







**Maritime - Led Prosperity** 

## **MAJOR PORTS**

**Cargo Handled at** Major Ports (MMT) since 2013

47%

2013-14 555.48 2023-24 820

**Capacity at Major Ports (MMT)** since 2013

103%

2013-14 800.52 2023-24

**Decrease in Container Turn Around** Time (Hrs) since 2013

27%

2013-14 41.76

2023-24 30.12

**Decrease in Overall Turn Around** Time (Hrs) since 2013

48%

2013-14 93.59

2023-24 48.06

## **COASTAL SHIPPING**

**Cargo Handled (MMT)** since 2013

86.21%

2013-14 87

2023-24 162

**Cargo Handled on National** Waterways (MMT) since 2013

1830%

2013-14 6.89

2023-24 133.03

**Operational National Waterways** (No.) since 2013

2013-14 03

2023-24 24

**Multimodal Terminals / Permanent** Jetties (No.) since 2013

62%

2013-14 16

2023-24 26

**National Waterways for** River Cruise (No.) since 2013

233%

2013-14 03

2023-24

**Investment in National Waterways** (Rs. in Cr.) since 2013

453%

2013-14 182.61 2023-24 1010.50

## **SHIPPING**

**Ship Carrying Capacity (GRT)** (In 000)\* since 2013

33%

2013-14 10309

2023-24 13754

**Number of Sea Cruise Passengers** (In Lakhs) since 2013

454%

2013-14 0.85

2023-24 4.71

Number of Ship / Vessels\* since 2013

**26**%

2013-14 1205

2023-24 1527

**Number of Seafarers (In Lakhs)** since 2013

2013-14

2023-24 2.85

### **MAJOR PORTS**

Cargo Handled - 820 MMT Turn Round Time (Container) - 30.12 Hrs 2023-24 Capacity - 1630 MMT Overall Turn Round Time - 48.06 Hrs Cargo Handled - 795.00 MMT Turn Round Time (Container) - 28.36 Hrs 2022-23 Capacity - 1617.39 MMT Overall Turn Round Time - 52.43 Hrs Cargo Handled - 720.05 MMT Turn Round Time (Container) - 32.39 Hrs 2021-22 Capacity - 1597.59 MMT Overall Turn Round Time - 52.87 Hrs Cargo Handled - 672.68 MMT Turn Round Time (Container) - 33.41 Hrs 2020-21 Capacity - 1560.61 MMT Overall Turn Round Time - 55.99 Hrs Cargo Handled - 704.93 MMT Turn Round Time (Container) - 32.87 Hrs 2019-20 Capacity - 1534.91 MMT Overall Turn Round Time - 56.13 Hrs Cargo Handled - 699.10 MMT Turn Round Time (Container) -**37.81** Hrs 2018-19 Capacity - 1514.09 MMT Overall Turn Round Time - 59.51 Hrs Cargo Handled - 679.37 MMT Turn Round Time (Container) - 40.26 Hrs 2017-18 Capacity - 1451.19 MMT Overall Turn Round Time - 64.43 Hrs Cargo Handled - 648.40 MMT Turn Round Time (Container) - 43.44 Hrs 2016-17 Capacity - 1359.00 MMT Overall Turn Round Time - 82.31 Hrs Cargo Handled - 606.47 MMT Turn Round Time (Container) - 44.64 Hrs 2015-16 Capacity - 965.36 MMT Overall Turn Round Time - 87.36 Hrs **581.34** MMT Cargo Handled -Turn Round Time (Container) - 43.44 Hrs. 2014-15 871.52 MMT Capacity -Overall Turn Round Time - 96.00 Hrs.

2013-14

Cargo Handled - 555.48 MMT

Capacity - 800.52 MMT

Turn Round Time (Container) - 41.76 Hrs

Overall Turn Round Time - 93.59 Hrs

### **PPP**

**AWARDED** SANCTIONED (No. of Projects / ~Value in INR Cr.) (No. of Projects / ~Value in INR Cr.) 5/9080 7/700 **AWARDED SANCTIONED** (No. of Projects / ~Value in INR Cr.) (No. of Projects / ~Value in INR Cr.) 8/9600 13/8300 **AWARDED SANCTIONED** (No. of Projects / ~Value in INR Cr.) (No. of Projects / ~Value in INR Cr.) 4/750 9/2500 **AWARDED SANCTIONED** 2020-21 (No. of Projects / ~Value in INR Cr.) (No. of Projects / ~Value in INR Cr.) 1/900 4/3800 **AWARDED SANCTIONED** 2019-20 (No. of Projects / ~Value in INR Cr.) (No. of Projects / ~Value in INR Cr.) 3/630 **AWARDED SANCTIONED** 2018-19 (No. of Projects / ~Value in INR Cr.) (No. of Projects / ~Value in INR Cr.) 2/890 1/700 **AWARDED SANCTIONED** (No. of Projects / ~Value in INR Cr.) (No. of Projects / ~Value in INR Cr.) 2/910 0/0 **AWARDED SANCTIONED** 2016-17 (No. of Projects / ~Value in INR Cr.) (No. of Projects / ~Value in INR Cr.) 2/480 2/910 **AWARDED SANCTIONED** 2015-16 (No. of Projects / ~Value in INR Cr.) (No. of Projects / ~Value in INR Cr.) 4/3020 3/2100 **AWARDED SANCTIONED** 2014-15 (No. of Projects / ~Value in INR Cr.) (No. of Projects / ~Value in INR Cr.) 6/14970 4/1810

**AWARDED** 

(No. of Projects / ~Value in INR Cr.)

6/8374\*

2013-14

**SANCTIONED** 

(No. of Projects / ~Value in INR Cr.)

6/11170

## **COASTAL SHIPPING**

**CARGO HANDLED (MMT)** 























## <u>IWT</u>

Cargo Handled on NWs	<b>133.03</b> MMT			Multimodal Terminals /	20.11
Operational National Waterways	<b>24</b> No.	20	23-24	Permanent Jetties  Investment in	<b>26</b> No. <b>1010.50</b>
National Waterways for River Cruise	<b>10</b> No.			National Waterways	(Provisional)
Cargo Handled on NWs	<b>126.15</b> MMT			Multimodal Terminals /	<b>25</b> No.
Operational National Waterways	<b>24</b> No.	2022-23	<del></del>	Permanent Jetties Investment in	
National Waterways for River Cruise	<b>10</b> No.			National Waterways	544.31
Cargo Handled on NWs	<b>108.79</b> MMT			Multimodal Terminals /	<b>24</b> No.
Operational National Waterways	<b>19</b> No.	20	21-22	Permanent Jetties Investment in	
National Waterways for River Cruise	<b>09</b> No.			National Waterways	419.00
Cargo Handled on NWs	83.61 MMT			Multimodal Terminals /	<b>24</b> No.
Operational National Waterways	17 No.	2020-21	-	Permanent Jetties Investment in	367.30
National Waterways for River Cruise	<b>08</b> No.			National Waterways	307.30
Cargo Handled on NWs	<b>73.64</b> MMT			Multimodal Terminals /	<b>24</b> No.
Operational National Waterways	<b>16</b> No.	20	19-20	Permanent Jetties Investment in	732.93
National Waterways for River Cruise	<b>08</b> No.			National Waterways	/32.33
Cargo Handled on NWs	<b>72.31</b> MMT			Multimodal Terminals /	<b>22</b> No.
Operational National Waterways	13 No.	2018-19	<b>*</b>	Permanent Jetties Investment in	<b>853.15</b> C
National Waterways for River Cruise	<b>08</b> No.			National Waterways	003.10
Cargo Handled on NWs	<b>55.03</b> MMT			Multimodal Terminals /	<b>20</b> No.
Operational National Waterways	11 No.	20	)17 <b>-</b> 18	Permanent Jetties Investment in	950.57
National Waterways for River Cruise	<b>08</b> No.			National Waterways	990.97
Cargo Handled on NWs	<b>55.47</b> MMT			Multimodal Terminals /	<b>19</b> No.
Operational National Waterways	<b>09</b> No.	2016-17	<b>\rightarrow</b>	Permanent Jetties Investment in	
National Waterways for River Cruise	<b>06</b> No.			National Waterways	<b>767.19</b> C
Cargo Handled on NWs	<b>8.14</b> MMT			Multimodal Terminals /	10 No
Operational National Waterways	<b>03</b> No.	20	15-16	Permanent Jetties Investment in	<b>18</b> No.
National Waterways for River Cruise	<b>03</b> No.			National Waterways	<b>595.19</b> C
Cargo Handled on NWs	<b>6.59</b> MMT			Multimodal Terminals /	16 No
Operational National Waterways	<b>03</b> No.	2014-15	-	Permanent Jetties  Investment in	<b>16</b> No.
National Waterways for River Cruise	<b>03</b> No.			National Waterways	<b>324.13</b> C
Cargo Handled on NWs	<b>6.89</b> MMT			Multimodal Terminals /	ICNIC
Operational National Waterways	<b>03</b> No.	20	13-14	Permanent Jetties Investment in	<b>16</b> No.
National Waterways for River Cruise	<b>03</b> No.			National Waterways	<b>182.61</b> C

## **SHIPPING**

(61(1) (111 666)	13754		2023-24	Sea Cruise passengers (No. in lakhs)*	4.71
Number of Ship/ Vessels *	1527		2025-24	Seafarers (No. in lakhs)	2.85
Ship Carrying Capacity (GRT) (in 000)*	13662	2022 22		Sea Cruise passengers (No. in lakhs)*	3.05
Number of Ship/ Vessels *	1523	2022-23		Seafarers (No. in lakhs)	2.58
Ship Carrying Capacity (GRT) (in 000)*	13696		2021-22	Sea Cruise passengers (No. in lakhs)*	1.32
Number of Ship/ Vessels *	1522		2021-22	Seafarers (No. in lakhs)	2.50
Ship Carrying Capacity (GRT) (in 000)*	12999	2020-21		Sea Cruise passengers (No. in lakhs)*	<b>0.01</b> (COVID)
Number of Ship/ Vessels *	1493	2020 21		Seafarers (No. in lakhs)	2.06
Ship Carrying Capacity (GRT) (in 000)*	13015		2010-20	Sea Cruise passengers (No. in lakhs)*	4.24
Number of Ship/ Vessels *	1465		2019-20	Seafarers (No. in lakhs)	2.24
Ship Carrying Capacity (GRT) (in 000)*	12751	2018-19		Sea Cruise passengers (No. in lakhs)*	2.64
Number of Ship/ Vessels *	1432	2010-19		Seafarers (No. in lakhs)	2.35
Ship Carrying Capacity (GRT) (in 000)*	12688		2017 10	Sea Cruise passengers (No. in lakhs)*	1.94
Number of Ship/ Vessels *	1403		2017-18	Seafarers (No. in lakhs)	2.09
Ship Carrying Capacity (GRT) (in 000)*	12357	0010 17		Sea Cruise passengers (No. in lakhs)*	2.27
Number of Ship/ Vessels *	1374	2016-17		Seafarers (No. in lakhs)	1.54
Ship Carrying Capacity (GRT) (in 000)*	11440		2015-16	Sea Cruise passengers (No. in lakhs)*	1.26
Number of Ship/ Vessels *	1305		2015-16	Seafarers (No. in lakhs)	1.44
Ship Carrying Capacity (GRT) (in 000)*	10522	0014 15		Sea Cruise passengers (No. in lakhs)*	1.08
Number of Ship/ Vessels *	1250	2014-15		Seafarers (No. in lakhs)	1.27
Ship Carrying Capacity (GRT) (in 000)*	10309		0010 14	Sea Cruise passengers (No. in lakhs)*	0.85
Number of Ship/ Vessels *	1205		2013-14	Seafarers (No. in lakhs)	1.17

### **SAGARMALA**

## 90 Port modernization

projects worth

₹ 31,000 crores

completed 230 MTPA capacity increased

4,900 trained under

### **DDU GKY**

SAGARMALA Convergence Program

More than **39,000** candidates trained at Safety Training Institution, Alang

Establishment of

**CEMS at Mumbai** and

Visakhapatnam

### Coastal Cargo volume increased from

**60 MTPA** to **162 MTPA** 

Number of National Waterways increased from 5 in 2014 to 111 in 2022, total length of ~20,000 kms cross 24 states

### 11 Projects

worth

₹267 crores

promoting coastal & cruise tourism and Island Development are completed

37 projects

completed worth

₹ 10,050 cr

under National Infrastructure Pipeline

## 69 Road & Rail connectivity

projects worth

~₹35,500 Cr.

completed resulting in addition of ~1,500 km length of road & rail connectivity to Ports

### **9 Fishing Harbour**

projects Completed worth

₹620 crores

benefitting 30,000 fishermen

Modernization of 5 Fishing Harbours taken up

worth ~₹550 Cr.

### **5 Coastal Berths**

Completed worth

₹**122 CF.** with net capacity addition of 6.35 MTPA

6 Projects related to promoting Inland Waterways worth

₹635 CF completed

**65.38%** physical presence of NMHC completed

**13** Urban Water Passenger Transport projects are completed

21 Projects
of more than

₹23,000 crores

have been awarded under **PPP mode** 

9 Port Industrialization projects worth

₹45,865 Cr. completed. Total

8,000+ Acres

of land have been allotted at Port for Industrialization

Around **2 Lakh**+
direct and indirect
employment generated.

### CICMT

established at IIT Kharagpur

### **10 Projects**

related to RORO/ROPAX & Passenger jetties promoting coastal movement in Maharashtra, Gujarat and Goa worth

₹580 Cr. completed.

Ghogha-Hazira ROPAX ferry reduced travel time from

10 hrs to 4 hrs

Mumbai-Mandwa ferry service reduced travel time from **3 hrs** to just **45 mins** 

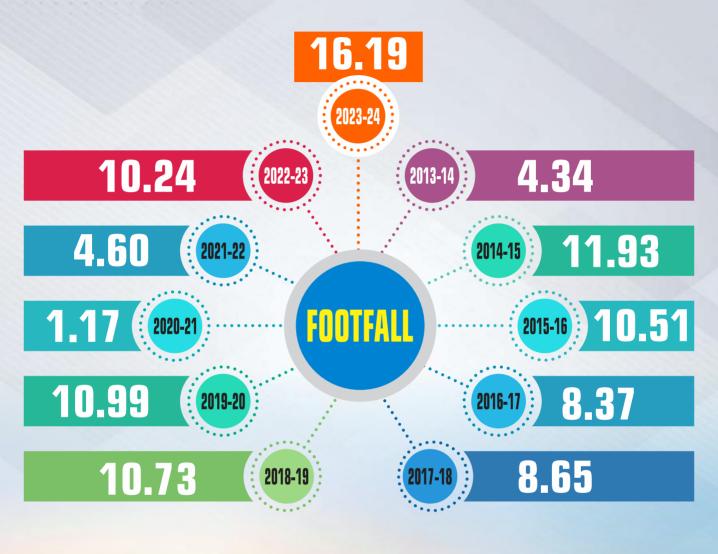
### ~100 Rail and Road

connectivity on projects implemented in coordination with MoR and MoRTH under the

PM Gati Shakti

## LIGHTHOUSE TOURISM

FOOTFALL (No. in Lakhs)





## STATE-WISE INFRASTRUCTURE BUILT IN LAST 10 YEARS

### **MOPSW**

### **GUJARAT**

NO. OF PROJECTS

25

PROJECT INVESTMENT

₹ 2810.99 CT

#### **ODISHA**

NO. OF PROJECTS

O5

PROJECT INVESTMENT

₹ 3456.29 cr

### **KARNATAKA**

NO. OF PROJECTS

15

PROJECT INVESTMENT
₹ 1141.86 CT

### **ANDAMAN & NICOBAR**

NO. OF PROJECTS

13

PROJECT INVESTMENT
₹426.01 CT

### **TRIPURA**

NO. OF PROJECTS

O1

PROJECT INVESTMENT

₹ 0.57 CT

### **WEST BENGAL**

NO. OF PROJECTS **36**PROJECT INVESTMENT

₹ **2696.06 C** 

#### GOA

NO. OF PROJECTS

12

PROJECT INVESTMENT

₹594.16 CT

#### **TAMIL NADU**

NO. OF PROJECTS

52

PROJECT INVESTMENT

₹8991.54 CT

#### **JHARKHAND**

NO. OF PROJECTS

01

PROJECT INVESTMENT

₹275.66 CT

### **MAHARASHTRA**

NO. OF PROJECTS

31

PROJECT INVESTMENT

₹ 9614.49 CT

### **ANDHRA PRADESH**

NO. OF PROJECTS **28**PROJECT INVESTMENT
₹ **3438.50 cr** 

### **KERALA**

NO. OF PROJECTS

20

PROJECT INVESTMENT
₹798.88 CT

#### **ASSAM**

NO. OF PROJECTS

O1

PROJECT INVESTMENT

₹47.00 Cr

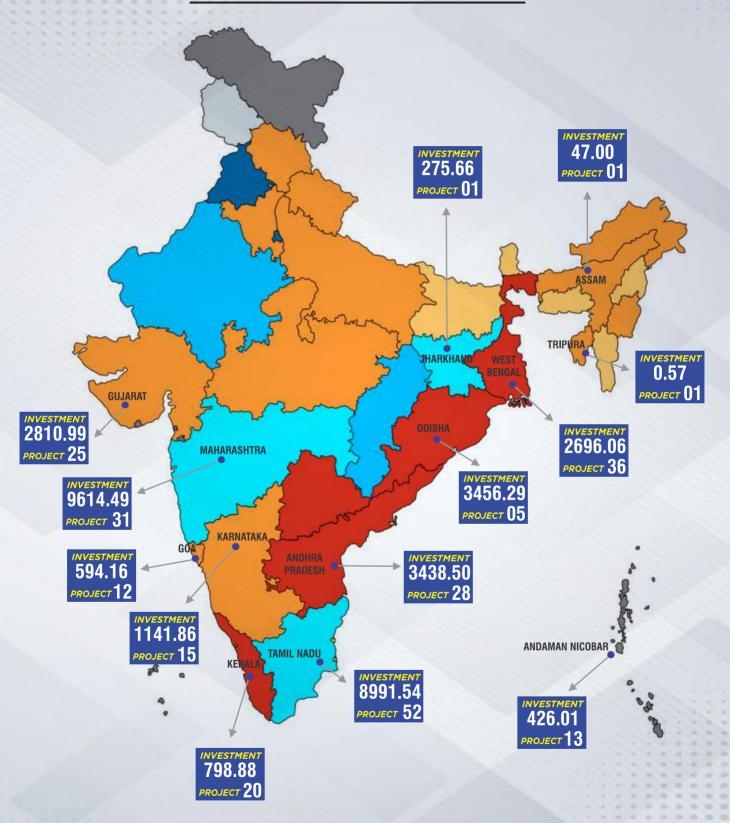
**TOTAL NO. OF PROJECTS** 

240

**TOTAL INVESTMENT** 

₹*34,292 cr* 

## INVESTMENT SNAPSHOT IN LAST DECADE



TOTAL NO. OF PROJECTS - 240

TOTAL INVESTMENT - ₹34,292 CI

TARGET FOR COMPLETION
BY DECEMBER 2023

97 Projects / 10,245 Cr

## SNAPSHOT OF INFRASTRUCTURE TYPE & PROJECTS COMPLETED

### PORTS WING, IWAI AND SHIPPING

## CAPACITY AUGMENTATION

Creation /
construction of new
facilities

Upgradation of port facilities

Development / Extension of port facilities

Mechanization / automation

## LOGISTICS/ LOGISTICS SERVICES

MMLP, Storage & Warehouses

Truck Parking, Yards
Optimization

RFID, Container scanners

Navigation automation

## ROAD / RAIL CONNECTIVITY / MODAL SHIFT

Construction / upgradation of new/ existing connectivity

Full Rake handling / doubling, Signaling infra

ROB, loading facilities, siding etc.

RO-RO/ ROPAX, passenger transit, ferry

## PORTLED INDUSTRIALIZATION / COMMUNITY DEVELOPMENT/ COMMUNITY SERVICES

SEZ, trade service, etc.

Modernization of Fisheries Harbour

Convention center

## CTRUISE/TOURISM FACILITIES/ BUSINESS DEVELOPMENT

Cruise terminal, berths etc.

Shore side: Walkways, parking facilities, passenger centers et.

Customs, Cargo Testing Centre, PHO, FSSAI etc.

## **LEGISLATIVE REFORMS**

### **Enactment of National Waterways Act, 2016**

National Waterways Bill, 2015 for declaration of 111 (5 existing and 106 additional) waterways was introduced and passed by the Lok Sabha on 21st December 2015 and by the Rajya Sabha on 9th March 2016. The National Waterways Act, 2016 came into force w.e.f. 12th April, 2016. 111 (106 new + 5 Existing) National Waterways (NWs) declared increasing the total length of NWs from 4,382 km to 20,262 km.

### **Recycling of Ships Act, 2019**

With the objective of regulating the ship recycling industry, India has enacted the Recycling of Ships Act, 2019. India has also acceded to the Hong Kong International Convention on Recycling of Ships, with the objective of ensuring safe and environmentally sound recycling of ships.

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

The Act was notified on 17.02.2021. The act was notified to come in force on 03.11.2021. 7 Rules under the Act have been notified. The Major Port Authorities Act, 2021 provide for regulation, operation and planning of Major Ports in India and vests the administration, control and management of such ports upon the Boards of Major Port Authorities. The legislation empowers to perform with greater efficiency on account of increased autonomy in decision making and by modernizing their institutional framework. The ports have been empowered to fix Scale of Rates for port services and assets. PPP concessionaires are free to fix tariffs based on market conditions etc. The compact Board with professional independent Members is capable of strengthening decision—making and strategic planning.

### Marine Aids to Navigation Act, 2021

The Marine Aids to Navigation Act, 2021 has been notified and published in the Gazette of India by Legislative Department, Ministry of Law & Justice on 2nd August, 2021 after getting the President's assent on 31st July, 2021. The Bill was passed by Lok Sabha on 22nd March, 2021 and by the Rajya Sabha on 27th July, 2021. The Act aims to replace over 90-year-old Lighthouse Act, 1927 to incorporate the global best practices, technological developments and India's International obligations in the field of Marine Aids to Navigation. The new Act will facilitate harmonized and effective functioning of aids to marine navigation and Vessel Traffic Services along the Indian coastline.

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

Inland Vessels Act, 2021 was passed by both houses of the Parliament and the assent of the Hon'ble President was received on 11 August 2021. The Act has been published in the gazette on 12th August 2021, which aims to replace over 100 years old Inland Vessels Act, 1917 (1 of 1917) and usher a new era in the inland water transport sector to make the Legislative framework user friendly and promote ease of doing business. . 09 Rules under the Act have been framed and notified and one Rule is at pre-publication stage.

### Revision of Model Concession Agreement (MCA), 2021

MoPSW has announced the revised Model Concession Agreement (MCA) - 2021 on 18th November, 2021. The new MCA will be applicable to all the future PPP projects at major ports, as well as projects which are already approved by the Government but are still under bidding stage. New MCA is aimed at reducing arbitrations and litigation in the sector as well as make the sector attractive for private sector participation. It has not only provided more clarity for the responsibilities and obligations of authority and private party, but also introduced clauses related to the termination payment prior to COD, change in cargo due to unforeseen circumstances as well as change in law. These clauses among others should enhance Ease of Doing Business (EoDB). Providing flexibility to the concessionaires at PPP projects to set market linked taria instead of approaching Taria Authority of Major Ports (TAMP) not only cases the burden of compliance, but also provides level playing field to the PPP projects to compete with other ports in the country.

### Formulation of Tariff Guidelines, 2021

In December 2021, new tariff guidelines have been issued which allow the concessionaires at Major Ports to set tariffs as per market dynamics. Tariff used to be determined and regulated by Tariff Authority of Major Ports (TAMP) and with these guidelines the concessionaire doesn't have to approach TAMP for determination of tariff. Transition to market linked tariff will provide a level playing field to PPP concessionaires at Major Ports to compete with private ports.

### Policy for Award of Waterfront and Associated Land to Port Dependent Industries in Major Ports (Captive Policy), 2016

Allocation of waterfront and associated land to port based industries on Public-Private-Partnership (PPP)/captive basis is one of the areas which have been identified for participation/investment by the private sector in Major Ports. The Policy has resulted in uniformity and transparency in the procedure for awarding captive facilities. It has also enabled optimal utilization of capacities in major ports and

increase revenue to the Major Port Authority. The ambit of the Policy includes creation of new assets as well as utilization of currently unutilised existing assets such as vacant berths. This policy is further being revised for Port Dependent Industry, both Private Sector and PSUs may require dedicated Port facility for its use. In order to address the issues of extension, nominations, et al, the Ministry is in the process of preparation of the Policy.

## Formulation of the Guidelines for dealing with stressed public private partnership (PPP) Projects at Major Ports

The Government of India invited private investment in the Major Port Sector and several projects were awarded under DBFOT basis or its similar variants across the Major Ports in the country. In spite of due diligence and caution at the time of conceptualizing these projects from various perspective, the survival of some of the projects is at a risk due to various reasons that were either not foreseen or those which were beyond the control of the contracting parties. On examining the issues it was noticed that these projects are either being operated under stress or have been abandoned/terminated, some leading to litigation. It was felt that there is a need to address the issues concerning these concessions so that the Major Port Sector continues to attract private investment which would have a positive impact on the growth of port infrastructure in the country.

The first Guidelines on Stressed PPP projects were issued by this Ministry on 11.07.2018. These guidelines covered only those stressed projects which faced issues after resuming Commercial Operations i.e. Post-Commercial Operation Date. However, it is observed that there are PPP Projects which have faced issues during construction stage as well i.e. Pre-Commercial Operation Date. It has also been observed that there is another category of stressed projects both at Pre-COD and Post COD stage which require a totally different treatment due to their borrowings being categorized by lenders as NPA and/or lenders have approached NCLT for recovery of their dues. On 10.05.2022, the Ministry of Ports, Shipping & Waterways has issued the 'Guidelines for dealing with stressed PPP Projects at Major Ports' for reviving the struck projects and unlocking blocked capacity.

### **DIGITAL REFORMS**

### National Logistics Portal (Marine)

Hon'ble Minister for Ports, Shipping and Waterways (PS&W) inaugurated The National Logistics Portal (Marine) on 27.01.2023. The National Logistic Portal (Marine) – NLP, a project of national importance is a one-stop platform aimed at connecting all the stakeholders of the logistics community using IT, to improve efficiency and transparency by reducing costs and time delays. NLP will evolve into a single window for all trade processes of the logistics sector spread across the country covering all modes of transport in the waterways, roadways, and airways along with an E-market place to provide a seamless end-to-end logistic service coverage.

### **SAGAR-SETU**

To further "Ease of Doing Business", SAGAR-SETU (Mobile App) of National Logistics Portal – Marine was launched by Hon'ble Minister, MoPS&W on 31st March, 2023. The App would facilitate real time operations and monitoring in the ports, handled services for the port fraternity to access vessel, cargo, container, finance & regulatory authority data and services leading to augmented customer experience.

### **SAGARMANTHAN - DIGITAL PLATFORM**

Hon'ble Minister for Ports, Shipping and Waterways virtually launched Real-time Performance Monitoring Dashboard of MoPSW 'SagarManthan' – Digital platform having all the integrated data related to the ministry and other subsidiaries. This dashboard will transform the workings of various departments by improving well-coordinated real time information. This platform has been developed completely in-house in the span of less than 1.5 months efficiently.

**FOCAL:** A dedicated portal named Forum Of Cargo owners And Logistics operators (FOCAL) was launched 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.

**LADIS:** A new portal launched named Least Available Depth Information System (LADIS) to ensure real time data on least available depth to disseminate to ship/barge & cargo owners so that they can undertake transportation on NWs in a more planned way and to avoid any hindrance in service and operation.

**CAR-D (CARgo-Data):** CAR-D is a web-based portal for collection and compilation, analysis and dissemination of all cargo and cruise movement data of National Waterways to the stakeholders. It captures the traffic data in a near real time mode from different terminals, operators, Maritime Boards etc. This portal gives access of the data to general public showcasing IWAI capabilities and potential of Inland Water Transport (IWT).

**PANI (Portal for Asset & Navigation Information:** This is an integrated solution bringing river navigation and infrastructure information on a single platform. It provides detailed information of various features of National Waterways and the assets such as fairway, infrastructure facilities, cross river structures, connectivity at jetties, emergency services for facilitating transportation of cargo.

**INSTITUTE:** Till 2014, there was only one Institute, i.e., National Inland Navigation Institute (NINI) for training of inland vessel crews. Two more institutions for research & development and training have been opened (i) Maritime Skill Development Centre, Guwahati, and (ii) School of Logistics Communication & Waterways at Agartala in Tripura.

## **GREEN SHIPPING**

- The Ministry of Ports, Shipping and Waterways has launched "Harit Sagar" Green Port Guidelines to reduce carbon intensity and to develop an environment friendly ecosystem at Major Ports with participation of all stakeholders. "Harit Sagar" Guidelines 2023 will provide comprehensive guidance to the Major Ports of the country for developing action plan for achieving Sustainable Developmental Goals (SDG) which include obligations on developing resilient infrastructure for safe, efficient and sustainable ports and promote environmental reporting as a means of communicating environmentally good behavior to stakeholders.
- Three Major ports i.e. Deendayal, Visakhapatnam and New Mangalore are producing surplus Renewable Energy.
- Three major ports, Deendayal, Paradip and V.O. Chidambaranar have been identified and to be developed as Hydrogen Hubs and Export Terminals for Green Hydrogen and Green Ammonia in the country under National Hydrogen Mission.
- V.O. Chidambaranar Port has been identified to develop infrastructure for facilitating the establishment of Offshore Wind Energy Industries.
- ◆ Inland Green Vessels Electric Catamarans, Hydrogen Vessels for reduction in carbon footprint Proposal under execution for procurement of 8 nos. (50 Pax) Hybrid Electric Catamaran through Cochin Shipyard Limited (CSL) on nomination basis. Charging stations being provided at Varanasi, Ayodhya, Mathura and Guwahati. Hydrogen Powered Catamaran vessel being constructed by CSL in collaboration with KPIT, Pune under R&D project of MoPSW. The two vessels after successful sea trials were delivered at Ayodhya and Varanasi. MV Guh, reached Ayodhya on 25 Jan 2024. Trials were completed with the shore infrastructure facility at Ayodhya. MV Nishadraj reached Varanasi on 22 Jan 2024 and dedication to nation by Hon'ble Prime Minister in February 2024.
- One R&D project for design and construction of Hydrogen Fuelled vessel has been given by MoPSW to CSL. The vessel is undergoing trials at Cochin Shipyard Limited. After successful trials the vessel would be transported to Varanasi for operations.

## Establishing a Centre of Excellence (CoE) in Green Shipping in India

A Letter of Intent between the Ministry of Ports, Shipping and Waterways, Government of The Republic of India and the Ministry of Industry, Business and Financial Affairs, Government of the Kingdom of Denmark was signed on 3rd May, 2022 for establishing a Centre of Excellence (CoE) in Green Shipping in India.

## **CENTRE FOR EXCELLENCE**

On 22nd March, 2023, the country's first National Centre of Excellence in Green Port and Shipping (NCoEGPS), a collaboration between the MoPSW and The Energy and Resources Institute (TERI), was inaugurated by Hon'ble Minister of PS&W at there search institution's field station in Gwal Pahari, Gurugram. NCoEGPS is expected to play a vital part in greening the shipping industry and ports by steering it towards carbon neutrality and circular economy.



### **WAY FORWARD**

By continuous efforts, the transformation of India's Maritime sector is aspired to be achieved by 2030. Through infrastructure and policy interventions, the goal of making India a global maritime hub by 2030 is being pursued.

### **PORTS**

◆ The increase of the port handling capacity from the current 2600+ MTPA is envisioned to exceed 3000+ MTPA by 2030 and 10000+ MTPA by 2047 through the expansion of existing ports and the development of deep draft mega ports such as Tuna Tekra in Gujarat and Vadhavan in Maharashtra. This will be complemented with increased efficiencies by harnessing automation and advanced technologies such as IoT, Al-ML, Industry 4.0 etc. aspiring towards developing Smart Ports.



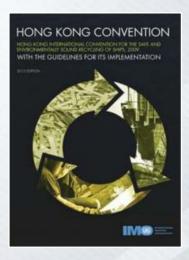
Furthermore, to leverage the private sector efficiencies and capital investment in the port sector, emulating the success story of JNPA (100% landlord port-PPP), it is envisioned to increase the cargo handling on PPP mode at major ports to 85% by 2030 from 56% currently. The goal is to raise this share to over 100% by 2047. ◆ To promote sustainability and align with the IMO GHG strategy, specific efforts will be made to achieve carbon neutrality in ports. In this regard, three hydrogen/ammonia hubs will be developed for production and distribution. Furthermore, the share of renewable energy at major ports will be increased from the current 10% to over 60% by 2030 and 100% by 2047.





### **SHIPPING**

India is already performing exceptionally well in terms of global ship recycling by holding 30% of the global share and securing the 2nd rank. India has also acceded the Hong Kong Convention as the 15th member state. The objective is to elevate India to the number 1 position in ship recycling by 2030 through augmentation of existing ship recycling facilities at Alang (Gujarat) etc. and development of new facilities.



Over the past few years, India's shipbuilding ecosystem has been enhanced through attractive policy reforms and the creation of a conducive environment for shipbuilding in India, thereby promoting the 'Make in India' initiative. Continuing these efforts the Government is putting active efforts to improve India's global ranking in ship building from the current 20th position to a place among the top 10 nations by 2030.

#20 Shipbuilding nation in the world

India is currently ranked 5th in terms of global seafarer supply. The goal is to increase the seafarer supply to over 20% by 2030.

### **CRUISE TOURISM**

• India's vision is to be established as the premier cruise hub in the Asia Pacific region. To achieve this goal, significant steps are being taken, including the development of state-of-the-art cruise terminals, the implementation of standardized procedures, and the introduction of e-visa facilities, among other measures. Going forward, the objective is to increase the annual number of cruise passengers in India to 18 lakhs by 2030, up from the current figure of 3.05 lakhs.

# India aspires to be in CRUISE TOURISM in ASIA PACIFIC REGION





Additionally, a well-defined and consistent cruise tourism policy will be established in line with international standards and practices. This policy will encompass various critical aspects such as GST, taxation, excise, and custom duties, both at the central and state levels, with the aim of fostering the growth of this emerging industry within India.

### **WATERWAYS**

Several steps have been taken in the past couple of years to harness the untapped potential of inland waterways. By 2030, the goal is to increase the modal share of inland waterways from the current 2% to 5% and overall share of coastal shipping & inland waterways to 7.5%.



- Waterways are also envisioned as a mode for river cruise tourism and are attracting the attention of various international tourists seeking a luxurious river tourism experience. As a way forward, 10 waterways will be made operational for river cruise tourism by 2030.
- Furthermore, a 5000 km regional waterway grid connecting BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation) will also be established for the purpose of streamlining trade and transportation throughout the region. To achieve this, measures including infrastructure enhancement, the development of agreed-upon policy aspects in collaboration with all participating countries, and the establishment of a multi-country institutional framework will be undertaken.



### **PROMOTING STARTUPS**

A dedicated Maritime Startup Policy will be established to promote startup growth in the maritime sector and create a supportive ecosystem for all startups. This policy will adopt a comprehensive approach, addressing every aspect of startups with 360-degree support from regulatory, financial, and marketing perspectives during the ideation to commercialization stages.

### **INDIA'S MARITIME 2047 ROADMAP**

Aspiration	FY 2030	FY 2047
Overall Port handling capacity (MTPA)	3000+	10,000+
% share of cargo handled at major ports on PPP mode	>85%	100%
No. of hydrogen/ Ammonia hubs	3	14
Share of renewable energy at major ports	>60%	>90%
Global rank in ship recycling	1	1
Global rank in ship building and repair	Top 10	Тор 5
No. of Annual cruise passengers (Lakhs)	18	50
Modal share of coastal shipping & inland waterways	7.5%	12%
Cargo handled through inland waterways (MTPA)	200+	500+





Ministry of Ports, Shipping & Waterways
Government of India