



**GOVERNMENT OF INDIA
MINISTRY OF SHIPPING
NEW DELHI**



**ANNUAL REPORT
2019-20**

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CONTENTS

CHAPTER	SUBJECT	PAGE NO.
I	INTRODUCTION	3-4
II	YEAR AT A GLANCE	5-16
III	SAGARMALA	17-22
IV	PORTS	23-38
V	SHIPPING	39-50
VI	FUNCTIONING OF ORGANIZATIONS	51-76
VII	INLAND WATER TRANSPORT	77-94
VIII	TRANSPORT RESEARCH & DEVELOPMENT WING	95-96
IX	INTERNATIONAL COOPERATION	97-99
X	ADMINISTRATION AND FINANCE	100-105
XI	USE OF OFFICIAL LANGUAGE	106-108
XII	LIST OF ANNEXURE	109-118

CHAPTER – I

INTRODUCTION



Shri Mansukh Mandaviya, Hon'ble Minister of State (IC) for Shipping interacting with Officers and Staff of Ministry of Shipping on 19.08.2019

- 1.1 Ministry of Shipping was formed in 2009 by bifurcating the erstwhile Ministry of Shipping, Road Transport and Highways into two independent Ministries.
- 1.2 Maritime Transport is a critical infrastructure for the economic development of a country. It influences the pace, structure and pattern of development. The Ministry of Shipping 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



MINISTRY OF SHIPPING

active involvement of the private sector in infrastructure services in recent times. To encourage private sector participation, Ministry of Shipping has laid down comprehensive policy guidelines for private sector participation in the Major ports.

Functions

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

Organizational set-up

1.6 Shri Mansukh Mandaviya is Minister of State (Independent Charge) for Shipping.

1.7 Secretary (Shipping) is assisted by Additional Secretary, Sr. Economic Adviser, Joint Secretary (Shipping), Joint Secretary (Ports), Joint Secretary (Sagarmala), Joint Secretary (DGLL, Admn. & PG), Joint Secretary (PPP), Adviser (Statistics), Development Adviser (Ports), officers at the level of Directors, Deputy Secretaries, Under Secretaries and other Secretariat/Technical Officers.

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

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

1.10 Adviser (Transport Research) 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 undertaking are functioning under the administrative control of the Ministry of Shipping:

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 Trusts at Mumbai, 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 ENTERPRISES

1. Shipping Corporation of India
2. Cochin Shipyard Limited

OTHER CORPORATIONS

1. Dredging Corporation of India
2. Ennore Port 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

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

CHAPTER – II

YEAR AT A GLANCE



17th Maritime State Development Council meeting chaired by Shri Mansukh Mandaviya, Hon'ble Minister of State (IC) for Shipping on 15.10.2019 at India International Centre, New Delhi

BACKGROUND

2.1 The Maritime Sector in India comprises of Ports, Shipping, Shipbuilding and Ship repair and Inland Water Transport Systems. India has 12 Major ports and about 200 non major ports. 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 2018-2019

2.3 The Budget Estimate of Gross Budgetary Support (GBS) for FY 2019-2020 was Rs.1902.56 crore for the Ministry. However,



MINISTRY OF SHIPPING

at the stage of Revised Estimate (RE), this has been reduced to Rs. 1523.40 crore. Against the RE allocation of Rs. 1523.40 crore, actual expenditure as on 31.12.2019

was Rs.1115.37 crore. Summary of GBS and Internal & Extra Budgetary Resources (IEBR) outlay for 2019-2020 are given below:

(Rs. in Crore)

Sector	2019-20 (BE)		2019-20(RE)		Actual Exp. (2019-20)*	
	GBS	IEBR	GBS	IEBR	GBS	IEBR
Ports & Light houses	869.85	4847.79	638.53	3099.19	480.89	1270.11
Shipping	115.00	730.00	104.31	830.00	69.56	394.20
IWAI	757.00	0.00	542.91	0.00	427.61	0.00
Others	160.71	0.00	237.65	0.00	137.31	0.00
Total	1902.56	5577.79	1523.40	3929.19	1115.37	1664.31

*upto 31st December, 2019

OUTLAY FOR 2020-2021

2.4 The GBS and IEBR outlay details for 2020-2021 are given below:-

Sector	2020-2021 (BE)		TOTAL
	GBS	IEBR	
Ports & Light-houses	601.10	2979.83	3580.93
Shipping	144.70	735.00	879.70
IWAI	678.30	0.00	678.30
Others	375.90	0.00	375.90
Total	1800.00	3714.83	5514.83

2.5 Out of the total GBS of Rs. 1800 crore, Rs. 50 crore have been earmarked for the North Eastern Region during 2020-2021.

PORT SECTOR

Private-sector Participation

2.6 By Financial Year 2018-19, 34 PPP projects with an investment of Rs. 22,377 crore involving capacity addition of 300 MTPA are under operation. Another, 13 PPP projects with an investment of Rs. 7,173 crore involving capacity addition of 140 MTPA are under implementation. Further, there are 20 captive projects with an investment of Rs. 5,234 crore involving capacity addition of 142.45 MTPA under operation and 7 captive projects with an investment of Rs. 6,823 crore involving capacity addition of 55 MTPA are under implementation.

2.7 During Financial Year 2017-18, PPP projects handled 353.49 MT cargo i.e. 52.03% of total cargo handled in Major Ports. During Financial Year 2018-19, 377.27 MT cargo was handled by PPP projects which is 53.96% of total cargo handled at Major Ports. In addition, 12 projects with an investment of Rs. 6,000 crore are also identified which have a potential to be operated on Public Private partnership (PPP) Mode.

Cargo Traffic at Indian Ports

2.8 During 2018-19, major and non-major ports in India handled a total cargo throughput of around 1282 MT. The traffic grew by 6.13% over the corresponding period of previous year. The 12 Major Ports handled traffic of 524.03 MT during April – December 2019, representing an increase of about 0.98% over

the corresponding period of previous year. Of the 12 Major Ports, cargo handled during April – December 2019 at 7 ports showed positive growth. Amongst these 7 major ports, growth in throughput at Deendayal Port was the highest at 8.83% followed by Visakhapatnam (8.64%), Cochin (7.36%), V O Chidambaranar (4.63%), Paradip (3.97%),

Kolkata (incl. Haldia) (2.10%) and Mumbai (1.71%).

Commodity-wise Cargo Traffic at Major Ports

2.9 During 2019-20 upto December 2019, 12 Major Ports handled 524.03 MT of traffic as against 518.94 MT over the corresponding period of previous year. The composition of the cargo is given below: (In Million Tonnes)

Year	POL	Iron Ore	F&RM	Coal	Container (In Million TEUs)	Other Cargo	Total
2005-06	142.09	79.17	12.19	58.76	61.98 (4.61)	69.38	423.57
2006-07	154.34	80.58	14.13	59.98	73.44 (5.54)	81.31	463.78
2007-08	168.75	91.80	16.63	64.93	92.27 (6.71)	84.94	519.31
2008-09	176.14	94.04	18.23	70.40	93.14 (6.59)	78.59	530.53
2009-10	175.09	100.33	17.72	71.71	101.24 (6.90)	95.00	561.09
2010-11	179.17	87.06	19.99	72.73	113.93 (7.52)	96.97	570.03
2011-12	179.10	60.40	20.39	78.78	120.10 (7.78)	101.36	560.14
2012-13	185.98	28.47	14.74	86.66	119.82 (7.70)	110.12	545.79
2013-14	187.31	24.66	13.74	104.73	114.64 (7.46)	110.42	555.50
2014-15	188.77	17.91	16.20	117.86	119.44 (7.96)	121.16	581.34
2015-16	196.42	15.35	15.90	125.96	123.12 (8.20)	129.72	606.47
2016-17	212.37	42.54	14.00	117.59	124.58 (8.45)	137.32	648.40
2017-18	226.68	41.05	14.89	120.77	133.63 (9.14)	142.35	679.37
2018-19	232.36	34.07	15.13	127.70	145.45 (9.88)	144.39	699.10
Apr-Dec 2019	178.03	39.37	12.58	108.37	110.09 (7.54)	75.59	524.03

2.10 While the commodities viz. Coal and POL are showing steady growth, there has been fluctuation in traffic of Iron Ore, Fertilizer and Containers during the last few years. The other general traffic continued to grow. Jawaharlal Nehru Port (JNPT) continued to be the leading container handling port in the country with a share of about 43% followed by Chennai (21%) and the remaining share of 36% handled by other major ports.

Cargo Traffic at Non-major Ports

2.11 The traffic handled at non-major ports which was 470.60 MT during 2014-15 increased to

582.59 MT during 2018-19 which was 45% of the total maritime traffic of the country. The Maritime States namely Gujarat, Andhra Pradesh and Maharashtra accounted for 94.12% of the traffic handled by non-major ports. The cargo traffic handled by non-major ports during April-December, 2019 was around 447.21 MT recording growth of 4.8% over corresponding period of previous year.

Port Efficiency

2.12 Efficiency at ports has an important bearing on the transaction cost. Major ports have



improved their efficiency of operation particularly in terms of turnaround time. The Average Turnaround Time improved from 107.28 hours in 2011-12 to 59.51 hours during 2018-19.

Port Capacity

2.13 Infrastructure development and capacity augmentation of major ports is an ongoing process. Cargo handling capacity of major ports has increased from 800.52 MTPA as on 31.03.2014 to 1514.09 MTPA as on 31.03.2019. Similarly, Cargo handling capacity of non- major ports has increased from 599.47 MTPA as on 31.03.2014 to 863.50 MTPA as on 31.03.2019. There is adequate capacity build up in Indian ports to cater to the requirement of trade. During the last five years, 160 port infrastructure projects with a capacity of 442.08 MTPA and total investment of Rs 39186.65 crore have been awarded in Major Ports.

Recent reforms/initiatives

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

Major Port Authorities Bill

2.15 The Government introduced the Major Port Authorities Bill, 2016 in the Lok Sabha in December, 2016 for replacing the Major Port Trust Act, 1963 which governs the Major Ports. The said Bill was referred to the Department Related Parliamentary Standing Committee. The recommendations of the Committee proposed to be accepted were incorporated in the Official Amendments Bill but the same could not feature in the business/ discussions in the Lok Sabha. On dissolution of the 16th Lok Sabha the Bill got lapsed. The Government now proposes to introduce the Major Ports Authorities Bill, 2020 to replace the Major Port Trust Act, 1963 for providing more autonomy to the Ports by allowing the Board of Major Port to

fix tariff/ scale of rate for services provided and uses of port assets. Besides, the role of Tariff Authority for Major Ports is to be removed and an Adjudicatory Board is to be provided for resolution of disputes.

Model Concession Agreement for Port Sector

2.16 Model Concession Agreement (MCA) gives the various parameters for the implementation and maintenance of PPP projects. More than 50 PPP Projects have been awarded by Major Ports based on the MCA of 2008. The Model Concession Agreement has been amended with a view to obviate the problems being faced in execution of PPP Projects on account of certain provisions of the present MCA, in order to enhance confidence of investors and make the investments in the Port Sector attractive.

2.17 The salient changes in the revised MCA are:-

- a) Change in equity holding requirements to provide Exit Route to developers.
- b) Payment of Royalty by private operators to Port on "per MT of cargo handled" basis instead of "percentage of Gross Revenue"
- c) Provision for Additional Land
- d) Improved utilization of Project Assets and higher Productivity
- e) Amendment in Definition of "Change in Law"
- f) Provision for Commercial Operation before COD
- g) Provision for Mitigation Measures – Constitution of a Board

Chabahar Port

2.18 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 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.

- 2.19 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.
- 2.20 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].
- 2.21 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 Shipping).
- 2.22 Government of India has taken-over the

operations of two berths at Shahid Beheshti Port, Chabahar, Iran during Chabahar Trilateral Agreement meeting held at Chabahar on 24th December 2018 and has 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.

- 2.23 With this first step a long journey has 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.

Major Initiatives/Achievements

- a) Kolkata Port being the oldest Port in the Country (established 1870) is celebrating its 150th anniversary. The year-long celebrations were inaugurated by the Hon'ble Prime Minister of India on 11.01.2020 with a light – and – sound show and illumination of Rabindra Setu (Howrah Bridge). The Port also handed over a cheque of Rs. 501.00 crore through the Hon'ble Prime Minister to Chairman, Life Insurance Corporation of India towards its full and final pension payment liability in another function at Netaji Indoor Stadium on 12.01.2020.
- b) India improved its ranking under the Trading Across Border (TAB) parameter of Ease of Doing business (EoDB) from 80 to 68. This impressive record has been facilitated due to various measures like Direct Port Delivery (DPD), Direct Port Entry (DPE), Introduction of RFID, Installation of scanners/container scanners, Simplification of procedures etc., taken by the major ports.
- c) An upgraded Port Community System (PCS) (PCS 1x version) has been introduced. The system enables seamless data flow between the various stakeholders through common



- interface. To move towards complete paperless regime, E-DO (Electronic Delivery Order) through PCS made mandatory along with e-invoicing and e-payment.
- d) To meet the infrastructure requirement for LNG imports, Floating Storage Regasification Unit (FSRU) within Port limits offers a low cost, fast track and flexible option, as compared to traditional onshore terminals. Guidelines for establishing FSRU at Major Ports have been issued by the Ministry of Shipping on 7.3.2019. Under the guidelines, the entire investment of the gasification and storage units including pipeline shall be made by the entity setting up the FSRU. The FSRU projects are to be taken up on license basis upto 30 years under the provisions of the Guidelines on Land Management at Major Ports. The water area, land area and other facility/permission such as right of way for pipelines shall be provided by the Port at applicable charges.
- e) Policy Guidelines for Land Management 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.
- f) Two multipurpose berths, No.14 & No.16 at Deendayal Port, Kandla were inaugurated by the then Union Minister for Shipping on 8.3.2019. The optimal capacity of each berth is 4.50 MMTPA with a draught of 13.0 M and designed for vessels of size upto 75000 DWT. The development of back up area of 21.0 ha. at each berth is part of the project. The new berths would help in reducing the congestion in the port. These berths constructed at a cost of Rs 280 Crore and completed in 22 months i.e. two months prior to the scheduled completion time.
- g) The 17th Meeting of Maritime State Development Council (MSDC) was held on 15.10.2019 at New Delhi under the chairmanship of Hon'ble Minister of State for Shipping (Independent Charge) with Ministers and officials from various Maritime States and Government of India. The meeting agreed that there is a need for a closer and active interaction between the Central Govt. and the Maritime States/UTs for augmenting the infrastructure development and safety & security of the ports as ports play a vital role in EXIM Trade.
- h) A large extent of Land belonging to Major Ports is under lease with Departments of Gol and State Governments on which interest and penal interest have been levied in cases of unpaid lease rentals. The interest and penal interest over a period of time have increased quite substantially which is coming in the way of settlement of lease rent. In order to facilitate and expedite the recovery of these huge pending dues of Major Ports, Ministry of Shipping has issued "One Time Settlement Scheme (OTSS)" for settlement of dues with Government of India/ State Government Ministries/Departments on 13th August, 2019.

Deep draft berth at Major Ports

- 2.24 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

- 2.25 Towards facilitating 'Ease of Doing Business (EoDB)', Ministry of Shipping had 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), Direct Port Delivery, Direct Port Entry, Installation of Container Scanners, E-delivery orders, RFID based Gate-automation System, etc. The RFID solution has been implemented in all Major Port to enhance security, remove bottlenecks for seamless movement of traffic across port gates. Logistic data bank service under Delhi Mumbai Industrial corridor Development Corporation Ltd. (DMICDC), for enabling track and trace movement of EXIM containers has also been implemented at all Major Ports.
- 2.26 Port Community System (PCS 1x) has been launched on 11th December, 2018 which enables seamless data and information flow between the various stakeholders. Ministry of Shipping is in process of installation of 8 Mobile Scanners at various Major Ports. All 8 Mobile Scanners have been received at the identified sites. Work order for 4 Drive through Scanners has also been issued.
- 2.27 Besides, JNPT under EoDB has undertaken a number of initiatives for ensuring convenience to trade & reduction in cargo EXIM Dwell time. To ensure faster cargo evacuation JNPT has set up a Customs Processing Zone, Centralized Parking Plaza, besides undertaking widening of Port Highways. It has also developed a Common Rail yard. JNPT has procured electronic RTGSs for increasing yard productivity, besides making ground breaking initiatives

for increasing Direct Port Delivery & Direct Port Entry to facilitate trade. All these reforms are regularly communicated to the stakeholders through website update, social media & regular stakeholder meetings. India's impressive record in improving its ranking under the Trade Across Borders (TAB) parameter of EoDB from 146 to 80 was to a large extent reforms undertaken in JNPT. The ranking has since further improved to 68.

Project Unnati

- 2.28 An exercise was undertaken 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.
- 2.29 A total number of 116 new initiatives for 12 Major Ports were identified under Project Unnati to increase the volume of traffic significantly and also avoidance of capital expenditure. The roadmap for improvement has been suggested along with the timelines, approach and methodology for implementation. Out of these, 95 have already been completed, 9 are dropped and the remaining initiatives are under implementation.

SHIPPING SECTOR

- 2.30 The shipping industry is one of the most globalised industries, intricately linked to the world economy and trade, and operating in a highly competitive business environment.



The Indian maritime sector facilitates not only transportation of national and international cargoes but also provides a variety of other services such as shipbuilding and ship repairing, freight forwarding, light house facilities, training of marine personnel, etc.

2.31 Shipping is an important indicator of, both, commodity and services trade of any country. It plays an important role in the Indian economy, with around 95% of India's trade by volume and 68% in terms of value being transported by sea. India's shipping tonnage was only 1.92 lakh Gross Tonnage (GT) on the eve of independence. It increased gradually thereafter, but was practically stagnant at around 7 million gross tonnage (GT) till the beginning of 2004-05. However, the tonnage tax regime introduced by the Government of India in that year boosted the growth of the Indian fleet as well as its tonnage. Now India has one of the largest merchant shipping fleets among the developing countries and

ranks 17th in the world. Indian shipping tonnage is 12.71 million G.T. as on November 30, 2019, with the public-sector Shipping Corporation of India Ltd. having (3.10 million GT) the largest share of 24.39%. In terms of ownership in world tonnage, however, India has a share of only 1.27% as on January 1, 2019. In comparison, China ranked 3rd, with a share of 10.51%.

2.32 As on September 30, 2019, 41.99% of the Indian fleet was over 20 years of age and 12.49% in the age group of 16-20 years as per Directorate General of Shipping. As on 1st July, 2019, the average age of ships globally was 15.04% years as per ISL Shipping Statistics and Market review 2019 – Vol 9/10. While India's overseas seaborne trade has been growing exponentially over the years, there is a sharp decline in the share of Indian ships in the carriage of India's overseas trade from about 40% in the late 1980s to 7.9% in 2018-19.

Size and average age of the Indian fleet in the last five years

As on	Number of vessels	GT	DWT	Increase (%) (In terms of GT)	Average age (years)
31.3.2012	1135	11030751	16611651	5.6	18.1
31.3.2013	1158	10454789	15376982	-5.2	17.5
31.3.2014	1213	10497540	15322526	0.4	17.9
31.3.2015	1210	10506388	15471273	0.1	18.3
31.3.2016	1273	10858288	16036798	3.3	18.9
31.3.2017	1313	11547576	17257865	6.3	19.2
31.3.2018	1384	12581592	19082274	9.0	19.3
31.3.2019	1405	12784421	19383064	1.6	19.9

Source: D.G. Shipping

2.33 The world of shipping has not changed dramatically in the months gone by. The outlook of the global shipping industry continues to be uncertain and the freight rates in the past year continued to be volatile in almost all segments of shipping. Industry leaders urge the need to remain cautious

especially on the back of the global tensions seen in the past several months relating to the US-China trade war, the ongoing tensions in the Persian Gulf and the expected implications and impact of the use of marine fuels with a Sulphur content of not more than 0.50%, against the previous limit of 3.50%, by

all shipping lines beginning January 1, 2020. The Indian shipping industry continues to be affected by chronic problems related to an aging fleet, inability to participate in critical sectors and large ticket contracts of LNG trade and carriage, and a low share in the carriage of Indian EXIM trade. On the coast too Indian flag vessels are trying with limited success to induce more cargo from road and rail on to the coast.

2.34 Following are the major achievements during 2019-20:-

- a) India has become the first country in the world to issue a Biometric Seafarer Identity Document (BSID), capturing the facial biometric data of seafarers. The BSID introduces new security features, including an embedded biometric chip. A record of each BSID issued would be maintained in a national data base, with the related information being accessible internationally. The new BSID card conforms to the International Labour Organization Convention Number 185 on Seafarer Identity Documents.
- b) The lead taken by India in rolling out the Seafarer Identity Document programme is significant as India is one of the major suppliers of trained manpower for the international shipping industry. The number of Indian seafarers who are employed on Indian and foreign flag vessels crossed over 2 lakh personnel in 2018, showing an unprecedented increase of 35% over the previous year.
- c) The Cabinet Committee on Economic Affairs (CCEA) in its meeting held on 09.10.2019 has approved Shipping Ministry's proposal regarding settlement of subsidy claims for executed shipbuilding contracts under the shipbuilding subsidy scheme, 2002-2007 wherein CCEA has approved

extension of timeline and budgetary support beyond 31.03.2014 for release of committed liability of shipbuilding subsidy through budgetary support of approx. Rs.153 crores for a total number of 51 vessels, including retained subsidy for 47 vessels and full subsidy for 4 vessels. This subsidy is to be released in financial years 2019-20, 2020-21 and 2021-22. Guidelines for release of this pending subsidy are being formulated.

India Accedes to the Hong Kong Convention

2.35 India, one of the world's five major ship recycling countries, has acceded to the IMO Hong Kong International Convention, the treaty that will set global standards for safe and environmentally-sound ship recycling. India's accession brings the Convention a significant step closer to entering into force, with the required 15 States now party to it and with India's ship recycling volume contributing considerably to the required recycling capacity. Secretary, Shipping and Director General of Shipping deposited the instrument of accession to the treaty with IMO Secretary-General Kitack Lim on November 28 during the 31st Session of the IMO Assembly.

India re-elected to the IMO Council for the Biennium 2020-21

2.36 The Assembly of the International Maritime Organization (IMO) has elected the new 40-member IMO Council for the biennium 2020-21 that will be responsible, under the Assembly, for supervising the work of the international organisation. In the election held at IMO, London on 29 November, 2019, India was re-elected to the IMO Council under Category "B" - States with the largest interest in international seaborne trade. The Recycling of Ships Act, 2019 received the assent of President on 13.12.2019 and has been published in the Extraordinary Gazette of India on 16.12.2019.



2.37 In order to promote the "Make in India" initiative, Government had issued a notification on 13th February, 2019 granting first priority to "Indian built vessels" to exercise Right of First Refusal (RoFR) option for chartering of vessels done through tender process for all types of requirements. This move was, however, challenged in the court by certain shipping companies. The notification was stayed and the matter remains sub-judice.

INLAND WATER TRANSPORT (IWT)

2.38 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 have been initiated by hydrographic surveys and engineering studies through consultants. IWAI Offices have been established on NW-1 to 5.

Recent Initiatives

2.39 The major initiatives for development of IWT in 2019-20 are given below:

Jal Marg Vikas Project (JMVP) on NW-1

a) Government is implementing the Jal Marg Vikas Project (JMVP) at an estimated cost of Rs. 5369.18 Crore for capacity augmentation of navigation on National Waterway -1 (NW-1) on the Haldia – Varanasi stretch of Ganga-Bhagirathi- Hooghly River System with the technical and financial assistance of the World Bank. The project is scheduled to be completed in 2022-23. Projects worth Rs. 1800 crores (approx.) have commenced on ground in a time period of three years

after statutory clearances.

- b) Under JMVP, construction RCC Jetty of Multi-modal Terminal (MMT) at Sahibganj is completed and inaugurated by Hon'ble Prime Minister in September 2019. Works of MMT Haldia and Navigational lock at Farakka are proceeding on schedule.
- c) From February 2017 to June, 2019, IWAI conducted seventeen successful pilot movements of bagged cement, timber logs, fly ash, yellow peas, food products, stone-chips, silica sand etc. between various Origin-Destination pairs on NW-1.

North East

- a) In addition to existing MMT Pandu, a permanent Ro-Ro cum IWT terminal constructed at Dhubri on NW-2 and development of NW-16 (river Barak) is going on.
- b) 11 consignments of ODC of M/s. Power Grid Corporation Ltd have been transported successfully through Indo-Bangladesh Protocol routes and NW-2 during the last two years.
- c) The first ever container movement of cargo on National Waterway-2 (Brahmaputra) with 48 containers of edible oil, petro-chemical and beverages reached Pandu in Assam on 05.12.2019. The consignment moved from Haldia Dock Complex through the Indo-Bangladesh Protocol Route.
- d) NW-3 is provided with 24 hours navigational aids in the entire route on which 9 permanent terminals with storage and handling facilities are available. Government has sanctioned Rs. 38 crore for reconstruction of lock gate at Trikkunnapzha across NW-3 for utilization of full capacity of NW-3. Development of new NW-9 in Kerala is also going on.
- e) Container transportation from Kottayam port on NW-9 and NW-3 to ICTT, Vallarpadam, Cochin port, Kochi has been commenced in March, 2019. Over dimensional cargo (ODC)

moved from Cochin Port via NW-3 to BPCL/ KRL Ambalamugal with 15 consignments having 4614 metric tons.

- f) In addition to dredging work in river Krishna (part of NW-4), floating terminals (4 nos.) at Durga Ghat, Bhavani Island, Amaravati and Vedadri are at the final stage of completion and land acquisition for fixed terminals (4 nos.) at Ibrahimpattanam, Harischandrapuram and Muktyala & Madipadu is in progress.

New NWs

- a) Based on the outcome of techno-economic feasibility conducted for 106 new NWs, 20 NWs have been found to be technically viable and Detailed Project Reports (DPRs) have been prepared. Development activities have been initiated on 10 viable NWs viz., River Barak (NW-16), River Gandak (NW-37), Waterways in Goa - NW-27- Cumberjua, NW 68- Mandovi, NW 111-Zuari, Alappuzha-Kottayam -Athirampuzha Canal (NW-9), River Rupnarayan (NW-86), Sunderbans Waterways (NW-97), River Kosi (NW-58) and River Ghagra (NW-40).
- b) To promote optimal utilization of vessels of the IWAI for movement of cargo on National Waterways, six cargo vessels of IWAI have been given on hire to the private shippers for a period of three years on bare boat charter basis through an open tender.

International Co-operation

- a) Taking ahead Hon'ble Prime Minister's vision of promoting Inland Waterways, for connectivity of Bhutan to sea through waterway route, a cargo of 1000 tonnes of stone chips transported from Bhutan through Dhubri port in Assam for transportation through NW-2 (river Brahmaputra) and Indo-Bangladesh Protocol route in Bangladesh to Narayanganj.
- b) Movement of Passenger and Cruise Services on Coastal and Protocol route between India and Bangladesh commenced in March, 2019.

- c) Bangladesh has allowed India use of its Chattogram and Mongla Ports for transit movement of our goods through waterways, rail, road or multi-modal transport in its territory for which a Standard Operating Procedure (SOP) was signed by the two countries on 5.10.2019. The alternative connectivity is expected to boost development of the North East Region (NER) by increasing trade volumes and reducing logistic costs. Eight routes are provided under the Agreement which would enable access of NER via Bangladesh.
- d) At the Shipping Secretary Level Talks (SSLT) between India and Bangladesh at Dhaka on 4-5 Dec 2019, both countries agreed to commence trial runs on movement of Indian transit cargo for North East Region (NER) through Chattogram and Mongla ports from January-February 2020.
- e) India and Nepal have agreed to include Inland Waterways connectivity as an additional mode of transport in the Treaty of Transit. Three routes for evacuation of cargo have also been agreed by both countries.
- f) Phase-1 of Kaladan Multimodal Transit Transport Project administered by Ministry of External Affairs in Myanmar completed by IWAI as project Development Consultant.

SAGARMALA SECTOR

- 2.40 The Sagarmala Programme is the flagship programme of the Ministry of Shipping to promote port-led development in the country through harnessing India's 7,500 km long coastline, 14,500 km of potentially navigable waterways and strategic location on key international maritime trade routes. The main vision of the Sagarmala Programme is to reduce logistics cost for EXIM and domestic trade with minimal infrastructure investment.
- 2.41 Under the Sagarmala Programme, 500 projects at an estimated investment of more



than Rs. 3.55 Lac Crore have been identified for implementation upto 2035. Of these, 143 projects (costing Rs. 80,233 Crore) have been completed and 190 additional projects (costing Rs. 2.12 Lac Crore) have been awarded and are under implementation. These projects are being implemented by relevant Central Ministries, State Governments, Ports and other agencies primarily through the private or PPP mode.

2.42 Projects completed during FY 2019-20 include, 10 projects of port modernization, 8 projects of port connectivity and 2 projects of coastal community development. Projects completed under pillar of port modernization are construction of coastal berth at Chennai Port, installation of container scanners at JNPT, KPL, HDC, KoPT & NMPT, mechanisation of berths at NMPT, yard restructuring at JNPT, development of multipurpose berth at Paradip Port, etc. Projects completed under pillar of port connectivity includes rail connectivity project of Krishnapatnam Port, rail line from Chennai to Korukkupet, internal rail connectivity of DPT, KPL and KoPT, etc.

2.43 Under the budget head of Sagarmala, a total of Rs. 1820.8 Crore has been sanctioned and Rs. 1,102.1 Crore has already been released for the development and implementation of 93 projects for a total project cost of Rs. 5,533 Crore. Out of which, Rs. 180.86 Crore has been released during FY 2019-20.

2.44 Four projects funded by Sagarmala have been completed during 2019-20 namely construction of fishing harbor at Poompuhar and Mookaiyur, coastal berth at Chennai Port and development of paved storage yard at Chennai Port for handling export cargo. Centre of Excellence in Maritime and Shipbuilding (CEMS), a first of its kind in Asia with two campuses with 24 laboratories in total (6 laboratories in IRS Mumbai and 18 in Indian Maritime University campus in Vishakhapatnam) has been set up and started operations in 2019-20. Further, a Centre for Inland and Coastal Maritime Technology (CICMT) at IIT Kharagpur has been set up to serve as the technology arm of the Ministry of Shipping to provide research, testing and experimentation facility to IWAI, CSL and major ports. Under the Sagarmala DDU-GKY Phase – II convergence program, training has started in Andhra Pradesh, Kerala and Tamil Nadu.

2.45 Master Plans have been finalized for the 12 major ports. Based on the same, 69 port capacity expansion projects (cost: Rs. 37,441 Crore) have been identified for implementation. Out of these, 30 projects have been completed, 26 projects are under implementation and 13 projects are under various stages of development. 4 projects have been completed during FY 2019-20 and added capacity of 18.23 MTPA at major ports.

CHAPTER – III

SAGARMALA



Shri Mansukh Mandaviya, Hon'ble Minister of State (IC) for Shipping at the Conference on fueling the maritime sector at New Delhi

Sagarmala Programme

3.1 Vision of the Sagarmala Programme is to reduce logistics cost and time for the movement of EXIM and domestic cargo and development of port-proximate future industrial capacities near the coast. The implementation of projects under the Sagarmala Programme is progressing smoothly. Under the four project themes

of Sagarmala viz. port modernization, connectivity enhancement, port led industrialization and coastal community development, 500 projects have been identified at an estimated infrastructure investment of Rs. 3.55 Lac Crore. Out of these, 143 projects (worth Rs. 0.88 Lac Crore) have been completed, and 190 projects (worth Rs. 2.12 Lac Crore) are already under implementation (**Table 1**).

Table 1: Summary of projects under Sagarmala

S. No	Project Theme	Total		Completed		Under Implementation	
		#	Project Cost (Rs. Cr)	#	Project Cost (Rs. Cr)	#	Project Cost (Rs. Cr)
1	Port Modernization	206	78,611	81	24,113	59	24,288
2	Connectivity Enhancement	201	1,28,786	38	9,416	88	91,157
3	Port Led Industrialization	34	1,42,457	8	45,300	23	96,046
4	Coastal Community Development	59	5,300	16	1,403	20	954
Total		500	3,55,154	143	80,233	190	2,12,445



- 3.2 As part of the Sagarmala, 93 projects (worth Rs. 5,533 Crore) have been sanctioned by the Ministry of Shipping at a cost of Rs. 1,821 Crore and total fund released is Rs. 1102 Crore till December 2019. This includes unique and innovative projects such as Gogha-Dahej RO-Pax Ferry Services Project (Rs. 117 Crore sanctioned and Rs. 99.18 Crore released) and RO-RO Services Project at Mandwa (Rs. 66.56 Crore sanctioned and released). In addition, Government has sanctioned the National Maritime Heritage Complex project at Lothal with estimated cost of Rs 478.9 Crore. Hon'ble Prime Minister of India laid the foundation for the project on 4th March 2019 and its DPR is under preparation. The projects under Sagarmala are being implemented by relevant Central Ministries, State Governments, Ports and other agencies primarily through the private or PPP mode.
- 3.3 The Sagarmala Development Company Limited (SDCL) was incorporated on 31st August 2016 for providing funding support to project SPVs and residual projects under Sagarmala. SDCL has identified a few SPVs for the purpose of equity investment in-line with Sagarmala objectives. SDCL has invested equity support of Rs. 125 Crore and Rs. 284.5 Crore in Krishnapatnam Rail Company Limited (KRCL) and Haridaspur-Paradip Railway Company Limited (HPRCL), government majority-owned SPVs, to improve connectivity to Krishnapatnam Port and Paradip Port respectively. SDCL has also invested Rs. 70 Crore equity in 2 other projects. SDCL has taken over Indian Ports Global Limited (IPGL) in 2018-19 and invested approx. Rs. 10 crore for development and operations of Chabahar Port in Iran.

Port Modernization & New Port Development

- 3.4 As per the studies conducted under the Sagarmala Programme, it is expected that

by 2025, cargo traffic at Indian ports will be approximately 2500 MMTPA while the current cargo handling capacity of Indian ports is only 2406 MMTPA. A roadmap has been prepared for increasing the Indian port capacity to 3300+ MMTPA by 2025 to cater to the growing traffic. This includes port operational efficiency improvement, capacity expansion of existing ports and new port development. There are 206 projects worth Rs. 78,611 Crore of port modernization, out of which 81 projects worth Rs. 24,113 Crore have been completed and 59 projects worth Rs. 24,288 Crore are taken up for implementation.

- 3.5 Master Plans have been finalized for the 12 major ports. Based on the same, 69 port capacity expansion projects (cost: Rs. 37,441 Crore) have been identified for implementation. Out of these, 30 projects have been completed, 26 projects are under implementation and 13 projects are under various stages of development. 4 projects completed during FY 2019-20 and added capacity of 18.23 MTPA at major ports. 2 new port locations have been identified for development of greenfield ports at Vadhavan (Maharashtra) and Paradip Outer Harbour (Odisha).

Port Connectivity Enhancement

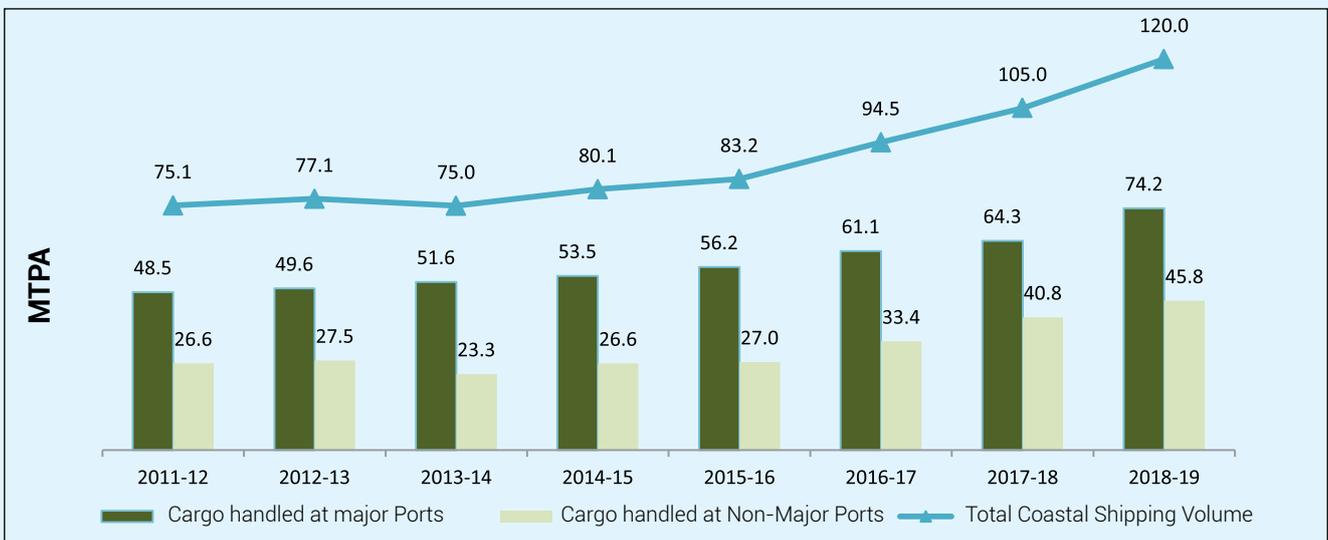
- 3.6 Indian Port Rail Corporation Limited (IPRCL) has taken up 29 projects (Total cost: Rs. 1,562 Crore). Out of these, 12 projects (cost: Rs. 287 Crore) have been completed, 17 projects (cost: Rs. 1275 Crore) are under implementation.
- 3.7 54 rail connectivity projects (cost: Rs. 52,840 Crore) are being taken up by Ministry of Railways and 3 projects (cost: Rs. 1,300 Crore) are taken up either in Non-Government Rail (NGR) or JVs. 26 projects (cost: Rs. 2,275 Crore) are to be taken up by major ports. Out of the total 83 rail projects (cost: Rs. 56,416 Crore), 23 projects (Rs.

5,331Crore) have already completed, 51 projects are under implementation (Rs. 48,707Crore) and 9 projects are under various stages of development (Rs 2,377 Crore).

- 3.8 Total 89 road connectivity projects have been identified under Sagarmala by MoRTH, NHAI, State PWDs and Port Trusts. 9 projects have been completed (cost: Rs. 1,553 Crore), 20 projects are under implementation (cost: Rs. 21,365 Crore), 60 projects are under various stages of development (cost: Rs. 18,734 Crore). 5 projects (Rs. 7,720 Crore) undertaken by MoRTH, 3 project are under implementation. 63 projects are undertaken by NHAI, out of which, 3 projects (Rs. 217 Crore) have been completed, 10 projects (Rs. 13,545 Crore) are under implementation. 15 projects are undertaken by Port Trusts, out of which, 3 projects (Rs. 208 Crore) have been completed and 5 projects (Rs. 449 Crore) are under implementation. 6 projects are undertaken by State PWDs, out of which, 2 projects (Rs. 828 Crore) completed, 2 projects are under implementation. Out of the total 89 road connectivity projects, 52 projects (Rs. 15,505 Crore) are proposed to be implemented under Bharatmala Pariyojna.
- 3.9 To promote Coastal Shipping, Ministry of Shipping has taken number of steps

facilitating trade. Some of these are implementing a Coastal Berth Scheme , relaxation u/s 406/407 for easier licensing requirement for chartering vessels for coastal movement of EXIM/empty containers, agricultural and horticulture commodities, animal husbandry products and farm produce and fertilizers. Cabotage has been relaxed for 5 years for specialized vessels (RO-RO, RO-PAX).

- 3.10 The scope of the Coastal Berth Scheme has been extended up to March 2020, its scope has been expanded and it has been integrated into the Sagarmala Programme. A total of 57 projects (cost: Rs. 2,613 Crore) have been taken up for financial assistance under this scheme. Of these 39 projects (cost: Rs. 1,569 Crore) have been sanctioned for total financial assistance of Rs. 636.7 Crore and Rs. 360.84 Crore has been released to Major Ports/State Maritime Boards/State Governments while the remaining 18 projects are under various stage of development and process of approval.
- 3.11 Coastal shipping traffic has picked up grown since 2015-16. In 2018-19 the growth of coastal cargo has been 14.3% while the growth of EXIM cargo has been 4.9%. At the start of Sagarmala Programme coastal cargo was ~ 12% of total cargo volume while in 2018-19 this has grown to ~ 20%.



Growth in Coastal Volume in India



3.12 The Ministry of Shipping has partnered with Asian Development Bank (ADB) for carrying out coastal shipping study for development of perspective plan for transport of various commodities through coastal route. The core objective of this study is to identify key issues impacting coastal shipping and developing solutions to address these issues in order to make coastal shipping a more prominent mode of transport in India's domestic logistics. The study reported significant growth in coastal shipping

for various commodities and projects around 340 MTPA by 2025 including short sea shipping with neighboring countries basis and has made recommendations on necessary interventions. Ministry of Shipping is taking necessary steps/actions on possible resolutions in coordination with respective ministries, state government, and authorities of major and non major ports. The study report was shared with maritime fraternity on 10th December 2019 through dissemination workshop organized by ADB.



Workshop for Dissemination of the coastal shipping study to key stakeholders and discussion on the action plan for coastal shipping

Port-Linked Industrialization

3.13 In the context of enhancing industrial capacities near the coast, 14 potential port-linked industrial clusters across Energy, Discrete Manufacturing and Maritime sectors have been identified under Sagarmala. Of these, mega food processing parks at Satara, Maharashtra (Rs. 139 Crore) and Godavari (Rs. 373 Crore) and 6 Thermal Power Plants around Krishnapatnam (AP) and Tuticorin (TN) at the cost of Rs. 54,748 Crore have been completed. Two Mega Food Park projects are being implemented by APIIC & KSIDC respectively along with 9 Greenfield Electronics manufacturing clusters and 14 thermal power plants around Krishnapatnam, Ennore & Tuticorin.

Ports, Ministry of Shipping is developing various industrial zones. SEZ at JNPT (Rs. 12,554 Crore), Smart Industrial Port Cities (SIPC) at Paradip (Rs. 7,600Crore) & Kandla (Rs. 11,147 Crore) are under implementation. The Coastal Employment Units (CEUs) at VoCPT (Rs. 500 Crore) and KPL (Rs. 111 Crore) are under various stages of development.

Coastal Community Development

3.15 Coastal community development is an important objective of the Sagarmala Programme. In this regard, Ministry of Shipping is taking up a number of initiatives/projects in the areas of coastal community skill development and development of fishermen community. A budget of Rs. 100 Crore has been allocated under Sagarmala for

3.14 Based on availability of land with the Major

coastal community development activities.

- 3.16 On the skill development front, skill gap study of 21 coastal districts (spread across 9 states and 3 UTs), has been completed and domain ministries & concerned state governments have been asked to implement the district action plans. In addition, Ministry of Shipping is funding skill development under Sagarmala-DDU-GKY Convergence programme Phase-II for port and maritime sector.
- 3.17 Centre of Excellence in Maritime and Shipbuilding (CEMS), a first of its kind in Asia with two campuses with 24 laboratories in total (6 laboratories in IRS Mumbai and 18 in Indian Maritime University campus in Vishakhapatnam) has been setup. CEMS will provide 50 courses across 18 specializations; covering 770 modules out of which 270 will be tools and algorithm-based courses while 500 will be process and sector based. It can train 10,512 students and runs on a Hub and Spoke Model with majority funding from private sector. The total project cost is Rs. 766 Crore and the Ministry of Shipping has sanctioned Rs. 50.07 Crore towards setting of the CEMS. CEMS is equipping students with employable engineering and technical skills in the areas of Ship Hull Design, Ship Detailed Design, Shipbuilding & Maintenance, Repair & Overhaul (MRO), Product Lifecycle Management (PLM), and advanced digital manufacturing-factory concepts.
- 3.18 Ministry of Shipping has set up the National Technology Centre for Ports, Waterways and Coasts (NTCPWC), at IIT Madras to provide innovative and applied research-based engineering solutions to various issues related to ports, waterways and coasts in the country. The project cost of Rs 70.53 Cr is being shared by MoS, IWAI and the Major Ports. NTCPWC has already working on more than 25 projects from Major Ports, Coastal State Govts/UTs.
- 3.19 A Centre for Inland and Coastal Maritime Technology (CICMT) at IIT Kharagpur has been set up to serve as the technology arm of the Ministry of Shipping to provide research, testing and experimentation facility to IWAI, CSL and major ports. MoU between IIT, Kharagpur & Ministry of Shipping for CICMT signed in July 2019. The cost of the project is Rs.69.20 Cr and it is funded by Ministry of Shipping.



Signing of MoU between IIT, Kharagpur & Ministry of Shipping for CICMT



- 3.20 Ministry of Shipping is also funding the Occupational Health and Safety training project for workers at Alang-Sosiya Shipyard. Since 2017 around 23,000 workers have been trained at Alang. In addition to this, a specialized hospital is now operational in Alang. This will ensure immediate response and care to the workers in the yards, particularly for orthopedic and burn injuries.
- 3.21 Ministry of Shipping is setting up Multi-skill Development Centres(MSDC) in major ports to meet the skills requirement in the ports in the logistics, cruise tourism etc. MSDC is now operational in JNPT and Chennai Port. Operationalization process is underway in Visakhapatnam Port, Cochin Port and New Mangalore Port.
- 3.22 As part of the coastal community development component of the Sagarmala

Programme, Ministry of Shipping is part-funding fishing harbour projects in convergence with Department of Animal Husbandry, Dairying and Fisheries (DADF). Out of 21 fishing harbour projects (cost: Rs. 2,375 Crore) identified under Sagarmala, 16 projects (cost: Rs. 1,452 Crore) have been funded under Sagarmala. Ministry of Shipping has sanctioned Rs. 398.46 Crore and released Rs. 242.56 Crore.

Potential Impact

- 3.23 The projects identified under Sagarmala Programme are expected to mobilize more than Rs. 3.55 Lac Crore of infrastructure investment; double the share of domestic waterways (inland & coastal) in the modal mix, generate logistic cost savings, boost merchandize exports and enable creation of new jobs, including both direct and indirect jobs.

CHAPTER – IV

PORTS

INTRODUCTION

4.1 Ports provide an interface between the ocean transport and land-based transport. There

are 12 Major Ports in India out of which 6 are located on the East Coast and 6 on the West Coast.





MAJOR PORTS IN INDIA

KOLKATA PORT

4.2 Kolkata Port 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 Kolkata Port handled 47.09 Million Tonnes (MT) of traffic in 2019-20 (upto December, 2019). While KDS handled traffic of 13.34 MT. HDC handled 33.76 MT. The port has 52 berths (KDS – 35 including 6 Oil Jetties and HDC – 17 including 3 Jetties) handling various types of cargos including containers with an effective rated capacity of 82.57 MTPA.

4.4 Important project awarded during the year include Procurement of 1 No. 40 Tonne Rail Mounted Quay Crane (RMQC) (A/c HDC) (Rs 47.43 crores.)

Notable achievements during the year

- Interchanging of Lock gate work has been recently executed at HDC. The outer lock gate at HDC has been replaced with a new lock gate which had started moving after 25 long years which is a historic occasion for HDC.
- Largest consignment of container cargo with 52 containers from Haldia Docks was carried through National Waterway-1 from Haldia to Patna on 30.07.2019.
- Minister of State for Shipping (Independent Charge) inaugurated the RFID Operation,

CCTV Operations and Rabindra Setu and three Truck Parking Terminals at KDS. The RFID system will provide single window system to the port users for obtaining permit/ passes through cashless transactions.

- On 03.10.2019, MT Jag Abha discharged 26706 MT of HSD at Berth No.2, on account of Indian Oil Corporation Ltd, the highest ever discharge of HSD at HDC in a single day.

PARADIP PORT

4.5 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 Trust (PPT) 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.

4.6 The Port handled 83.62 Million Tonnes (MT) of traffic in 2019-20 (upto December, 2019). The port has Sixteen (16) berths/jetties + Three (3) SPM & One (1) Ro-Ro Jetty for handling different types of cargoes with an effective rated capacity of 239.00 MTPA.

Notable achievements during the year

- Iron Ore Handling Plant of PPT has registered the following records in the month of December, 2019:-
 - Highest quantity loaded in a Single day i.e. 48,020 MT on 31.12.2019.
 - All time record loading of 55,000 MT Iron ore fines to a vessel within 31 hrs on 09.12.2019.
 - All time record of tipping 7 Rakes in a single tippler (TP-149) on 18.12.2019.



Shri Mansukh Mandaviya, Hon'ble Minister of State for Shipping, (I/C) made his first official visit to Paradip Port Trust as part of regular review on 16th October 2019

- b) PPT successfully completed movement of 30 Vessels in 24 hours i.e. from 27th May 07:30 am to 28th May 07:30 am



Paradip Port view



c) Probably, as a first time Maritime movement in India, PPT's Marine team carried out day and night Shipping movement, with the help of laptop & GPS device in the absence of

Navigational buoys, which had drifted out of their position during the Cyclone FANI. Thus, PPT could handle 3.5 Lakh tonnes of cargo on 5th May 2019.



Chairman of Paradip Port Trust Shri Rinkesh Roy met Chief Minister Shri Naveen Patnaik and handed over a cheque of Rs. 5 crore for CM Relief Fund towards rehabilitation and restoration efforts in areas affected by cyclone Fani

NEW MANGALORE PORT

4.7 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 98.00 MTPA. It handled traffic of 27.60 million tonnes during the year 2019-20 (upto December 2019). Important projects relating to Mechanization of Berth No. 14 for handling Container and other clean cargo on PPP mode (Rs.280.71 Crores) and Providing PQC pavement for the area of 2000 Sq. Mtr. (Rs. 13 Crores) were awarded during the year. Project relating to Mechanization of Berth No. 16 (old No. 18) for providing equipments

for handling bulk cargo on DBFOT Basis (Rs. 469.46 crores) was completed during the year.

Notable achievements during the year

- a) The Port has registered 12.14 % growth in container traffic during the current year up to December by handling 1,11,979 TEUs compared to 99,856 TEUs handled in the corresponding period of previous year.
- b) First Mediterranean Moor ODC vessel called on 03.11.2019 at New Mangalore Port. This transported the over dimensional cargo meant for oil refinery in Nigeria. Phil Engg., 1250 MT Weight ODC cargo loaded/Rolled on board MV DONG BANG GIANT 2 at berth no 14.

c) NMPT had entered into a concessional agreement with M/s. Chettinad Mangalore Coal Terminal Pvt. Ltd (CMCTPL) for mechanized handling of coal and other bulk cargo in the year 2016. M/s. CMCTPL has developed the facility and commenced its commercial operation by handling first shipment of coal brought by vessel MV Yangze on 08.11.2019 having draft of 13.10 Meters and Length Overall of 200 Meters. The above facility has been developed for

handling coal on common user basis. The entire coal cargo which was earlier handled in semi mechanized manner at various Berths of NMPT will now be handled at the dedicated mechanized coal terminal. With development of mechanized handling having dust suppression facility, the dust pollution at NMPT will come down drastically. It will also increase the productivity and reduce turnaround time of vessel.



Signing of MoU for mechanization of Berth No.14 at New Mangalore Port for handling Containers & other cargo on DBFOT basis in PPP mode

COCHIN PORT

4.8 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 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.

4.9 Cochin Port has 21 Berths including 1 SPM with an effective rated capacity of 78.60 MTPA. The Port handled 25.00 Million tonnes cargo traffic during 2019-20 (Upto December 2019). The cargo handled by the port includes POL, Iron Ore, Fertilizers, Fertilizer Raw Material (Dry) and others.



4.10 Important Project awarded during the year includes providing shore power supply to the vessels calling at UTL berth under Green Port Initiative Phase II (Rs. 1.14 cr). Project relating to providing shore power supply to the vessels calling at UTL berth under Green Port Initiative Phase I was completed during the year.

Notable achievements during the year

a) Commencement of Helicopter Service from

Cochin Port area to major tourist destinations in Kerala in November, 2019, targeting cruise tourists wanting to enjoy an aerial view of Cochin or visit distant locations like Munnar within the short span of 8 to 10 hours of stay by the cruise ships at the Port, jointly with the District Tourism Promotion Council (DTPC), Ernakulam.



Buggy flagged off by Hon'ble Minister for Shipping at Cochin Port

b) Cochin Port was awarded 'Second Place' in the Sector 'Common Sewage Treatment Plan' for substantial and sustained efforts in pollution control and for initiatives in environmental protection in 2018, from the Hon'ble Chief Minister of Kerala on 5th June 2019.

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 between 18° 56'43" North and 72° 56'24" East along the eastern shore of Mumbai harbour off Elephanta Island.

JAWAHARLAL NEHRU PORT

4.11 Constructed in the mid 1980's and

4.12 Jawaharlal Nehru Port is an all weather tidal Port having 15 berths with an effective rated

capacity of 138.87 MTPA. The port handled traffic of 50.73 MT during 2019-20 (upto December, 2019) of which containerized cargo account for 45.09 MT which is 89 % of total traffic. The port has 5 fully automated Container Terminal, 4 of these operating in PPP format in partnership with Major Global Terminal Operators namely APM, PSA and DP World.

Notable achievements during the year

- a) JNPT has been awarded 'Best Port of The Year (Containerized)' at the 4th India Maritime Awards.
- b) JNPT won 'MALA AWARD 2019' for Container Handling Port of the year and Hall of fame for Container Handling Port of the year for last 9 years, continuously.

MUMBAI PORT

4.13 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.

4.14 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.

4.15 The port has 29 berths (including OCT) with an effective rated capacity of 79.00 MTPA.

The port handled traffic of 46.16 million tonnes during 2019-20 (upto December, 2019). The major cargo commodity handled is POL (63 % of the total traffic).

Notable achievements during the year

- a) Mumbai Port Trust opened another chapter in its rich history. On the lines of Miami and Singapore, on 9-11-2019 two majestic cruise liners, Karnika & Costa Victoria, home ported together at Mumbai harbour. In a historic move, the MbPT extended its capacity to berth two longer cruise ships at its twin berths of BPS and BPX enabling Costa Victoria (829 feet) and Karnika (805 feet) ships to berth at BPX and BPS. Costa Victoria operated by Carnival Maritime, has a total passenger capacity of 2400, along with crew capacity 800, arrived from Goa at Mumbai Port on 8th November 2019 and sailed to Maldives via Goa, New Mangalore, Kochi, and Colombo on 10.11.2019. Karnika operated by Jalesh Cruises, has a total passenger capacity of 1700, along with crew capacity 720, arrived from Muscat at Mumbai Port on 9th November 2019 and sailed to High Seas the same day. Karnika is a premium luxury cruise ship with exclusive decor and cuisine to attract not only the vast majority of the Indian travelers but also the discerning foreign tourists.
- b) DIU has become a new destination for cruises. For the first time, a cruise service was launched from Mumbai Port to Diu with cruise ship 'Karnika' leaving Mumbai Port at 2030 hours on 13.11.2019 with 400 passengers. Diu will be frequented by the cruise ship 17 times until May, 2020 and progressively more ports shall be added.
- c) In keeping, with the promotion for the Cruise shipping undertaken by Ministry of Shipping and Mumbai Port Trust, encouraging results are showing up. For the first time, Mumbai Port has four cruise ships docked on the same day on 18.11.2019. 'Mein Schiff 6' coming



from Muscat, having 2500 passengers on board arrived at 5.00 a.m. 'Karnika' having 800 passengers arriving from Goa berthed at 6.00 a.m. 'Silver Spirit' arriving from Muscat with 570 passengers docked at 8.00 a.m and 'Angriya' arriving from Goa with 124 passengers docked at 07.00 a.m. This was a momentous occasion having four cruise ships together on the same day in Mumbai Port. With about 1700 passengers booked for departure on 'Karnika', 136 passengers booked for departure on 'Angriya' and 500 passengers on 'Silver Spirit', there were in all more than 6000 passengers transiting through Mumbai Port.

KAMARAJAR PORT LIMITED (ENNORE)

4.16 Kamarajar Port Limited (KPL), the 12th Major Port under the Ministry of Shipping 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.

4.17 Over the years, the port, which was primarily handling coal at initial stage, has developed as a multi cargo port and now has created facilities for handling liquid bulk, Iron Ore, auto mobiles and general cargoes. The port has 7 + 1 LNG berths with rated capacity 91.00 MTPA. The port handled traffic of 23.42 MT during 2019-20 (upto December, 2019) which includes Coal, POL and other cargoes.

CHENNAI PORT

4.18 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 13° 06' N latitude and 80° 18' E-longitudes on the Bay of Bengal.

4.19 Chennai Port has 24 berths with an effective

rated capacity of 134.00 MTPA. The port handled a cargo of 35.83 MT during the year 2019-20 (upto December, 2019). The cargo handled comprises (container – 20.57 MT, POL –10.05 MT, Fertiliser – 0.14 MT and others – 5.07 MT). Projects relating to Development of paved storage yard at Chennai Port for handling export cargo (Rs. 54.00 Crore), Construction of Coastal Berth at Chennai Port (Rs. 80.00 Crore) and Strengthening of JD4 & JD6 berths (Renamed as Balance work of Modernization of JD at portions of JD4 & JD6) (Rs. 7.36 cr) were completed during the year.

Notable achievements during the year

- a) 34,226 Tonnes of Dolomite handled on 03.05.2019, from the vessel VIOLA carrying 55,000 Tonnes at Jawahar Dock 2 surpassing the previous record of 30,565 Tonnes discharged from the vessel V FULMAR on 18.10.2016.
- b) Chennai Port Trust has set another landmark achievement by handling 1,13,000 Tonnes of Crude Oil on 01.06.2019, from the vessel M.T. SIKINOS I carrying 1,45,000 Tonnes through the 42" diameter pipeline from Bharathi Dock (BD-III), Chennai Port to CPCL refinery in Manali. The above achievement surpasses the previous record of 1,01,000 Tonnes discharged from the vessel M.T. MARATHI at BD- III on 21.03.2019.
- c) Chennai Port has recorded another record performance in loading Steel Bars of 7,487 Tonnes for Export against the total booking quantity of 20,117 Tonnes from JD 1, in a single day on 13.07.2019 to the vessel DANCEFLORA SW. The above noteworthy achievement surpasses the previous record of 6,846 Tonnes loaded through to the vessel KONSTANTINOS on 13.07.2017.
- d) Chennai Port Railway Service has set a milestone by handling 239808 Tonnes of Steel (Inward) through 85 rakes, 3747

wagons during the month of August 2019 surpassing the previous record handling of 177792 Tonnes of Steel (Inward) through 61 rakes, 2778 wagons during the month of October 2017.

- e) CMA CGM RHONE, the highest capacity container vessel called Chennai Port on 08.09.2019 visited to the Chennai Container Terminal Pvt Ltd., operated Terminal in Chennai Port.
- f) M.V SEABOURN OVATION, a modern Bahamas flag ultra luxury cruise ship on its maiden visit called Chennai Port on 13.12.2019 with 551 Passengers and 429 crews from Kochi and sailed to Trincomalee, Sri Lanka on 14.12.2019.
- g) Chennai Port Trust signed an agreement with M/s. KIA MOTORS, A Korean automaker, along with their Logistic Partners M/s. Glovis India Anantpur Pvt. Ltd., on 05.09.2019 to provide tailor made facilities and concessional benefits for the export of vehicles.
- h) Chennai Port Trust, India and Port Authority of Thailand (Ranong Port) entered into the Sister Port MoU at Visakhapatnam Port on 07.11.2019 to strengthen longstanding relationship and to improve co-operation between India and Thailand in the BIMSTEC Conclave.
- i) Construction of 260 Meter long Coastal berth at an estimated cost of Rs.80 Cr including Capital dredging for deepening upto (-)11.88 M was completed in November, 2019 with a Capacity addition of 1 MTPA.



Inauguration of Coastal Berth at Chennai Port by Shri Mansukh Mandaviya, Hon'ble Minister of State for Shipping



MORMUGAO PORT

4.20 Mormugao Port, situated on the west coast of India, is more than a century 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 Mts. which is presently being deepened to -19.80 Mts. 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.

4.21 The Port has 9 operating berths viz. 6 mooring dolphins for handling bulk cargo. The effective rated capacity of the port is 63.40 MTPA. There is a dedicated cruise berth and a berth for the use of Navy and Coast Guard. The port handled a traffic of 11.71 MT during the year 2019-20 (upto December, 2019). The project relating to Replacement of existing Fenders with SCN (Reverse) type Cone fenders at existing Cruise Berth was awarded and projects relating to Immigration offices and allied facilities at existing Cruise berth and Removal of Mooring Dolphins from the water areas of existing Cruise Berth were completed during the year.



The Vessel M.V Norwegian Jade made a Maiden call on the Mormugao Port on 04/12/2019, during which there was a Plaque ceremony between MPT and Captain/Agents signifying goodwill gesture.

Notable achievements during the year

a) The arrival of the second luxury cruise liner Karnika operated by Jalesh Cruises at Mormugao Port on 13.04.2019 added

another chapter in domestic cruise tourism in India. The domestic cruise sector has already gained momentum in the past few months and is poised to grow at a steady

pace in the coming months and the state of Goa stands to benefit from domestic cruise tourism. Being a tourism state, Goa has a great potential for the growth of this cruise sector in the country.

- b) The inaugural visit of cruise ship KARNIKA brought around 71 guests to the state from Mumbai Port and departed with almost 1069 guests to Mumbai. The logistics and other ground arrangements for the inaugural visit of the domestic cruise were handled efficiently by M/s. Inchcape Shipping Services in Close collaboration with the Mormugao Port Management. Karnika, India's Second Luxury cruise ship will make regular visits between Mumbai-Goa-Mangalore. Karnika cruise is a 14-deck, 245-meter long passenger ship built in Italy. It can accommodate 2000 Passengers at a time and will have 725 crew members including hospitality and marine crew.

V.O. CHIDAMBARANAR PORT

- 4.22 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.
- 4.23 The Port has 15 berths with an effective rated capacity of 111.46 MTPA. It handled a traffic of 26.90 MT during the year 2019-20 (upto December, 2019).

Notable achievements during the year

- a) V O Chidambaranar Port created a new record by handling 4,524 TEUs of Container in a single day on 25.08.2019 surpassing the previous Single Day record of 4,402 TEUs on 14.08.2019.
- b) During August, 2019 the Port handled 80,474

TEUs of Containers surpassing the previous highest performance of 73,027 TEUs of containers handled during July, 2019 which is the highest ever number of TEUs handled by the Container Terminal in a single month so far at this Port.

- c) On 16.09.2019, V.O.Chidambaranar Port had berthed a vessel with highest capacity of 95,692 DWT carrying a parcel size of 89,777 Tonnes of Coal at Berth No. IX. The Panama flagged vessel 'MV NBA VERMEER' with Length of 234.98 meters, beam of 38 meters and draft of 14.16 meters arrived from the Port of Baltimore, United States of America. Previously, the highest parcel size vessel 'MV KMAX Emperor' with 85,224 tonnes of Limestone was handled at the Port on 25.07.2019.

DEENDAYAL PORT (KANDLA)

- 4.24 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 31 berths including SPM, Oil Jetties and Dry Cargo with an effective rated capacity of 267.10 MTPA. The port handled 92.41 MMT of traffic during 2019-20 (upto December, 2019). The cargo handled comprises POL, Iron Ore, Fertilizers, Coal (Thermal/coking) etc. Projects relating to Smart Industrial Port City (SIPC) at Kandla, work of land filling at location 2 (Rs. 167.47 Crore), providing rail connectivity for berth No. 13, 14, 15 & 16 from take off point to the western end of berth (Phase II-PW Works) (Rs. 34 Crore) and setting up of a 14MW wind power project were completed during the year.

Notable achievements during the year

- a) Deendayal Port Trust bagged Award for 10th edition of All India, "Maritime and Logistics Awards 2019 (MALA)" for Best Major Port of the year and "Hall of Fame".



Deendayal Port Trust received the Government Port of the Year award at the Samudra Manthan Awards-2019.

b) DPT bagged Gujarat Star Awards, as Best Port of the year in Non- Containerized Cargo handling, in a function organized on 13th December, 2019 by Daily Shipping Times at Gandhidham.

VISAKHAPATNAM PORT

4.25 Port of Visakhapatnam, a natural harbour is located almost between Kolkata and Chennai on the East coast of India at latitude 17°41' and longitude 83°17'. It was opened to commercial shipping on 7th October, 1933. The Visakhapatnam Port is the only Indian Port possessing three international accreditations viz. ISO 14001; 2004 (EMS)/ OHSAS 18001 and ISO 90001:2000 (QMS). The Port has mechanized handling facilities for iron ore, iron pellets, alumina, fertilizer raw material, crude oil & POL products, liquid ammonia, Phosphoric acid, edible oil, caustic soda and other liquid cargoes. The inner harbor can accommodate fully laden Panamax vessels of draft upto 14.5 meters and the outer harbor can accommodate

Supercape vessels of 200,000 DWT with a draft upto 18.10 meters. The port has the distinction of possessing Supercape handling facility and the deepest container terminal among Major Ports of India.

4.26 Visakhapatnam Port has 27 berths plus 1 SPM with an effective rated capacity of 131.09 MTPA. The port handled traffic of 53.54 MMT during the year 2019-20 (upto December, 2019). Important projects awarded during the year include repair and rehabilitation of existing LPG berth in the outer harbor (Rs.5.91 Crore) and providing hard surfacing with precast concrete blocks of M-55 grade to the Port stack yards (West of B ramp, North of OHC) in Port area (Rs. 9.93 Crore). Project relating to Development of Multipurpose terminal by replacement of existing EQ-2 to EQ-5 berths to cater to 14.5 Metres draft vessels in the Inner Harbour (Rs. 198.46 Crore) was completed during the year.

Notable achievements during the year

a) A two day BIMSTEC conclave was organised by Port of Visakhapatnam on 7th - 8th November, 2019 at Visakhapatnam comprising 7 member states viz.,

Bangladesh, Bhutan, Myanmar, Nepal, Sri Lanka, Thailand and India constituted for improving and strengthening Maritime co-operation, trade and commerce among the member Nations.



BIMSTEC Port's Conclave at Visakhapatnam on 7th & 8th November, 2019

b) Port of Visakhapatnam has been declared winner for the 3rd consecutive year in Port Service Sector for outstanding achievements in Environment Management by Greentech Foundation on 11th – 12th July, 2019.

c) New multi-purpose terminal at EQ-2 and EQ-3 berths to cater 14.5 meter draft vessels was inaugurated on 7th November, 2019 by Minister of State for Shipping (Independent Charge) Shri Mansukh Mandaviya.



Inauguration of new Multi-purpose terminal at EQ-2 and EQ-3 berths to cater 14.5 meter draft vessels in Inner Harbour Visakhapatnam Port on 7th November, 2019



d) Port of Visakhapatnam entered into a Memorandum of Understanding with Port Authority of Thailand (Ranong Port) for

promoting EXIM trade between two countries i.e., Thailand and India.



Signing of MoU with Thailand at BIMSTEC Ports Conclave, Visakhapatnam

e) Port of Visakhapatnam has been declared winner in Services Sector for outstanding achievements in Safety Management by Greentech Foundation on 8th December, 2019.

PERFORMANCE OF MAJOR PORTS

4.27 Traffic handled at Major Ports

(In million tonnes)

Sl. No.	Port	Actual 2018-19	Provisional 2019-20 (upto December, 2019)
1	Kolkata	18.55	13.34
2	Haldia	45.21	33.76
3	Paradip	109.28	83.62
4	Visakhapatnam	65.30	53.54
5	Chennai	53.01	35.84
6	V.O. Chidambaranar	34.34	26.90
7	Cochin	32.02	25.00
8	New Mangalore	42.51	27.60
9	Mormugao	17.68	11.71
10	Jawaharlal Nehru	70.71	50.73
11	Mumbai	60.59	46.16
12	Deendayal (Kandla)	115.40	92.41
13	Kamarajar (Ennore)	34.50	23.42
Total		699.10	524.03

4.28 Cargo Handled at Major Ports

(In Million tonnes)

Sl. No.	Commodity	Actual 2018-19	Provisional 2019-20 (upto December, 2019)
1	POL	232.36	178.03
2	Iron Ore	34.07	39.37
3	Fert. & Fert. Raw Materials	15.13	12.58
4	Coal	127.70	108.37
5	Containerized Cargo	145.45	110.09
6	Others	144.39	75.59
Total		699.10	524.03

4.29 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 (Upto Dec., 2019)	1524.91	524.03

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



MINISTRY OF SHIPPING

4.30 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)	
		2018-19	2019-20 (upto December, 2019 (*))
1	Kolkata	92.08	98.64
2	Haldia	72.96	83.28
3	Paradip	60.35	73.05
4	Visakhapatnam	60.22	60.28
5	Chennai	47.41	48.21
6	V.O.Chidambaranar	47.04	46.80
7	Cochin	35.21	35.76
8	New Mangalore	46.21	46.50
9	Mormugao	63.06	66.78
10	Jawaharlal Nehru	51.22	50.88
11	Mumbai	60.42	62.39
12	Deendayal (Kandla)	72.24	72.24
13	Kamarajar (Ennore)	47.27	46.42
Total (All Ports)		59.51	62.47

(*)Provisional

(ii) Average Output per Ship Berth Day

(In Tonnes)

Sl. No.	Port	Average Output Per Ship Berth Day	
		2018-19	2019-20 (upto December, 2019 (*))
1	Kolkata	4408	4220
2	Haldia	9593	10061
3	Paradip	26197	25055
4	Visakhapatnam	13790	14672
5	Chennai	17288	16401
6	V.O.Chidambaranar	15353	15164
7	Cochin	22839	23409
8	New Mangalore	18126	15119
9	Mormugao	12163	12634
10	Jawaharlal Nehru	26498	27072
11	Mumbai	10409	10634
12	Deendayal(Kandla)	17363	16376
13	Kamarajar (Ennore)	24258	23378
Total (All Ports)		16541	16132

(*)Provisional

CHAPTER – V

SHIPPING



Oil Rigs under repair at Cochin Shipyard Limited

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 of Shipping.
- 5.6 However, despite government push for import contracts on FOB/FAS basis, due to the decreasing quantum of FOB contracts, while India's EXIM trade has been steadily growing at Compounded Annual Growth Rate (CAGR) of 7.1%, from 2004-05 to 2018-19, the share of Indian ships in the carriage of India's EXIM trade has drastically declined from 13.7% in 2004-05 to about 7.9% in 2018-19. In 1987-88, the share of Indian ships in India's EXIM trade was 40.7%.
- 5.7 Exports have come to be regarded as an engine of economic growth in the wake of liberalization and structural reforms in the economy. India's exports in value terms increased by 8.73% from US\$303.6 billion in 2017-18 to US\$333.1 billion in 2018-19, while imports increased by 10.14% from US\$464.5 billion in 2017-18 to US\$512.84 billion in 2018-19.
- 5.8 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).
- 5.9 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.
- 5.10 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

5.11 The Ministry of Shipping is the nodal Ministry for formulating policy measures for the promotion of Indian Shipbuilding and Ship repair Industry. There are 28 Shipyards in the country, 6 under Central Public Sector, 2 under State Governments and 20 under private Sector. The breakup of the government owned, controlled shipyards is as under:-

- (a) Ministry of Shipping
 - i. Cochin Shipyard Limited, Kochi
 - ii. Hooghly Cochin Shipyard Limited – a subsidiary of CSL
- (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
 - Alock Ashdown Co. Ltd. (closed in July 2019)
 - (ii) Under Government of West Bengal
 - Shalimar Works Limited, Kolkata.

5.12 The global shipbuilding industry is going through an extended downturn for the past few years, with world's leading shipyards facing financial troubles due to lack of orders. The effects are being particularly felt in bulk cargo vessel segments (Bulkers, Containers, Crude Tankers), wherein ships delivered during 2008-12 period have created an excess supply of vessels in the market, pushing down the charter rates. However, the global shipbuilding prospects achieved modest recovery, riding on the IMO 2020 Sulphur regulations and world fleet renewals. The International Maritime Organization (IMO) has enforced a new 0.5% global sulphur cap on fuel content from January 01, 2020, lowering from the present 3.5% limit. The global fuel sulphur cap is part of the IMO's response to heightening environmental concerns, contributed in part by harmful emissions from ships. Experts have stated that these regulations have created significant requirements for technology to be fitted to new ships or retrofitted to existing ships. There could be a scenario where 10% to 15% of fleet has a scrubber fitted by the end of 2020 and in some sectors like VLCCs it could be even higher. That is likely to be a positive effect for suppliers and for shipyards.

5.13 India requires a vibrant and robust shipbuilding and ship-repair industry for economic as well as strategic reasons. At present Indian shipbuilding industry has less than 1% of global share. Keeping in view that India has a coastline of 7500 km, inland water ways potential of over 20,000 km, shipbuilding has been identified as one of the key sectors under the 'Make in India' initiative.

Shipbuilding

5.14 Ship-building is a manufacturing industry endowed with the unique feature of having nearly 65 percent value addition coming from other technology/ancillary industries



such as steel, electronics, engineering and electrical equipment, port infrastructure as well as trade and shipping services. Another characteristic feature of ship-building is that unlike other manufacturing industries which pre-dominantly follow make-to-stock inventory model, shipbuilding is an order-driven industry where each vessel is custom built on receipt of the ship-building 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.

Indian Shipbuilding capability

5.15 Currently, the maximum size of the vessels, which can be built in India in the public sector is 1,10,000 DWT at Cochin shipyard. 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 also 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

5.16 As on September 30, 2019, CSL has 73 ships on order including, 1 No. Indigenous Aircraft Carrier for the Indian Navy, 1 No. Technology Demonstration Vessel for DRDO, 2 Nos. 500 Pax cum 150 Ton Cargo Vessel for A&N Administration, 2 Nos. 1200 Pax cum 1000 Ton Cargo Vessel for A&N Administration, 10 Fishing Vessels for Tamil Nadu Fishermen (under the scheme of Dept. of Fisheries, Tamil Nadu), 3 Nos. Marine Ambulance for the Dept. of Fisheries, Govt. of Kerala, 10 Nos. of Ro-Ro & Ro-Pax Vessels for the IWAI, 8 Nos. of Anti-Submarine Warfare Shallow Water Crafts (ASW SWC) for the Indian Navy. 9 Nos. Floating Border Outpost for the Border Security Force, 4 Nos. of mini bulk carrier for JSW group and 23 nos. of battery operated passenger ferry for the Kochi Water Metro Project.

ORDER BOOK POSITION OF MEMBER SHIPYARDS of SAI

(Rs in Crores)

Sl. No.	Name of Shipyard	Order book position till 31.12.2019 SHIP BUILDING
1	Shoft Shipyard Pvt. Ltd.	443.82
2	Marine Frontiers Pvt. Ltd.	172
3	Dempo Shipbuilding and Engg. Pvt. Ltd	1.82
4	A.C. Roy & Co.	27.98
5	Reliance Naval & Engg. Ltd.	4140
6	Mandovi Drydocks	42.3
7	Chowgule & Co. Ltd.	37.34
8	Vijai Marine Shipyards	70.02
Total		4935.28

Source: Shipyards Association of India (SAI) is an association of Indian Private Sector Shipyards

Potential in Shipbuilding

5.17 The likely growth in demand for shipbuilding in India is expected to emerge from the 106 new National Waterways (NWs) declared under the National Waterways Act, 2016. The Indian shipbuilding industry, however, continues to be driven primarily by the defence requirements. 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. This is expected to provide a spurt in the indigenous shipbuilding. Besides, the Indian Navy's indigenisation plan is also expected to give a fillip to the growth of ancillaries and generally improve the shipbuilding environment in the country. The vision of GOI as per the draft 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. In the commercial shipbuilding, the requirements envisaged in Coastal and Inland Waterways transportation present the most promising segment. Cochin Shipyard has signed a contract on July 11, 2018 with IWAI for construction of 10 ROPAX/RORO vessels for use in inland waterways segment, thus making an inroad in the inland waterways segment.

5.18 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

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

Ship Repair

5.19 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. The global market for ship repair and maintenance service is expected to witness significant growth, reaching a market value of \$ 20,532.6 billion in 2017. 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.



Vessels under repair at Cochin Shipyard Limited

Indian Ship Repair Capability

5.20 Amongst public sector shipyards, Cochin Shipyard Ltd has the highest capacity for ship repairing (125 thousand DWT). In the private sector, Reliance Naval Engg. Ltd. has the maximum capacity for ship repairing (400,000 DWT) followed by L&T Shipbuilding Ltd. (300,000 DWT).

5.21 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 27 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

5.22 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

5.23 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

5.24 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

5.25 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

5.26 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.

Recent steps/ initiatives in shipbuilding and ship repair

Financial Assistance Policy on Shipbuilding

5.27 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 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 amended guidelines on February 2019 and have been uploaded on website of Ministry of Shipping. A total amount of financial assistance of Rs. 45.23 Crores has been released to five Indian Shipyards for delivering 17 vessels.

Right of Refusal to Indian Shipyards

5.28 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 as amended on December 2018 have been uploaded on website of Ministry of Shipping.

Grant of Infrastructure Status

5.29 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 which is self sufficient for carrying on shipbuilding/repair/breaking activities.

International Ship Repair Facility

5.30 The 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 Crores. CSL continued to operate the dry-dock & existing facilities in the leased area (first phase) at Cochin Port premises. CSL completed the repairs of seven ships during the financial year 2018-19. Meanwhile, gate of the existing dry-dock was successfully replaced during the period, March – October 2018. The construction works, which commenced on November 17, 2017, is progressing in full swing. More than 60% of the piling works are completed and the facility is expected to be commissioned in FY 2020-21. As a part of our efforts to develop Kochi as a maritime hub of India, CSL is setting up a maritime park adjacent to the ISRF premises to house major OEMs and service providers of the ship repair industry. Civil construction is almost complete. 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.

New Large Dry-dock at CSL

- 5.31 The Cochin Shipyard Limited is constructing New Dry Dock (Graving Dock of size 310m x 75/60m x 13m and Gantry Crane : 600 Tons x 1, LLTT Cranes : 75 Ton x 2, and other allied facilities) within their premises at an estimated cost of Rs. 1799 Crores (Rs. 920 Crores for Civil + Rs. 879 Crores for Machinery, electrical & consultancy).
- 5.32 The new dry-dock measuring 310 x 75/60 x 13m with 600T gantry crane will be located at the northern end of the existing premises of the Company. The new dock will augment the Company's shipbuilding and ship repair capacity essentially required to tap the market potential of building specialized and technologically advanced vessels such as LNG Carriers, Aircraft Carriers of higher capacity, jack up rigs, drill ships, large dredgers and repairing of offshore platforms and larger vessels. Turnkey contract for construction works of plant and machinery for the new dry-dock project was awarded on April 27, 2018 and construction activities commenced on June 01, 2018. Ground improvement works and RCC piling are in progress and five hundred piles have been completed. Contract for the supply & commissioning of 600 T gantry crane was issued on March 14, 2019.

SHIP RECYCLING

- 5.33 Ship breaking in India takes place mainly at Alang-Sosiya in Gujarat. Ship breaking is also carried out in a limited manner at Kolkata, but it is restricted to vessels upto overall length of 157 meters. Small ships varying from 200 Light Displacement Tonnage (LDT) to 2500 LDT are taken up for breaking in Kerala also. Ship breaking takes place at Mumbai also, where Mumbai Port Trust has restricted beaching/breaking of Chemical Tankers, POL Tankers, Passenger Vessels, Reefer Vessels and Fishing Trawlers at ship breaking plots. Since the ship breaking plots in Mumbai

Port are small in size compared to plots at Alang, general cargo vessels of 1000 LDT are generally brought for beaching/breaking. The ship breaking capacity available in the country with the public and private sector is approximately 4.5 Million LDT.

Ship-breaking Code (Revised), 2013

5.34 Ship Recycling in the country is currently regulated under the Ship Breaking Code (Revised), 2013. This Code, which had been formulated based on the directions of the Apex Court, is in some areas more stringent than the Hong Kong International Convention on Safe and Environmentally sound recycling of ships(HKC).

Ship Breaking Scrap Committee

5.35 A Ship Breaking Scrap Committee (SBSC)

under the Chairmanship of Joint Secretary (Shipping) has been constituted to, inter alia, streamline various measures relating to modernization/upgradation of ship breaking yards, implementation of Ship Breaking Code, 2013 and administration of ship breaking scrap development fund (Ferrous Scrap Development Fund).

5.36 The Gujarat Maritime Board (GMB) has finalised a project for upgradation of existing environmental infrastructure at Alang Sosiya ship recycling yard at a total cost of US\$ 111 million, which includes US\$ 76 million as soft loan from JICA. A loan agreement has been signed on 15.09.2017 between JICA and Ministry of Finance.

5.37 The cost of the project will be shared as follows:

Item	Cost (in million US\$)
Loan from JICA	76
Taxes & Admn cost to be borne by GMB	25
Balance to be shared between GMB and M/o Shipping	10
Total cost	111

5.38 The project has the following main components:

- a) Upgrading 70 yards (Providing impervious floors to prevent pollutants in sub-soil)
- b) Improvement of existing Environmental Facility (Effluent Treatment Plant Incinerator and Oil Recovery systems,etc).
- c) Introduction of Mobile Decontamination Units.(Pollution Response Equipment to avoid oil spill and fire)
- d) Introduction of Large Mobile Cranes (for enhancing safety in material handling from ships to plots and Beach Cleaning Wheel Loaders to collect wastes from coastal area, if any)

- e) Introduction of Tank Cleaning Barge (for decontamination of cargo hold of oil tankers anchored at Alang Anchorage, thus making them gas free to avoid fire /explosion and to prevent oil spill.
- f) Introduction of Multipurpose Vessel (proposed for standby operation when at Anchorage at Alang when decontamination is in process, for surveillance to address any accidental oil spill and firefighting)
- g) Training and capacity building of yard workers and associated stakeholders

5.39 GMB has appointed a Project Management Consultant and the project is expected to be completed by March, 2024.

5.40 Ministry of Shipping is funding the



Occupational Health and Safety training project for workers at Alang-Sosiya Shipyard. Since 2017 around 23,000 workers have been trained at Alang. In addition to this, a specialized hospital is now operational in Alang. This will ensure immediate response and care to the workers in the yards, particularly for orthopedic and burn injuries.

Recycling of Ships Act, 2019

5.41 The main features of the Recycling of Ships Act, 2019 are:

- i. The Recycling of Ships Act, 2019 restricts and prohibits the use or installation of hazardous materials, which applies irrespective of whether a ship is meant for recycling or not.
- ii. For new ships, such restriction or prohibition on use of hazardous materials will be immediate, that is, from the date the legislation comes into force, while existing ships shall have a period of five years for compliance.
- iii. Restriction or prohibition on use of hazardous materials would not be applied to warships and non-commercial ships operated by Government.
- iv. Ships shall be surveyed and certified on the inventory of hazardous materials used in ships.
- v. Under this Act, ship recycling facilities are required to be authorized and ships shall be recycled only in such authorized ship recycling facilities.
- vi. This Act also provides that ships shall be recycled in accordance with a ship-specific recycling plan. Ships to be recycled in India shall be required to obtain a Ready for Recycling Certificate in accordance with the HKC.
- vii. The Act imposes a statutory duty on ship recyclers to ensure safe and environmentally sound removal and

management of hazardous wastes from ships.

- viii. Appropriate penal provisions have been introduced in the Act to deter any violation of statutory provisions.
- ix. Every Ship Recycler shall provide adequate measures for safety, health, training and welfare of workers in his ship recycling facility and for this purpose, the provisions of the Factories Act, 1948 shall apply.
- x. Every Ship Recycler shall provide an individual or comprehensive insurance coverage for the regular and temporary workers in such manner as may be prescribed.

Accession to the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009

5.42 India has acceded on 28.11.2019 to the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 and has enacted the Recycling of Ships Act, 2019, which will enable enforcement of the provisions of the Hong Kong Convention (HKC).

COASTAL SHIPPING

5.43 Coastal Shipping is a fuel efficient and environmentally friendly mode to reduce road and rail congestion. The ability to move large volumes in a short period gives coastal shipping a distinct comparative advantage over other modes of transport. Despite the inherent advantages, however, Coastal Shipping is still in its infancy in India. To promote coastal shipping in India the following policy decisions have been taken:-

- (a) Cabotage has been relaxed under section 407 of Merchant Shipping Act, 1958, for coastal movement of :
 - EXIM/EMPTY containers
 - Agriculture, horticulture, fisheries and animal husbandry commodities.
 - Fertilizers.

(b) The requirement of licensing for chartering vessels under section 406 of MS Act, 1958 has been exempted for the following:

- EXIM/EMPTY containers
- Agriculture, horticulture, fisheries and animal husbandry commodities.
- Fertilizers.

CRUISE SHIPPING

5.44 The Government has taken various steps to promote cruise shipping, which is in its nascent stage in India. Cruise shipping generates direct and indirect employment and helps the country to earn huge amount of foreign exchange. The vision of the Government is to put India on the global cruise market both for ocean & river cruises. To give a fillip to cruise shipping, Ministry of Shipping has relaxed Cabotage till 5th Feb, 2029 for foreign flag passenger/cruise ships to call at more than one Indian Port without obtaining a license from Directorate General of Shipping. To promote Domestic Cruise Shipping, concession of 40% on composite port charges of USD 0.35 per GT for 1st 12 hours of stay is given to domestic cruise vessels for 75-100 calls in a year and 50% concession for calls exceeding 100 in a year

for a period of three years i.e. up to 3-11-2020 at all Major Ports except Mumbai Port, where concession of 20% for 100 calls or more in a year starting from 1st October to 30th September will be applicable.

5.45 Currently the ports of Mumbai, Cochin, Goa, New Mangalore and Chennai are primarily ports of call for cruise lines. However, Costa New Classica cruise has made Mumbai its home-port in 2017-18 & 2018-19. In the year 2018-19, 157 vessels carrying 2,01,872 passengers called at five major Ports namely Mumbai Port, Chennai Port, Cochin Port, Mormugao Port and New Mangalore Port. Cruise Ship Costa Victoria, a 2000 passenger carrying capacity ship is home-ported in Mumbai port, offering a seven day voyage (from Mumbai to Male) and three days voyage (Kochi to Male). Such 9 voyages are to take place during the cruise season from November 2019 to February 2020.

5.46 The first premiere luxury cruise line of India M/s Jalesh Cruise have home-ported their cruise ship 'Karnika' at Mumbai, which has been operating along the Indian coast and carrying passengers to other countries as well.

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

No. of International Cruise ships and passengers handled in Indian Ports								
PORT	No. of ships	No. of passengers						
Chennai	4	2450	5	3202	2	1245	5	3685
Cochin	33	35541	46	57019	42	50117	49	62753
Mumbai	40	37820	51	57076	40	56601	42	58858
New Mangalore	23	19160	28	30246	22	24153	26	28798
Mormugao	28	30867	28	44182	32	44662	35	47778
TOTAL	128	125838	158	191725	138	176778	157	201872

5.48 India's first domestic Cruise Ship 'Angriya', with best in-class amenities has been

operating between Mumbai and Goa since October, 2018. The vessel made 64 calls



MINISTRY OF SHIPPING

each at Mumbai and Goa and carried 55,798 passengers during the year 2018-19. The number of Domestic Cruise Ships and

passenger handled in Indian Ports in 2018-19 are given in the Table below.

No. of Domestic Cruise Ships and passenger handled in Indian Ports in 2018-19			
Name of Port	Name of Ship	No. of calls	No. of Passengers
Mumbai	ANGRIYA	64	27,899
Goa	ANGRIYA	64	27,899
Total		128	55,798

INITIATIVES ON MERCHANT SHIPPING LAWS

Revamped Merchant Shipping Bill to replace Merchant Shipping Act, 1958

5.49 The Merchant Shipping Bill, 2016 lapsed in May 2019 due to the dissolution of the 16th Lok Sabha. Currently the process of appointment of a reputed law university as a consultant for revisiting the provisions of Merchant Shipping Bill, 2016 and Merchant Shipping Act, 1958 is under process.

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

5.50 The Admiralty (Jurisdiction and Settlement of Maritime Claims) Bill, 2017, was passed by the Parliament on 24.07.17. The President gave his assent to the Bill on 09.08.17. The law aims to establish a legal framework for consolidation of related laws to replace the archaic laws of British era with modern Indian legislation and to confer admiralty jurisdiction on all High Courts of the coastal states of the country.

5.51 As per the new Act, High Courts of all the coastal states shall exercise admiralty jurisdiction over maritime claims, which include several aspects not limited to goods imported, but also claims in relation to payment of wages of seamen, loss of life, salvage, mortgage, loss or damage, services and repairs, insurance, ownership and lien, threat of damage to environment, etc. The law accords highest priority to payment of wages to the seafarers. The Act also provides for protection against wrongful

and unjustified arrest and has provision for transfer of cases from one High Court to another High Court.

5.52 The Admiralty (Assessors) Rules, 2018 regarding appointment of Assessors under the Admiralty (Jurisdiction and Settlement of Maritime Claims) Act, 2017 was notified in the Gazette on 29.07.2018. 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 courts of coastal states of the country. As of January, 2020, the High Court at Kolkata has notified these rules.

5.53 Vessel Sharing Agreements had been exempted from the provisions of section 3 of the Competition Act, 2002, initially for a period of one year w.e.f. the 11th of December, 2013, until the 10th of December, 2014, and the exemption was again extended for one more year w.e.f. 5th February, 2015 upto 4th February, 2016. After a joint review of the said exemption, conducted by the Competition Commission of India and Directorate General of Shipping, Govt. of India, it has been periodically extended and at present the said exemption stands valid till 3.7.2021 for fostering ease of doing business in the liner shipping industry in India, without, compromising the core anti-competition principles.

CHAPTER – VI

FUNCTIONING OF ORGANIZATIONS



SCI Panna Offshore supply ship

DIRECTORATE GENERAL OF SHIPPING

6.1 The Directorate General of Shipping {DG(S)}, an attached office of the Ministry of Shipping, Government of India 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 Additional Director General of Shipping and Deputy Directors General of Shipping (non-technical). 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. The Nautical Adviser and Chief Surveyor are also Chief Examiners of Master/Mates and Engineers



respectively.

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 Multimodal 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

- 6.6 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/re-construction abroad and subsequent periodical/annual surveys and issuance of certificate have been delegated to recognize Classification Societies.
- 6.7 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.

Examination

- 6.8 In line with modern developments in technology and to encourage our young Marine Engineers to work on technologically advanced ships, where ship is propelled using both Steam and Motor power, the Chief Examiner of Engineers defines qualifying

sea service requirements for Candidates appearing for combined Steam and Motor examination after working on these ships for various grades of Competency Examination vide EAC Circular 7 of 2018.

Tablet Based Examination System (TBES) Project

6.9 Directorate General of Shipping (DGS) in line with STCW Convention and Digital India will shift the existing manual Certificate of Competency (CoC) written examination into Tablet Based CoC Examination System format. National Institute of Smart Government (NISG) has been appointed by the Directorate as a consultant, who has delivered feasibility study; Detail Project Report (DPR), Expression of Interest (EOI) and Request for Proposal (RFP). After implementation of Tablet Based Examination System at MMDs the existing NCV Examination outsourced to Institute of Marine Engineers India (IMEI) will also be merged with the DGS Tablet Based Examination System.

Video Conferencing System for oral examinations

6.10 National Institute for Smart Government (NISG) has been awarded the work to provide consultancy services for selection of System Integrator for video conferencing solution for Oral examination on 29th August, 2019. A pre-RFP meeting held to understand the requirements of system in the Directorate on 19.11.2019 and Request for Proposal (RFP) will be finalized and published shortly.

Safety Equipment Surveys

6.11 The Classification Societies (ROs) carry out the Surveys of Safety Equipment on board ships under the requirements of SOLAS Convention 1974 as amended and the M.S. (Fire Fighting Appliances) Rules, 1990 and M.S. (Life Saving Appliances) Rules, 1991.

and issue certificate.

Supply of Shore Electric Power to visiting ships in Indian Ports

6.12 Two ports namely Adani port , Mundra & Kochi port have started supplying shore power to visiting ships from 1st November, 2019. Adani Port, Mundra will supply shore power to Tugs, barges, pilot boats and other types of ships with power demand at ports less than 50 kW and Kochi port will supply shore power to Tugs, barges, pilot boats and other types with power demand at ports less than 125 kW.

International Oil Pollution Prevention (IOPP) Surveys

6.13 The Classification Societies (ROs) are also responsible for survey and certification for Oil Pollution under the various Annexes of MARPOL 73/38 Convention. In this survey, inspection of pollution prevention equipment is undertaken to protect and safeguard the marine environment.

Usage of Swachh Sagar Portal

6.14 As per Directorate Notification, all Ships irrespective of whether require Waste Reception Facility or not have to fill up an Advance Notification Form on the Portal indicating amount of waste on ship. If Waste Reception Facility is used, the waste collector has to upload Waste receipt. Based on said two parameters, that is Advance Notification Form (ANF) and usage of waste reception through uploading of waste receipt. At present Swachh Sagar has been implemented in around 11 major ports & 40 minor ports.

Certificate of Fitness and International Pollution Prevention Certificate (IPPC)

6.15 The Certificate of Fitness / IPPC for the carriage of Noxious Liquid Substances in Bulk are issued after survey is carried out under Annex – II of the MARPOL and the



Gas and Chemical Codes formulated by the International Maritime Organizations. This survey is usually carried out by the Classification Societies on behalf of the Department and the certificate is issued to

the vessel by them.

Registration of Ships

6.16 There is consistent increase in the vessels registered under Indian flag as evident from the chart below:

Sl. No	Period	Coastal	Overseas	Total
1	2017	929	443	1372
2	2018	945	456	1401
3	2019	972	457	1429

Government Shipping Office, Mumbai/Chennai/Kolkata

6.17 The main functions of the Government Shipping Offices established under Section 11 of the Merchant Shipping Act, 1958 are:

- To provide means for securing the presence on-board at proper times of the seamen who are so engaged.
- To facilitate making of apprenticeship to the sea service.
- To hear and decide disputes under Section 132 between a Master, Owner or Agent of a ship and any of the Crew of the ship.
- Issue of Continuous Discharge Certificate-cum-Seafarers Identity Document (CDC).

Issuance of Continuous Discharge Certificates

6.18 Indian Seafarers are required to possess a certificate called Continuous Discharge Certificate (CDC) to be able to work on an Indian Flag Ship. Entire process of issuance of CDC has been made online since June, 2015. Total number of seafarers who have utilized this facility by the end of December, 2019 is 65043 and the number of CDC issued is 55866. In the year 2019, CDCs issued were as under:-

Fresh CDC	55866
Renewal CDC	7605
Duplicate CDC	600
Replacement CDC	9091

Seamen's Employment Office, Mumbai/Chennai/Kolkata

6.19 The seamen's Employment Office, established under section 12 of the Merchant Shipping Act 1958, continued to function in accordance with the provisions contained in section 95 to 98 of the M.S. Act and as guided by the instructions and orders issued by the Directorate from time to time. In terms of the amended section 95 of M.S. Act, 1958 the business of the seamen Employment Offices Includes:-

- Issuance of license, regulating and controlling the recruitment and placement service providers
- Ensuring that no fees or other charges for recruitment or placement of seafarers are borne directly or indirectly or in whole or in part, by the seafarers
- Ensuring that adequate machinery and procedure exist for the investigation, if necessary, of complaints concerning the activities of recruitment and placement service providers
- Issuance of Biometric Seafarers Identity Document (BSID)
- The total No. of BSIDs issued till 31.12.2019 are given as under:

Mumbai	16031
Chennai	9298
Kolkata	3945
Total	29274

Maritime Training in India

6.20 India has a long maritime tradition. India is the 16th largest maritime country in the world. The single largest contribution factor to this glorious tradition is the presence of a strong, dedicated, efficient and reliable reservoir of officers and ratings of Merchant Navy in India. The safety and efficiency of ships are crucially dependent upon professional ability and dedication of well trained seafarers. Great importance has

always been attached to the maintenance of high quality training imparted to maritime personnel in India, which has facilitated India to emerge as a major manpower supply nation to the world-wide shipping. The ever increasing demand of the India seafarers world-wide is testament of the quality of education and training received in India.

6.21 There are 151 Training Institutes at present. The summary of the capacity of the various pre-sea training institutes is given as under:-

Pre-sea Training	Total approved annual capacity
Diploma in Nautical Science	2670
Graduate Marine Engineering	2576
Electro Technical officers	2068
BE/B-Tech Marine Engineering	2762
Training for General Purpose Rating	7600
Certificate Course in Maritime Catering	2006
B.Sc Nautical Science	1865
Total	21,547

6.22 Region-wise annual intake of pre-sea courses:-

Region	Name of the Course	Approved in take
Eastern Region	Diploma in Nautical Science	NIL
	Graduate Marine Engineering	140
	Electro Technical officers	120
	BE/B-Tech Marine Engineering	526
	Training for General Purpose Rating	700
	Certificate Course in Maritime Catering	240
	B.Sc Nautical Science	190
	TOTAL	1916
Western Region	Diploma in Nautical Science	2000
	Graduate Marine Engineering	1220
	Electro Technical officers	916
	BE/B-Tech Marine Engineering	560
	Training for General Purpose Rating	2200
	Certificate Course in Maritime Catering	1046
	B.Sc Nautical Science	625
	TOTAL	8567



Region	Name of the Course	Approved in take
Northern Region	Diploma in Nautical Science	560
	Graduate Marine Engineering	120
	Electro Technical officers	72
	BE/B-Tech Marine Engineering	120
	Training for General Purpose Rating	880
	Certificate Course in Maritime Catering	160
	B.Sc Nautical Science	NIL
	TOTAL	1912
Southern Region	Diploma in Nautical Science	110
	Graduate Marine Engineering	1096
	Electro Technical officers	960
	BE/B-Tech Marine Engineering	1556
	Training for General Purpose Rating	3820
	Certificate Course in Maritime Catering	560
	B.Sc Nautical Science	1050
	TOTAL	9152

6.23 During the year 2019, 07 Institutes were suspended, 09 Institutes have been closed and 02 Institutes have voluntarily withdrawn approval. Overall, 18 Institutes were issued withdrawal, closure and suspension order by the Directorate General of Shipping. At present, 151 DGS approved Maritime Training Institutes are running.

E-Governance initiatives

6.24 Directorate General of Shipping has undertaken several measures to provide its services to its stakeholders on an e-platform. The e-governance project by the name e-samudra was conceived by the DGS in the year 2004. In the past two years, these e-samudra modules have been revamped/ upgraded in accordance with the new requirements. Thereby many of the services of DGS are now brought on an e- Platform. These are as under:

Registration of ships

6.25 The DGS through its field offices [Mercantile Marine Departments] functions as the Registrar of Indian flag vessels. The entire process of registration of Indian ships and

related processes such as alteration of name, change in mortgage etc., has been made online since May, 2015. Total number of ships who have utilized this facility by the end of December, 2019 is 2284.

Issuance of Licensing and Chartering permissions

6.26 "The filing of an application for permission, processing of such application [for both export and import charter], payment of fee and issuance of such permission is completely online, since, November, 2014. 4623 applications have been processed till the end of December, 2019."

Concurrent feedback system

6.27 A concurrent feedback mechanism has been developed and hosted on the official website of the DGS to receive feedback/ inputs from service users on various services provided by DGS. The said feedback mechanism also provides for receiving grievances from other stakeholders and enables their grievances redressed. Concurrent feedback mechanism allows the users of the service to rate the service utilized

and also to provide descriptive comments on the same. The concurrent feedback mechanism has now been converted into a robust Grievance Redressal Mechanism. A three member team has been functioning to monitor the redressal of grievances. In total 3635 feedbacks were received in the year 2019, which were resolved. It is observed that the average response time to redress the grievances during the year is 1.5 days, whereas this response time is seen to have been reduced during the quarter ending 31.12.2019 to 1.3 days.

E- Learning Platform

6.28 The Director General of Shipping is the first maritime administration to roll out online learning platform or post sea training for seafarers. This training is provided to the seafarers free of cost. The LMS based platform has a number of interactive videos, mock tests and doubt clearing sessions. More than 18,000 Indian seafarers are using this platform.

Initiatives taken by the Directorate General of Shipping

6.29 The Directorate is assisting the implementing of the 'Shipbuilding financial Assistance Policy 2016-2026' which is rolled out by Ministry of Shipping, as per the guideline issued vide file no. SY-16023/6/2015-SBR dated 27.10.2017, as amended in October, 2017 and further amended in 28.02.2019. The Shipbuilding Finance Assistance Policy and the guidelines came into force with effect from April 1, 2016 and shall be applicable for shipbuilding contracts signed during the dates, April 1, 2016 to March 31, 2026, including the said dates.

6.30 The Instrument of Accession to the Hong Kong Convention on Safe and Environmentally Sound Recycling of Ships, 2009 signed by the President of India, was deposited with the Secretary-General of International Maritime Organization on

28.11.2019 during the 31st Regular Session of IMO Assembly at London, by Indian delegation lead by Secretary (Shipping), GoI. The Recycling of Ships Act, 2019 has been passed in Lok Sabha on 03.12.2019 and in Rajya Sabha 10.12.2019. India has been re-elected to the IMO Council in Category 'B' for the biennium 2020-21. Election held on 29.11.2019 during 31st Regular Session of Assembly at IMO, London. An agreement has been signed between Govt. of India and Swedish Transport Agency for mutual recognition of the certificates of seafarers on 02.12.2019 at New Delhi. This will enable the employment of Indian seafarers' on-board Swedish flag ships.

SEAMEN'S PROVIDENT FUND ORGANIZATION, MUMBAI

6.31 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 in the year 2019. SPFO was maintaining the PF account of approximately 88000 Indian seafarers

NATIONAL WELFARE BOARD FOR SEAFARERS

6.32 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 Shipping for advising the Government



MINISTRY OF SHIPPING

on the measure to be taken for promoting the welfare of Seamen whether on shore or aboard. The Board functions with Minister of shipping as the chairman and Minister of state for shipping as Vice 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. The term of the present National Welfare Board is due to expire on 2nd May-2020.

SEAFARERS' WELFARE FUND SOCIETY

6.33 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

Introduction

6.34 The Directorate General of Lighthouses and Lightships establishes and maintains Aids to Marine Navigation along the coastline of India as per Lighthouse Act, 1927.

Organizational Structure

6.35 The Directorate general is headed by the Director General, having 09 lighthouse Districts with Headquarters at Gandhidham, Jamnagar, Mumbai, Goa, Cochin, Chennai, Vishakhapatnam, Kolkata and Port Blair.

Aids to Navigation

6.36 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	194
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	03
9.	National Navtex Chain (7 Tx. Stations, 7 Monitoring Stations & Navtex Control Centre at Mumbai & Vizag.)	01

Lighthouses

6.37 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

6.38 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.



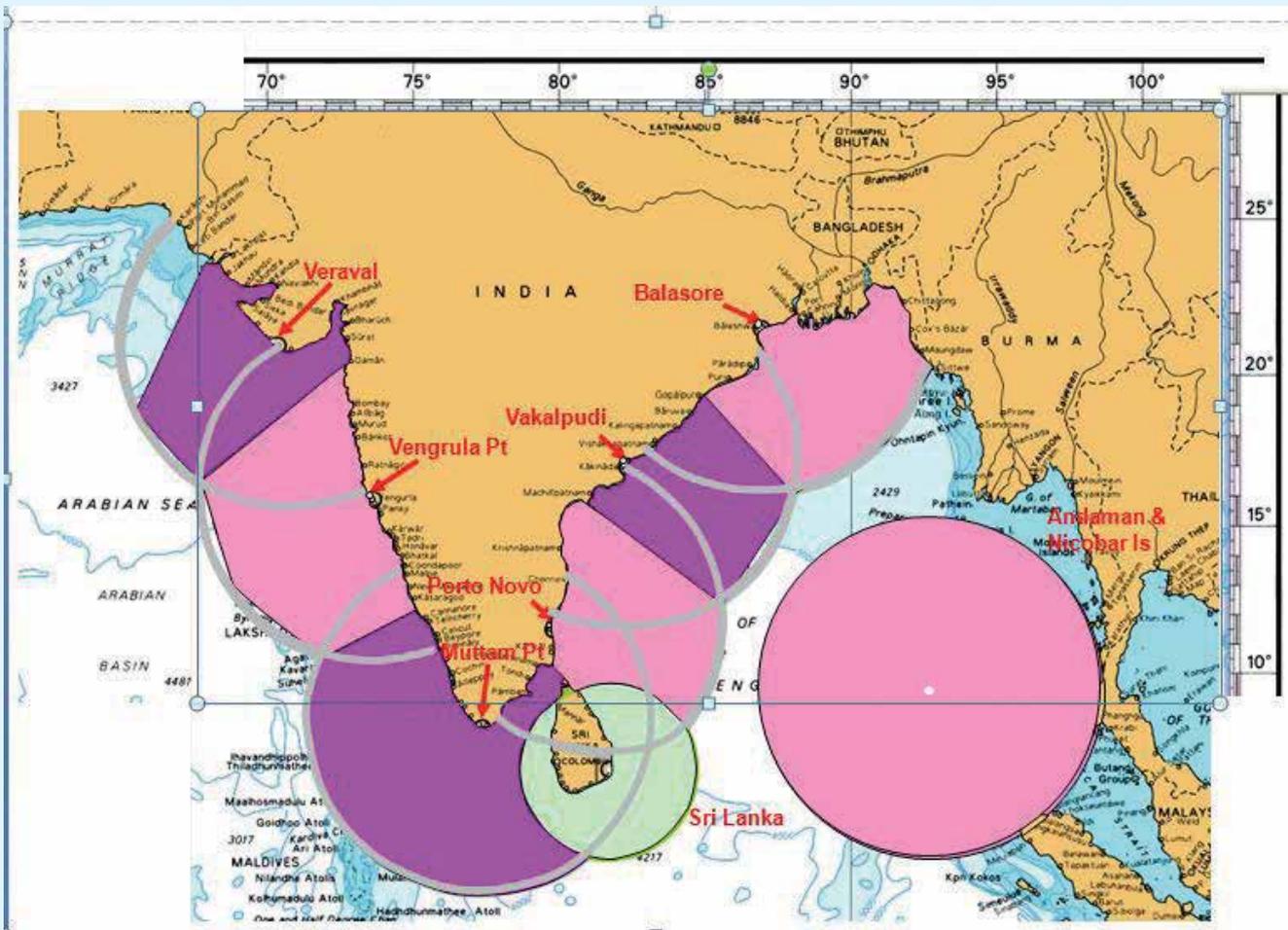
Lightship



National Navtex Network

6.39 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

6.40 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 three ocean-

going vessels, M.V. Sagardeep-II, M.V. Deepstambh-II and Indira Point. They are also used to monitor the performance of AtoNs established by the Directorate General.



MV Indira Point

Revenue Generation and Expenditure

6.41 The funding pattern of the Directorate is based on cost recovery system and it does not burden the taxpayers. All expenditure on management and development (plan and non-plan) is met out of the revenue collected by levy of light dues and thus the Directorate is a self-sustaining organization. The Central Government, as per the provisions of the Lighthouse Act, levies light dues on all the foreign going ships arriving at or departing from any port in India. The light dues are levied on Foreign Going Vessels @ Rs. 92/- per TEU on container vessels and @Rs 8/- per ton other than container Vessels once in 30 days. Provision has been made for on-line payment of light dues. A new e-portal for payment of Light dues is under development which is linked to "Bharat Kosh".

Development of Tourism

6.42 Lighthouses, due to its natural and scenic locations, have tremendous tourist

potential. The DGLL is promoting tourism at lighthouses in phased manner. In order to give impetus to promote tourism at Lighthouses, the Ministry has identified 08 Lighthouses along the coast of India and they have been taken up for promotion of tourism at on PPP mode at initial stage.

1. Kanhoji Angre (Maharashtra)
2. Sunk Rock (Off Mumbai Coast)
3. Aguada (Goa)
4. Muttom Point (Tamil Nadu)
5. Mahabalipuram (Tamil Nadu)
6. Kadalur Point (Kerala)
7. Minicoy (Lakshadweep)
8. Chandrabhaga (Odisha)

Establishment of new Lighthouse at Valsad Khadi

6.43 For easy identification of landmark and to provide seamless coverage of lighthouse along the Indian Coast a new Lighthouse at Valsad Khadi has been established.



Establishment of Staff quarters for Officers and staff at Gandhidham

6.44 The Directorate of Gandhidham is functioning since 2012. The staff and officers posted at this Directorate were facing immense difficulty due to scarcity

of residential accommodation in that area. In order to mitigate this problem and to provide accommodation facility for officials of the directorate staff quarters have been established.



Shri Mansukh Mandaviya, Hon'ble Minister of State (IC) for Shipping inaugurated the project on 4th October, 2019

INDIAN MARITIME UNIVERSITY (IMU)

- 6.45 IMU is a teaching-cum-affiliating University established on 14th November, 2008 to provide quality maritime education, training and research. For the Academic Year 2019-20, 1279 students were admitted in IMU Campuses and 2150 students were admitted in the Affiliated Institutes. 4 Statutes and 58 Ordinances were published in the Gazette of India during the year 2018-2019 and 6 statutes and 11 Ordinances were published from April 2019 to December 2019.
- 6.46 IMU conducted its 4th Convocation on 15th February 2019 at IMU Headquarters, Chennai. The First Doctoral Degree of IMU was awarded at this Convocation. Marinc 2019 –International Maritime Conference was jointly organized by Indian Maritime University (IMU) and Academy of Maritime Education and Training (AMET), Chennai on 4th and 5th November 2019. The major theme of the conference was "Trends in Marine Science and Technology". Shri Mansukh Mandaviya, Hon'ble Minister of Shipping (independent Charge) and Minister of State for Chemical & Fertilizers visited IMU on 14.11.2019 and dedicated newly built IMU Headquarter at Semmencherry, Chennai, to the Nation.
- 6.47 International Symposium on Marine Design and Construction 2019 (SMDC) was organized at Indian Maritime University,

Vizag Campus on 5.12.2019. SMDC is a joint Initiative of the IIT Madras, Andhra University, IMU Visakhapatnam Campus, IIT Kharagpur and CUSAT for strengthening the vision of design in India, construct in India and MAKE IN INDIA.

TARIFF AUTHORITY FOR MAJOR PORTS**Role & Functions of the Authority**

- 6.48 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 organization.
- 6.49 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.



6.50 An exercise for review of Reference Tariff Guidelines, 2013 has been undertaken. In the meanwhile, the validity of the Reference Tariff Guidelines has been extended upto 08 March 2020 or until further order whichever is earlier.

Land Policy Guidelines issued by Government of India

6.51 TAMP follows the Land Policy Guidelines issued by the Government from time to time. The Land Policy Guidelines, 2014 was announced by the Ministry of Shipping in January 2014. The Ministry of Shipping vide its communication dated 14 October 2015 forwarded the clarification and amendments to the Land Policy Guidelines 2014. The Ministry issues clarification circular from time to time, the latest being the clarification circular (Land Management) No. 1 of 2019-20 dated 29 April 2019.

Consultative Process and Position relating to Tariff Cases

6.52 The Authority has adopted a definite procedure for disposal of tariff cases. 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.

ANDAMAN LAKSHADWEEP HARBOUR WORKS

6.53 Andaman Lakshadweep Harbour Works (ALHW) a sub –ordinate office under Ministry of Shipping was established during 1965 for the service of A& N islands and Lakshadweep Islands. The ALHW is entrusted with the responsibilities of formulating and implementing the programme of Ministry

of Shipping 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 of Shipping 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.

The following projects have been completed by ALHW during 2019-20

1. Construction of (2x203) KL HSD Storage tank at Car Nicobar (Electricity Dept.)



ESTIMATED COST	: Rs. 252.00 Lakh
DATE OF COMMENCEMENT	: 02.12.2013
DATE OF COMPLETION	: Jan-2019

2. Providing Cement Concrete Road for Chatham Causeway in Port Blair



ESTIMATED COST : Rs. 87.60 Lakh
DATE OF COMMENCEMENT : 14.10.2018
DATE OF COMPLETION : Feb-2019

DREDGING CORPORATION OF INDIA LIMITED

6.54 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. 1.44% and 20% of the share capital was disinvested by the Government in the years 1991-92 and 2003-2004 respectively. 5% of the share capital was further disinvested by the Government of India in the year 2014-15. During 2016-17, 0.09% of the share capital was offered and purchased by the employees. The Government of India has sold the remaining 73.47% share capital to the four ports namely; Visakhapatnam Port, Paradip Port,

Jawaharlal Nehru Port and Deendayal Port vide the Share Purchase Agreement dated 08/03/2019 along with transfer of management and control. Its shares are listed on Mumbai, Kolkata and National Stock Exchanges. The Company is engaged in providing maintenance and capital dredging services, beach nourishment, land reclamation, shallow water dredging, marine port constructions activities, PMC services to Ports, Indian Navy etc. Located strategically on the eastern seaboard at Visakhapatnam, DCI helps in attaining and continuous availability of desired depths, in the shipping channels of major and minor ports for fishing harbours, Indian Navy and other maritime organizations.

Dredging operations

Important Contracts completed during the Year 2018-19:

- Maintenance dredging in Hooghly Estuary in the shipping channel of Kolkata Port Trust for the period of five years. (April 2018 to Mar 2019).
- Dredging for maintenance of channels and basins at Cochin Port for 2018-19.
- Maintenance Dredging at Cochin Ship Yard for 5 Years from 2015 and Capital dredging work carried out in connection with INS Vikramaditya for the Year 2018-19.
- Annual maintenance dredging at New Sand Trap and its approaches and other areas of VPT for 2018-19.
- Deployment of DCI Dr-XV at Visakhapatnam on charter hire basis for M/s AVR Infra Pvt. Ltd for 2018-19.
- Development of Multipurpose Terminal by replacement of existing EQ-2 to EQ-5 berths to cater to 14.00 mtrs draft vessels in Inner harbor of Visakhapatnam Port Trust of M/s ITDC,Vizag for the year 2018-19.
- Dredging in front of OB-II of Visakhapatnam



Port Trust of M/s ESSAR, Vizag for the year 2018-19.

- Maintenance dredging works to remove siltation using TSHD at Gangavaram Port for 2018-19.
- Capital dredging for proposed south and North Dock complex at Paradip for 2018-19.
- Hiring of Services for Maintenance Dredging at Konkall LNG Private Ltd. (earlier RGPPL) – Dabhol for 2018-19.
- Maintenance dredging of 14.00 Lakh Cubic meters of silt from Naval sites at Mumbai using combination of TSHD and Grab dredger for the year 2018-19.
- Maintenance dredging at VOC Port Trust by engaging a TSHD & BH-1 through M/s DCI Ltd for the year 2018-19.
- Maintenance dredging in channels and basins of Krishnapatnam Port Company Ltd for the year 2018-19.
- Dredging by engaging a TSHD in the channel and turning circle at Karaikal Port for 2018-19.
- Contract for dredging of LNG Jetty and its approaches at Kamarajar Port Limited for the year 2018-19.
- Capital dredging at Pussur River from Mongla Port to Rampal Power plant for the year 2018-19.

Financial Results

6.55 The Profit after tax of the Company is Rs. 4458.98 lakh for the year 2018-19 as compared to Rs. 1664.27 lakh for the previous year. The Company's earnings per share is Rs.15.92 for 2018-19 as compared to Rs. 5.94 for 2017-18. The operational income of the Company is Rs. 69173.86 lakh as compared to Rs. 59187.36 lakh for the previous year. The other income is Rs. 677.72 lakh as compared to Rs. 2024.54 lakh for the previous year. The total income for the year is Rs. 69851.58 lakh as compared to Rs. 61211.90 lakh for the previous year.

Dividend

6.56 Keeping in view the financial performance of the Company and other relevant considerations the Company has paid dividend of 30% of paid up share capital amounting to Rs.3 per share aggregating to Rs. 8.40 crore to the share holders for 2018-19. The dividend paid for previous year 2017-18 was 20% @ Rs.2 per share.

SHIPPING CORPORATION OF INDIA LIMITED (SCI)

6.57 During the last 58 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 31.12.2019 owns 60 vessels of 5.46 Million DWT, 3.02 Million GT and constitutes about 28% (in terms of DWT) of Indian tonnage.

Crude Transportation

6.58 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. Today SCI has a fleet of 32 crude and product tankers in all sizes. SCI has five VLCCs and they are employed on a mix of time charter / voyage charter / COA in India centric as well as in open cross trade market.

LNG Transportation

6.59 In 2004, SCI was the first Indian Shipping Company to have ventured into LNG Transportation and remains the only Indian Company operating in LNG sector in India. It co-owns four LNG Carriers in consortium with premier Japanese Companies and

independently manages their techno-commercial operations. Further, SCI has also signed MOU for post fixture management with GAIL for transportation of LNG from USA to India from 2016-17. Also a JV in Hong Kong is formed for managing LNG vessels and is currently developing opportunities in providing O&M services to LNG FSRU's and FSU's.

Commodity / Product Transportation

6.60 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

6.61 One of the strengths of SCI lies in having a diversified fleet. As Liner business was changing from break bulk to containers, SCI was the first Indian Shipping Company to acquire Cellular Container Vessels in 1993. 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, out of which one is employed on the coast and one in EXIM service. Presence of SCI in this segment has proved to have a moderating effect on the freight rates, thus, protecting the interest of Indian Exporters.

Coastal Services

6.62 SCI has been providing Technical Consultancy Services to various Government Agencies / Departments such as Andaman & Nicobar Administration (A&NA), Union Territory of Lakshadweep Administration (UTLA), Andaman & Lakshadweep Harbour Works (ALHW), Geological Survey of India (GSI),

Union Territory of Daman & Diu (UTDD), etc. for their various ship acquisition projects. SCI also manages Oceanographic & Coastal Research vessels on behalf of Government Agencies / Departments viz. three vessels owned by Geological Survey of India under Ministry of Mines and one vessel of National Centre for Antarctic & Ocean Research, one vessel of Centre of Marine Living Resources and Ecology and three vessels of National Institute of Ocean Technology under Ministry of Earth Sciences.

DRDO Project

6.63 SCI has provided / deployed its two Offshore Vessels on long term charter to the Defence Research & Development Organization (DRDO), for their strategic missions of national importance. In December'2018, Indian Navy inducted its first Deep Submergence Rescue Vehicle (DSRV) in Mumbai. SCI's Offshore Vessel viz. SCI Sabarmati was selected for conducting the maiden trials of the first DSRV of India. Similar trials were conducted in 2019 in the East Coast of India for the 2nd DSRV. Offshore Vessel SCI Sabarmati once again provided requisite support to Indian Navy for successfully inducting the DSRV.

Offshore Segment

6.64 SCI entered the offshore segment by acquisition of 10 Offshore Supply Vessels in 1984-85. These vessels have been providing vital support to the Indian Offshore Oil Industry by way of assisting the E&P Companies in their Exploration & Production (E&P) activities. SCI's offshore fleet now comprises of state-of-the-art AHTSVs, PSVs and MPSVs. SCI has also been providing O&M Services, by managing various specialized vessels of ONGC, India's largest E&P operator.

Financial Health

6.65 SCI had been a continually profit-making organization till financial year 2010-11.



However, prolonged depressed market conditions impacted SCI and incurred losses for three years from FY 2011-12 to FY 2013-14. In 2014-15, however, SCI managed a turnaround and posted a profit after tax of Rs.200.93 Crore due to the tanker market showing improvement, which partly offset the losses of the bulk carrier segment. The judicious cancellation of contracts and control of costs coupled with lower bunker

prices helped in SCI posting positive results in the initial years. Despite decrease in revenue from operations, over-all financial health of company has improved substantially with prudent financial management. SCI has, despite the continuing volatility in freight rates; posted consolidated net profits post FY 2013-14. The below table shows the financial performance of SCI during last 4 years:

Financial Year	2015-16*	2016-17**	2017-18	2018-19
Total Income (Rs. Crore)	4,214.7	3,592.6	3,617.5	4,144.1
Net Profit / Loss (Rs. Crore)	753.3	142.3	253.8	-122.00
Dividend (%)	Nil	Nil	Nil	Nil

*Figures are restated as per Ind AS

** Figures are restated as per Ind AS8

COCHIN SHIPYARD LIMITED

6.66 Cochin Shipyard achieved a net profit of Rs. 481.18 Crore for the year 2018-19 as compared to Rs. 396.75 Crore for the year 2017-18. The Company achieved a turnover of Rs. 2962 Crore for the year 2018-19 as compared to Rs.2355 Crore for the year 2017-18. Turnover for the half year ended September 30, 2019 was Rs.1707 Crore as against Rs.1458 Crore for the half year ended September 30, 2018. Company achieved a net profit of Rs. 328 Crore for the half year ended September 30, 2019 as compared to Rs. 254 Crore for the half year ended September 30, 2018.

Global Shipbuilding Industry

6.67 After an all time low order book in 2016 with only 14.3 million CGT placed globally, around 27.3 million CGT was contracted in 2017 and the levels are likely to be exceeded in 2018. As per the report on review of maritime transport 2018 published by United Nations Conference of Trade and Development (UNCTAD), Global seaborne trade is doing well, supported by the 2017 upswing in the world economy. Expanding at 4 percent, the fastest growth in five years, global maritime trade gathered momentum and raised sentiment in the shipping industry. Total

volumes reached 10.7 billion tons, reflecting an additional 411 million tons, nearly half of which were made of dry bulk commodities. The report further states that volumes across all segments are set to grow with containerized and dry bulk commodities trades recording the best performance. While the prospects for seaborne trade are bright, downside risks such as increased inward-looking policies and the rise of trade protectionism are, nevertheless, weighing on the outlook. CSL has signed the contract for 8 Nos. ASW - SWC vessels (Anti-Submarine Shallow Water Craft). On November 12, 2018 the new multi-modal freight terminal in Varanasi was dedicated to the nation by the Hon'ble Prime Minister of India, Shri Narendra Modi. The terminal, designed mainly for construction material, food grains, cement and fertiliser marked the beginning of the government's effort to resurrect the Ganga as a significant transportation artery. Cochin Shipyard has signed a contract on July 11, 2018 with IWAI for construction of 10 ROPAX/RORO vessels for use in inland waterways segment, thus making an inroad in the inland waterways segment.

Indian Ship Repair Industry

6.68 As per the AT Kearney report, India has a

market potential of Rs. 2,600 crore. from repair of domestic fleet out of which only 15% share is currently captured. The report has further highlighted that India can grow its shiprepair industry to Rs 9,000 crore in the next 10 years through infrastructure and process improvement. The report has highlighted low levels of process efficiency, lack of infrastructure to service vessels above 10000 DWT and weak ancillary landscape as road blocks for developing the industry. A key recommendation of the report was to lease out the repair facilities at major ports to specialist to augment revenue opportunity.

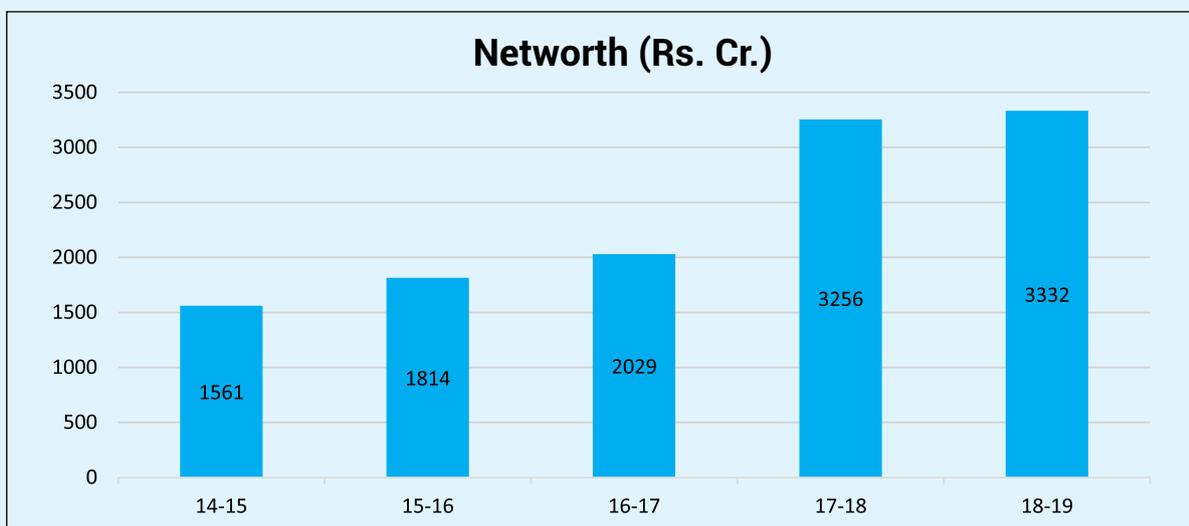
6.69 One of the major initiatives under the Sagarmala project was to lease out the ship repair facilities available at the major ports to specialists to generate more revenue and create a positive ship repair industrial climate. Based on this the Ministry had decided that CSL, a Govt. entity under the same Ministry may be offered the first opportunity for ship repair operations at various port facilities. Accordingly, CSL entered into an agreement with Mumbai Port Trust on October 20, 2018 and commenced operations and management of the Indira Dock on January 18, 2019. CSL has also signed an MOU with Kolkata Port Trust to take over their Netaji Subhas Dock on lease basis. Similarly, discussions are underway for operation &

maintenance of the Marine Dockyard facility under the A&N Administration in Port Blair. These initiatives would help better utilization of existing ship repair facilities in the country and is likely to positively impact the Company's revenue.

6.70 CSL's initiatives in setting up of ship repair facilities at Cochin Port premises through the setting up of International Ship Repair Facility (ISRF) at Cochin Port premises progressed during the year. The construction of the ISRF at Cochin Port Trust premises commenced on November 17, 2018. The establishment of the above facility for undertaking repair of small and medium size vessels along with other maritime facilities will lead to the development of ancillary industries and would facilitate the emergence of Kochi as the maritime hub of India.

Financial Highlights

6.71 CSL posted yet another year of impressive performance despite the shipbuilding market scenario remaining lackluster. Diversified operational segments and product profile helped the Company to achieve a turnover of Rs.2,962.16 crore for the year as compared to Rs. 2,355.12 crore in the year 2017-18. The profit before tax was Rs 751.38 crore for the year as against Rs. 604.86 crore in the previous year. The net profit was Rs.481.18 crore as compared to Rs. 396.75 crores for the previous year.





Operational Highlights

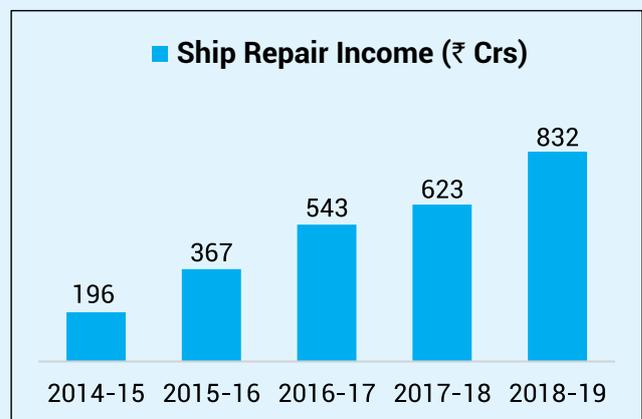
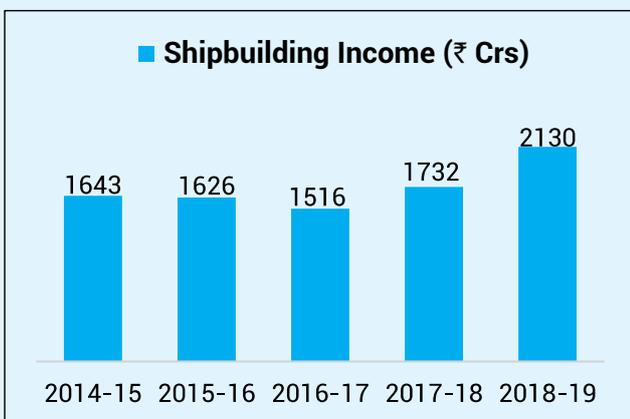
6.72 The Company achieved a total shipbuilding income of Rs. 2,130.18 crore during 2018-19 as against Rs. 1,731.86 crore in 2017-18. During the year 2018-19, CSL delivered three Tuna Long Liner Cum Gilnetter Fishing Boats for the beneficiaries of Tamil Nadu. The yard also completed various major milestones on the projects which are under construction such as launching of SH 21 and SH 22 - 500 Pax vessels, start of erection of SH 23 - 1200 Pax vessel, commenced grand assembly of hull blocks of SH 24 - 1200 Pax vessel, steel cutting and erection start of BY 98-99 - the Ro-Pax vessels for Inland Waterways Authority of India (IWA).

6.73 Indigenous Aircraft Carrier (IAC) project progressed satisfactorily. Trials of 6 out of 8 Nos. 3MW DGs have been completed. Gas turbine starting and trials scheduled from September 19, 2019. STW of ship systems such as salvage, heeling & trimming, bilge and firemain etc. has been completed. 72000 Mtrs. out of estimated 82500 Mtrs. piping has been completed. 1475 km (75% of the estimated cable length) has been laid on board as on March 31, 2019. Trials of part of IPMS (Integrated Platform Management System) have been commenced.

Installation & operations checks of electrical power distribution systems & internal communication systems and installation of Ship Data Network (SDN) are in progress. Installation of 2 Nos. restraining gear has been completed. Installation of other AFC equipments and systems such as arresting gear, AFC PSS, ammunition magazine etc., have progressed well. 3D modelling of the super structure is nearing completion which will lead to the culmination of the design phase of the ship. Outfitting of super structure shall commence soon after above 3D modelling completion. Preparation has been commenced for the Basin Trials (BT) of the carrier scheduled in February 2020. Phase 3 contract negotiations are at an advanced stage and are expected to be concluded by mid of FY 2019-20.

Ship Repair

6.74 During the year, the Company achieved a total ship repair income of Rs. 831.97 crore as compared to Rs. 623.27 crore during the financial year 2017-18. Major vessels repaired during the year include INS Vikramaditya, INS Shardul, ModuSagar Bhushan, ICGS Samar, INS Sagardhwani, RV SindhuSadhana, INS Jamunaetc.



International Ship Repair Facility (ISRF) at Cochin Port Trust

6.75 CSL continued to operate the dry-dock & existing facilities in the leased area (first

phase) at Cochin Port premises. CSL completed the repairs of seven ships during the financial year 2018-19. Meanwhile, gate of the existing dry-dock was successfully

replaced during the period, March – October 2018. The construction works, which commenced on November 17, 2017, is progressing in full swing. More than 60% of the piling works are completed and the facility is expected to be commissioned in FY 2020-21. As a part of our efforts to develop Kochi as a maritime hub of India, CSL is setting up a maritime park adjacent to the ISRF premises to house major OEMs and service providers of the ship repair industry. Civil construction is almost complete and we expect to allocate the initial units to service providers during Q3 2019-20. 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.

New Dry-dock Project

6.76 The new dry-dock measuring 310 x 75/60 x 13m with 600T gantry crane will be located at the northern end of the existing premises of the Company. The new dock will augment the Company's shipbuilding and ship repair capacity essentially required to tap the market potential of building specialized and technologically advanced vessels such as LNG Carriers, Aircraft Carriers of higher capacity, jack up rigs, drill ships, large dredgers and repairing of offshore platforms and larger vessels. Turnkey contract for construction works of plant and machinery for the new dry-dock project was awarded on April 27, 2018 and construction activities commenced on June 01, 2018. Shri Pinarayi Vijayan, the Hon'ble Chief Minister of Kerala and Shri Nitin Gadkari, Hon'ble Union Minister for Shipping, Road Transport, Highways, Water Resources, River Development and Ganga Rejuvenation did the honours of ground breaking ceremony of the dry-dock project on October 30, 2018. Ground improvement works and RCC piling

are in progress and five hundred piles have been completed. Contract for the supply & commissioning of 600 T gantry crane was issued on March 14, 2019.

HOOGHLY COCHIN SHIPYARD LIMITED (HCSL)

- 6.77 The new Joint Venture Company, Hooghly Cochin Shipyard Limited was incorporated on October 23, 2017. Cochin Shipyard has invested 60.28 crore (16.28 crore by way of equity and 44 crore by way of debentures) for building up the infrastructure of the Company. In this respect a Detailed Project Report (DPR) has been submitted by the project management consultant for the project. The proposed developmental work in Nazirgunge shall be carried out in a phased manner, as operational phase & expansion phase. Operation phase will cater to the refurbishment of existing slipways, development of related shops, allied facilities and expansion phase is intended to establish the side launching facilities and associated outfit berthing facilities. The expected total project cost including operational and expansion phase would be 169.76crore including GST.
- 6.78 The Construction contract for civil work for the new yard was awarded on January 10, 2019. Tendering activities with regard to other work packages like external electrical, gas piping, fire-fighting, etc. are under process. The ground-breaking ceremony of the construction of new yard at HCSL was performed by Shri Madhu S Nair, Chairman (HCSL) and CMD (CSL), at Nazirgunge on February 16, 2019 in the presence of Shri Vinit Kumar IRSEE, Chairman (KoPT), Shri S Balaji Arunkumar, Dy. Chairman (KoPT)/CMD (HDPEL) and the Directors of CSL. The operational phase of the project is expected to be completed within 18 months and the unit to be operational by 2020. The



establishment will promote socio-economic development in the region and will also help development of ancillary units.

SAGARMALA DEVELOPMENT COMPANY LIMITED

6.79 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 (Shipping) 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 (Shipping), Secretary (DOPT) and an expert (to be nominated by the Ministry of Shipping from outside the Ministry) as members. The Government Director and two Non-Official (Independent) Directors, on the Company Board, shall be appointed by the Ministry of Shipping, 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 is solicited.

- 6.80 Sagarmala Development Company Limited (SDCL) was incorporated on 31st August, 2016 and it 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.
- 6.81 SDCL endeavors to provide a framework and funding for ensuring integrated development of Indian maritime sector. These includes 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.
- 6.82 During 2018-19, the Sagarmala Development Company Limited infused Rs 125 Crore in the Krishnapatnam Rail Company Limited (KRCL). KRCL is tasked with the development of a double railway line between Krishnapatnam Port and Venkatachalam and

single railway line between Venkatachalam and Obulavaripalle. This project will result in reduction of transit distance from the existing route by over 50 km. The train operations began in 2019. SDCL has also taken over the Indian Ports Global Limited (IPGL). Investment in Chabahar port through IPGL is first overseas strategic venture for India. The Chabahar project gives India a sea-land access route into Afghanistan and Central Asia through Iran's eastern borders. India, through IPGL, on 24th December 2018, took over operations at Chabahar port. With the objective of improving connectivity to Haldia Port, the Sagarmala Development Company Limited has also infused equity in an ROB project connecting Haldia Port to the road network. SDCL invested Rs. 50 Crore in the SPV for this project formed with NHA. SDCL has also invested equities of Rs. 284.5 Crore in Haridaspur-Paradip Railway Company Limited (HPRCL), government majority-owned SPV to improve connectivity to Paradip Port in FY2019-20.

INDIAN PORT RAIL AND ROPEWAYS CORPORATION LIMITED (IPRCL)

6.83 In order to provide efficient rail evacuation systems to Major Ports and thereby enhance their handling capacity and efficiency, a proposal seeking 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) has been incorporated on 10th July 2015 under Companies Act, 2013, in which the subscribed share capital of Rs.100 Crore has been 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 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 infrastructure, railway siding, locomotives, conveyor belts, land management etc. including policy formulation, promotion, development, implementation, construction, operation, maintenance, management and finance thereof.

INDIAN PORT GLOBAL PRIVATE LIMITED

6.84 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 with an authorized capital of Rs.10 crore and a paid-up capital of Rs. 5 crore. The two promoters were Jawaharlal Nehru Port Trust and Deendayal Port Trust, holding equity in the ratio of 60:40, respectively.

6.85 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 Minister of Shipping from the Indian side and Minister 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.

6.86 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 have been purchased by Sagarmala Development Company Ltd. (SDCL) (a company under Administrative control of Ministry of Shipping).

SETHUSAMUDRAM CORPORATION LIMITED

6.87 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.

HOOGLHY DOCK & PORT ENGINEERS LIMITED

6.88 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 has 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 Shipping.

Rehabilitation-cum-restructuring of HDPEL

- 6.89 The Cabinet vide its meeting dated 16.09.2015 approved the Improved Voluntary Retirement Scheme (IVRS) at IDA Linked 2007 Pay Scale for HDPEL employees and Rehabilitation-cum Restructuring of HDPEL through formation of Joint Venture (JV). The Improved VRS was implemented w.e.f. 13.10.2015 for 3 months wherein 268 employees opted and released under the scheme. As on date there are 45 employees in HDPEL. The Competent Authority has approved the proposal on 23.06.2016 for Rehabilitation-cum-Restructuring of HDPEL by selection of JV with Cochin Shipyard Ltd. (CSL). Accordingly, on 23rd October, 2017, a new JV Company between HDPEL and CSL in the name of "Hooghly Cochin Shipyard Ltd." was incorporated and Shareholders' Agreement signed on 17th November, 2017 at Cochin. CSL having a share of 74% and HDPEL having a share of 26% in the JV Company.
- 6.90 The Union Cabinet on 03rd October, 2019 has approved the proposal for Liquidation & Restructuring of and providing improved Voluntary Retirement Scheme (VRS) for the employees of Hooghly Dock & Port Engineers Limited (HDPEL). HDPEL has initiated action in view with decision of the Cabinet.

CENTRAL INLAND WATER TRANSPORT CORPORATION LIMITED

- 6.91 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 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.
- 6.92 Pursuant to the Cabinet decision for voluntary winding-up of CIWTC, the company on 19.12.17 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.
- 6.93 Subsequently, CIWTC filed an appeal before the National Company Law Appellate Tribunal (NCLAT) at New Delhi against



National Company Law Tribunal (NCLT) order dated 28.09.2018 on suspension of Liquidation of CIWTC. 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 in view with the Govt. of India, Ministry of Shipping decision vide meeting dated 05.07.2019 to consent for Voluntary

Liquidation of CIWTC and taking into account consideration the claim of Garden Reach Shipbuilders & Engineers Ltd. (GRSE) and Kolkata Port Trust (KoPT) and order of release of certain fund. The Adjudicating Authority, after hearing the parties will pass appropriate order in accordance with law. CIWTC on 18.11.2019 has filed an application before NCLT, Kolkata on in view with the directives of NCLAT, Delhi.

CHAPTER – VII

INLAND WATER TRANSPORT



IWAI vessel MV RN Tagore with 16 TEU containers from Kolkata to Varanasi

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 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-ParadipPort stretches and consultancy work for studies including EIA-EMP are 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 also development and maintenance of other infrastructure such as navigation aids and terminal facilities as laid down in the IWAI Act, 1985 (82 of 1985). During 2019-20, the important measures like River Conservancy works (dredging & bundling) carried out for development & maintenance of fairway alongwith navigational aids and terminal facilities on NW-1. The stretch-wise following Least Available Depth (LAD) is maintained by deploying 11 nos. Departmental dredgers alongwith 13 nos. survey vessels for monitoring:

(a)	Haldia - Farakka stretch	560 km	2.6 m to 3.0 m
(b)	Farakka - Barh stretch	400 km	2.1 m to 2.5 m
(c)	Barh - Ghazipur stretch	290 km	1.6 m to 2.0 m
(d)	Ghazipur - Chunar/ Allahabad	370 km	1.1 m to 1.5 m

7.5 Fixed terminals at GR Jetty-2 (Kolkata), Patna (Low level and high level) are operational and in-use. Pakur & Farakka jetty (owned by Farakka Barrage Project) are available for utilization. Further RCC jetties have been constructed as a part of MMT Varanasi & Sahibganj respectively. Besides, floating terminals at 20 locations have also been provided on NW-1. Differential Global Positioning System (DGPS) stations are setup at Swaroopganj, Bhagalpur and Patna for providing DGPS connectivity between Sagar and Buxar (1195 km) and River Information System (RIS) facility between Haldia-Farakka (Ph-I) & Farakka-Patna (Ph-II) have been completed and in operation. The phase-III of RIS stations between Patna - Varanasi is under implementation.

Jal Marg Vikas Project

7.6 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. The project implementation is planned to be completed by March, 2023. On completion, JMVP will provide a supplementary, cost-effective, safe and environment-friendly mode of transport, giving the cargo operator modal choice of transport and enable socio-economic growth in Uttar Pradesh, Bihar, Jharkhand and West Bengal. The progress achieved under each component of JMVP during the period of report is summarised below:-

Fairway Development

- 7.7 The fairway development consists of (i) provision of least assured depth in the fairway from Haldia to Varanasi; (ii) bank protection works; (iii) river bend correction upstream of the Farakka Navigation Lock; and (iv) provision of Navigation Aids & RIS.
- 7.8 A revised Dredging Management Plan (DMP) has been formulated for implementation on NW-1, as per the details given below:-
- a) Provision of Least Assured Depth (LAD) of 3m and bottom channel width of 35/45 m on the Farakka-Kahalgaon stretch (146 Kms), Sultanganj-Mahendrapur stretch (74 kms) and Mahendrapur-Barh stretch (71 kms) through Performance Based Assured Dredging contracts. These three contracts were awarded on 09.04.2018, 12.04.2019 and 12.04.2019 at costs of Rs. 150 crore, Rs 159.30 crore and Rs 182.9 crore respectively. The financial progress (as on 31.12.2019) for Farakka-Kahalgaon stretch is Rs. 41.14 crore, Sultanganj-Mahendrapur stretch is Rs. 15.93 crore and Mahendrapur-Barh stretch is Rs. 18.29 crore.
 - b) On the advice of IIT, Madras, the dredging strategy plan for providing an LAD of 2.5 m and bottom channel width of 30 m on the Barh-Majhau stretch through Departmental Dredgers on O&M Contracts; and on Majhau-Ghazipur stretch and Ghazipur-Varanasi stretch through Quantity Based Maintenance Dredging contract was approved. The tender process for the Barh-Digha and Digha-Majhau stretches have already been initiated with floating of tenders on 20.11.2019 and bid submission dates on 20.01.2019 and 15.01.2019 respectively. Tender documents for the remaining stretches are under approval.
 - c) Presently, no dredging is planned on the Kahalgaon-Sultanganj stretch (50 km) due to the presence of Dolphin Sanctuary.
- 7.9 DGPS reference station with MF link was established at Swaroopganj with a view to provide sub-meter accuracy in position fixing so as to facilitate the operators to navigate their vessels smoothly and effectively along the navigational channel. The River Information System was made fully operational to monitor vessel movements through remote base stations at Haldia, Garden Reach (GR) Jetty, Tribeni, Swaroopganj, Kumarpur, Ballia and Farakka. These stations were integrated into two control stations at Farakka and GR Jetty. Both the control stations would monitor the vessels plying in this river stretch via Automatic Identification System (AIS) and communicate with vessels via VHF. 30 IWAI vessels were equipped with Inland AIS system, short range radar and VHF.

Multimodal terminal at Varanasi

- 7.10 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 mtr long two-lane road connecting the Multi-Modal Terminal with NH-7 and a 35 mtr long and 5.8 mtr 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 finalisation in consultation with the Dedicated Freight Corridor Corporation of India and North Central Railway.
- 7.11 The proposal for operation, management and development of the multimodal terminal at Varanasi to be awarded to a private operator under the PPP Model on tender-cum-auction basis was appraised



by the Public-Private Partnership Approval Committee (PPPAC) on 28.02.2019 and the recommendation of the Committee was approved by the competent authority. RFP has been issued to the shortlisted bidders on 25.07.2019. Pre-bid meetings with the prospective bidders were held on 19.08.2019 and on 03.10.2019. However no bids were received and an alternative model for management of the terminal by a private operator is being considered.

7.12 The Standing Committee of National



Board for Wildlife, in its meeting held on 15.05.17, 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.

Multimodal Terminal at Sahibganj

7.13 The multimodal terminal, with a terminal capacity of 3.18 MTPA, is constructed in two phases in Samdanala Village of Sahibganj. Hon'ble Prime Minister inaugurated the terminal on 12.11.2019. Rail connectivity is proposed from the terminal to Sakrihali 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 on tender-cum-auction basis. RFQ has been issued on 14.08.2019. Pre-application meeting was held on 24.09.2019. The PPPAC Memo has been referred for appraisal to the Department of Economic Affairs.

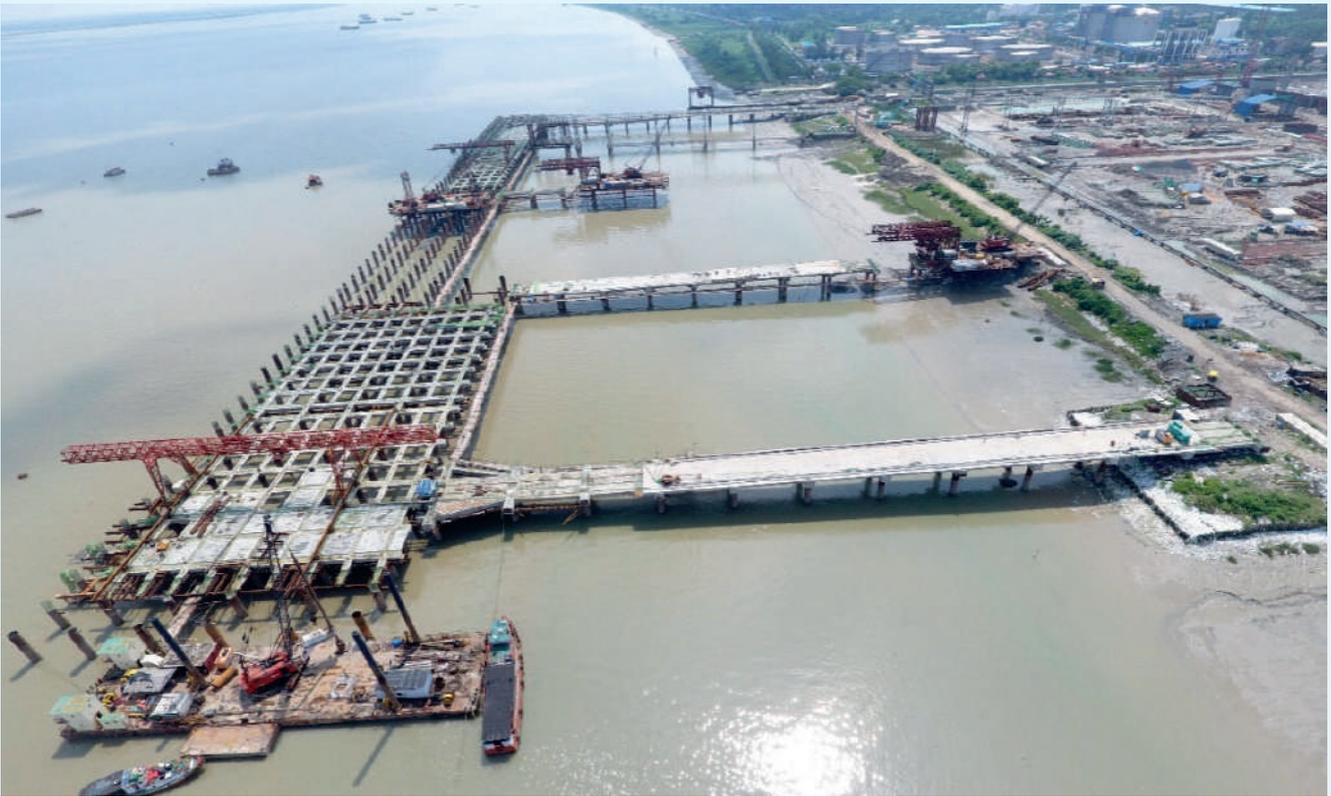


Sahibganj Multimodal Terminal

Multimodal Terminal at Haldia

7.14 The multimodal terminal at Haldia, with a terminal capacity of 3.18 MTPA, is being constructed in two Phases on a 61 acre land in the Haldia Dock Complex leased from the Kolkata Port Trust (KoPT) 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 physical progress is 78% and financial progress is Rs. 351.08 crores as on 31.12.2019. Rail alignment for connectivity from the terminal is under finalisation in consultation with the Haldia Dock Complex.



Multimodal Terminal (under construction) Haldia

Navigational Lock at Farakka

7.15 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 47% and financial progress of Rs. 172.84 crore as on 31.12.2019.

Intermodal terminal at Kalughat and Ghazipur

7.16 An intermodal terminal is proposed to be constructed on 5.159 ha of land in Kalughat, Saran district of Bihar, with road connectivity

to NH-19. Land acquisition is in progress. DPR is ready and tender process for award of work is in progress. The Terminal is being planned to handle mostly container traffic destined to Nepal.

7.17 An intermodal terminal is proposed to be constructed on 8.917 ha of land in Ghazipur, Uttar Pradesh. 5.103 ha of land has already been acquired and registered with IWAI. Balance 3.813 ha of land is at an advanced stage of acquisition. DPR is ready. Tender process has been kept on hold due to poor response shown by the prospective bidders in a stakeholder meeting held in Mumbai.



Ro-Ro terminals

7.18 The locations for five pairs of Ro-Ro terminals have been identified at Rajmahal and Manikchak; Samdaghat and Manihari; Kahalgaon and Tintanga; Hasnapur and Bakhtiyarpur and Buxar and Saraikota. Various studies are in progress.

Integrated Vessel Repair & Maintenance Complexes

7.19 The Integrated Vessel Repair & Maintenance Complexes were proposed to be set up at Sahibganj and Gaighat (Patna). The Sahibganj complex is not being pursued further in view of vessel repair facilities coming up at Kolkata. The Gaighat Complex is proposed on the land already in the possession of IWAI.

Output /Outcomes under JMVP

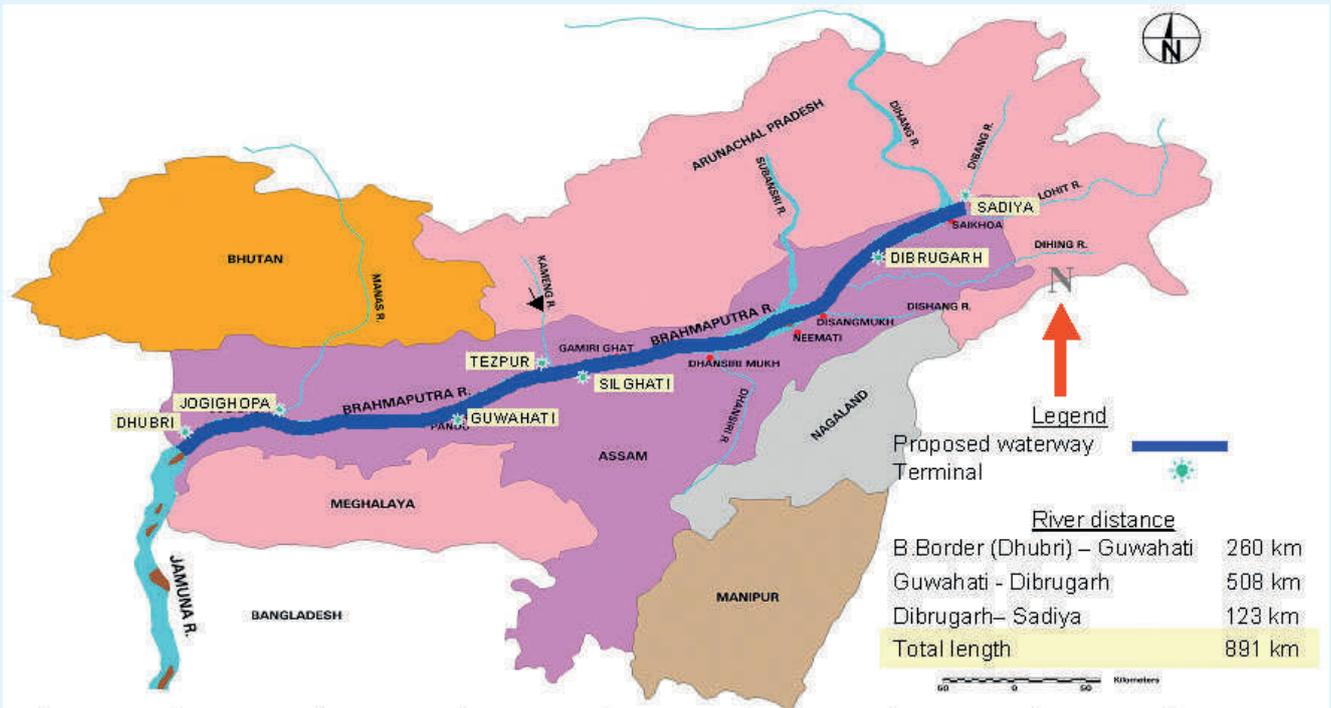
7.20 The following outcomes/outputs have already been achieved under the project:

- a) Vessels of capacity of 1000 DWT started navigating on NW-1, against the vessel capacity of 750 DWT in 2015-16.
- b) Phase-1 of the multimodal terminals at Varanasi and Sahibganj, with modern cargo handling facilities, have been completed and commissioned. Construction work on the new navigational lock at Farakka and the Haldia MMT is at advanced stages.
- c) Aids to Navigation & River Information System were made fully operational.
- d) Traffic volume on NW-1 increased from 5.06 MMT in 2014-15 to 6.79 MMT in 2018-19.
- e) IWAI has developed an optimal dredging policy for NW-1, which is not only very efficacious considering the hydraulic and morphological characteristics of Ganga, but also substantially cost-effective.

- f) Thirteen new vessel designs suited for navigation on NW-1 have been developed which are already available on public domain for use by prospective vessel manufacturers.
- g) Passage of vessels through the Kashi Turtle Sanctuary has been permitted.
- h) The vexatious issue as to whether maintenance dredging in rivers require prior environmental clearance under the EIA Notification of 2006 was resolved with the MoEF&CC confirming that this does not require. MoEF&CC also confirmed that inland waterways, terminals, jetties etc. are not covered under EIA Notification, 2006 requiring prior environmental clearance.
- i) The long pending issue of transfer of the existing navigational lock along with the appurtenant land, buildings and structures by the Farakka Barrage Project (FBP) to IWAI and its rehabilitation and modernisation was resolved with the transfer of the same to IWAI in April, 2018.

National Waterway –2

7.21 National Waterway-2 comprises of river Brahmaputra from Dhubri to Sadiya, a stretch 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.



7.22 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



7.23 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 has been established. IWAI has deployed its own modern Ro-Ro Vessel M.V. 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 Hatsingimari and Dhubri. Ro-Ro terminals are also proposed at Neamati-Kamalabari and Maijan (Dibrugarh) to Sengajan are proposed for which DPR has been prepared. IWAI have deployed 4 nos. of Departmental Dredgers and 6 nos. of Survey Launches in NW-2.

7.24 The IWAI had launched a Roll on-Roll off (Ro-Ro) service from 11th October' 2018 in Assam from Neamati to Manjuli 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 reduce 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 km) 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.

7.25 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 Manjuli 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

7.26 On NW-3 in Kerala, the important works carried out during 2019-20 include development of the navigation channel with the specified dimensions by undertaking dredging in all stretches except a 1.00 km long shoal in Kayamkulam Kayal and 1.10 km in Edappallikotta – Kollam stretch. At Kayamkulam Kayal, the work of removing Chinese fishing nets from the NW-3 channel is yet to be completed by the State Government. Dredging will be taken up after removal of fishing nets.

7.27 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 litigations 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.



Over Dimensional Cargo moved in Champakkara Canal of NW-3.

- 7.28 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 with a scheduled completion period of 26 months and released 1/3rd of sanctioned cost to Govt. of Kerala. The construction of lock-gate is in progress by Irrigation Department, Govt. of Kerala on deposit basis.
- 7.29 The Irrigation Department, Govt of Kerala was entrusted with the replacement of lock shutters of 40 feet wide navigational lock at Thanneermukkom at a cost of Rs.2.85 crore on deposit basis. The shutters were replaced with stainless steel to avoid corrosion and maintenance free seamless operations.
- 7.30 Cargo terminals have been constructed at 9 places viz., Kottappuram, Aluva, Maradu, Vaikkom, Thanneermukkom, Thrikkunnappuzha, Kayamkulam, Kollam and Alappuzha. Additional works are also carried out by CPWD at Alappuzha terminal for safety of the premises and to obtain NOC from Firefighting Department (still awaiting clearance) and allotment of building number. The above terminals are not attracting expected cargo mainly due to reluctance on the part of consignors and consignees to accept a modal shift to IWT mode.
- 7.31 Two Roll-on/Roll-off terminals within the Cochin Port area, one at Bolghatty and the other at Wellington Island have been constructed by IWAI through Cochin Port Trust 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. In terms of tones, total cargo moved



in NW-3 in an organized way by barges during 2018-19 was 4.283 lakh tones, which mainly consists of Sulphur, Phosphoric Acid, Liquefied Ammonia Gas, Rock Phosphorous etc.

7.32 A total of 312 solar powered lighted buoys and 17 numbers beacon lights were maintained by IWA I all along NW-3 to facilitate safe navigation round the clock.



Container transportation (on a trial run) in NW-9 and NW-3 from Kottayam Port to Kochi Port during March 2019.

National Waterways (NW-4)

7.33 Development work is being implemented 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

7.34 The Phase-wise break up for the development of NW-5 are as under:-

Paradip/Dhamra to Pankapal (via Kani River)	212 km
Pankapal to Talcher (River Brahmani)	112 km
East Coast Canal (Charbatia to Geonkhali) & Matai Riever (Charbatia to Dhamra)	256 km
Total	588 km

7.35 Based on the feasibility studies conducted, DPR prepared during 2015 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 stretch of NW-5 between Paradip/Dhamra and Talcher in following two phases:-

- a) Phase-I: Between Paradip / Dhamra and Pankapal – 212 km.
- b) Phase-II: Pankapal to Talcher - 120 km.

The balance length of the waterway from Dhamra to Geonkhali is not considered feasible for development.

7.36 Preparatory work in Phase- I covering 212 km between Paradip / Dhamra and Pankapal is being taken up. Preliminary activities such as Hydrographic survey and mathematical model study in Phase-II covering 120 kms. from Pankapal to Talcher are going on.

7.37 Consultant has been engaged 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 lock and raising / construction of embankments along with drainage sluices" on National Waterway – 5 in Odisha.

7.38 In the tidal zone from Padanipal to Dhamra, maintenance dredging will be required at places for providing the desired LAD and same will be taken up only after obtaining the statutory environment, CRZ and Wildlife clearances. EIA & EMP studies, which have been taken up through a Consultant.

NW-16 (River Barak)

7.39 River Barak was declared as National Waterway-16(NW-16) in the year 2016. It connects Silchar, Karimganj and Badarpur in Cachar valley of Assam with Haldia and Kolkata ports through Indo-Bangladesh Protocol (IBP) Route. The progress on NW-16 are enumerated as below:

Fairway Development

7.40 Work is going on for dredging and providing fairway maintenance for Least Available Depth of 2m along with provision of navigational aid upto Badarpur.

Terminals

a) Two Floating pontoons are proposed to be mobilized from NW-2 to NW-16 for placement at Badarpur and Karimganj Terminals.

- b) Two Forklifts and 02 nos. Shore Cranes are also proposed to be mobilized from NW-3 to NW-16.
- c) The tender for upgradation/repairing of Karimganj and Badarpur terminal is under process at an estimated cost of the work is Rs.5.42 cr. (Karimganj-2.69 Cr. & Badarpur 2.73 Cr.).

Status of 106 New National Waterways (NWs):

7.41 Under the National Waterways Act, 2016, 106 new NWs were declared as NWs in addition to the existing five NWs. Feasibility Study Reports (FSRs)/Detailed Project Reports (DPRs) have been completed for 104 new NWs depending upon navigational potential. The DPR of river Jhelum (NW-49) & river Yamuna (NW-110) is underway. Based on ongoing evaluation process, 53 NWs have not been found viable for navigation. Based on the DPRs, development works have been initiated on 10 new NWs .

CARGO MOVEMENT

7.42 The traffic on National Waterways during 2018-19 was 72.31 million tonnes, an increase of 32% over 2017-18. In 2019-20, NW-4 and NW-97 (Sundarbans waterways) were added to the list of operational waterways taking the count of operational National Waterways to 13. Traffic on these operational National Waterways is shown in the table below:

Sl. No	National Waterways	FY 2017-18 (Metric Tonnes)	FY 2018 - 19 (Metric Tonnes)	FY 2018-19 (upto December 2019) (Metric Tonnes)
1	NW - 1 (Ganga- Bhagirathi - Hooghly river)	5,480,000	6,793,981	5,049,960
2	NW - 2 (Brahmaputra river)	561,469	502,003	285,262
3	NW - 3 (West Coast Canal, Champakara canal and Udyogmandal canal)	427,988	408,790	392,704
4	NW - 4 (Krishna river)	NA	452,066	82,226
	Sub Total (National Waterways 1-4)	6,469,457	8,156,840	5,810,152
Maharashtra Waterways				
5	NW-10 (Amba river)		22,381,100	16,716,312
6	NW-83 (Rajpuri creek)		816,205	526,718



MINISTRY OF SHIPPING

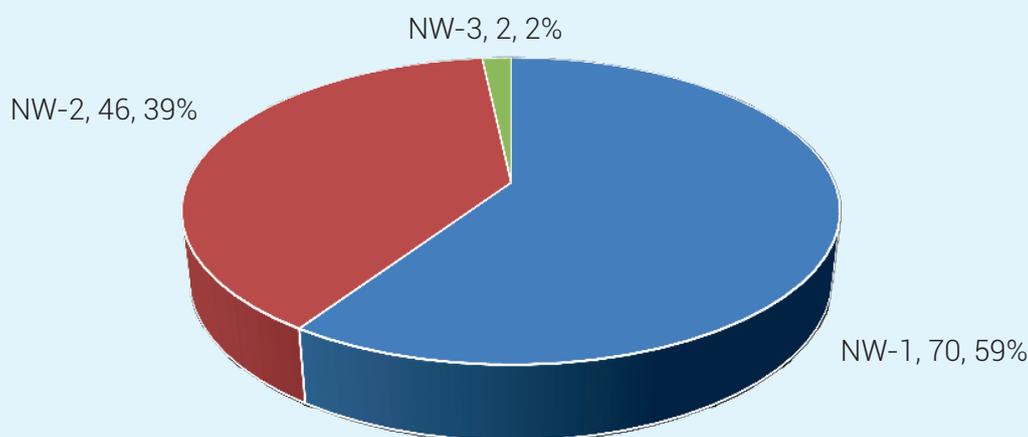
Sl. No	National Waterways	FY 2017-18 (Metric Tonnes)	FY 2018 - 19 (Metric Tonnes)	FY 2018-19 (upto December 2019) (Metric Tonnes)
7	NW-85 (Revdanda creek &Kundalika River)		1,769,947	958,735
8	NW-91 (Shastri River-Jaigad Fort creek)		3,374,399	66,643
	Total	25,960,000	28,341,651	18,268,408
Goa Waterways				
9	NW-68 (Mandovi river)		1,653,751	960,375
10	NW-111 (Zuari river)		2,104,219	1,016,110
	Total	11,090,000	3,757,970	1,976,485
Gujarat Waterways				
11	NW-73 (Narmada river)		40,941	82,801
12	NW-100 (Tapi river)		28,780,183	23,340,049
	Total	11,520,000	28,821,124	23,422,850
13	(NW-97) Sundarbans		3,227,460	2,677,224
14	(NW-16) Barak River			1882
Grand Total (in Metric Tonnes)		55,039,457	72,305,044	52,157,000
Grand Total (in Million Metric Tonnes)		55.03	72.31	52.16

Passenger, Cruise and Ro-Ro initiatives

7.43 IWAI has taken several initiatives to increase the passenger cruise traffic on national

waterways. Figure shows the annual number of cruise trips on NW-1, NW-2 and NW-3 for the year 2018-19.

Figure 1: Number of cruise trips on National waterways



RV Bengal Ganga flagged off from Kolkata on 29th March 2019 for Dhaka



MV Madhumati flagged off from Dhaka on 29th March 2019 for Kolkata



Shri. Gopal Krishna, Secretary, Ministry of Shipping inaugurating First River Cruise Vessel RV Bengal between India and Bangladesh at Kolkata

Ro- Ro Initiatives

7.44 IWAI established new Ro-Ro services on NW-2 (Brahmaputra River) & NW-4 (Krishna

River) in addition to the existing Ro- Ro services on NW-1 to provide impetus to cargo movements on waterways.

Ro-Ro vessel on NW-4





IWAI'S OTHER INITIATIVES

Forum of Cargo Owners and Logistics Operators (FOCAL)

7.45 A dedicated portal named FOCAL was launched by IWAI to connect cargo owners interested in moving their cargo using the IWT mode and vessel operators who are operating vessels on National Waterways (NWs). The portal allows registered users to share their transportation requirement and

positioning of vessels on different NWs.

Least Available Depth Information System (LADIS)

7.46 A new portal LADIS has been launched by IWAI with a view to ensure that real-time data on Least Available Depth (LAD) is disseminated for ship/barge and cargo owners so that they can undertake transportation on NWs in a more planned way.



Launch of LADIS on IWAI website by Shri Gopal Krishna, Secretary, Ministry of Shipping

National Inland Navigation Institute (NINI) at Patna

7.47 NINI was established by IWAI at Patna and has been functional from February 2004. Induction courses for deck and engine ratings, preparatory courses for Serang and engine drivers, basic and advanced dredging courses, refresher courses for hydrographic surveyors, courses for repair and maintenance of vessels, etc. are conducted in NINI regularly. So far, a total 9848 candidates have been trained at NINI till 31st October, 2019.

7.48 A 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 upto June 2020.

INTERNATIONAL COOPERATION

Bangladesh

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

7.49 The 20th meeting of Standing Committee on PIWTT was held at Dhaka on 04th December' 2019. The Indian side was led by Shri Rajat Sachar, Sr. Economic Adviser, Ministry of Shipping, Government of India

while Shri Bolanath Dey, Additional Secretary (Development), Ministry of Shipping, led the delegation of Bangladesh. During the meeting, the following important issues were agreed by the both sides: -

- a) Operationalization of Dhulian-Rajshahi stretch (94 km) of PIWTT and to extend it upto Aricha (270 km).
- b) Introduction of trade between Chilmari (Bangladesh) and Dhubri (India) route of PIWTT by shallow draft mechanized vessels.
- c) Declaration of Jogighopa in India and Bahadurabad in Bangladesh as new Ports of Call in PIWT & T.
- d) Issue of river notices on fortnightly basis by Bangladesh similar to Indian side from January' 2020.
- e) Provision of necessary navigational aids and pilot services on Indo-Bangladesh Protocol routes on their side for smooth connectivity and navigation of vessels to NER.
- f) Inclusion of Ichamati river (NW-44) as a

new route under PIWT&T.

Passenger and Cruise services on the Coastal and Protocol routes

7.50 An SOP on Passenger and Cruise services on the Coastal and Protocol routes between India and Bangladesh was signed by both the countries on 25th October, 2018. India and Bangladesh started inaugural cruise services between India and Bangladesh in April 2019.

Use of Chattogram and Mongla ports for movements of transit goods from India

7.51 Bangladesh has allowed India use of its Chattogram and Mongla Ports for transit movement of Indian goods through waterways, rail, road or multi-modal transport in its territory for which a Standard Operating Procedure (SOP) was signed by the two countries on 5.10.19. The alternative connectivity is expected to boost development of the North East Region (NER) by increasing trade volumes and reducing logistic costs. Eight routes are provided under the Agreement which would enable access of NER via Bangladesh.



20th Standing Committee meeting on PIWTT between India and Bangladesh held in Dhaka on 4.12.19



7.52 At the first meeting of the India -Bangladesh Inter Governmental Committee on use of Chattogram and Mongla ports held at Dhaka on 5.12.19. Bangladesh agreed to furnish a reasonable proposal on the Administrative fee to be charged for Indian transit cargo. It was decided to amend the Agreement on use of Chattogram and Mongla Ports to include Nakugaon land Port of Bangladesh and Dalu Land Customs Station of India as additional entry and exit points. Both countries agreed to commence trial runs on movement of Indian transit cargo for North East Region (NER) through Chattogram and Mongla ports from January-February 2020.

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

7.53 India and Bangladesh have signed an MoU for development of fairway from Sirajganj to Daikhowa and Ashuganj to Zakiganj on Indo-Bangladesh Protocol route 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.

7.54 On the dredging in the Ashuganj-Zakiganj (295 km) stretch of Kushiya river, BIWTA has awarded the work to M/s Dharti-Banga JV on 04.10.2018 at a total cost of BDT 95.49 Cr through open tendering. Pre dredging survey was completed in January, 2019. Two dredgers are deployed and dredging commenced from 31-03-2019, but was stopped from 06-05-19 due heavy current during monsoon and has resumed from 3rd week of December'2019.

7.55 On the dredging in the Sirajganj-Daikhowa (175 km) stretch of Jamuna river, BIWTA awarded the work to M/s Dharti-Banga JV

on 11.11.2018 at the total cost of BDT 227.46 Crore through open tendering. Agreement was signed on 25.11.2018 for two years initial dredging (36 lakhs cu.m) and 05 years maintenance Dredging (10.80 lakh cu.m per year). Pre dredging survey completed and one dredger mobilized at site. Dredging is expected to commence from January,2020.

Shipping Secretary Level Talks

7.56 The Shipping Secretary Level talks (SSLT) between Bangladesh and India were held at Dhaka on 05.12.2019. The Indian delegation was led by the Shri Gopal Krishna, Shipping Secretary, Government of India while Bangladesh Shipping Secretary, Abdus Samad led his country's delegation. During the meeting, the following issues were discussed: -

- a) Addendum to the PIWTT on points agreed by India and Bangladesh regarding additional Ports of Call, new routes and extension of PIWTT to be signed as soon as possible.
- b) Documents to be submitted by Bangladesh for concluding the physical verification of the maritime training, examination and certification system.
- c) Inclusion of V.O. Chidambaranar, Dhamra and Kamarajar Ports from India and Cox Bazar and Muktarpur from Bangladesh as ports of call under Coastal Shipping Agreement.
- d) Third country EXIM trade through PIWTT and Coastal Shipping route.
- e) Setting up of a technical committee to visit the new terminal facilities at Varanasi and Sahibganj for considering the proposal for extension of PIWT&T route up to Varanasi.



Shipping Secretary of India and Bangladesh exchanging documents in Dhaka

Myanmar

7.57 The Kaladan Multimodal Transit Transport Project (KMTTP) was conceptualized by the Ministry of External Affairs (MEA) to provide an alternative connectivity of 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 work of Sittwe Port & IWT component in Paletwa

is completed in Phase-I and handed over to the Govt. of Myanmar. Under Phase II of the project Wreck removal from Sittwe Port Basin area has been completed, work order issued for Operation & Maintenance (O&M) of completed project components and DPR preparation is completed for the construction of Container handling facility at Sittwe/Paletwa.

Nepal

7.58 India and Nepal have agreed to include Inland Waterways connectivity as an additional mode of transport in the Treaty of Transit. Three routes for evacuation of cargo have also been agreed by both countries.



Discussion on IWT cooperation between Delegations of India and Nepal



Bhutan

7.59 In a first ever movement of its kind, a vessel of the Inland Waterways Authority of India, carrying stone from Bhutan sailed from Dhubri in Assam to Narayanganj in Bangladesh, over river Brahmaputra and the Indo Bangladesh Protocol Route. It is the first time that an Indian waterway was used as a channel for transport of cargo between two countries, using India for transit.

7.60 The stone aggregates were transported

by trucks from Phuentsholing in Bhutan which is 160 KMs from IWAI's Dhubri jetty in Assam. Till now, Bhutan has been exporting significant quantity of stone aggregates to Bangladesh through the land route. The ship transported 1000 MT of stones which is equivalent to 70 trucks by road. Inland Water Transport (IWT) of cargo through this route has cut short travel time by 8 to 10 days, and reduce transportation cost by 30%, bringing down logistics costs with an environment friendly mode of transport.



Shri Mansukh Mandaviya, Shipping Minister flagging off the vessel carrying stone chips from Bhutan to Bangladesh

CHAPTER – VIII

TRANSPORT RESEARCH & DEVELOPMENT WING

TRANSPORT RESEARCH

8.1 The Transport Research Wing (TRW) provides research and data support to the Ministry of Shipping 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 2019-20:-

- a) Basic port Statistics of India – 2017-18
- b) Half-Yearly update on Indian Port Sector for period ending 30th September, 2018 and 31st March, 2019
- c) Indian Shipping Statistics 2018

d) Statistics of India's Ship-building & Ship-repairing Industry 2017-18

e) Statistics of Inland Water Transport 2017-18

8.4 The publications are on the website of Ministry of Shipping: www.shipmin.gov.in under the head, "Transport Research Wing". The work relating to the preparation of publications "Basic Port Statistics- 2018-19", "Half-Yearly update on Indian Port Sector for period ending 30th September, 2019", "Indian Shipping Statistics 2019", "Statistics of Inland Water Transport 2018-19" and "Statistics of India's Ship-building & Ship-repairing Industry 2018-19" 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 of Shipping 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.

DEVELOPMENT WING

8.6 The Development Wing is Apex Technical Organization of the Ministry headed by Development Advisor (Ports). This Wing



deals with the subjects 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, 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/ up gradation 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 with Coast Guard for implementation of their "National oil spill Disaster contingency plans" at the major ports. This Wing also coordinates the Research Committee Works related to Port Sector of the Ministry.

CHAPTER – IX

INTERNATIONAL COOPERATION

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 got re-elected as Member of the IMO Council for biennial 2020-21 under Category 'B', representing nations with the largest interest in international seaborne trade, for biennial 2020-21 during the IMO Council election held on November 29, 2019.
- 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 34 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.
- 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 6 to 7 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.



MINISTRY OF SHIPPING

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

9.8 India has entered into cooperation instruments/arrangements with the following 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	

B. Unilateral Agreements

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 countries:-

1. Vincent/ Grind Anes
2. Dominica
3. Hellenic Republic
4. Georgia
5. Vanuatu
6. Thailand
7. Liberia
8. Marshal Islands
9. Kuwait
10. Bahamas
11. Qatar
12. Barbados
13. Netherlands

14. Japan
15. Belize
16. Jamaica
17. Isle of man
18. Luxemburg
19. Cyprus
20. Malta
21. Norway
22. France
23. Denmark
24. Ire Land
25. Bangladesh
26. Ghana
27. Latvia
28. Antigua and Barbuda
29. Vietnam
30. Australia
31. Singapore
32. Hong Kong
33. Panama

Joint Working Group (JWG) Meetings held during the year 2019

- The 4th meeting of India- Japan Shipping Policy Forum was held in New Delhi on January 15, 2019.
- The 8th Meeting of the Joint Committee on Ports and Maritime Cooperation between India and Iran was held on July 29- 30, 2019.
- The 7th Meeting of the JWG Maritime between India and Norway was held on November 18- 21, 2019 in Norway.

BIMSTEC CONCLAVE OF PORTS – VISAKHAPATNAM 7-8 NOVEMBER, 2019

9.10 With a view to promoting regional cooperation within South Asia as part of India's Neighbourhood First Policy, revitalization of the Bay of Bengal Initiative for Multi-sectoral Technical and Economic Cooperation (BIMSTEC) which brings together Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka and Thailand is given high priority by India.

9.11 BIMSTEC Conclave of Ports was organized by the Visakhapatnam Port Trust in Visakhapatnam on 07-08 November, 2019 in which all BIMSTEC countries participated. The Conclave aimed at providing a platform for maritime interaction, port led connectivity

initiatives and sharing best practices among Member States with an emphasis on the following shared common objectives:-

- To develop a BIMSTEC community of interests among ports of the region keeping in mind the specific characteristics of the region, without duplicating efforts at other levels.
- To harness the comparative advantages of all BIMSTEC Ports for the collective prosperity of the entire regional economy;
- To promote the indigenous shipping industry and associated infrastructure.
- To address the issues of land locked countries.

9.12 The Conclave deliberated upon various themes, i.e. Port led Industrial and Tourism Development; Emergent Roles of Ports in the Global Supply Chain; Safe and Secure ports; Port Services - Delivering values and Green Port Operations and made recommendations for follow-up. Conclusion of a BIMSTEC Coastal Shipping Agreement has been under consideration in the Ministry of Shipping for enhancing connectivity among BIMSTEC Member States.



CHAPTER – X

ADMINISTRATION AND FINANCE



Officials & Staff member of Ministry of Shipping celebrating International Yoga Day in building premise

ADMINISTRATION

10.1 Administration Wing of the Ministry of Shipping is headed by Joint Secretary (Administration) who is assisted by Deputy Secretary (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 270 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 of Shipping, 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 of shipping has constituted a Committee for surprise checking in the premises of the Ministry. The Ministry of Shipping is one of the few Ministries, which have successfully completed online APARs of all the officers

of Ministry of Shipping 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 of Shipping. Contributions were also raised and collected towards “Flag Day”. Essay competitions both in Hindi and English were conducted during Communal Harmony Week / Vigilance Awareness Week. The Participants are rewarded for participating in these events.



Celebration of Swachhta Pakhwada by Main Secretariat, Ministry of Shipping

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

- 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 of Shipping has exclusively created



MINISTRY OF SHIPPING

a new cell and an Information and Facilitation Counter (IFC) at the Reception for the convenience of the general public who visit personally.

- c) In the Ministry of Shipping (Main Sectt.), we have appointed/designated 21 CPIOs and 13 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 of Shipping i.e. www. shipmin.gov.in.
- d) 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.

- e) Copies of the RTI Act and circulars received from DOPT on RTI are circulated promptly to all the organizations for compliance.
- f) Useful guidance material/instructions are also circulated to all CPIOs/ Appellate Authorities.
- g) 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.
- h) All the useful records are duly maintained.
- i) The Quarterly details of RTI Applications and RTI Appeals received and disposed of by this Ministry during the period from 01.01.2019 to 31.12.2019 are as under:-

Sl. No.	Period	RTI Applications received and disposed of	RTI Appeals received and disposed of
1	January – March	127	5
2	April – June	177	6
3	July – September	178	5
4	October – December	129	9
	Total	611	25

Internal Audit

- a) The Internal Audit Wing in the Pr. CCA organization of Ministry of Shipping 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.
- b) The Officers of the Internal Audit Wing as well

as officers posted in other section have been imparted various trainings related to Internal Audit in the past. This year three AAOs have been imparted training in Risk Bases Audit.

- c) 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 of Shipping.
- d) 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 take stock of the outstanding paras.

Important Audit Observation

10.7 The summary of important audit observations, appearing in the following most recent Audit reports of the year ended March, 2018 is at **ANNEXURE-IV**.

DEPARTMENTAL ACCOUNTING ORGANIZATION

10.8 The Accounts and Budget wings of the Ministry of Shipping 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, Conduct of internal audit of all the units under the Ministry to ensure compliance of the prescribed Rules, Rendering Technical advice to the Ministry on Financial and accounting Matters, cash management and coordination with the Controller General of Accounts, C&AG, Finance Ministry and other related agencies.

10.9 The Pr. Chief controller of Accounts organization comprises of Pr. Chief Controller of Accounts, one Controller of Accounts, one Deputy Controller of Accounts, Six Pay & Accounts Officers located as 2 in Delhi, 1 in Kolkata, 1 in Mumbai, 1 in Noida and 1 in Andaman (Port Blair). The Budget Section consists of one Under Secretary (Budget).

10.10 The Pr. Chief Controller of Accounts office is primarily responsible for the following major tasks:-

Payments

- Making Sanctioned Payments on behalf of the Ministry after conducting pre-check of bills as per approved Budget.
- Release of authorization to other Ministries to incur the expenditure on behalf of the Department.

Receipts

- Budgeting, accounting and reconciliation of the receipts of Ministry of Shipping.
- Monitoring the repayment of loans and interest thereof received from State Governments and other PSU's. The payment on account of Grants-in-Aid, Loan, Subsidy and equity to Public Sector Undertakings, Port Trusts and International Maritime Organization.

Submission of Accounts and Reports

- Preparation of monthly accounts, Finance Accounts, Annual Appropriation Accounts, and Statements of Central Transactions and their submission to the Controller General of Accounts, Ministry of Finance, Department of Expenditure, Government of India.
- Monitoring of Internal Extra Budget Resources (IEBR) and its submission to office of the CGA.
- Monitoring and submission of mandatory information as per Fiscal Responsibility and Budget Management (FRBM) Act and Rules.
- Preparation of Management Information Reports based on accounting, budget & audit data for submission to various authorities.
- Preparation of financial statistics on monthly basis regarding receipts and expenditure for upload on Ministry's website.

Budget

- Preparation and submission of Annual Budget Estimates and Revised Estimates, re-appropriation of funds of the Department of Shipping, Ministry of Shipping, Road Transport and Highways. Coordination with Ministry of Finance and other Departments in all the budget matters.
- Monitoring/disposal of all the Audit Paras and Observations made by the C&AG of India (civil and commercial) and coordination with Monitoring Cell of the Department of



Expenditure, M/o Finance for the 'Action Taken Note'.

Computerization of Accounts

10.11 With a view to eliminate the delay in compilation of Accounts and to provide the information on expenditure accounts, on timely, accurate basis, the office of Pr. Chief Controller of Accounts at present is implementing various software packages like E-Lekha, PFMS and GePG etc.

E-Lekha

10.12 A web based application for generating daily/monthly of MIS of Accounting information. All the PAOs are uploading data daily on E-lekha. Pr. Account office is submitting the monthly account through E-lekha.

PFMS

10.13 In 2008-09 Hon'ble Finance Minister announced the establishment of Central Plan Schemes Monitoring System (CPSMS), which is now known as Public Financial Management System (PFMS), to provide comprehensive Decision Support and Management Information to various Scheme managers responsible for administering Plan Schemes. Since then the scope of PFMS has been enlarged to cover direct payment to beneficiaries both under selected Plan and non-Plan Schemes. Today several Scheme managers are using CPSMS to directly credit the bank accounts of implementing agencies and beneficiaries.

10.14 PFMS has operationalized an active interface with 86 banks (26 Public Sector Banks, 50 Regional Rural Banks and 10 major Private Sector Banks) to provide immediate validation of bank accounts, prompt electronic credit to the beneficiary's bank account and bank reconciled expenditure statements to the implementing agencies with 104 Centrally Sponsored Schemes (CSS) and more than 600 Central Sector Schemes (CSS), along with State Plans and Additional

Central Assistance (ACA), the CPSMS is managing funds in excess of Rs.4,00,000 crore annually. The system is geared for fund management and e-payments for Plan/non-Plan Schemes of the Government of India and report utilization under these schemes at different levels of implementation on a real time basis.

GE PG

10.15 The Government e-Payment Gateway (GePG) is envisaged to provide a payment gateway for the Civil Ministries and departments with the specific objective of leveraging the existing IT capabilities of the Core Banking Systems and application software functionalities of the CGA's organization towards the development of an integrated payment and accounting system for all levels of usage with seamless interface and data communication. This would result in the elimination of physical cheque processing system and traditional issues associated with it, which would ensure major cost savings for the department by greatly enhancing the overall payment processing efficiency; Online reverse file (payment scroll) giving MIS on unique e-Authorization ID for all e-payment fund transfers; Online auto-reconciliation to facilitate major savings in time and efforts and speed up the compilation of accounting processes; and ensuring a secure single point data capture of transaction data thereby eliminating duplication of work and data inconsistency.

Grant No. 89 – Ministry of Shipping

10.16 The position of savings/excess in respect of above mentioned Grant No. 89 for the year 2019-20 and actual expenditure for the year 2019-20 (upto 31st December, 2019) 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

2017-18 to 2019-20 (upto 31st December, 2019) are given in **ANNEXURE-VII**. Profile of actual Expenditure in 2019-20 (upto 31st December, 2019) is at **ANNEXURE-VIII**. The Ministry of Shipping 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-IX**.

Vigilance

10.17 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.

10.18 There are 30 Attached/Subordinate/PSU/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.

10.19 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 of Shipping particularly the Port Trusts. Punitive action has been taken wherever required in consultation with CVC against the delinquent officials.

10.21 During the Vigilance Awareness Week, a pledge was administered by 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.

10.22 Vigilance activities in various organizations under this Ministry are being reviewed periodically through their reports/returns and also through interactions with CVOs/Head of the Organizations.



Cricket Team of Ministry of Shipping and ALHW at Port Blair Stadium



CHAPTER – XI

USE OF OFFICIAL LANGUAGE



Hindi Pakhwada competition

11.1 Hindi Section has been established in the Ministry of Shipping for implementation of the Official Language Policy of the Union Government. Presently it is under the administrative control of Joint Secretary (Shipping/OL), assisted by Assistant Director (OL). The Hindi section consists of one Joint Director (OL)- (Currently vacant), one Assistant Director (OL), two Senior Translation Officers, one Junior Translation Officer 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 Shipping 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.

Official Language Implementation Committee (OLIC)

11.4 There is an Official Language Implementation Committee (OLIC) constituted in the Ministry under the Chairmanship of Joint Secretary (Shipping/OL). 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 2019-20 (upto 31-12-2019).

Inspections to assess the progressive use of Hindi

11.5 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:

11.6 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. No inspection was conducted by the First Sub Committee of the Committee of Parliament on Official Language during the year 2019-20 (as on 31-12-2019).

Inspection in the offices under the control of ministry of Shipping:

11.7 The officials of the Ministry of Shipping inspected seven offices under its control during the reporting period namely:

- I. Lighthouse, Kavarathy: 13.05.2019
- II. Dy. Chief Engineer (Lakshadweep) office, ALHW, Kavarathy: 13.05.2019
- III. Cochin Port Trust, Kochi: 15.05.2019
- IV. Murmugao Port Trust, Goa : 07.10.2019
- V. New Mangalore Port Trust, Mangalore : 10.10.2019
- VI. Chennai Port Trust, Chennai : 22.10.2019
- VII. Kamarajar Port Ltd., Chennai: 24.10.2019

Organization of 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 13-09-2019 to 27-09-2019. During Hindi Pakhwada various competitions were held. Prizes were awarded by the Secretary (Shipping) to the winners of the competitions held during Hindi Pakhwada. This year there were total 56 Prizes for 08 Competitions in which 45 Officers and Staff participated and 38 participants won total 56 Prizes.



Hindi Pkhwada Prize distribution by Shri Gopal Krishna, Secretary (Shipping)



Organization of Hindi workshop

11.9 Two Hindi workshops were organized during the reporting period. First Hindi workshop was conducted on 21-05-2019, in which participants were trained on 'Use of Hindi in Official Work' to facilitate them doing their official work in Hindi. 15 officers/staff from various sections of the Ministry trained in this workshop.

11.10 Second Hindi workshop was conducted during Hindi fortnight on 25.09.2019 in which 17 officers and staff were trained. The subject of the workshop was 'How to prepare Quarterly Progress Report regarding progressive use of Hindi'.

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:-

11.11 Ministry of Shipping 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. The implementation of this scheme is under process for the year 2019-20.

Rajbhasha Shield Scheme

11.12 To promote use of Hindi in the headquarters of offices under the control of Ministry of Shipping a Rajbhasha Shield scheme is being run on annual basis, under which region wise offices are awarded with a shield and certificate. Under this scheme, winners have been declared for the year 2018-19.

Incentive scheme for doing official work in Hindi

11.13 Ministry of Shipping 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 5000/- Rs. each, Three Second Prizes of 3000/- Rs. each and Five Third Prizes of 2000/- Rs. 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 2018-19 one official of this ministry was awarded first prize of Rs. 5000/- under this scheme.

In-House Magazine "Nautarni"

11.14 Ministry's in house Hindi magazine "Nautarni" is being published to promote the creative writing in Hindi in the officers and employees of the ministry of Shipping. In this magazine creative and informative articles and the articles related to the activities of the Ministry of Shipping are published. Till now 5 issues of this magazine are published and articles have been invited for the Sixth issue of this in house magazine.

Hindi Salahakar Samiti

11.15 With a view to render advice for effective implementation of the Official Language Policy of the Government, the Hindi Salahakar Samiti (Advisory Committee) of the Ministry of Shipping had been constituted and its tenure had expired. The process of reconstitution of the committee is in progress.

ANNEXURE-I

(para 1.5 refer)

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, (15 of 1908) and the Major Port Trusts Act, 1963 (38 of 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
- 5A. Ship breaking
6. Fishing vessels industry
7. Floating craft industry

II. IN RESPECT OF THE UNION TERRITORIES:

- Inland waterways and traffic thereon

III. IN RESPECT OF THE UNION TERRITORIES OF THE ANDAMAN AND NICOBAR ISLANDS AND THE LAKSHADWEEP.

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

IV. OTHER SUBJECTS WHICH HAVE NOT BEEN INCLUDED UNDER THE PREVIOUS PARTS:

- Legislation relating to shipping and navigation on inland waterways as regards mechanically propelled vessels

and the carriage of passengers and goods on inland waterways.

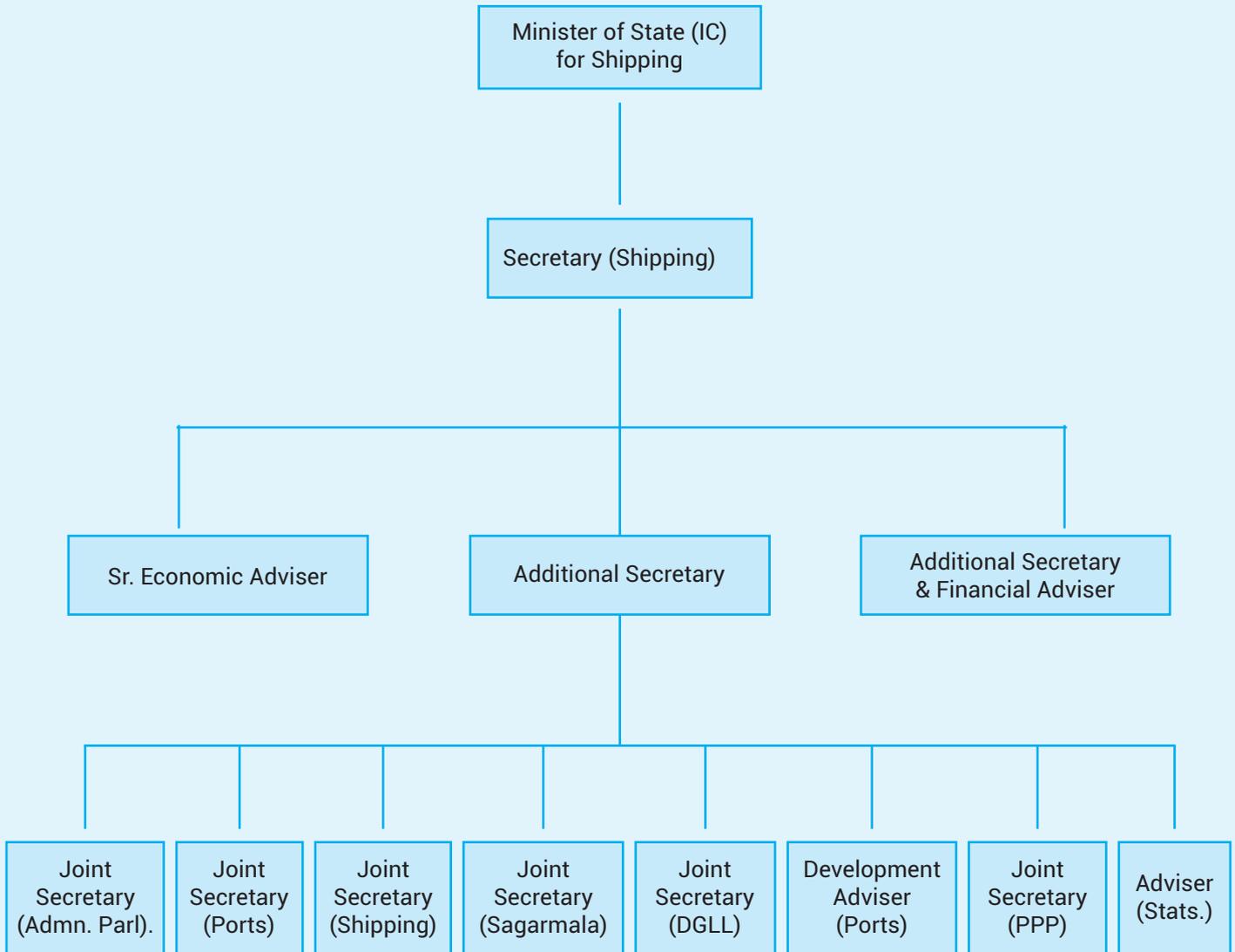
- Legislation relating to and coordination of the development of minor and major ports.
- Administration of the Dock Workers (Regulation of Employment) Act, 1948 (9 of 1948) and the Schemes framed thereunder other than the Dock Workers (Safety, Health and Welfare) Scheme, 1961.
- To make shipping arrangements 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.
- Planning of Inland Water Transport.
- Formulation of the privatization policy in the infrastructure areas of ports, shipping and inland waterways.
- 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

- The Coasting Vessels Act, 1838
- The Indian Ports Act, 1908 (15 of 1908)
- The Inland Vessels Act, 1917 (1 of 1917)
- The Dock Workers(Regulation of Employment) Act, 1948 (9 of 1948)
- The Merchant Shipping Act, 1958 (44 of 1958)
- The Major Port Trusts Act, 1963 (38 of 1963)
- The Seamen's Provident Fund Act, 1966 (4 of 1966)
- The Inland Waterways Authority of India Act, 1985 (82 of 1985)
- The Multimodal Transportation of Goods Act, 1993 (28 of 1993)
- Suppression of Unlawful Acts against Safety of Maritime Navigation and Fixed Platform on Continental Shelf Act, 2002
- Indian Maritime University Act, 2008
- National Waterways Act, 2016
- The Admiralty (Jurisdiction and Settlement of Maritime Claims) Act, 2017.
- The Recycling of Ships Act, 2019.

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, 2019 and Number of appointments made during the Preceding Calendar year 2019:

**Ministry/Department/Attached/Subordinate Office:
Shipping Representation of SCs/STs/OBCs/EWSs (As on 01.01.2020)**

Group	Total Employee	SCs	STs	OBCs	EWS	Total
A	55	10	02	03	-	15
B	99	17	08	25	-	50
C (Excluding Safai Karamchari)	41	10	02	07	-	19
C (Safai Karamchari)	-	-	-	-	-	-
Total	195	37	12	35	-	84

Number of Appointments made during the Calendar Year 2019

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

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

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

ANNEXURE-IV

(Para 10.7 refer)

IMPORTANT AUDIT OBSERVATIONS

The summary of important Audit Observations, appearing in the following most recent Audit Report for the year ended March, 2018 is given below:

Report No. 13 of 2019 Union Government (Commercial), Compliance Audit Observations

COCHIN SHIPYARD LIMITED

(i) Improper estimate in quoting prices for construction of double-ended Ro-Ro Ferry vessels

Cochin Shipyard Limited incurred a loss of Rs. 7.83 crore due to fixing of low contract price for the Ro-Ro Ferry vessels built for Kochi Municipal Corporation. Audit observed that against the estimated cost and contract price of Rs. 7.60 crore, CSL incurred a total cost of Rs. 15.43 crore for construction of both the vessels whereas it recovered only Rs. 7.60 crore as against the total cost. No claim was preferred by CSL to recover the balance amount of Rs. 7.83 crore. Thus, wrong estimate had resulted in loss of revenue of Rs. 7.83 crore.

SHIPPING CORPORATION OF INDIA LIMITED

(ii) Payment of Performance Related Pay in violation of DPE Guidelines

As per DPE guidelines, profits from only the core business activities of the CPSEs were to be considered for distribution of Performance Related Pay (PRP) to employees but the Shipping Corporation of India considered non-core profits also, for distribution PRP. Thus, the payment of Rs. 11.03 crore to its employees by SCI as "Performance related pay" was not in compliance with DPE guidelines.



ANNEXURE-V

(Para 10.16 refer)

GRANT OF THE MINISTRY OF SHIPPING
FOR THE FINANCIAL YEAR 2019-2020 (upto 31/12/2019)

(Rs. in crore)

Grant No. & Name		Original	Supplementary	Total Budget	Actual Expenditure	Saving
Grant No. 89	Revenue Account	1635.99	0.00	1635.99	879.79	NA
	Capital Account	266.57	0.00	266.57	235.58	
Total		1902.56	0.00	1902.56	1115.37	

Source: E lekha

ANNEXURE-VI

(Para 10.16 refer)

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

(Rs. in crore)

REVENUE RECEIPTS

Sl. No.	MAJOR HEAD	2017-18	2018-19	2019-20 (upto 31.12.2019)
1.	0021-Taxes on Income other than Corporation Tax	17.12	19.29	14.27
2.	0045-Other Taxes & Duties on Commodities & Services	0.00	-1.70	-0.27
3.	0049- Interest Receipts	19.50	235.61	9.75
4.	0050-Dividends & Profits	193.67	202.37	194.77
5.	0070-Other Administrative Services	0.00	0.02	0.00
6.	0071-Contribution & Recoveries towards Pension & Other Retirements Benefits	8.73	9.19	9.61
7.	0075-Miscellaneous General Services	0.00	0.00	0.00
8.	0210-Medical & Public Health	0.41	0.42	0.34
9.	0216-Housing	0.36	0.45	0.43
10.	1051-Ports and Light Houses	302	306.99	250.33
11.	1052-Shipping	112.74	98.41	65.97
12.	1056-Inland Water Transport	16.48	24.72	0.00
13.	1475 - Other General Economic Services	19.17	0.00	0.00
A	REVENUE RECEIPTS *	690.18	895.77	545.20

CAPITAL RECEIPTS

Sl. No.	MAJOR HEAD	2017-18	2018-19	2019-20 (upto 31.12.2019)
1.	4000- Miscellaneous Capital Receipts	0.00	0.00	0.00
2.	6858- Loans for Engineering Indst.	0.00	0.00	0.00
3.	7051- Loans for Port & Light Houses	54.25	260.82	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	0.31	0.39	0.30
	CAPITAL RECEIPTS **	54.56	261.21	8.14



ANNEXURE-VII

(Para 10.16 refer)

**HEADWISE DETAILS OF EXPENDITURE FOR THE LAST THREE YEARS i.e.
FROM 2017-18 TO 2019-20 (upto 31/12/2019)**

(Rs. in crore)

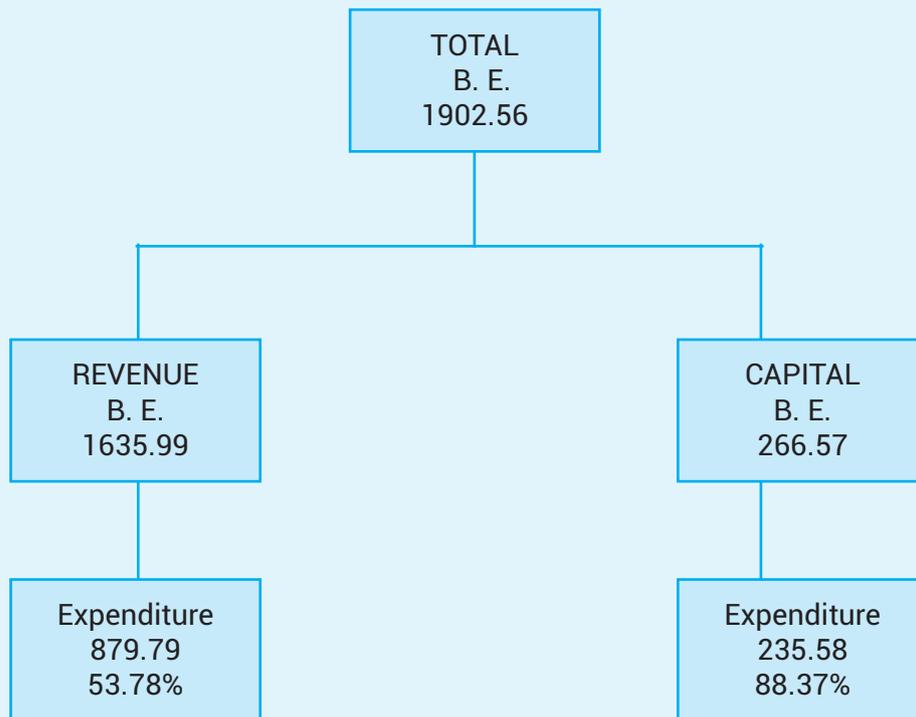
PARTICULARS	2017-18	2018-19	2019-20 (up to December 2019)
REVENUE EXPENDITURE			
2049-Interest Payment	0.25	0.38	0.22
2071-Pension Payment	26.25	30.79	29.27
2235-Social, Security & Welfare	0.07	0.06	0.03
2852-Industries	36.76	29.91	18.80
3051-Ports&Lighthouses (Gr.No.87)	764.05	773.33	529.93
3051-Port and Lighthouses Andaman & Nicobar administration	12.07	9.25	8.80
3052-Shipping	127.03	124.17	62.82
3056-Inland Water Transport	444.91	862.00	403.38
3451-Economic Services	49.56	55.74	36.85
3601-Grant-in-aid to State Government	195.60	100.00	27.72
TOTAL (Revenue Exp.)	1656.55	1985.63	1117.82
CAPITAL EXPENDITURE			
4405-Capital outlay on fisheries	9.06	8.18	2.41
4406-Capital outlay on forestry & wildlife	0.00	0.00	
4801-Capital outlay on Power Proj	0.00	1.51	0.17
5051- Capital outlay on Ports & Lighthouses (Gr.No.87)	223.14	177.77	263.10
5051- Capital outlay on Ports & Lighthouses Andaman & Nicobar administration	4.55	5.74	3.81
5052-Capital outlay on Shipping Andaman & Nicobar administration	2.02	2.94	0.88
5052-Capital outlay on Shipping (Gr.No.87)	0.00	-25.26	6.70
5053-Capital Outlay on Civil Aviation	0.00	0.00	0.00
5075-Other Transport Services	9.71	0.00	0.00
5452-Capital outlay on tourism Andaman & Nicobar administration	0.97	1.05	0.78
6858-Loans for Engineering Industries	0.00	0.00	0.00
7051-Loans for Ports & Light Houses	0.00	0.00	7.84
7610-Loans to Govt. servants	0.00	0.33	0.30
TOTAL (Capital Exp.)	249.45	172.26	285.99
Grand Total (Rev.+Cap.)	1906.00	2157.89	1403.81

ANNEXURE-VIII

(Para 10.16 refer)

PROFILE OF ACTUAL EXPENDITURE (NET) IN 2019-20 (upto 31/12/2019)

(Rs. in crore)



Source:- Consolidated
Classified Abstract

B.E. – Budget Estimate



ANNEXURE-IX
(Para 10.16 refer)

MINISTRY OF SHIPPING

DEPRECIATION RESERVE FUND (8115)	Rs. in crore
Opening Balance as on 01.04.2019	258.28
Receipt during Apr-December 2019	19.00
Payment during Apr-December 2019	0.00
Closing Balance as on 31.12.2019	277.28
GENERAL RESERVE FUND (8121)	
Opening Balance as on 01.04.2019	768.23
Receipt during Apr-December 2019	63.82
Payment during Apr-December 2019	0.00
Closing Balance as on 31.12.2019	832.05

Source: Classified Consolidated abstract Account



सत्यमेव जयते

**GOVERNMENT OF INDIA
MINISTRY OF SHIPPING**

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