tugs by major ports under Atmanirbhar Bharat Abhiyan and SOP for Procurement of Deep-Sea Fishing Vessels

5.28 In order to promote small and medium shipyards, in September, 2020, the Ministry has issued Standard Operating Procedures pertaining to Procurement/Chartering of Port Crafts by the Major Ports. Further, to assist the Major Ports to implement the Make in India policy, the Ministry has constituted a Standing Specification Committee to prepare Approved Standardized Tug Design & Specifications (ASTDS). Further, this Ministry has issued Standard Operating Procedure (SOP) on 08.02.2021 for Procurement of Deep-Sea Fishing Vessels to assist the state fisheries departments in expeditious implementation of PMMSY.

Promotion of Make in India initiative

5.29 In order to promote the Make in India initiative, a notification was issued in October, 2020 regarding RoFR for Indian built and Indian flagged ships through amendments to Guidelines for chartering of vessels done through tender process for all types of requirements.

International Ship Repair Facility

5.30 Cochin Shipyard Limited (CSL) is developing International Ship Repair Facility (ISRF) within the premises of Cochin Port Trust (CoPT) 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 & existing facilities in the leased area (first phase) at Cochin Port premises. CSL completed repairs of twelve ships during the year 2020-21. The construction works of ISRF project, which commenced on November 17, 2017, is progressing despite the setbacks due to COVID-19 pandemic. 100% piling works & 87% of the deck concreting works completed. Various industrial buildings are in the advanced stages of completion. CSL received all components pertaining to the transfer system supplied by M/s. IMG, Germany. With regards to shiplift system, CSL started receiving various consignments from M/s. Syncrolift AS, Norway. Structural works are in progress at manufacturer’s premises for the 10 T crane ordered on M/s. CJSC SMM, Russia. Order has been issued to M/s. Liebherr, Germany for the supply & commissioning of 3 nos. tower cranes. ISRF project is targeted for commissioning in the latter part of the calendar year 2022. 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.

Cruise Shipping

5.31 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, the Ministry has relaxed Cabotage till 5th February, 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 is made applicable for a period of one year vide order dated 14.08.2020:-

- The port charges for a Cruise Ship to be charged at \$ 0.085 per GRT for first 12 hours stay ('Fixed Rate') and \$ 5

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 13.08.2022.

5.32 The number of International Cruise ships and passengers handled in Indian Ports are given in the Table below.

Port	2019-20		2020-21		2021-22 (Till. 15.12.2021)	
	No. of Passengers	No. of Vessels	No. of Passengers	No. of Vessels	No. of Passengers	No. of Vessels
Chennai	612	2	0	0	0	0
Cochin	67907	44	0	0	8946	07
New Mangalore	24080	21	0	0	0	0
Mormugao	International - 57241	38	0	0	13805	07
	Domestic - 95634	125	0	0		
Mumbai	222105	221*	0	0	51555	26*
Visakhapatnam	0	0	0	0		
TOTAL	467579	451	0	0	74306	40

* Includes Domestic and foreign cruise vessel data.

5.33 The number of Domestic Cruise Ships and passenger handled in Indian Ports in 2020-21 are given in the Table below.

No. of Domestic Cruise Ships and passenger handled in Indian Ports in 2020-21		
Name of Port	No. of calls	No. of Passengers
Mumbai	26	51555
Goa	07	13805
Cochin	07	8946

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

5.34 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 to bring in 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, 2020 and Coastal Shipping Bill 2021 are being processed.

The Admiralty (Jurisdiction and Settlement of Maritime Claims) Act, 2017

5.35 The Admiralty (Jurisdiction and Settlement of Maritime Claims) Act, 2017 was enforced on 1.04.2018. Rules under clause (b) of subsection (2) of section 16 of the Admiralty (Jurisdiction and Settlement of Maritime Claims) Act, 2017 to provide for the practice and procedure of admiralty jurisdiction under this Act, including fees, costs and expenses in such proceedings are being framed by the High Courts of coastal states of the country. As of December,

2020, the High Court at Calcutta, the Bombay High Court, the Orissa High Court and the Madras High Court have notified these rules.

Recycling of Ships

5.36 The Recycling of Ships Act, 2019 is aimed at ensuring that ships, when being recycled after reaching the end of their operational lives, 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 International Convention for safe and environmentally sound recycling of ships, on the basis of which, it has been enacted, comes into force. The Convention 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 under the rule making powers, 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. Steps have been initiated to enhance the overall ship recycling capacity in the country from the existing 4.50 MMTPA of LDT to about 9.0 MMTPA of LDT by 2024.

CHAPTER – 6

FUNCTIONING OF ORGANIZATIONS



Hon'ble Minister and Hon'ble Minister of State attended the Diamond Jubilee valedictory function of Shipping Corporation of India (SCI)

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 Director 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.

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 was 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

6.9 The SWF Society is set up as a Central Organization for the Welfare of Indian Seafarers and their families. It 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, the 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.

DIRECTORATE GENERAL OF LIGHTHOUSES AND LIGHTSHIPS

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

- 6.12 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

- 6.13 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	204
2.	Lightship	01
3.	DGPS Stations	23
4.	Racons	64
5.	Deep Sea Lighted Buoys	21
6.	National Automatic Identification System (AIS) Physical Shore Stations (PSS)	87
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

6.14 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

6.15 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

6.16 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. 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.

Lighthouse Tender Vessels

6.17 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, M.V. Sagardeep-II and Indira Point. These are also used to monitor the performance of AtoNs established by the Directorate General.



MV Indira Point

National AIS Network

6.18 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

Establishment of new Lighthouse Tower at Ravalpir

6.19 For easy identification of landmark and to provide seamless coverage of lighthouse along the Indian Coast a new Lighthouse tower of 30 Mt height RCC tower in place of 7 Mt trestle tower at Rawalpir in Gujarat has been established. Hon'ble Union Minister for

Ports, Shipping & Waterways and AYUSH, Shri Sarbananda Sonowal inaugurated the new Lighthouse on 20th October, 2021.



Establishment of new Lighthouse at Valiyazhikkal

6.20 For easy identification of landmark and to provide seamless coverage of lighthouse along the Indian Coast a new Lighthouse at Valiyazhikkal in Alappuzha district of Kerala has been established. Hon'ble Union Minister for Ports, Shipping & Waterways and AYUSH, Shri Sarbananda Sonowal inaugurated the new Lighthouse on 30th October, 2021. The 41.26 metre height pentagonal RCC tower with elevator and allied buildings has been constructed and the lighthouse is currently on trial run since 03.06.2021. Construction of

the lighthouse will immensely benefit the mariners plying in this Kerala region and the local fishermen will benefit for Day mark in day time and Safe return in Night time from the sea. Structure work of the lighthouse tower is completed. Finishing works are in progress.



Marine Aids to Navigation Act, 2021

6.21 The Government of India enacted a new Act, namely Marine Aids to Navigation Act, 2021 which repealed and replaced the Lighthouse Act, 1927. The new Act facilitates legal frame work for Vessel Traffic Service, Training & Certification, and Accreditation of training organization and development of Heritage lighthouses. The Act has been passed by the Parliament and received the assent of President on 31.07.2021 and it is notified in the official gazette. Framing of eight Sub-ordinate legislations of Marine Aids to Navigation Act 2021 are in progress. Out of which 06 draft rules namely, Marine Aids to

Navigation (Central Advisory Committee Procedural) Rules, 2021; Marine Aids to Navigation (Removal or Alteration of Obstruction) Rules, 2021; Marine Aids to Navigation (Duties of Director General) Rules, 2021; Marine Aids to Navigation (Accounting and Financial power) Rules, 2021; Marine Aids to Navigation (Vessel Traffic Service) Rules, 2021 and Marine Aids to Navigation (Training and Certification Rule) Rules, 2021 have been pre-published in the Official Gazette for public consultation in accordance with section 46 (1) of the Act. Remaining draft Rules are being submitted shortly.

COCHIN SHIPYARD LIMITED

6.22 Cochin Shipyard achieved a net profit of Rs. 610.10 crore for the financial year 2020-21 as compared to Rs. 637.69 crore for the year 2019-20. The Company achieved a turnover of Rs. 2,818.90 crore for the year 2020-21 as compared to Rs. 3,422.49 crore for the year 2019-20. Turnover for the half year ended September 30, 2021 was Rs. 1,025.72 crore as against Rs. 989.88 crore for the half year ended September 30, 2020. Company achieved a net profit of Rs. 168.11 crore for the half year ended September 30, 2021 as compared to Rs. 151.01 crore for the half year ended September 30, 2020.

Global Shipbuilding Industry

6.23 The shrinkage of GDP and the trade volumes due to the current COVID-19 pandemic is directly impacting the demand and the shipyards. The current COVID-19 pandemic is the worst health crisis in more than a century and potentially without precedent if we take the globalized nature of the current

economy. A simultaneous supply and demand shock that led to the global recession and unprecedented contraction in global trade (affecting both the export potential of nations and their demand for imports). In an updated autumn 2020 report, the WTO forecast a 9.2% decline in the volume of world merchandise trade, in 2020 followed by a muted rise in 2021. Trade volume growth thus would remain clearly below the pre-crisis trend of early 2020. The impact of the COVID-19 pandemic compounded existing trends, complicating an already challenging new building environment at the start of the year. Foremost amongst these was the long period of yard rationalisation after the contracting boom in the 2000s, and more recently, the uncertainties surrounding the potential impact of environmental legislation along with non-availability of finance for the industry. These existing impediments, combined with the adverse impacts of the COVID-19 pandemic, created a perfect storm of events that has effectively suppressed the appetite for fresh ordering this year.

6.24 The fillip due to the prospects due to large ageing fleet replacements and new regulatory restrictions generated some interest and likely to impact positively on long term basis. However, the pandemic situation and the world real GDP stagnant growth on year-on-year basis will have direct negative impact on the seaborne trade and thus limiting the appetite for the new shipbuilding orders in the near future.

Indian Shipbuilding Industry

6.25 Global downturn and rising competition have resulted in pressures on Indian ship

building industry leading to a decline in its global share to <1%. While India is one of the market leaders in ship recycling, ship repairs is a very nascent market. With the objective of propelling India to the fore-front of the global maritime sector, Ministry of Ports, Shipping and Waterways has formulated Maritime India Vision 2030 (MIV 2030), a blueprint to ensure coordinated and accelerated growth of India's maritime sector in the next decade.

6.26 MIV 2030 envisions an overall investment of ₹3,00,000 – 3,50,000 crore across ports, shipping, and inland waterways categories. This vision roadmap is estimated to help unlock ₹20,000 plus crore worth of potential annual revenue for Indian Ports. Further, it is expected to create an additional 20,00,000 plus jobs (direct and indirect) in the Indian maritime sector. Some of the Governmental initiatives already put in place are:

- a) Financial Assistance Policy on Shipbuilding (2016)
- b) Grant of Infrastructure Status (2016)
- c) Atmanirbhar Bharat Policy (Revised in 2020)
- d) SOP for chartering/procurement of tugs (2020)
- e) Pradhan Mantri Matsya Sampada Yojana (2020)

6.27 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 channelising

the cargo to improve demand, improving the ecosystem for ancillary industries; generate standardised designs for better productivity with appropriate Governmental interventions to create level playing fields to make the industry competitive in International arena. The MIV document also advocates creation of a Maritime Development Fund to provide easy access to working capital and long-term finance needs across marine sectors thus giving access to Indian ship owners to improve their capacity and shipyards to improve the infrastructure.

Ship Repair Industry

6.28 Global ship repair market is currently dominated by shipyards in China, Singapore and Middle East largely due to the availability of a 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 less than 1%, the country's location is favourable with 7 to 9% of the global trade passing within 300 NM of the coastline. Additionally, India is poised well to offer repair services to Indian Navy and the allies US Navy's 5th and 7th fleet in Indian Ocean & Arabian Sea.

6.29 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. 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. To address the above gaps, under MIV 2030 the government is giving a strong push with initiatives such as channelising the domestic demand leveraging Atmanirbhar Policy, increase and improve infrastructure through better access to financial instruments, ease of doing business and improve efficiencies by creating free trade depots, maritime clusters etc.

- 6.30 Ship repair industry being labour intensive, India has got the advantage of having strong work force to cater for 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. 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.

Ship repair industry like many other industries has been greatly affected by the prevailing COVID-19 pandemic. Ship repair facilities across the world have suffered right from the start of the pandemic.

HOOGHLY COCHIN SHIPYARD LIMITED (HCSL)

- 6.31 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. HCSL aspires to establish itself as one of the leading shipbuilding yard in east coast for quality inland and coastal vessel construction. The “new yard of Hooghly Cochin Shipyard Limited, Nazirgunge unit” is ready for inauguration.

- 6.32 The construction activities under civil works package had crossed the 50% mark in 2019-20 when all works at site had to be stopped on March 23, 2020 due to the outbreak of COVID-19 pandemic. The stoppage of work continued till June 09, 2020 which lasted for a period of 79 days. Work could be resumed only post relocating workmen within the confines of the site in order to minimize impact of COVID-19 pandemic, even though it remained unabated in the whole state. Although work at the site resumed by June 10, 2020, the momentum of work progress could not be regained to pre-COVID pace due to regular interim lockdown imposed by respective State Governments, thereby effecting the mobilisation of work force and materials to the desired level. One of the most significant achievements was the civil work completion at the slipway. Slipway work was being repeatedly hampered by frequent flooding due to substantial tidal variation in the Hooghly, accentuated by severe monsoons, steep water current & proximity to the navigational channel of Kolkata Port Trust.

TEBMA SHIPYARDS LIMITED (TSL)

- 6.33 As part of CSL’s long term strategy viz., CRUISE 2030, CSL had identified deep sea fishing vessel as one of the several opportunities and towards this CSL acquired Tebma Shipyards Limited (TSL) on September 15, 2020 through the statutory insolvency resolution

process and since then TSL is a wholly owned subsidiary of CSL. CSL proposes to utilise the facilities at TSL for building fishing vessels (especially technologically advanced deep sea fishing vessels), tugs and specialized crafts of upto 80 M length which projects huge potential in domestic as well as international markets in the coming years. TSL has two facilities; one in Malpe, Karnataka and the other in Chengalpet, Tamil Nadu. The facilities at Malpe is spread across three units as below:

- (a) Malpe Harbour Complex – Hull erection and launching;
- (b) Hangarkatta – Steel preparation and block fabrication; and
- (c) Babuthotta – Warehouse.

6.34 Due to the financial difficulties and consequent statutory insolvency resolution process, TSL’s facilities had been non-operational for the past several years. Post takeover by CSL in September 2020, TSL has initiated the process of revamping its infrastructure facilities at Malpe for commencing the operations. Out of the three facilities at Malpe, Hangarkatta and Babuthotta facility is operational presently. The revamping activities at Malpe Harbour Complex are progressing.

The activities for revamping the Chengalpet facility is proposed to be initiated once the Malpe facility is up and running and the feasibility of Chengalpet facility is established.

SHIPPING CORPORATION OF INDIA LIMITED (SCI)

6.35 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 17.12.2021 owns 59 vessels of 5.311 million DWT, 2.94 million GT and constitutes about 27.5% (in terms of DWT) of Indian tonnage.

Crude Transportation

6.36 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

6.37 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 15 dry bulk carriers 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.

Container Movement

6.38 One of the strengths of SCI lies in having a diversified fleet. SCI is the only Indian Shipping Company providing container services which connects West Coast of India to East Coast of India and mainland to Port Blair. SCI has two container vessels in its fleet, which are deployed in



Hon'ble Minister Shri Sarbananda Sonowal virtually flagged off the SCI Chennai on EXIM voyage from Shipping Corporation, Mumbai

the Indian Coastal Sector and they are the largest vessels on the Coast. Presence of SCI in this segment has proved to have a moderating effect on the freight rates, thus, protecting the interest of Indian Manufacturers, Exporters and a boon to the Coastal trade. During the COVID-19 crisis and related lock down period, SCI's coastal service was able to tide over the challenges by reorienting services by adding / omitting port calls as per needs & requirements of the trade with a view to ensure uninterrupted movement of essential commodities like wheat, rice, agricultural commodities etc. from surplus to deficient regions.

INDIAN MARITIME UNIVERSITY (IMU)

6.39 IMU is a teaching-cum-affiliating University established on 14th November, 2008 to provide quality maritime education, training and research. The admission cycle was affected due to the prevalent pandemic. The admission process was modified to

address the challenges and for the first time the capacity utilization for marine programmes crossed 90%.

Major initiatives taken by IMU

- IMU Headquarters is reviving the process of delivering the training courses (57 new training courses under the auspices of Indian Ports Association) which are meant for up-skilling the Port personnel. As part of above, 3 training programmes of 5 days duration have been completed.
- Establishment of state-of-the-art laboratories for graduate and post graduate students of Naval Architecture and Ocean Engineering at IMU Visakhapatnam Campus such as Workshops, Machine Shops, CNC lathe, fluid Mechanics, Material Testing, Electrical and Electronics, Physics and Chemistry.
- Establishment of Smart Inter-active Classrooms with digital boards and video and audio set ups at IMU Visakhapatnam Campus. This has helped for effective

teaching with the students in the online mode during the Covid pandemic.

- IMU Chennai Campus also completed training for Major Port officials.

TARIFF AUTHORITY FOR MAJOR PORTS (TAMP)

6.40 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 regulatory jurisdiction of the Authority extends to all the Major Port Trusts and private terminals operating therein. The Authority is statutorily mandated to frame the Scale of Rates and Statement of Conditions for the services rendered by the Major Port Trusts and Private Terminals thereat as well as charges for use of port properties. The Authority consists of a Chairman and two Members. The sanctioned strength of officers and staff of the Authority is 36. Tariff Authority for Major Ports is an ISO 9001:2015 and ISO 27001:2013 certified organisation.

6.41 The Authority follows the following guidelines issued by the Government of India as policy direction u/s 111 of the Major Port Trusts Act, 1963 for regulating tariff of Major Port Trusts and Private Terminals operating thereat.

Sr. No.	Guidelines
(I).	Upfront Tariff Guidelines, 2008.
(ii).	Reference Tariff Guidelines, 2013.
(iii).	Guidelines for Determination of Upfront Tariff for Stevedoring and Shore Handling Operations, 2016.
(iv).	Berthing Policy for Dry Bulk Cargo for Major Ports, 2016.
(v).	Tariff Policy for Major Port Trusts, 2018.
(vi).	Tariff Guidelines, 2019, for regulation of tariff for BOT Operators operating in the Major Port Trusts who were governed by erstwhile Tariff Guidelines of 2005.

6.42 In order to promote participative approach in tariff fixing, special care is taken to give adequate opportunities to users to furnish written and / or oral submissions. Port-level joint hearings are organized to facilitate maximum participation of the greatest number of users to hear their arguments on all tariff proposals and final decisions are taken in the Authority meetings and tariff Orders are notified in the Gazette of India. This year the Authority has held 17 joint hearings through video conferencing in view of Covid-19 pandemic.

6.43 The Authority since inception has disposed of 1087 cases. Every notification, declaration, Order and regulation of the Authority made under the MPT Act is published in the Gazette of India. The details of the disposal of tariff cases are tabulated below:

Particulars	From 01/04/2020 to 31/03/2021	From 01/04/2021 to 31/12/2021
No. of Tariff cases approved	44	36

ANDAMAN LAKSHADWEEP HARBOUR WORKS

6.44 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

6.45 Dredging Corporation of India Limited (DCI) is owned by four major ports namely Visakhapatnam Port, Jawaharlal Nehru Port, Paradip Port and Deendayal Port. The DCI is specialized in the field of Dredging and Land Reclamation of Maritime Sector. Besides Dredging Projects’ execution, the DCI also provides solution for project management consultancy for development of ports, inland waterways, reservoirs, dams and flood control management.

6.46 Dredging Corporation of India Limited (DCI) was incorporated in March, 1976 with an authorized capital of Rs. 30 crore and paid-up capital of Rs. 28 crore. In the financial year 1991-92, 2003-04 and 2014-15, Government of India disinvested 1.44%, 20% and 5% of the share capital respectively. 0.09% of the

share capital shares were issued as ESOP shares in 2016-17. Government of India disinvested the balance of shares of 73.47% to Major Port Trusts - Visakhapatnam Port Trust (19.47%), Paradip Port Trust (18%), Jawaharlal Nehru Port Trust (18%) and Deendayal Port Trust (18%) in accordance to the Share Purchase Agreement dated 08/03/2019 along with transfer of management and control. The shares of DCI are listed on Mumbai, Kolkata and National Stock Exchanges.

6.47 The Board of the DCI was authorized to recruit its first Managing Director and Chief Executive Officer subsequent to disinvestment of DCI capital shares, through a Search-cum-Selection Committee headed by the Chairman, Jawaharlal Port and two independent directors - former Member in the Railway Board & former Managing Director, Indian Railway Finance Corporation and former Chairman and Managing Director of Shipping Corporation of India as members.

6.48 The DCI based on the requirements of maintenance dredging at Major Ports and to upgrade the technology and capacity of dredging has proposed to procure a Traylor Suction Hopper Dredger (TSHD). The Ministry accorded in-principle approval for construction of



MoU Signing ceremony between DCI and CSL in the presence of Hon. Minister

12,000 cubic meter Trailing Suction Hopper Dredger by Cochin Shipyard Limited.

6.49 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 strives to adopt a win-win model to complete all the assignments to utmost client satisfaction, with highest professional integrity adhering to international safety standards, efficiently adopting cost effective operations with our versatile and modern fleet of dredgers supported with auxiliary equipment. DCI works towards sustainable, eco-friendly future and offer solutions in dredging for coastal protection, to increase water holding capacity of water bodies to increase water table and beneficial uses of dredged material and natural resources.

SAGARMALA DEVELOPMENT COMPANY LIMITED

6.50 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:

a) 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.

b) 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.

c) 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.

d) A budgetary allocation of Rs. 250 crore for FY 2016 -17 and an equal amount for each of the subsequent 4 years solicited.

e) 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.

6.51 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.

6.52 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 provided hereunder:

approval of Cabinet to form a Special Purpose Vehicle (SPV) was mooted by the Ministry. The Cabinet approved the proposal of formation of SPV on 25th March 2015. Based on this decision a company namely Indian Port Rail Corporation Ltd. (IPRCL) incorporated on 10th July 2015 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

a) To provide efficient and competitive rail

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
	Total Equity Investment by SDCL	541.78		

INDIAN PORT RAIL & ROPEWAY CORPORATION LIMITED (IPRCL)

6.53 In order to provide efficient rail evacuation systems to Major Ports and thereby enhance their handling capacity and efficiency, a proposal seeking

evacuation systems to Ports in India by way of creating last mile connectivity of the ports.

b) Modernization of the rail infrastructure at ports; creating and managing the internal port railway system.

- c) Creation of new and enhancement of capacity in embedded hinterland connectivity.
- d) 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.
- e) To carry on the business of development, operations & maintenance of Ropeways and other modern transit systems.
- f) 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. including policy formulation, promotion, development, implementation, construction, operation, maintenance, management and finance thereof.
- g) 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, pulling down and restoration of railways, factories, mills, industrial plants, engines, machinery, works of all descriptions, including railways, tramways, waterways, road bridges, warehouses, factories, mills, museums, machinery, railway carriages, wagons, ships and vessels of every description, gas works, electric works, water works, drainage and sewage works and other public utilities, wharfs, docks, piers and buildings of every description in India and or outside India.

IPRCL Operations

6.54 During the year 2020-21, 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 JNPT, DPT, SMP, PPT, VPT, NMPT and KPL during the year 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.

6.55 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, efforts to rope in major clients viz. NTPC, oil companies through participation in competitive bidding were made. Participation in projects for rail connectivity in MMLPs for NICDC has been successfully done. Similarly, DFCCIL has awarded a DPR for rail connectivity to Rewari Jn. (DFC)-Kishangarh Balawas (Rewari-Hisar line of IR) to the existing Gurgaon line. 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. In Ropeway segment, IPRCL has been awarded the work of preparation of 5 DPRs, 4 Bid Process Management and one PMC work of ropeway projects in FY 2020-21.

Important Projects completed during the Year 2020-21:

Minister from the Iranian side and thereafter the contract was signed on

S.No	Name of Project	Port	Cost in crore (Rs.)
1	Track Renovation including other related ancillaries Civil Work in SMP yard	SMP	15.1
2	Doubling of Railway line from Durga Chak to Haldia Dock	HDC	99.37
3	Upgradation of rail network inside Cargo jetty – Civil and P. Way work	DPT	45.51
4	ONGC Bridge work inside JNPT holding yard	JNPT/ CR	12.5

INDIAN PORT GLOBAL PRIVATE LIMITED

6.56 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 Trust (JNPT) and Deendayal (erstwhile Kandla) Port Trust (DPT) 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 22nd January 2015. Authorized capital and Paid up capital of IPGL is Rs.10 crore. The two promoters were Jawaharlal Nehru Port Trust and Deendayal Port Trust, holding equity in the ratio of 60:40 respectively.

6.57 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 from the Indian side and

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

6.58 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 JNPT & DPT 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 JNPT & DPT 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.

- 6.59 Extension for the Short Lease Contract of Shahid Beheshti Port of Chabahar from June, 2020 to June, 2021 and thereafter same has been extended upto June, 2022. A consignment of two Mobile Harbour Cranes (MHCs) to Iran's Chabahar port has been supplied, with a total contract value of over USD 25 Million under a contract agreement for supply of 6 MHC. The consignment of cranes arrived from Marghera port, Italy unloaded successfully on 18th January, 2021 at Chabahar port. IPGL commenced its operations at Shahid Beheshti Port of Chabahar on 25th December 2018 through its Iranian subsidiary IPGCFZ and has completed 3 years of terminal operations. During this period IPGL terminal handled container, bulk, break bulk, livestock and heavy lift cargo of around 3.5 Mill MT.

HOOGHLY DOCK & PORT ENGINEERS LIMITED

- 6.60 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

- 6.61 The Union Cabinet on 03rd October, 2019 approved the proposal for Liquidation & Restructuring of 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 9th 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.

- 6.62 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 Kolkata Port Authority 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 of Port, Shipping & Waterways.

CENTRAL INLAND WATER TRANSPORT CORPORATION LIMITED

- 6.63 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 Central Inland Water Transport Corporation Ltd. (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.

- 6.64 Pursuant to the Cabinet decision for voluntary winding-up of CIWTC, the company on 19.12.2017 had appointed an Insolvency Professional for conducting voluntary liquidation in terms of Insolvency & Bankruptcy Code, 2016. However, in view of the claims made by Kolkata Port Trust (KoPT) and Garden Reach Shipbuilders & Engineers (GRSE), the Liquidator of CIWTC on 21.06.2018 filed an application with National Company Law Tribunal (NCLT) in terms of Regulation 40(2) of Insolvency and Bankruptcy Board of India Regulations, 2017 for suspending the process of voluntary liquidation of CIWTC and for further directions. The Hon'ble National Company Law Tribunal, Kolkata Bench, Kolkata on 28.09.2018 by its impugned Order suspended the voluntary liquidation of the Appellant and rejected the prayer for conversion to an application under section 271 of the companies act, 2013 for winding up and compulsory liquidation.
- 6.65 NCLAT vide Order dated 07.08.2019 has disposed the case directing CIWTC to move before Adjudicating Authority (National Company Law Tribunal NCLT, Kolkata) with the request to act under Section 59 of Insolvency and Bankruptcy Code, 2016. After due pursuance, the Hon'ble NCLT, Kolkata Bench heard the aforesaid application of CIWTC on

29.12.2020 and issued the order on 02.02.2021 recalling the earlier order dated 28.09.2018 passed in C.A. No. 791/KB/218 and allowed the Company to be liquidated, subject to the provisions of section 59 of the Code.

- 6.66 Due to financial liabilities of CIWTC and 22 nos. (Twenty Two) ongoing litigations with 10 nos. court cases by ex-employees & employee unions and balance 12 nos. court cases of creditors and debtors of the company, the route for appointing the Insolvency Professional was taken by the Ministry under section 59 of insolvency and Bankruptcy Code, 2016 (Code) and under insolvency & Bankruptcy Board of India (Voluntary Liquidation Process) Regulations, 2017. However, MoPSW with the approval of Competent Authority on 09.06.2021 has directed CMD, CIWTC 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 creditors

and sundry debtors for early closure of CIWTC. The CSC after detailed consultations with the stakeholders has formulated a 'Framework of Way forward for the Closure of CIWTC' viz. transfer of assets, liabilities, litigations etc to Kolkata Port Authority 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 of Port, Shipping & Waterways.

SETHUSAMUDRAM CORPORATION LIMITED

- 6.67 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 – 7

INLAND WATER TRANSPORT



M.V. SANKARDEV VESSEL PLYING ON NATIONAL WATERWAY

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.

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

7.3 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 are operational and vessels are plying on these National Waterways. Fairway development works in Vijayawada – Muktyala stretch of river Krishna (part of NW-4) under Phase- I are in progress at a cost of Rs. 96 Crore. 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 EIA-EMP is underway.

National Waterway- 1

7.4 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).

7.5 During 2020-21, the important measures like River Conservancy works (dredging & bandalling) was carried out for the development & maintenance of fairway along with navigational aids and terminal facilities along NW-1 hinterlands.

7.6 On the advice of NTCPC of IIT, Chennai, the dredging strategy plan for providing an LAD of 2.5 m and bottom channel

width of 30 m on the Barh-Majhaua stretch through Departmental Dredgers on O&M Contracts; and on Majhaua-Ghazipur stretch and Ghazipur-Varanasi stretch through Quantity Based Maintenance Dredging contract are under finalization :-

- Barh – Digha – Majhaua
- Majhaua – Ghazipur
- Ghazipur – Varanasi
- Trebeni – Farakka

7.7 For Kahalgaon-Sultanganj stretch (50 km) due to the presence of Dolphin Sanctuary no dredging activity is planned. Presently stretch-wise following Navigable Depth is maintained by deploying 11 nos. Departmental dredgers along with 13 nos. survey vessels for monitoring of Waterways stretches.

- (a) Haldia – Farakka stretch
560 km 2.6 m to 3.00 m
- (b) Farakka – Barh stretch
400 km 2.1 m to 3.00 m
- (c) Barh – Ghazipur stretch
290 km 1.5 m to 2.50 m
- (d) Ghazipur – MMT Varanasi
140 km 1.1 m to 2.20 m

7.8 The Multi-Modal Terminal at Varanasi and Sahibganj on National Waterway -1 inaugurated by the Hon'ble Prime Minister on 12.11.2018 & 12.09.2019 respectively.

Jal Marg Vikas Project -I

7.9 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

7.10 Jal Marg Vikas Project (JMVP) on National Waterway-1 (NW-1) from Haldia to Varanasi was approved by the CCEA on 3rd January, 2018 at a cost of Rs. 5369.18 crore. The loan agreement with the World Bank was signed on 2nd February 2018. The estimated cost of JMVP of Rs. 5,369.18 crore (US\$ 800.00 million) was to be utilized as per the following funding pattern:

- (I) 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 (UD\$ 45.00 million).

Jal Marg Vikas Project - II (Arth Ganga)

7.11 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’.

7.12 Developing community jetty under Arth Ganga may impact on the economic ecosystem along both banks of the river, under envisaged vision and leadership of our Hon’ble Prime Minister of India has conceptualized “Arth Ganga” under Jal Marg Vikas Project that Plans afoot to energise economic activity along river banks to offers IWT benefits to the society at large.

7.13 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.

7.14 The JMVP I & II together offers sustainable, commercially viable and safe navigation for efficient management of logistics and IWT transport system. The project become critical enabler for sustaining, channelizing and accelerating economic growth along the hinterland of river Ganga.

7.15 The progress plan of Arth Ganga includes development of about 62 Nos. of community jetties and 5 pairs of Ro-Ro terminals that facilitates connectivity to support the 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. The progress achieved under each component of JMVP during the period of report is summarized below:-

Multimodal terminal at Varanasi

7.16 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 11.01.19. Rail connectivity from the IWT Terminal to Jeonathpur railway station on the

Eastern Dedicated Freight Corridor(EDFC) is planned. The rail alignment is under finalization in consultation with the Dedicated Freight Corridor Corporation of India and North Central Railway.

- 7.17 The proposal to Equip, Operate and Transfer (EOT) the multimodal terminal at Varanasi to be awarded to a private operator under the PPP Model was appraised and recommended for approval by the Standing Finance Committee (SFC), chaired by Secretary of Ministry on 23.04.2020.
- 7.18 The efforts for Operationalization of MMT Varanasi is 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 PPT tenders etc.
- 7.19 The Standing Committee of National Board for Wildlife, in its meeting held on 15.05.2017, had recommended grant of permission for movement and plying of inland vessels through the Kashi Turtle Wild Life Sanctuary at Varanasi subject to IWAI taking the standard mitigation measures prescribed by the Wildlife Institute of India and conditions prescribed by the State Chief Wildlife Warden. IWAI has complied with/is complying with these mitigation measures as per the stipulations. Further, Govt. of UP vide notification dated 17.03.2020 has de-notified the existing Kashi Turtle Sanctuary.

Multimodal Terminal at Sahibganj

- 7.20 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.

- 7.21 The Rail connectivity is proposed for the terminal to Sakrigali railway station. The rail alignment is under finalization. The operation, management and development of the multimodal terminal at Sahibganj is proposed to be awarded to a private operator under the PPP Model.
- 7.22 Sahibganj MMT OMD project was appraised and recommended for approval by the Public Private Partnership Appraisal Committee (PPPAC), chaired by Secretary, Department of Economic Affairs on 01.06.2020. Final approval was received from Ministry of Ports, Shipping and Waterways on 09.11.2020
- 7.23 The Project Management Unit of Jal Marg Vikas Project made efforts for Operationalization of MMT Sahibganj with the assistance of Asset Management consultant for the development of draft concession agreement and tender documents under PPP model. The PPPAC Memo has been referred for appraisal to the Department of Economic Affairs.

Multimodal Terminal at Haldia

- 7.24 The Multimodal terminal at Haldia, with a terminal capacity of 3.08 MTPA in first phase, is being constructed in two Phases on a 61 acres land in the Haldia Dock Complex leased from the Kolkata Port Trust (KoPT)/SMPT on 30 year 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. 481.37 crore. Considering d-scoping of items and GST impact, the physical

progress as on December 2021 is 97.35% and financial progress is Rs. 469.75 Crore The Rail alignment for connectivity from the terminal is under finalization in consultation with the Haldia Dock Complex.

- 7.25 The proposal to Equip, Operate and Transfer (EOT) the multimodal terminal at Haldia to be awarded to a private operator under the PPP Model was appraised and recommended for approval by the Expenditure Finance Committee (SFC), chaired by Secretary, Ministry of Ports, Shipping and Waterways, on 23.04.2020. The Tariff proposal (to be applicable) for Haldia MMT EOT bidding was approved by the IWAI Board during the 173rd Board meeting on 22.10.2020.
- 7.26 Under Jal Marg Vikas initiated Development of Multimodal Terminal Project at Haldia with investment INR 481.37 Cores (excluding land cost) for terminal construction. M/s ITD Cementation Ltd. was appointed by IWAI in the year 2017 and now the civil work of terminal is near completion and physical progress of 97.35% has been achieved.
- 7.27 During journey of developing National Waterway-1, the Private Sector Participation was envisaged for improving investment climate betterment of IWT services to the stakeholders and increasing cargo handling efficiency with reduced logistics cost. Private sector is better placed in terms of market accesses, vessel leasing/procurement and cargo mobilization for optimal utilization of the terminal facilities.

Navigational Lock at Farakka

- 7.28 The new navigational lock is being constructed on 14.86 ha of land in the Farakka Barrage Project (FBP), taken on transfer from the FBP 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 90.50 % (November, 2021) and financial progress of Rs. 308.32 crore as on 30.11.2021.

Intermodal terminal at Kalughat and Ghazipur

- 7.29 The Intermodal Terminal, Kalughat is being planned to handle mostly container traffic destined to Nepal. An intermodal terminal is proposed to be constructed on 5.159 ha (12.80 acres) of land in Kalughat, Saran district of Bihar, with road connectivity to NH-19. The SIA study of the proposed land completed and possession Certificate of 13.17 acres of land received on 26.09.2020. The EPC contract with M/s. Sanjay Construction was signed on 26.11.2021 at a cost of Rs. 78.28 crore and the contractor has mobilized and started site survey and geo technical investigation etc.
- 7.30 An intermodal terminal is proposed to be constructed on 8.917 ha of land in Ghazipur, Uttar Pradesh. 4.386 ha of land has already been acquired and registered with IWAI. Balance 4.531 ha of land is at an advanced stage of acquisition. DPR is ready. The Foundation Stone for the Terminal was laid by the then Hon'ble Minister on 25th January, 2018.
- 7.31 The DPR for development of terminal prepared. The Request for Expression of

Interest (RoEI) for inviting business proposal for development of shore side infrastructure at Ghazipur was published on 21.02.2020 with last date 23.03.2020 for submission of EoI against which no response received.

7.32 The Asset Management Consultant recommended for re-tendering and analyzed probable reasons for non-response of REOI. The primary reasons mentioned as under:-

- a) Onset of Pandemic has slow down the business and economic activity.
- b) Lack of incentive to the applicant for sharing their business model etc.
- c) High perceived risk among stakeholders as IWT is nascent sector

7.33 Accordingly, to gauge market for development of shore side infrastructure at proposed site of IMT Ghazipur the RoEI was re-floated on 04.03.2021 by giving proper advertisement and organized stakeholder’s consultations, thereafter single EoI was received, accordingly the plan for development to be taken up under JMVP

National Waterway-2

7.34 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 (Orumghat) 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.

7.35 Currently, there are three road bridges across river 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.



Containerized cargo transportation from Haldia on NW-1 to Pandu on NW-2

7.36 Earlier, IWAI had started a similar Ro-Ro service between Dhubri and Hatsingimari which reduced the travel distance by 190 km. A permanent Ro-Ro terminal was constructed at Dhubri for the purpose to provide a direct link between Assam and Meghalaya, avoiding circuitous route of 220 km through Jogighopa, Ro-Ro operation between Dhubri & Hatsingimari established. IWAI has deployed its own modern Ro-Ro Vessel Gopinath Bordoloi for Ro-Ro operation in this route from July, 2017.

Two Ro- Ro routes are under operation viz. i) between Neamati to Kamalabari and ii) between Hatsingmari and Dhubri. Ro-Ro terminals are also proposed at Neamati-Kamalabari and Maijan (Dibrugarh) to Sengajan for which DPR has been prepared. IWAI have deployed 4 nos. of Departmental Dredgers and 6 nos. of Survey Launches in NW-2.

7.37 The IWAI had launched a Roll on-Roll off (Ro-Ro) service from 11th October '2018 in Assam from Neamati to Majuli Island. The new Ro-Ro facility has been started in collaboration with the Government of Assam to provide the much needed connectivity for Majuli Island. This service has reduced the road route distance of 423 km that trucks take from Neamati to Majuli Island via Tezpur Road Bridge to only 12.7 km with the use of river route. Majuli is one of the biggest riverine islands (144 km²) in the world located on river Brahmaputra and faces serious challenges of connectivity. It has 144 villages with a population of over 1,50,000.

7.38 The IWAI had procured a new vessel MV Bhupen Hazarika at a cost of Rs 9.46 crore for the new service from Neamati to Majuli island and is also providing the needed terminal infrastructure. The 46.5 metre long, 13.3 metre wide vessel has the carrying capacity of eight trucks and 100 passengers. The IWAI is also planning to procure more such Ro-Ro vessels for use on river Brahmaputra.

National Waterway (NW) -3

7.39 On NW-3 in Kerala, the important works carried out during FY 2021-22 (up to December 2021) which include development of the navigation channel with the specified dimensions by undertaking dredging in all stretches

except 1.00 km long shoal in Kayamkulam Kayal and 1.10 km to be dredged in various shoals in Edappallikotta – Kollam stretch.

7.40 The progress of capital dredging and widening of narrow sections in NW-3 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 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.

7.41 The Irrigation Department of Govt. of Kerala was entrusted with reconstruction of new navigational lock at Thrikkunnappuzha (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. 33 crore to Govt. of Kerala. The physical progress of construction of lock-gate is 48% and same is in progress by Irrigation Department, Govt. of Kerala on deposit basis.



7.42 The Irrigation Department Government of Kerala was entrusted with the modernization work of 40 feet wide lock gate at Thannermukkom for the replacement of old Mild steel shutters to stainless steel shutters at a total cost of Rs.2.85 crore on deposit basis. As a result, the shutters are free from corrosion and the maintenance cost of the lock reduced to large extend. The project was completed and commissioned in January, 2020 after satisfactory trail run. Now the lock is facilitating movement of larger vessels towards upstream and downstream of West Coast Canal of NW.3.

7.43 Cargo terminals have been constructed at 9 places (viz. Kottappuram, Aluva, Maradu, Vaikkom, Thanneermukkom, Alappuzha, Thrikkunnappuzha, 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 KSWC (Kerala State Warehousing Corporation) 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.

7.44 Two Roll-on/Roll-off terminals within the Cochin Port Trust (CoPT) limit, one at Bolghatty and the other at Willington Island have been constructed by IWAI through Cochin Port Trust under a MoU to provide connectivity with ICTT, Vallarpadam. By utilizing this facility, trucks / trailers bound for Vallarpadam need not pass through the congested roads of Kochi city. These terminals were in operation from February 2011 to June 2017. Total 2.58 lakh TEU's have been transported between these terminals by a Ro-Ro vessel operated under a contract with a private operator, till the operation was terminated in June 2017 due to the dispute between Operator and CoPT.

7.45 Two Ro-Ro vessels viz., M.V. CV RAMAN and M.V. ADI SHANKARA having capacity of transporting 15 TEU's constructed through Cochin Shipyard Ltd (CSL) at a cost of Rs.24.57 crore, taken over on 28.09.2020 and deployed for Ro-Ro service with Container Trailers between Willington Island & Bolghatty Island on NW-3. The Operation & Maintenance under a MoU signed on 24.10.2020 with M/s Kerala Shipping & Inland Navigation Corporation Ltd. (A Govt. of Kerala Undertaking) entrusted for operation of 2 Ro-Ro vessels for a period of 15 years.

The Ro-Ro service commenced from February 2021 which will decrease the road congestion / container traffic from the city roads of Kochi and to reach the destination at ICTT, Vallarpadam Container Terminal through IWT mode.



7.46 IWAI owned Ro-Ro vessels (2 nos.) were dedicated to the Nation by the Hon'ble Prime Minister of India Shri Narendra Modi by a virtual flagging-off ceremony on 14.02.2021 at Kochi. The Ro-Ro operation with container trailers has commenced between Bolghaty & Willingdon Island and same is continued in NW-3, which reduces the road congestion of Kochi city.



7.47 Total cargo moved in NW.3 in an organized way by barges during the FY 2020-21 was 5.74 lakh tonnes, which mainly consists of Sulphur, Phosphoric Acid, Liquified Ammonia Gas, Rock Phosphate. Subsequent to the commencement of Ro-Ro services in NW-3, the cargo transportation during the FY 2021-22 (till November) increased to 10.81 lakh tonnes.

7.48 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

National Waterways (NW-4)

7.49 Development work has been initiated on NW-4 between Vijayawada and Muktyala stretch of Krishna River at a cost of Rs. 96 crore. Land acquisition for the construction of Ro-Ro terminals is in progress in consultation with the Government of Andhra Pradesh.

National Waterway (NW)-5 :

7.50 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 :	256 Km	
Total :	588 Km	

7.51 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.

7.52 Phase-I development covering 212 Km between Paradip / Dhamra and Pankapal taken up, such as (i) Thalweg survey & (ii) Studies on cross structures and construction of weirs / barrages / locks etc. Hydrographic survey of Phase-II covering 120 kms from Pankapal to Talcher completed in October, 2020.

7.53 Consultancy service for preparation of Detailed Project Report (DPR) followed by Front End Engineering Design (FEED) for construction of 4 Weirs / Barrages with 3 navigational locks, 2 Check Dams & 1 Rubber Dam with navigational locks etc. (Phase-I) is under finalization and vetting of design and drawings to be undertaken by Central Water Commission after entering an MoU. Consultancy service for Preparation of Detailed Engineering Report (DER) including Detailed Engineering Design & Drawing (DED & D) for the existing bridges which needs modification/re-construction (Phase-I) accepted by Competent Authority. Shifting / Relocation of HT / LT Power lines entrusted with Govt. of Odisha on deposit basis at a cost of Rs.43.98 crore is in progress and expected to be completed by March, 2022.

Development of Sonamura Terminal

7.54 As per decision in the 19th 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).

Transportation of transit cargo from Bhutan to Bangladesh

7.55 Transit transportation of Bhutanese bulk cargo (Stone aggregates) to Bangladesh via NW-2 and IBP routes commenced on 11th July 2019. The IWAI vessel MV 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 of Bhutan cargo to Bangladesh via IBP route took place during FY2021 (4369 MT). The route has the potential to become a popular mode of choice for trade between Bhutan & Bangladesh.



Hon'ble Minister of State (Independent Charge) for Shipping, Shri Mansukh Mandaviya digitally flagged off first movement of Bhutanese Goods from Dhubri destined to Bangladesh

National Inland Navigation Institute (NINI) at Patna

7.57 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 2020-21 were as below:

- (i) The following training activities were carried out:
- Induction Training GP Rating Course (33rd Batch)
 - The GP Rating (Inland Vessel) trainees were imparted practical training on board training ship T.S. Survekshak and CSD Buxar
 - A course was conducted successfully for Bihar Government personnel for Refresher Training of Master Trainer for "Safe Swim" Programme.
 - Course was conducted successfully for Induction training for newly recruited floating staff of IWAI.

- (ii) Preparatory Course for Inland Vessel Certificate of Competency.

- Conducted the following Preparatory Courses for Inland Vessel Examinations:
- Serang
- Master Class II
- Master Class I
- Second Class Engine Driver
- First Class Engine Driver

International Cooperation

Bangladesh

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

7.58 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 potential cargo for movement is fertilizers, cement, food grains, agricultural products, containerized cargo etc. The export cargo from India to Bangladesh is mainly fly-ash which is to the tune of 30 lakhs MT per annum. Around 638 inland vessels (including 600 Bangladeshi flag vessels) completed approximately 4000 loaded voyages annually on IBP routes.

7.59 For making the Protocol more effective, many landmark decisions were taken at the Secretary Shipping Level Talks held in October, 2018 in New Delhi and in December, 2019 in Dhaka. Some of the decisions taken during these talks included extension of protocol routes, inclusion of new routes, and declaration of new Ports of Call to facilitate trade between the two countries. These decisions are given effect with the signing of 2nd addendum under PIWT & T on 20th May, 2020 at Dhaka, Bangladesh.

7.60 To further strengthen the cooperation between Bangladesh, Secretary Shipping Level Talks (SSLT) were also



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

held in October, 2021 at New Delhi. Many agenda were discussed during the Talks inter alia including proposal for Drop-in-Centre for recreation and first aid medical facilities for crew of Bangladeshi inland vessels, extension of PIWT&T route up to Varanasi and inclusion of Chandpur-Chittagong stretch in PIWT&T.

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

7.61 India and Bangladesh have signed an MoU for development of fairway from Sirajganj to Daikhowa (175km) and Ashuganj to Zakiganj (295km) on Indo-Bangladesh Protocol route for dredging and to develop and maintain fairway of 2.5 m depth and 30 m 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 crore, out of which Rs. 244 crore is to be borne by India.

Myanmar

7.62 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 is piloted and funded by the MEA which has appointed IWAI as their Project Development Consultant (PDC) for Port & 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. Under Phase II Wreck removal from Sittwe Port Basin area, appointment of O&M agency and DPR preparation for the construction of Container handling facility at Sittwe/Paletwa are to be completed.

CHAPTER – 8

TRANSPORT RESEARCH & DEVELOPMENT WING



Hon'ble Minister Shri Sarbananda Sonowal attended the launch of the 5 vessels done by women officials of Cochin Shipyard Limited (CSL).

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 collection, compilation and publication of transport data pertaining to ports, shipping and inland waterways, it also scrutinizes and validates data received from various primary/secondary sources for consistency and comparability. TRW is 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 and State Governments etc.

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

- a) Basic port Statistics of India – 2019-20
- b) Half-Yearly update on Indian Port Sector for period ending 30th September, 2020 and 31st March, 2021
- c) Indian Shipping Statistics 2020
- d) Statistics of India's Ship-building & Ship-repairing Industry 2019-20

e) Statistics of Inland Water Transport 2019-20

8.4 The publications are on the website of Ministry: www.shipmin.gov.in under the head, "Transport Research Wing". The work relating to the preparation of publications "Basic Port Statistics- 2020-21", "Half-Yearly update on Indian Port Sector for period ending 30th September, 2021", "Indian Shipping Statistics 2021", "Statistics of Inland Water Transport 2020-21" and "Statistics of India's Ship-building & Ship-repairing Industry 2020-21" is under progress.

8.5 Apart from publication and dissemination of data, 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 projects under Ministry costing Rs. 150 crore and above and updates on OCMS (Online Computerized Monitoring System) of Ministry of Statistics & Programme Implementation. 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 of port development and renders technical advice on matters relating to the development of Major Port Projects, Andaman & Lakshadweep Harbour Works (ALHW) and the Dredging Corporation of India Limited, etc. This Wing also renders technical advice to other Ministries in the case of Fishing Harbour and also Maritime State Governments as and when requested regarding Minor Ports. This Wing also renders advice in 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 crafts.

8.7 The Development Wing is associated with processing the technical and administration matters related to the International Navigation Association – Permanent International Association for Navigational Congress, (INA-PIANC) wherein Government of India is a member country. The Development Wing is associated for implementation of their "National oil spill Disaster contingency plans" at the major ports for which Indian Coast Guard is the nodal agency. This Wing also coordinates the Research Committee Works related to Port Sector of the Ministry.

CHAPTER – 9

INTERNATIONAL COOPERATION



MOU signing between MoPSW and Ministry of culture to develop National Maritime Heritage Complex in presence of the then Hon'ble Minister of State(IC)

COOPERATION WITH MULTILATERAL ORGANIZATIONS

9.1 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 Hqs., London. Also, the Unveiling of the bust of Mahatma Gandhi was held on 8th December, 2021 during IMO Election 2022-2023.

9.2 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.

- 9.3 Currently, there are two IMO Conventions namely, (a) International Convention on Civil Liability for Bunker Oil Pollution Damage 2001; and (b) International Convention for the Control and management of Ships' Ballast Water and Sediments, 2004 which are under consideration in the Ministry for India to sign an instrument of accession.
- 9.4 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.
- 9.5 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 give boost to the Domestic ship recycling industry in India which is one of the world's five major ship recycling countries.

- 9.6 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.
- 9.7 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.

MARITIME TRANSPORT COOPERATION INSTRUMENTS/ARRANGEMENTS:

A. Bilateral cooperation arrangements on shipping

- 9.8 India has entered into cooperation instruments/arrangements 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	Federal Republic of Germany
Cyprus	The Netherlands	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		

B. Mutual and Unilateral Agreements on recognition of certificates of seafarers.

9.9 India has signed agreements for Mutual Recognition of Certificates of Competence (CoC) of Seafarers with Sweden, Malaysia, UAE and Republic of Korea. India's CoC is unilaterally recognized by the following 33 countries:-

1. Saint Vincent / the Grenadines	18. Luxemburg
2. Dominica	19. Cyprus
3. Hellenic Republic	20. Malta
4. Georgia	21. Norway
5. Vanuatu	22. France
6. Thailand	23. Denmark
7. Liberia	24. Ire Land
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	

Joint Meetings held during the year 2021

- 2nd meeting of the Joint Commission between India and Russia was held on 14.02.2021.
- Virtual meeting on Memorandum of Understanding on recognition of Certificate of Competency under STCW Convention between India and Philippines (MARINA) was held on 30.03.2021.
- 4th meeting of the Joint Task Force on Blue Economy between India and Norway was held on 09.06.2021.
- 10th meeting of the Joint Committee between India and Iran was held on 12.07.2021.
- 9th Session of the Joint Commission for Economic Cooperation between India and Cyprus was held on 21.10.2021.
- India – Japan 2nd meeting on Logistic was held via video-conferencing on 17 March, 2021.
- India-UK 14th JWG meeting to counter terrorism (Maritime Security) was held virtually on 21-22 January, 2021.
- The meeting of Hon'ble Minister of P,S&W with Russia's Deputy Minister of Industry and Trade was held on 6th December, 2021 to discuss shipbuilding and Ship design.
- 2nd Trilateral Joint working Group (JWG) Meeting between India, Iran and Uzbekistan to discuss joint use of Chabahar Port was held on 14 December, 2021 through video conference.

CHAPTER – 10

ADMINISTRATION AND FINANCE



Maritime India Summit held on 2nd to 4th March, 2021.

Administration

10.1 Administration Wing of the Ministry 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) 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 In the Ministry, 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



Celebration of Swachhta Pakhwada

English were conducted during Communal Harmony Week / Vigilance Awareness Week. The Participants are 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. This Ministry has also migrated to e-file system w.e.f. 1st 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

- 10.7 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, 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 (Main Sectt.), we have appointed/designated 23 CPIOs and 15 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.

- c) 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.
- d) Copies of the RTI Act and circulars received from DOPT on RTI are circulated promptly to all the organizations for compliance.
- e) Useful guidance material/instructions are also circulated to all CPIOs/ Appellate Authorities.
- f) 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.
- g) All the useful records are duly maintained.
- h) The Quarterly details of RTI Applications and RTI Appeals received and disposed of by this Ministry during the period from 01.01.2021 to 31.12.2021 are as under:-

Accounts and Budget

10.8 Ministry of Ports, Shipping & Highways is headed by Secretary to the Government of India and he is the Chief Accounting Authority for the Ministry. He discharges his responsibilities through the Financial Advisor (FA) and the Pr. Chief Controller of Accounts. The Accounts and Budget Wings of the Ministry are functioning under the Pr. Chief Controller of Accounts. 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 etc. Pr. CCA office has the responsibility of preparation of Receipt Budget, Statement of Central Transactions, Finance Accounts and Appropriation Accounts, making payments of bills, expenditure monitoring 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.

Sl. No.	Period	RTI Applications received and disposed of	RTI Appeals received and disposed of
1	January – March	122	3
2	April – June	122	0
3	July – September	96	4
4	October – December	92	2
	Total	432	9

10.9 The Pr. Chief Controller of Accounts organization comprises 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 Under Secretary (Budget), who report directly to Pr. CCA. 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 throughout the country are as under:-

Payments

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

Receipts

- a) Accepting, budgeting and accounting the receipts of the Ministry.
- b) Monitoring the repayment of loans and interest thereon received from State Governments and Public Sector Undertakings.
- c) Receipt & Payment under New Pension Scheme.
- d) Submission of Accounts & Statements
- e) 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.

- f) Preparation of Annual Budget including the Outcome Budget and coordination with the Ministry of Finance in the Budget process during the financial year.
- g) Monitoring of Internal Extra Budgetary Resources (IEBR) and its submission to the office of the CGA.
- h) Monitoring and submission of mandatory information as per Fiscal Responsibility and Budget Management (FRBM) Act and Rules.
- i) Preparation of Management Information Reports based on accounting, budget & audit data for submission to various authorities.
- j) Preparation of financial statistics on monthly basis regarding receipts and expenditure for uploading on Ministry's website.
- k) Preparation of Monthly expenditure/ Weekly expenditure based on BE/RE and submission to various authorities viz. AS & FA, Secretary etc. for monitoring the expenditure.
- l) 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.
- m) Preparation of State wise monthly expenditure in respect of All RPAOs/PAOs for further submission to Ministry.

Budget

- a) 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.
- b) Vetting of Demands for Grants yearly after incorporating actual expenditure preparing and printing of Detailed Demands for Grants of the Ministry,
- c) Preparation of Annual Estimates of Revenue Receipts, Interest Receipt & Public Accounts for submission to Ministry of Finance.

Audit Wing as well as officers posted in other section have been imparted various trainings related to Internal Audit in the past. Consequent upon the effective utilization of Internal Audit mechanism during the past few years by the Pr. CCA's organization, there has been a significant improvement in maintenance of Accounts in all offices of the Ministry. Internal Audit paras and CGA's Audit Paras which involve major irregularities/deficiencies are brought to the notice of Head of Departments and matter perused for settlement on paras and review meeting are also arranged by Pr.CCA office to settle the outstanding paras. 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	528	43	53	538
CGA's Audit paras (Pr.AO/PAO)	16	10	0	06

Internal Audit

10.10 The Internal Audit Wing in the Pr.CCA organization of 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 as immense management tool to bring about objectivity and financial property in day to day functioning and by bringing greater sensitivity for financial prudence. The officers of the Internal

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

Computerization of Accounts

E-Lekha

10.12 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 based accounting portal E-Lekha. They are required to upload their daily transactions in this portal so that the date 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 PFMS was initially started 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 for online processing of sanctions, bills and payments of all types of expenditure. All the Modules of PFMS have been successfully implemented in all PAOs and DDOs of the Ministry.

Grant No. 77 – Ministry of Ports, Shipping and Waterways

10.14 The position of savings/excess in respect of above mentioned Grant No. 77 for the year 2021-22 and actual expenditure for the year 2021-22 (upto 31st December, 2021) 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 2019-20 to 2021-22 (upto 31st December, 2021) are given in **ANNEXURE-VII**. Profile of actual Expenditure in 2021-22 (upto 31st December, 2021) 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

10.14 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.

10.15 There are 30 attached/subordinate/PSE/autonomous bodies under the Ministry and each organization 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.

10.16 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.

10.17 During the Vigilance Awareness Week, a pledge was administered to the staff and officers of the Ministry. The banners, posters were displayed at the prime locations of the building and Notice Board of the Ministry. Vigilance Awareness Week was also observed in the attached/subordinate/PSE/autonomous bodies under the Ministry.

10.18 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.

CHAPTER – 11

USE OF OFFICIAL LANGUAGE

11.1 Hindi Section has been established in the Ministry of Ports, Shipping and Waterways for implementation of the Official Language Policy of the Union Government. Presently it is under the administrative control of Economic Advisor. The Hindi section consists of one Joint Director (OL)-(Currently vacant), one Assistant Director (OL) (Currently vacant), three Senior Translation Officers and one Stenographer. Hindi section monitors the implementation of Official Language (Hindi) Policy in the Ministry as well as in all the offices under its administrative control.

11.2 Keeping in view the Annual Programme issued by the Department of Official Language, Ministry of Home Affairs, each year, Ministry of Ports, Shipping and Waterways continued its efforts to do maximum 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 of the Ministry of Ports, Shipping and Waterways

11.4 The Resolution regarding the constitution of the Hindi Advisory

Committee of this ministry has been published in the Gazette of Govt. of India on 01.01.2022 with the approval of Honorable Cabinet Minister of Ports, Shipping and waterways. The tenure of this committee is three years from the date of the Resolution. Honorable Cabinet Minister of Ports, Shipping and Waterways is the Chairman of this committee and the 02 Sate Ministers are Vice Chairman. 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 of Ports, Shipping and Waterways in accordance with the policies laid down and the guidelines issued by the Kendriya Hindi Samiti and Department of Official Language in this regard from time to time. A proposal for the first meeting of this committee will soon be submitted before the Honorable Cabinet Minister of Ports, Shipping and Waterways.

Official Language Implementation Committee (OLIC)

11.5 There is an Official Language Implementation Committee (OLIC) constituted in the Ministry under the Chairmanship of Economic Advisor. The Committee reviews the progress made in the use of Hindi in the Ministry on quarterly basis. It gives appropriate suggestions and recommends measures to be taken for the effective implementation of the Official Language

Policy. Three meetings of the Committee were held during the year 2021-22 (upto 31-12-2021).

Inspections to assess the progressive use of Hindi

11.6 Due to outbreak of Covid-19 pandemic only one (01) office could be inspected during 2021-22 (upto 31-12-2021). The details of the inspections carried out by First Sub Committee of Parliament on Official Language and 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 section reviews the questionnaire 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 Office of Jawaharlal Nehru Port Trust, Mumbai on 16 July, 2021 and Paradip Port Trust, Paradip on 28 December, 2021 during the year 2021-22 (as on 31-12-2021).

Hindi Pakhwada (fortnight)

11.8 In order to encourage the use of Hindi in official work and to propagate Hindi, 'Hindi Pakhwada' was organized in the Ministry from 01-09-2021 to 14-09-2021. During Hindi Pakhwada, various competitions were held. Prizes were distributed to the winners of the competitions held during Hindi Pakhwada. This year total 42 Officers and Staff participated in 05 competitions and this participants won total 35 Prizes. Out of these, 13 participants, who could

not win any prize, were awarded with participation prize separately.

Hindi workshop

11.9 Two Hindi workshops (on 10.09.2021 & 23.12.2021) were organized during the reporting period. Total 16 participants were trained on 'Use of Hindi in official work' in Hindi Workshop organized on 10.09.2021 conducted by Sh. Prashant Kumar, Assistant Director (Official Language), Election Commission and 13 participants were trained on 'Use of Hindi E-tools in official work' in Hindi Workshop organized on 23.12.2021 conducted by Shri Deepak Kumar, Inspector (Technical), Department of Official language.

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

11.10 Ministry of Ports, Shipping and Waterways is running an Award Scheme on annual basis with an objective to promote book writing originally in Hindi and 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. Entries were invited under the scheme for year 2019-20 till 15.09.2021. Only one entry was received. The scheme will be implemented for the year 2020-21 also.

Rajbhasha Shield Scheme:-

11.11 To promote use of Hindi in the headquarters of offices under the control of Ministry of Ports, Shipping and Waterways, a Rajbhasha Shield scheme

is being run 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 Ministry of Ports, Shipping and Waterways is implementing the cash incentive scheme of Official Language Department in order to encourage officials for doing their official work in Hindi on yearly basis. Under this scheme, total ten prizes (cash awards) are to be given namely, Two First prizes of Rs.5000/- each, Three Second Prizes of Rs.3000/- each and Five Third Prizes of Rs.2000/- each. Any officer/employee who writes minimum 20,000 or more Hindi words in a financial year in his official work, is eligible to participate in this scheme. The word limit for non-Hindi speaking officials is minimum 10,000 words per year and they are given 20% weightage in the number of words. For the year 2020-21, total 03

officials of this ministry have participated under this scheme.

Quarterly Reward Scheme to encourage Sections/Divisions to do more and more of their official work in Hindi

11.13 A new incentive scheme has been started in compliance with the decision taken in the meeting of the Official Language Implementation Committee held on 20th July, 2021 in the Ministry. Under this, in order to encourage the Sections/Divisions of the Ministry to do more of their official work in Hindi, in each quarter depending on the volume of their Hindi work, the Sections and Divisions coming First, Second and Third position will be awarded with Rs.5,000/- , Rs.3,000/- and Rs.2,000/- respectively. TRW Division of this Ministry was awarded with Rs.5,000/- in cash as First prize for the quarter ending on 30.09.2021 by the Economic Advisor.

Annexure-I (para 1.5 refer)

MINISTRY OF PORTS, SHIPPING & WATERWAYS

I. The following subjects which fall within List 1 of the Seventh Schedule to the Constitution of India:

1. Maritime shipping and navigation; provision of education and training for the mercantile marine
2. Lighthouses and lightships
3. Administration of the Indian Ports Act, 1908 and the Major Port Authorities Act, 2021 (This replaces the erstwhile Major Port Trusts Act, 1963 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. Ship-building and ship-repair industry
6. Ship breaking
7. Fishing vessels industry
8. Floating craft industry

II. In respect of the Union Territories:

9. Inland waterways and traffic thereon

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

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

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

11. Legislation relating to shipping and navigation on inland waterways as regards mechanically propelled vessels and the carriage of passengers and goods on inland waterways.
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 Free on Board/Free along Site and export on Cost and Freight/Cost Insurance and Freight basis.
15. Planning of Inland Water Transport.
16. Formulation of the privatization policy in the infrastructure areas of ports, shipping and inland waterways.
17. Prevention and control of pollution:
 - (a) Prevention and control of pollution arising from ships, shipwrecks and abandoned ships in the sea, including the port areas;
 - (b) Enactment and administration of legislation related to prevention, control

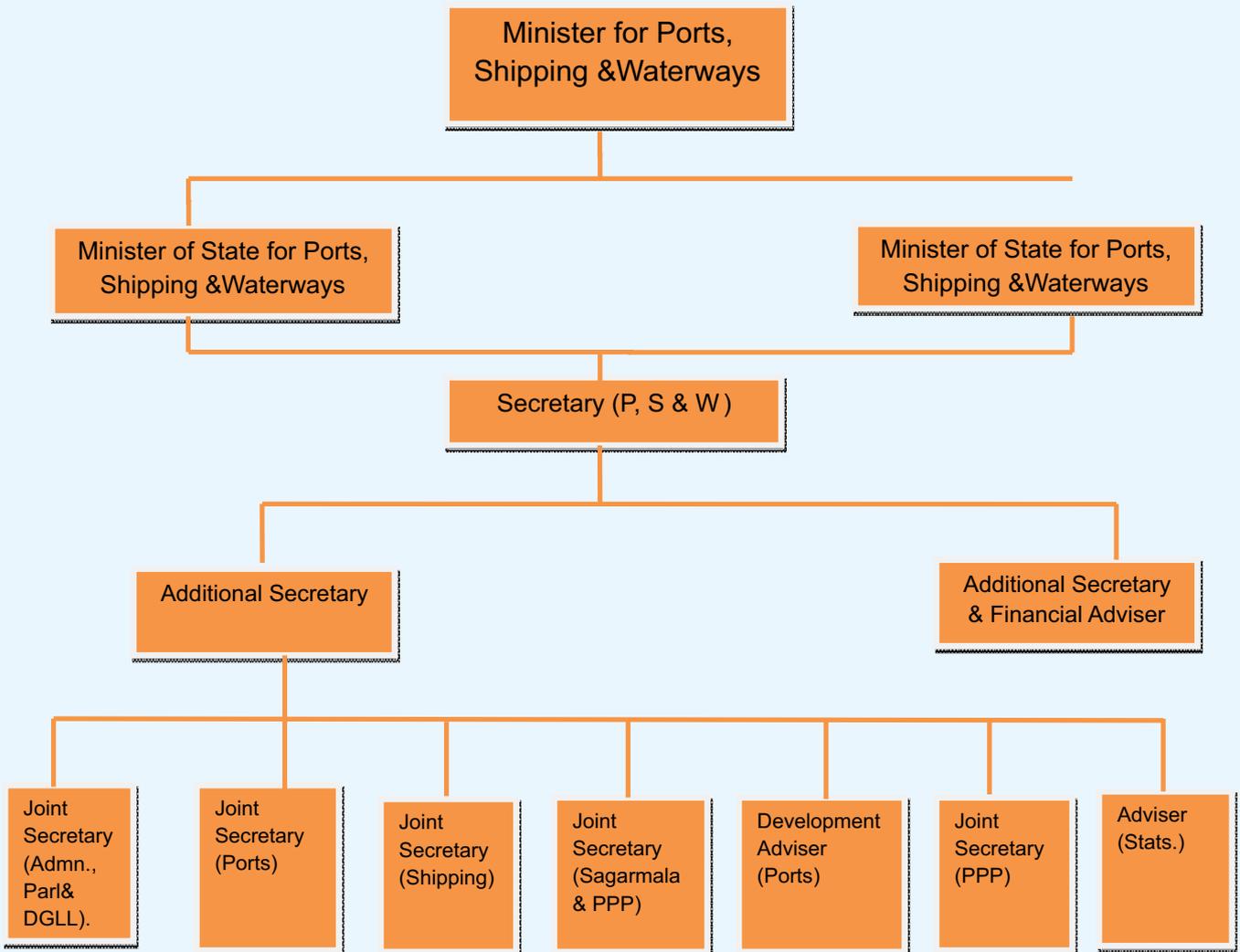
and combating of pollution arising from ships; and

(C) Monitoring and combating of oil pollution in the port areas. The Development of township of Gandhidham

V Acts and Rules

- The Indian Ports Act, 1908
- The Inland Vessels Act, 1917
- The Dock Workers (Regulation of Employment) Act, 1948
- The Merchant Shipping Act, 1958
- The Major Port Authorities Act, 2021 (This replaces the erstwhile Major Port Trusts Act, 1963
- The Seamen's Provident Fund Act, 1966
- The Inland Waterways Authority of India Act, 1985
- The Multimodal Transportation of Goods Act, 1993
- The Lighthouse Act, 1927

Annexure-II (para 1.12 refer)



Annexure-III (para 10.2 refer)

Annual Statement Showing the Representation of SCs, STs and OBCs as on 1st January, 2022 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 01.01.2021)**

Group	Total Employee	SCs	STs	OBCs	EWS	Total
A	45	10	02	06	-	18
B	107	19	05	32	-	56
C (Excluding SafaiKaramchari)	23	07	02	03	-	12
C (SafaiKaramchari)	-	-	-	-	-	-
Total	175	36	09	41	-	86

Number of Appointments made during the Calendar Year 2021

BY DIRECT RECRUITMENT					
Group	SCs	STs	OBCs	EWS	Total
A	-	-	-	-	-
B	-	-	-	-	-
C (Excluding SafaiKaramchari)	-	-	-	-	-
C (SafaiKaramchari)	-	-	-	-	-
Total	-	-	-	-	-

By Promotion				
Group	SCs	STs	OBCs	Total
A	-	-	-	-
B	-	-	-	-
C (Excluding SafaiKaramchari)	-	-	-	-
C (SafaiKaramchari)	-	-	-	-
Total	-	-	-	-

By Deputation				
Group	VH	HH	OH	Total
A	-	-	-	-
B	-	-	-	-
C (Excluding SafaiKaramchari)	-	-	-	-
C (SafaiKaramchari)	-	-	-	-
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	-	-
2.	Over payments	1	9.41
3.	Non-adjustment of advances- Contingency Advance- T. A. Advance LTC Advance Long Term Advances	1	0.13
4.	Blocking of Govt. money	-	-
5.	Non accounted of costly stores/ Govt. money	-	-
6.	Items of special nature	2	1939.96
	Total	4	1949.50

Annexure-V

(para 10.14 refer)

GRANT FOR THE FINANCIAL YEAR 2021-2022 (upto 31/12/2021)

Grant No. & Name	Original	Supplemen- tary	Total Budget	Actual Expenditure	Saving
Grant No.77 Revenue Account	1519.35	0.00	1519.35	967.85	No
Capital Account	183.00	0.00	183.00	127.32	
Total	1702.35	0.00	1702.35	1095.17	

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**

REVENUE RECEIPTS (Rs. in crore)

S. No.	MAJOR HEAD	2019-20	2020-21	2021-22 up to (31-12-2021)
1.	0021-Taxes on Income other than Corporation Tax	21.34	19.00	14.36
2.	0045-Other Taxes & Duties on Commodities & Services	-0.27	0.00	0.00
3.	0049- Interest Receipts	64.70	144.98	8.64
4.	0050-Dividends & Profits	194.77	290.63	88.89
5.	0070-Other Administrative Services	0.00	0.00	0.00
6.	0071-Contribution & Recoveries towards Pension & Other Retirements Benefits	9.36	10.03	12.96
7.	0075-Miscellaneous General Services	0.00	0.00	0.00
8.	0210-Medical & Public Health	0.41	0.39	0.33
9.	0216-Housing	0.53	0.47	0.44
10.	1051-Ports and Light Houses	330.37	384.07	274.96
11.	1052-Shipping	86.36	112.39	27.93
12.	1054-Roads and Bridges	--	0.00	0.00
13.	1056-Inland Water Transport	0.00	29.96	0.00
14.	1475 - Other General Economic Services	0.00	0.00	0.00
A	REVENUE RECEIPTS *	707.57	991.92	428.51

CAPITAL RECEIPTS

S. No.	MAJOR HEAD	2019-20	2020-21	2021-22 up to (31-12-2021)
1.	4000- Miscellaneous Capital Receipts	0.00	0.00	0.00
2.	6858- Loans for Engineering Indst.	60.74	0.00	0.00
3.	7051- Loans for Port & Light Houses	63.85	190.31	7.84
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	0.37	0.26	0.16
	CAPITAL RECEIPTS **	124.96	190.57	8.00

Annexure-VII
(para 10.14 refer)

**HEADWISE DETAILS OF EXPENDITURE FOR THE LAST
THREE YEARS i.e. FROM 2019-20 TO 2021-22 (upto 31/12/2021)**

REVENUE RECEIPTS

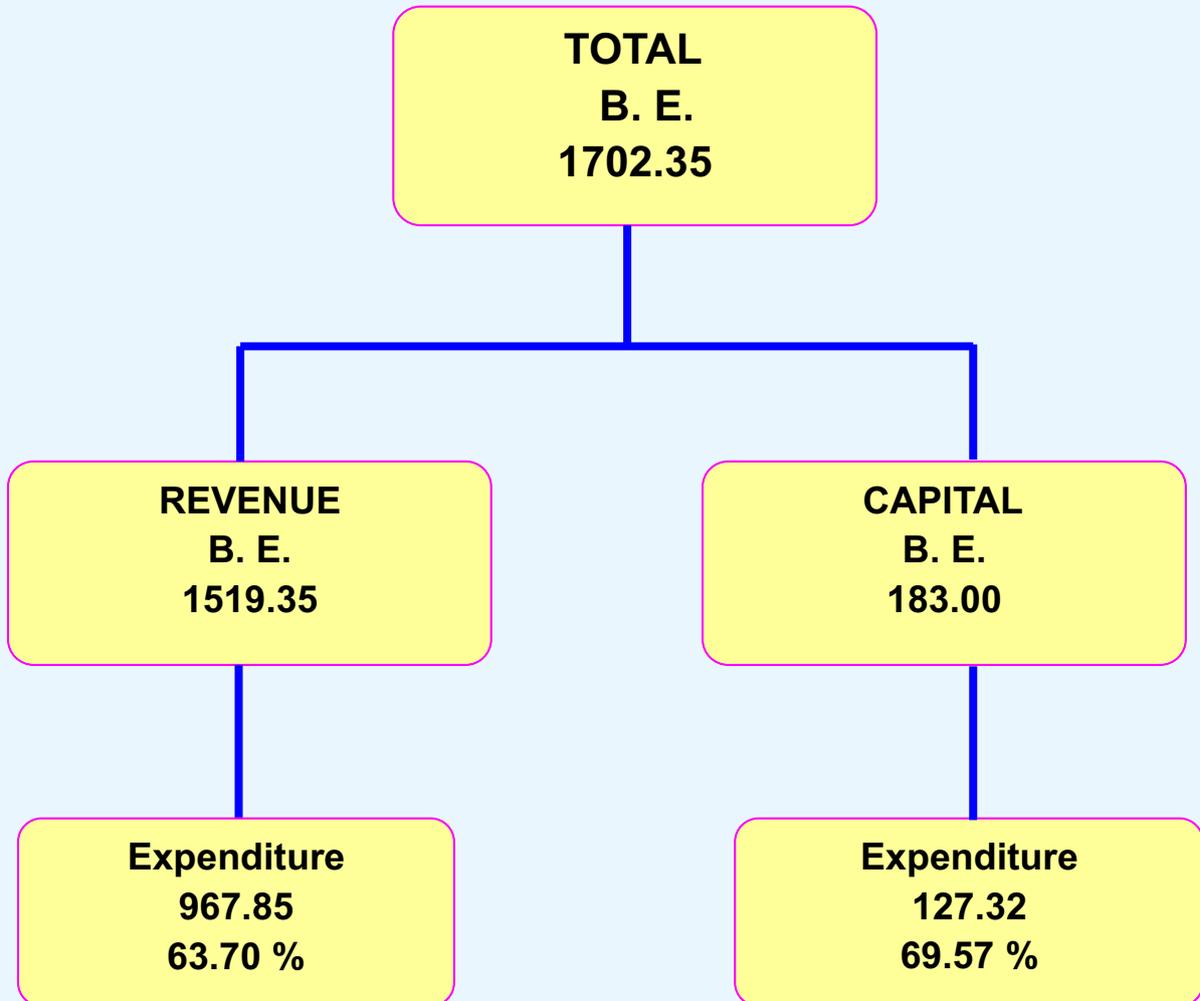
(Rs. in crore)

PARTICULARS	2019-20	2020-21	2021-22 (up to December 2021)
2049-Interest Payment	11.62	11.84	0.25
2071-Pension Payment	39.07	38.32	25.65
2235-Social, Security & Welfare	0.08	0.04	0.07
2801- Power		0.07	0.00
2852-Industries	231.28	151.48	71.80
3051-Ports&Lighthouses (Gr.No.77)	697.59	700.36	630.81
3051-Port and Lighthouses Andaman & Nicobar administration	10.51	4.15	10.33
Lakshadweep	2.94	3.65	1.39
3052-Shipping	89.82	116.36	63.86
3056-Inland Water Transport	506.37	531.12	382.07
3451-Economic Services	53.45	52.45	33.88
3475- Other General Economic Services	0.13		0.00
3601-Grant-in-aid to State Government	48.61	35.31	25.45
3605- Technical & Economical Co-operation with other Countries	0.00	0.00	100
TOTAL (Revenue Exp.)	1692.68	1650.62	1338.88
4405-Capital outlay on fisheries	6.11	4.94	1.32
4406-Capital outlay on forestry & wildlife	0.00	0.00	0.00
4801-Capital outlay on Power Proj	1.40		0.00
5051- Capital outlay on Ports & Lighthouses (Gr.No. 77)	241.61	159.99	145.10
5051- Capital outlay on Ports & Lighthouses Andaman & Nicobar administration	15.56	7.91	
5052-Capital outlay on Shipping Andaman & Nicobar administration	3.50	1.69	0.37
Lakshadweep		0.15	
5052-Capital outlay on Shipping (Gr.No.77)	16.17	6.25	2.66
5053-Capital Outlay on Civil Aviation	0.00	0.00	
5054 – Capital Outlay on Roads and Bridges	26.89	39.29	

PARTICULARS	2019-20	2020-21	2021-22 (up to December 2021)
5075-Other Transport Services	0.00		
5452-Capital outlay on tourism Andaman & Nicobar administration	1.37	1.42	
6858-Loans for Engineering Industries	0.00	0.00	
7051-Loans for Ports & Light Houses	0.00	0.00	
7610-Loans to Govt. servants	0.17	0.15	0.28
TOTAL (Capital Exp.)	312.78	221.79	149.73
Grand Total (Rev.+Cap.)	2005.46	1872.41	1488.61

Annexure-VIII
(para 10.14 refer)

PROFILE OF ACTUAL EXPENDITURE (NET) IN 2021-22
(upto 31/12/2021)



Source:- Consolidated
Classified Abstract

B.E. – Budget Estimate

Annexure-IX

(para 10.14 refer)

MINISTRY OF PORTS, SHIPPING & WATERWAYS

(₹ Rs. in crores)

DEPRECIATION RESERVE FUND (8115)	
Opening Balance as on 01.04.2021	258.90
Receipt during Apr-December -2021	27.00
Payment during Apr-December- 2021	0.00
Closing Balance as on 31.12.2021	285.90
GENERAL RESERVE FUND (8121)	
Opening Balance as on 01.04.2021	902.29
Receipt during Apr-December- 2021	86.84
Payment during Apr-December- 2021	0.00
Closing Balance as on 31.12.2021	989.13

Source: Classified Consolidated abstract Account



एक कदम स्वच्छता की ओर



सत्यमेव जयते

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पत्तन, पोत परिवहन और
जलमार्ग मंत्रालय
नई दिल्ली
WWW.SHIPMIN.GOV.IN