



# PRAGATI KI NAYI GATI







Sagarmala is the first of its kind programme for port-led-development. The earlier thrust on developing ports didn't adequately consider the backward linkages in terms of port road & rail connectivity to the hinterland & developing industrial areas in the port vicinity.

Sagarmala presents an integrated plan for port modernisation, enhancing port connectivity, port linked industrialisation and coastal community development.

We expect public & private investment of over Rs. 12 lakh Crore in these areas to bring about development of the country by exploring the natural advantage of the vast coastline. We are confident of making Indian manufacturing sector more competitive and create more jobs for the youth of the country through the flagship programme of Sagarmala.

*- Nitin Gadkari  
Honourable Minister*





## PREFACE

The vision of the Sagarmala programme is to stimulate economic growth by bringing port-driven prosperity to the people.

In the last 4 years, focused initiatives undertaken by the Ministry of Shipping include improving efficiency of ports, building capabilities and capacities of ports, creating seamless transport connectivity, and upskilling the coastal community.

While transforming the logistics sector by creating world-class infrastructure, Sagarmala will provide growth opportunities and employment to coastal and hinterland communities by unlocking the full potential of India's coastline and waterways.





## CONTENTS

### 1 Accelerating India's growth through ports



Port Performance



Port Modernisation



Port Connectivity

### 2 Driving growth through holistic development of ports



Port-Linked Industrialisation



Coastal Community Development

### 3 Transforming connectivity for sustainable growth



Inland Waterways



Coastal Shipping

### 4 Harnessing opportunities for the New India



Ship Repair & Ship Building



Cruise Shipping



Ease of Doing Business







**MINISTRY OF SHIPPING**  
Accelerating India's growth through Ports



# ACCELERATING INDIA'S GROWTH THROUGH PORTS

Efficiency achieved in cargo handling



# 5 TIMES

faster growth in Cargo Traffic  
at Major Ports during 2014-18  
compared to 2010-2014.

## Cargo Traffic at Major Ports

YEAR	CARGO (In MT)	GROWTH RATE
2010-11	570.32	
2011-12	560.137	-2%
2012-13	545.79	-3%
2013-14	555.487	2%
2014-15	581.344	+5%
2015-16	606.465	+4%
2016-17	648.398	+7%
2017-18	679.367	+5%

# ACCELERATING INDIA'S GROWTH THROUGH PORTS

## Growth in profits

**2x** Growth in Operating Surplus | Growth from Rs. 2,519 Crore in 2013-14 to Rs. 5,667 Crore in 2017-18.

Operating Surplus (Rs. Crore)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Growth Rate	2,561	2,571	1,807	2,519	3,599	4,297	4,920	5,667
	0%			20%				

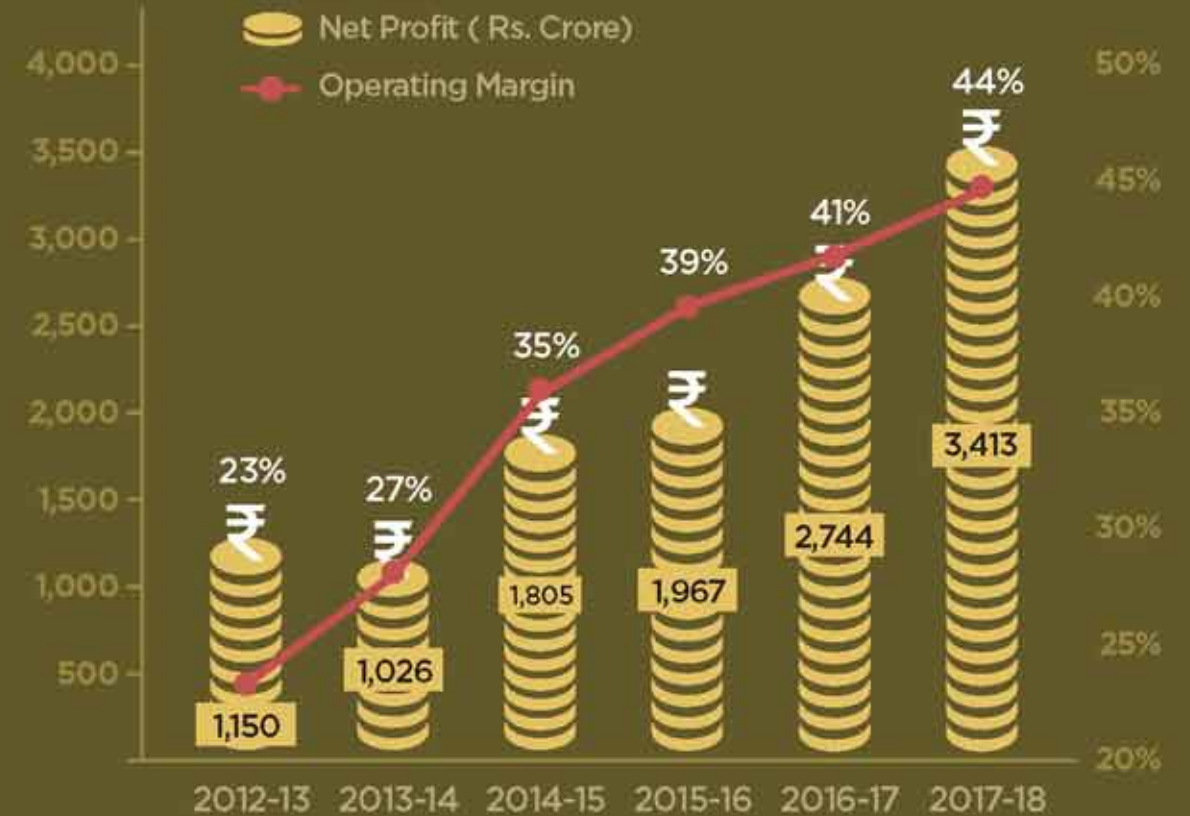
**63%** Growth in Operating Margin

from a low of 27% to a high of 44% in last 4 years

**3x** Growth in Net Profit

Increased efficiency at Major Ports resulted in tripling the profits during the last 4 years from Rs. 1,026 Crore in FY14 to Rs. 3,413 Crore in FY18.

## Net Profit and Operating Margin





## ACCELERATING INDIA'S GROWTH THROUGH PORTS

Improvement in performance, reduction in turnaround time



YEAR	HOURS
2011-12	107
2012-13	102
2013-14	94
2014-15	96
2015-16	87
2016-17	82
2017-18	64

Overall  
Turnaround  
Time (Hrs)





# SAGARMALA

## Project Implementation

• The Sagarmala Programme is based on the 4 key pillars for Port-led development and comprises of 577 projects across 19 States and UT's.

• Out of the 577 projects, more than 70% of the projects are in various stages of implementation.

### Sagarmala Overview

577 Projects



Port  
Modernisation

243

Projects

Rs.142,955 Cr  
Value of Project



Port  
Connectivity

211

Projects

Rs. 249,785 Cr  
Value of Project



Port-linked  
Industrialisation

57

Projects

Rs. 476,258 Cr  
Value of Project



Coastal Community  
Development

66

Projects

Rs. 7,125 Cr  
Value of Project

### Sagarmala Programme

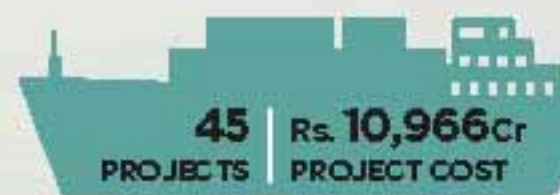
(Projects in Different Stages of Execution)



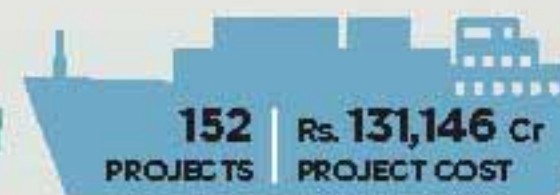
Completed



Under Implementation



Under Tendering



DPR Stage



# SAGARMALA

## Project Implementation

### NUMBER OF PROJECTS AWARDED



### VALUE OF PROJECTS AWARDED



### NUMBER OF PROJECTS AT COMPLETION





# SAGARMALA

## Projects in Coastal States

States	Projects Completed	Work In Progress	Total	Value (Rs. In Crore)
Gujarat	2	49	51	1,21,626
Maharashtra	6	102	108	2,34,807
Goa	4	25	29	11,710
Karnataka	5	37	42	23,983
Kerala	3	37	40	14,828
Tamil Nadu	15	88	103	2,25,831
Andhra Pradesh	12	92	104	1,62,961
Odisha	7	38	45	45,593
West Bengal	6	31	37	31,654







# PORT MODERNISATION

Modernising ports, modernising India

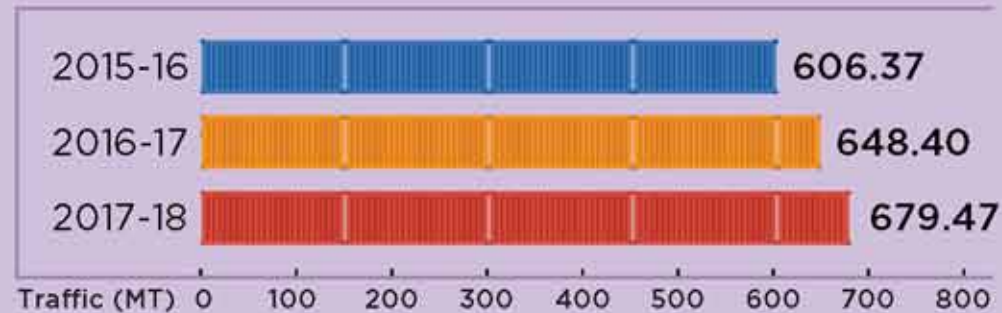


# MODERNISING PORTS, MODERNISING INDIA

## Traffic growth at Major Ports

Major boost through improving Port Infrastructure, increasing traffic & efficiency and decreasing costs

### TRAFFIC HANDLED AT THE MAJOR PORTS



- 2 Major Ports handled more than **100 million tonnes of cargo** in **FY 2017-18**.
- For the first time a Major Port in India, Deendayal Port (Kandla), crossed **100 MT of traffic in 2016-17**. Paradip Port has become the second major port to cross the figure of **100 MT of traffic during 2017-18**.



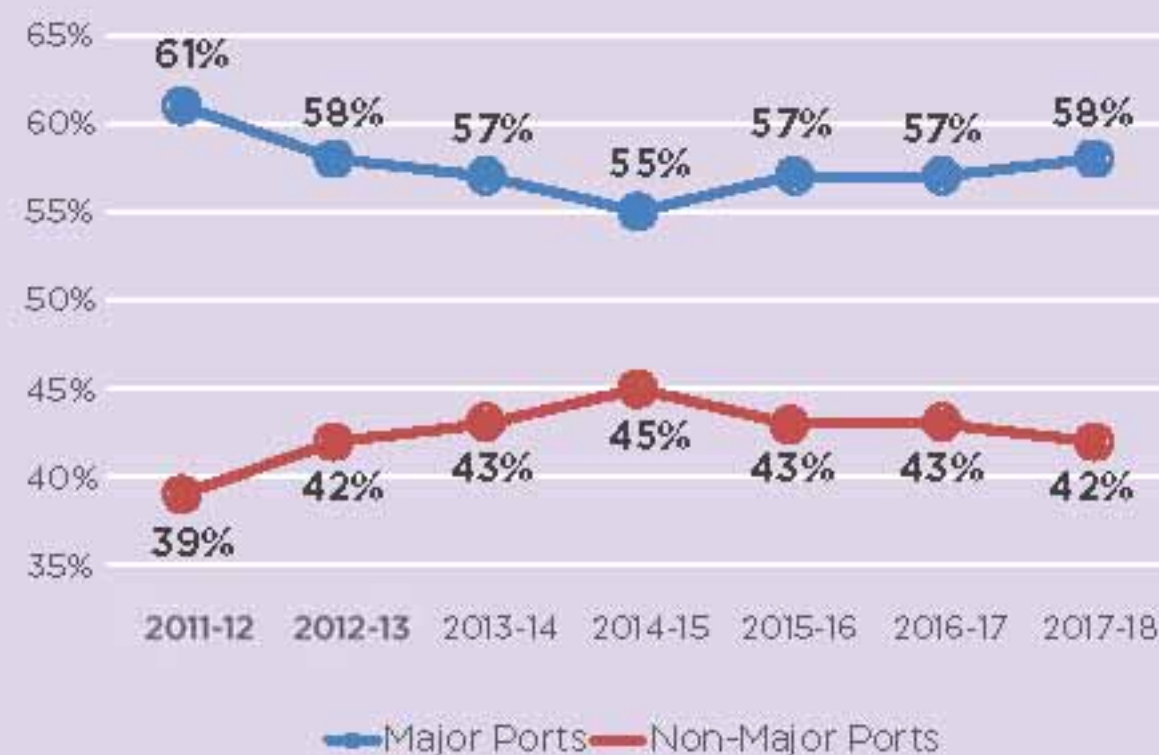


## MODERNISING PORTS, MODERNISING INDIA

### Traffic at Major & Non-Major Ports

- The share of Major Ports in traffic handled which declined continuously up to 2014-15, is increasing since then.
- The share of Major Ports in traffic handled, was **55% in 2014-15** and has increased to **58% in 2017-18**.

### Market Share of Major Ports & Non-Major Ports



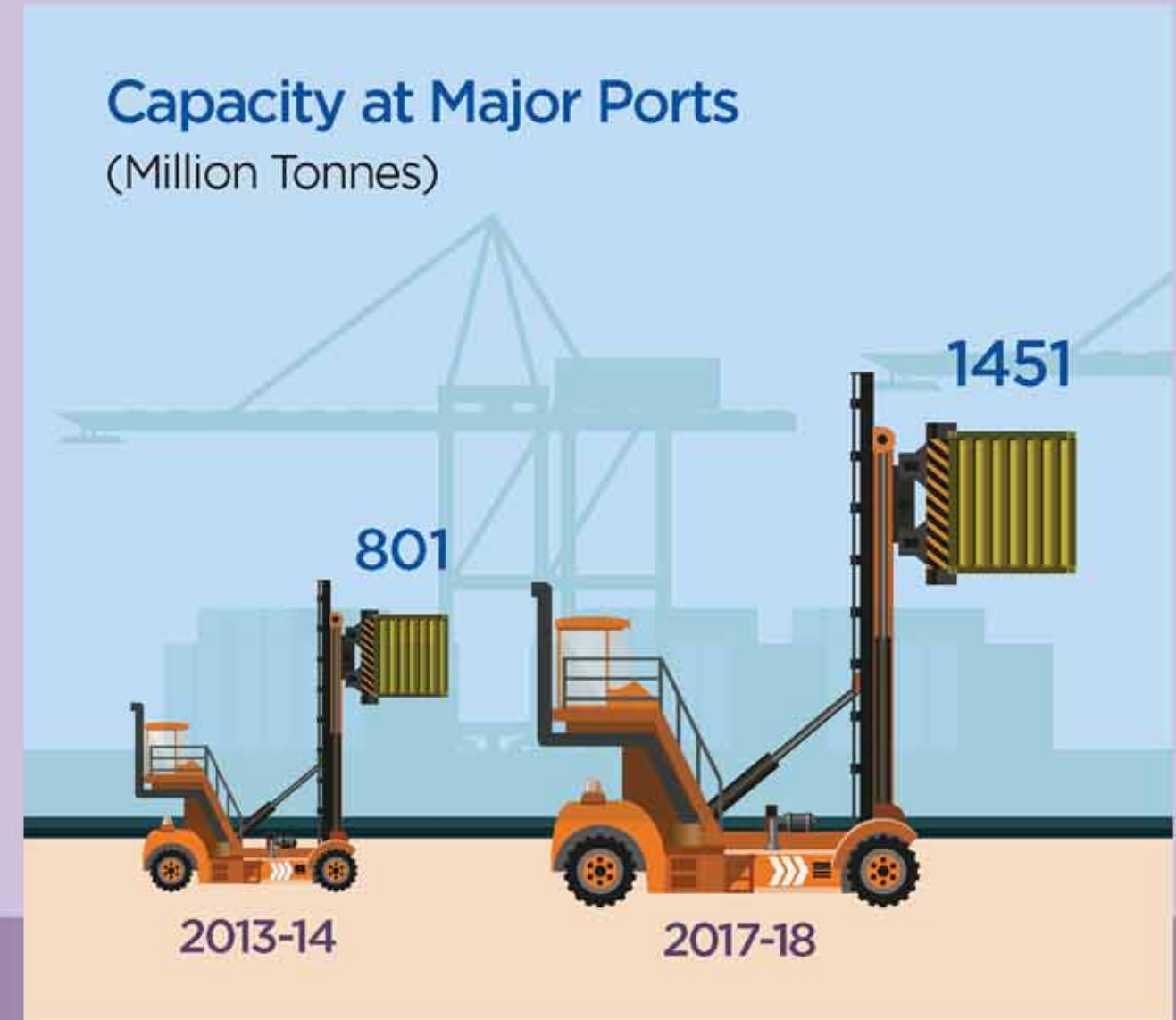


# MODERNISING PORTS, MODERNISING INDIA

## Capacity addition at Indian Ports

Projects identified to increase the capacity to 3500+ MMTPA to cater to the projected traffic of 2500 MMTPA by 2025

	Number	Cost (Rs. Crore)
Total Projects under Port Modernisation	243	142,955
Total Capacity Addition Projects at Major Ports	107	68,092
Total Completed Capacity Addition Projects at Major Ports	15	7,167
Work in Progress Projects for Capacity Addition at Major Ports	92	60,925





# MODERNISING PORTS, MODERNISING INDIA

## Efficiency improvement at Major Ports

**116 initiatives** identified across 12 Major Ports to unlock **100MTPA capacity**, out of which 86 initiatives have been implemented unlocking **80 MTPA**

**RFID based Gate-automation System** implemented in all Major ports

**e-Delivery Order** through PCS made mandatory along with e-invoicing and e-payment

**Direct Port Delivery and Direct Port Entry** facilitated for faster clearance

**Container Scanners** being installed for faster clearance





# MODERNISING PORTS, MODERNISING INDIA

## Important Projects

Fourth Container Terminal at  
JNPT inaugurated by the Prime Minister  
on 18th Feb. 2018

**Largest container terminal** in India with a capacity  
of **4.8 TEUs**

**India's largest FDI project** in the port sector

Estimated investment of **Rs. 7,915 crore**





# MODERNISING PORTS, MODERNISING INDIA

## Important Projects

### Sustainability Initiatives

**24.32 MW Non-conventional energy**  
commissioned at various Major Ports through  
solar and wind energy projects in 2016-17

Solarization of all lighthouses with  
**achievement of 100% green energy status**





# BUILDING INFRASTRUCTURE FOR NEW INDIA

## Important Projects

### Shipping Infrastructure Facilities at Andaman & Nicobar Islands and Lakshadweep

- Extension of New Dry Dock-II in Port Blair - **Rs. 96.24 Cr**
- Procurement of Two Tugs - **Rs. 63.55 Cr**
- Replacement & Upgradation of Cargo Handling equipment - **Rs. 39.02 Cr**
- Development of Sea Route to Baratang - **45.16 Cr**
- Extension of Wharf 60 m at Hope Town in South Andaman **Rs. 17.49 Cr**
- Construction of Berthing Jetty in Neil Island - **Rs. 38.19 Cr**
- Construction of Additional Approach and Wharf at Hut Bay in Little Andaman - **Rs. 45.55 Cr**
- Acquisition of 6 Ship for Increased Inter-Island Connectivity at a Cost of **Rs. 1800 Cr**
- Acquisition of Container Vessel for Lakshadweep at a Cost of **Rs. 90 Cr**





# PORT CONNECTIVITY

Connecting ports, connecting India to growth



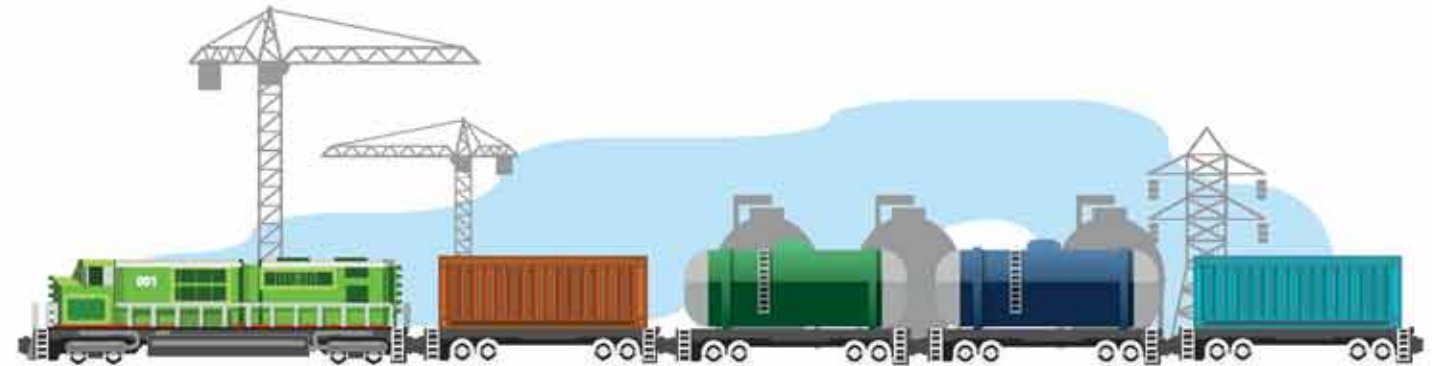
## ENHANCING CONNECTIVITY

### Rail

More than **50%** of the rail connectivity projects identified under Sagarmala are already under implementation through various agencies such as Indian Port Rail Corporation Limited (IPRCL)

IPRCL is a joint venture between Major Ports and Rail Vikas Nigam Limited (RVNL) dedicated to enhancing port rail connectivity and evacuation, while paving the way for seamless integration of port-railway system with the Indian Railways network.

### RAIL CONNECTIVITY PROJECTS STATUS



STATUS	NUMBER	LENGTH (KMS)	COST IN Rs. (Cr)
Completed	13	426	2592
Under Implementation	27	1967	18795
Pre- Implementation	30	1854	25341
<b>TOTAL</b>	<b>70</b>	<b>4247</b>	<b>46728</b>



## ENHANCING LAST MILE CONNECTIVITY

### Road



Total Road Projects  
**112**



Cost  
**Rs. 1,79,761 Cr**



Length  
**8,584 Km**



Coverage  
**12** major and **27** non-major ports

### ROAD CONNECTIVITY OF PORTS THROUGH SAGARMALA



STATE	NUMBER	LENGTH (KMS)	COST IN Rs. (Cr)
Gujarat	4	690	19,311
Maharashtra	14	2351	53,703
Goa	2	110	1,363
Karnataka	7	781	6,094
Kerala	21	220	4,423
Tamil Nadu	19	1913	54,800
Andhra Pradesh	36	2184	30,140
Odisha	4	62	649
West Bengal	5	275	9,278
<b>TOTAL</b>	<b>112</b>	<b>8584</b>	<b>179,761</b>

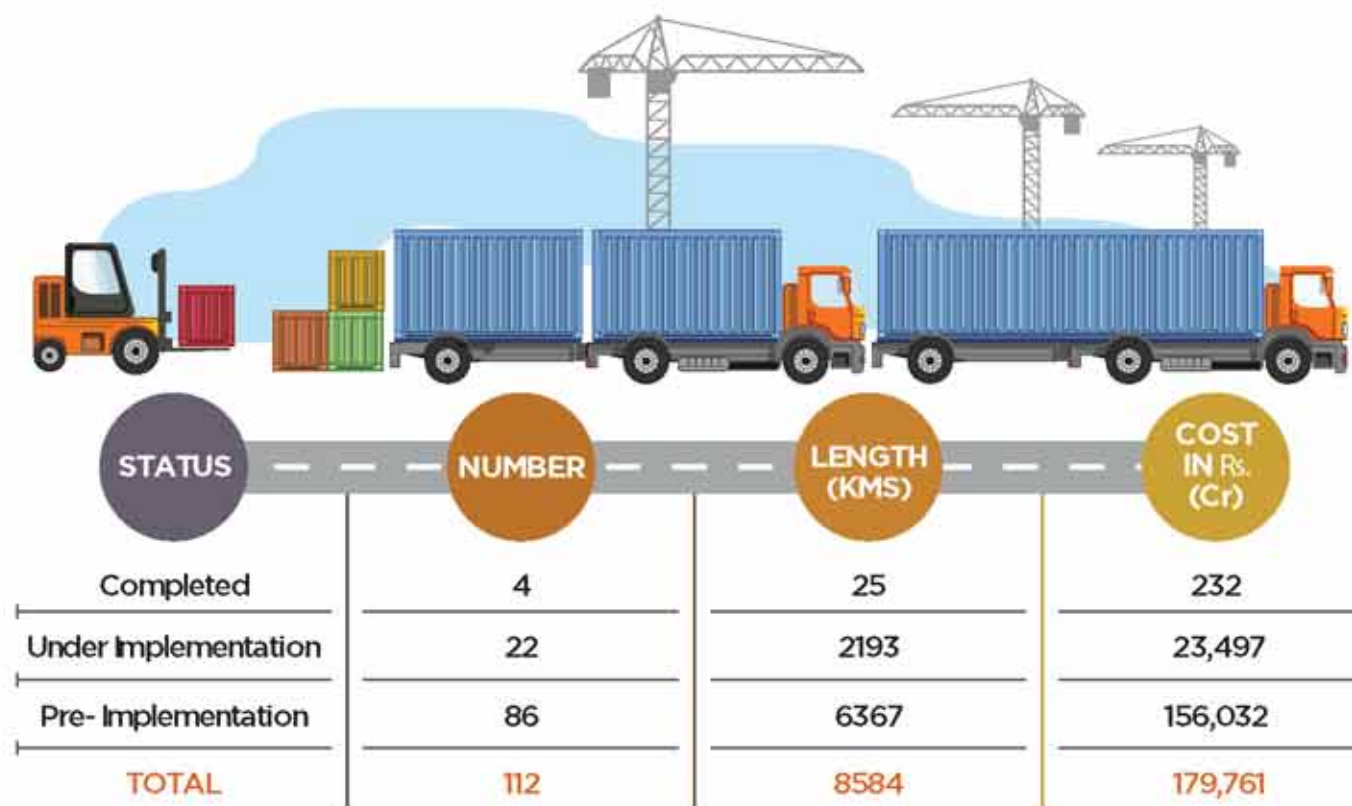


# ENHANCING LAST MILE CONNECTIVITY

## Road

More than  
**20%** of the projects are in various  
stages of implementation

### ROAD CONNECTIVITY PROJECTS STATUS





## ENHANCING CONNECTIVITY

### Multi Modal Logistics Park (MMLP)

**15 MMLPs**

identified under Sagarmala

**Cost Rs. 3,561 Cr**

#### STATUS OF MMLP PROJECTS



STATUS	NUMBER	COST (Cr)
Completed	1	120
Under Implementation	9	1,725
Pre- Implementation	5	1,717
Total	15	3,561



# ENHANCING CONNECTIVITY

## Multi Modal Logistics Park (MMLP)

### STATUS OF MULTI MODAL LOGISTICS PARKS (MMLPS)

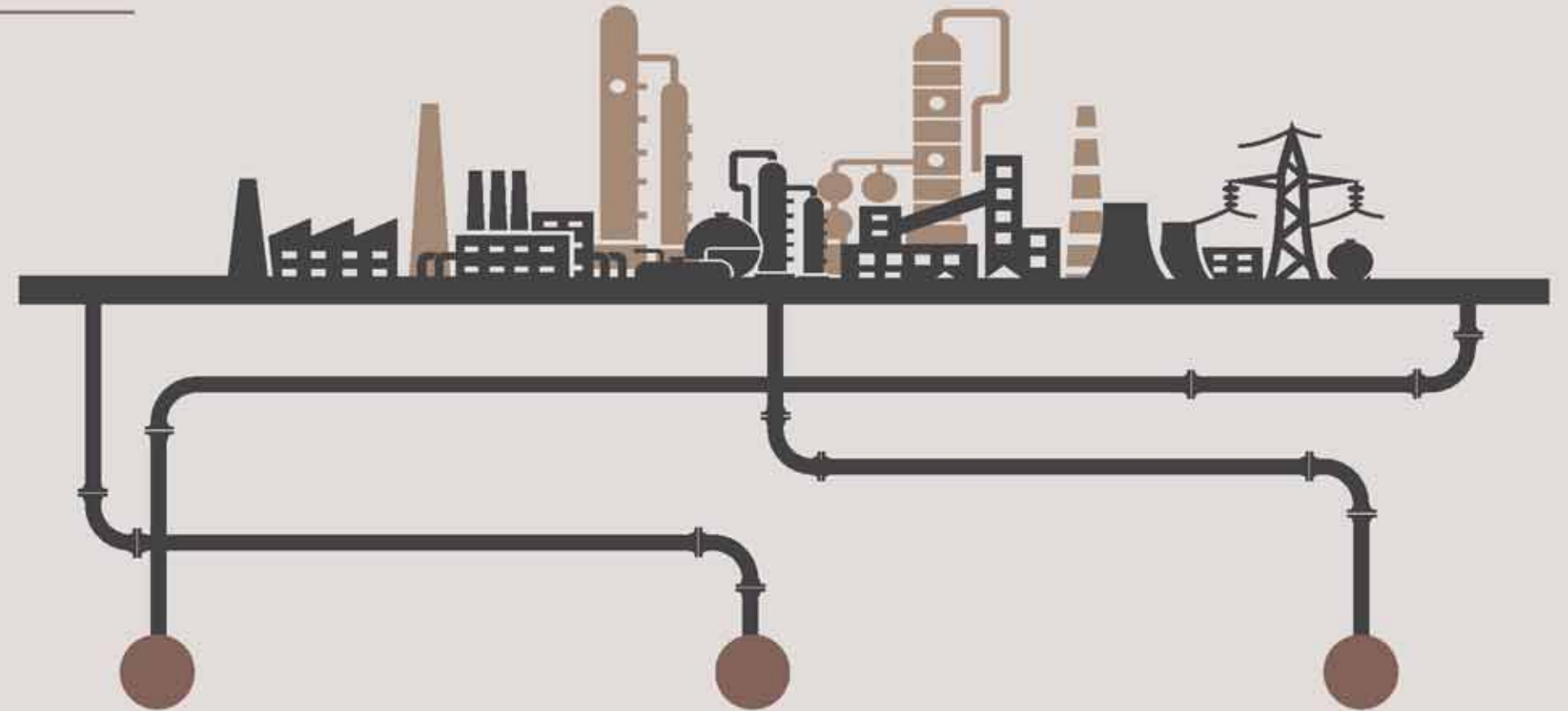
	PROJECT NAME	STATE	COST (Rs. Cr)	IMPLEMENTING AGENCY	DEVELOPMENT STATUS
1	New ICD in South Uttarakhand (Pantnagar)	Uttarakhand	120	CONCOR	Completed
2	New ICD in Naya Raipur	Chhattisgarh	207	CONCOR	Under Implementation
3	New ICD in Hyderabad (Nagulapally)	Telangana	102	CONCOR	Under Implementation
4	New ICD in Jharsuguda	Odisha	100	CONCOR	Under Implementation
5	MMLP at Swaroopganj in Rajasthan	Rajasthan	102	CONCOR	Under Implementation
6	MMLP at Phulera in Rajasthan	Rajasthan	310	CONCOR	DPR to be Prepared
7	MMLP at Paradip Port	Odisha	114	CONCOR	Under Implementation
8	New ICD in North Bengal (Darjeeling)	West Bengal	85	SJDA	Under Implementation
9	Phase II of Multi Model Logistics Hub - Ving Port	Andhra Pradesh	260	VPT	Under Implementation
10	Dry Port cum MMLP Terminal at Jolarpet	Tamil Nadu	200	ChPT	DPR to be Prepared
11	MMLP in Jogighopa, Assam	Assam	207	MoRTH	DPR to be Prepared
12	Dry Port at Niphad in Nashik District	Maharashtra	500	JNPT	DPR to be Prepared
13	Dry Port at Ranjani Village in Sangli District	Maharashtra	500	JNPT	DPR to be Prepared
14	Dry Port at Wardha	Maharashtra	353	JNPT	Under Implementation
15	Dry Port at Jalna	Maharashtra	400	JNPT	Under Implementation



## ENHANCING CONNECTIVITY

### Pipeline

**3** Pipeline projects (cost: Rs. 5,084 Cr) identified for transportation of crude oil and petroleum products across long distances



1 CRUDE PIPELINE  
PROJECT

**Rs. 1,584 Cr**

AT SALAYA - MATHURA  
UNDER IMPLEMENTATION

1 CRUDE PIPELINE  
PROJECT

**Rs. 500 Cr**

AT CHENNAI PETROLEUM  
CORPORATION LTD. (CPCL)  
UNDER IMPLEMENTATION

1 PRODUCT PIPELINE  
PROJECT

**Rs. 3,000 Cr**

AT HYDERABAD - PARADIP  
UNDER IMPLEMENTATION



## 1 Accelerating India's growth through ports



Port Performance



Port Modernisation



Port Connectivity

## 2 Driving growth through holistic development of ports



Port-Linked Industrialisation



Coastal Community Development

## 3 Transforming connectivity for sustainable growth



Inland Waterways



Coastal Shipping

## 4 Harnessing opportunities for the New India



Ship Repair & Ship Building



Cruise Shipping



Ease of Doing Business





# PORT-LINKED INDUSTRIALISATION

A robust eco-system of prosperity



## A ROBUST ECO-SYSTEM OF PROSPERITY

### 14 Coastal Employment Zones

(CEZs) identified across 9 coastal states. Within each CEZ there would be multiple industrial Cluster called CEU (Coastal Employment Unit)

### 35 Industrial Clusters across three Sectors

namely - Energy, Materials and Discrete Manufacturing, identified

### 12 Bulk Clusters for Basic Input Industries

such as Power, Refineries & Petrochemicals, Steel and Cement

### 23 Discrete Manufacturing Clusters

in the labor-intensive sectors of Electronics, Apparel, Leather Products, Furniture and Food-Processing etc

### Total 57 Industrialization Projects

near ports were identified worth Rs. 476,258 Cr out of which 18 projects worth Rs. 150000 Cr have either been completed or are under implementation





# A ROBUST ECO-SYSTEM OF PROSPERITY

## Key Highlights

-  Port-linked SEZ under implementation at JNPT expected to attract investment of around **Rs. 12,764 Cr** from industries that could create **more than 50,000 jobs**
-  Smart Port Industrial Cities (SPICs) are under implementation at Kandla and Paradip and expected to attract **investments worth over Rs. 13,000 Cr** and employment generation potential of over 55,000
-  **1 mega food processing park** at Satara, Maharashtra **cost: Rs. 139 Cr** has been completed
-  **3 Power Clusters** (Rs. 76,547 Cr) in Krishnapatnam (AP), Ennore (TN) and Tuticorin (TN)
-  Coastal Employment Units (CEUs) at **Tuticorin and Ennore** are planned for development
-  **2 Maritime Clusters** are planned for development in Gujarat and Tamil Nadu
-  **8 Electronics Manufacturing Clusters** cost **Rs. 170.4 Cr** in AP, Gujarat, Odisha, Kerala, West Bengal
-  **2 Food Processing Parks** cost **Rs. 248 Cr** in AP under implementation







# COASTAL COMMUNITY DEVELOPMENT

Providing livelihoods, enhancing lives



# PROVIDING LIVELIHOODS, ENHANCING LIVES

## Skill Development



Skill gap study of **21 coastal districts** completed and district action plan prepared



Skill development in Ports and Maritime sector with DDU-GKY to **train 30,000 persons** for the next 3 years



Fire safety training project for workers at Alang-Sosiya shipyard **4,036 workers trained**



Under coastal district skilling programmes in convergence with DDU-GKY **1,917 candidates trained**  
**1,123 candidates placed**



JNPT Multi-Skill Development Centres being set up for **training 1,500 persons annually** in the maritime sector





## PROVIDING LIVELIHOODS, ENHANCING LIVES

### Fishing Harbours

To improve the livelihood of fishermen community in 9 coastal states, total 26 Fishing Harbour Projects (Rs. 3,954 Cr) have been identified, which will benefit lakhs of fishermen



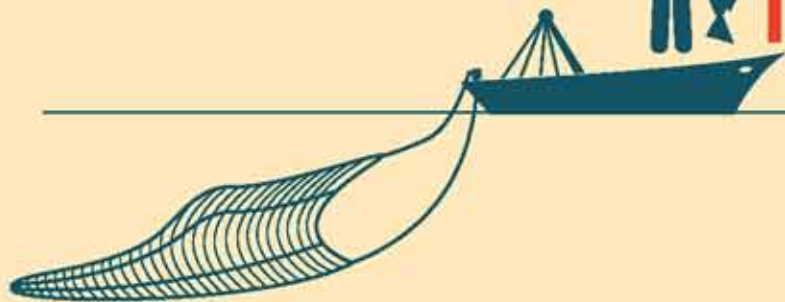
**11 PROJECTS**

COST Rs. 922 Cr  
SANCTIONED



IMPROVING  
LIVELIHOODS OF

**1.5 LAC** FISHERMEN



**26** FISHING HARBOUR PROJECTS  
HAVE BEEN IDENTIFIED





## FISHING HARBOUR PROJECTS

S. No.	Project Name	Project Status	State	Cost (Crore)	No. of Fishermen Benefitted	Fish Landing (Ton/yr)
1	Third stage expansion including modernisation of the existing fishing harbour of Malpe in Udupi District in Karnataka	Completed	Karnataka	50	3500	10000
2	Expansion of fishing harbour at Chinnamuttom in Kanyakumari District in Tamil Nadu	Completed	Tamil Nadu	74		
3	Modernisation of the existing fishing harbour at Amadalli in Uttara Kannada	Under Implementation	Karnataka	19	2000	4000
4	Stage-II expansion of Mirkawada Fishing Harbour in Ratnagiri District	Under Implementation	Maharashtra	75	17230	40000
5	Construction of Fishing Harbour at Thalai in Kannur District in Kerala	Under Implementation	Kerala	35	59369	15700
6	Construction of Mini Fishing Harbour Chettuva in Thrissur District in Kerala	Under Implementation	Kerala	30	34853	8000
7	Constructin of Fishing Harbour at Poompuhar in Nagapattinam District in Tamil Nadu	Under Implementation	Tamil Nadu	148	30000	
8	Modernisation of Sassoon Dock Fishing Harbour	Under Implementation	Maharashtra	52		48000
9	Fishing Harbour Phase-3 at Mangrol, District Junagadh	Under Implementation	Gujarat	158	10000	
10	Development of Fishing Harbour at Kulai	Pre Implementation	Karnataka	197	2500	27100
11	Fishermen development projects at Vadhavan (fishing harbour, fish processing centre, Deep sea fishing vessels)	Pre Implementation	Maharashtra	80		
12	Fishermen development projects at Enayam (fishing harbour, fish processing centre, Deep sea fishing vessels)	Pre Implementation	Tamil Nadu	80		
13	Fishing harbour Phase-2 at Veraval, District Gir Somnath	Pre Implementation	Gujarat	260		





## FISHING HARBOUR PROJECTS

S. No.	Project Name	Project Status	State	Cost (Crore)	No. of Fishermen Benefitted	Fish Landing (Ton/yr)
14	Development of Fishing Harbour in Juvvaladinne in SPSR Nellore District in the State of Andhra Pradesh	Pre Implementation	Andhra Pradesh	242	69750	
15	Phase-2 development of existing fishing harbour at Machilipatnam in Krishna district	Pre Implementation	Andhra Pradesh	252	57300	
16	Phase-2 development of existing fishing harbour at Nizampatnam in Guntur district	Pre Implementation	Andhra Pradesh	341	63775	
17	Development of fishing harbour at Vodarevu in Prakasam district	Pre Implementation	Andhra Pradesh	409	82200	
18	Development of fishing harbour at Uppada (V) U. Kotapalli (M) in East Godavari district	Pre Implementation	Andhra Pradesh	289	78225	
19	Construction of Major Fishing Harbour at Vasco Bay, MoPT	Pre Implementation	Goa	104		
20	Development of Fishing Harbour at Karanja in Raigad District	Pre Implementation	Maharashtra	150	1700	
21	Development of Fishing Harbour in Anandwadi, Sindhudurg District	Pre Implementation	Maharashtra	88	6300	5800
22	Development of Hejmaadi Kodi Fishing Harbour in Udupi District	Pre Implementation	Karnataka	139	7000	26224
23	Development of Fishing Harbour at Versova in Mumbai Suburban	Pre Implementation	Maharashtra	319	2900	
24	Construction of fishing harbour at Chandipur	Pre Implementation	Odisha	46	5600	
25	River mouth dredging of Mahanadi at Paradip fishing harbour	Pre Implementation	Odisha	21		
26	Fishing Harbour at Navabandar, Taluka Una, District Gir Somnath	Pre Implementation	Gujarat	295.85		





## 1 Accelerating India's growth through ports



Port Performance



Port Modernisation



Port Connectivity

## 2 Driving growth through holistic development of ports



Port-Linked Industrialisation



Coastal Community Development

## 3 Transforming connectivity for sustainable growth



Inland Waterways



Coastal Shipping

## 4 Harnessing opportunities for the New India



Ship Repair & Ship Building



Cruise Shipping



Ease of Doing Business





# INLAND WATERWAYS

Rivers for prosperity





# RIVERS FOR PROSPERITY

Bringing opportunities and prosperity to the hinterland

ROAD,  
COST  
PER KM

₹1.5



RAIL,  
COST  
PER KM

₹1



WATERWAYS,  
COST  
PER KM

20  
PAISE





# RIVERS FOR PROSPERITY

Bringing opportunities and prosperity to the hinterland

## BENEFITS OF INLAND WATER TRANSPORT



MAKE INDIAN INDUSTRY  
COMPETITIVE BY  
**REDUCING**  
LOGISTICS COST



PROVIDE OPTIMAL  
MODAL MIX BY  
CONVERGING **RIVER**  
TRANSPORT WITH  
OTHER MODES



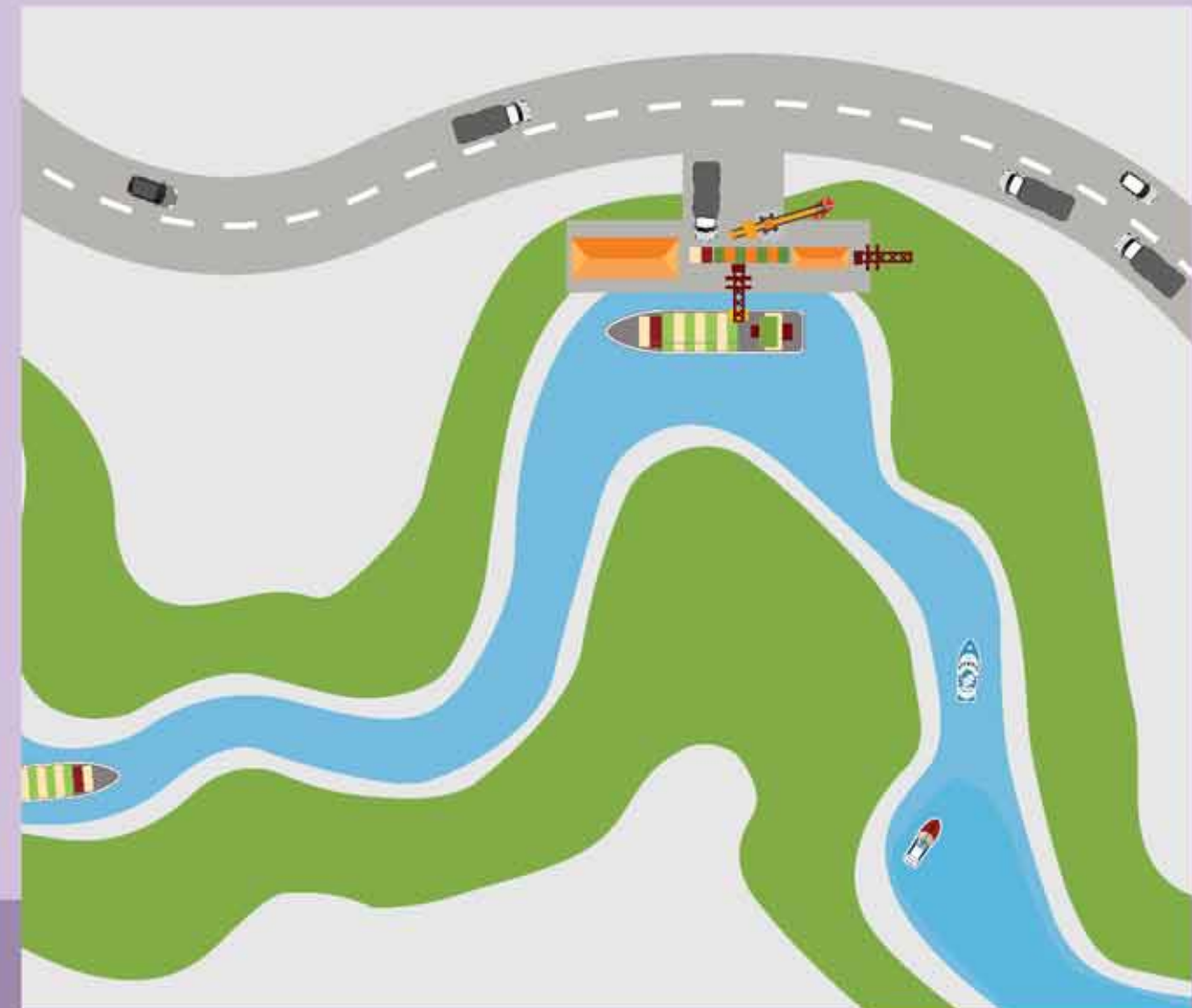
EASE CONGESTION  
ON **ROAD AND**  
RAIL NETWORKS



CATER TO THE NEEDS  
OF THE **GROWING**  
POPULATION  
AND ECONOMY



MINIMIZE LAND  
ACQUISITION AS  
COMPARED TO ROAD  
AND RAIL TRANSPORT





## RIVERS FOR PROSPERITY

**Improving navigation capacity in the Varanasi - Haldia stretch of National Waterway-1** (Ganga), the implementation of the Jal Marg Vikas Project (JMVP) at the cost of Rs 5369 Cr approved by the Govt.

NW-1 development & operations will lead to employment generation to the tune of

**46,000 direct and 84,000 indirect jobs.**

**Multimodal Terminals at Varanasi, Sahibganj and Haldia** and Navigation Lock at **Farakka** are being developed at a **cost of 1327 Cr**

Varanasi terminal is expected to be completed by Nov 18

JAL MARG VIKAS PROJECT (JMVP)  
ESTIMATED TO COST

**Rs. 5369<sup>Cr</sup>**





## RO-RO SERVICES

### People-friendly transportation

**Ro-Ro terminals** are being developed, at a cost of Rs. 300 Crore at Rajmahal -Manickchak (Jharkhand-West Bengal), Bakhtiyarpur-Hasanpur (Mahnar) (Bihar), Kahalgaon-Tintanga (Bihar) and Buxar-Sarai Kota (Bihar-Uttar Pradesh)

**River Information System (RIS)** from Haldia to Farakka is functional and from Farakka to Patna is ready to commence shortly

**Major activities under JMVP** are intermodal terminals, **five pairs of Ro-Ro terminals**, channel marking systems, integrated vessel repair & maintenance facilities, automated information techniques of Differential Global Positioning System, **day and night navigation aids**, slipways, bunkering facilities, river training and river conservancy





## RIVERS FOR PROSPERITY

Bringing opportunities and prosperity to the hinterland

### National Waterway-2

Regular movement of cargo on National Waterways-2 (river Brahmaputra) from Pandu to Dhubri/Hatsingimari flagged off on 29th December, 2017 at Majuli, Assam

Cargo transported

**400** tonnes of cement

Distance covered

**255** km

Benefit

Saving of **1,50,000** tonne km of road transportation per trip

Ro-Ro service carrying vehicles, passengers and cargo from Dhubri to Hatsingimari on NW-2 is going on successfully from July, 2017





## RIVERS FOR PROSPERITY

### National Waterway-3

Kottapuram to Kollam (168 km) together with Champakara canal (14 km) and Udyogmandal canal (23 km) was declared as NW-3 in 1993

IWAI has constructed **9** terminals at Kottapuram, Aluva, Maradu, Vaikkom, Thanneermukkom, Thrikkunnappuzha Kayamkulam, Kolam & Alappuzha

Approximately **10** lakh tonnes of cargo is being moved on NW-3 per annum





# RIVERS FOR PROSPERITY

## Inland Water Transport

DEVELOPMENT OF 8 NEW WATERWAYS HAS BEEN TAKEN UP DURING 2017-18

S.No.	National Waterway	State	Length (km)
1	Mahanadi - Luna River (NW-64)	Odisha	98
2	Amba River (NW-10)	Maharashtra	45
3	Revadanda Creek - Kundalika River (NW-85)	Maharashtra	31
4	Narmada River (NW-73)	Gujarat & Maharashtra	226
5	Tapi River (NW-100)	Gujarat	173
6	Ajoy (Ajay) River (NW-7)	West Bengal	19
7	Alappuzha- Changanassery Canal (NW-8)	Kerala	29
8	Kalyan-Thane-Mumbai Waterway, Vasai Creek And Ulhas River (NW- 53)	Maharashtra	145





**COASTAL SHIPPING**  
Safer, Smarter, Sustainable



## COASTAL SHIPPING

Safer, Smarter, Sustainable

Sagarmala programme is also aimed at promoting coastal shipping, which is not only a **substantially cheaper mode** of transport compared to other modes of transport but also more **environment friendly**. Further, coastal shipping **provides opportunities to Indian entrepreneurs**, and smaller shipping operators as well as port/ hinterland logistics opportunities to smaller companies catering to coastal/ domestic trade, often in smaller ports/ harbours.

### NEW LOGISTICS CORRIDORS THROUGH COASTAL SHIPPING





## COASTAL SHIPPING

Safer, Smarter, Sustainable



Coastal Shipping in India has grown at a CAGR of **approx. 10%** between 2015 and 2018 compared to 2.2% between 2012 and 2015



Besides the present coastal shipping movement of 106.8 MTPA in FY2017-18, a potential of moving an additional **130 MMTPA** by 2025 has been identified under Sagarmala Programme



MoU signed between Pondicherry and Chennai to boost coastal movement of **EXIM cargo**





# COASTAL SHIPPING

Safer, Smarter, Sustainable

## Initiatives taken to promote Coastal Shipping



Cabotage has been relaxed for 5 years for specialized, foreign-flagged vessels such as RO-RO, RO-Pax, Hybrid RO-RO, Pure Car Carriers, Pure Car and Truck Carriers, LNG Vessels, Project Cargo Vessels



Cabotage has also been relaxed for EXIM Containers being transhipped in India



Cabotage has been relaxed for Agricultural Commodities





# COASTAL SHIPPING

Safer, Smarter, Sustainable

## Infrastructure development for promoting coastal shipping

- **116 initiatives** identified across 12 major ports to unlock **100MTPA capacity**, out of which 86 initiatives have been implemented unlocking **80 MTPA**
- Development of port infrastructure to enable coastal shipping.  
**50 projects (cost Rs. 2,482 Cr)** identified for financial assistance under the Coastal Berth Scheme
- **31 projects (cost Rs. 1,413 Cr)** sanctioned with financial assistance of **Rs. 586 Cr** and **Rs. 334 Cr** released
- **19 projects** under various stage of development and process of approval. Funding under the scheme is available for construction of coastal berth, passenger jetty, breakwater, capital dredging and mechanization of coastal berth





# COASTAL SHIPPING

## MoUs with Bangladesh



An agreement has been signed to promote coastal shipping between India and Bangladesh which will help in providing an alternative route for the transportation of **EXIM** cargo as well as domestic cargo to the North Eastern Region



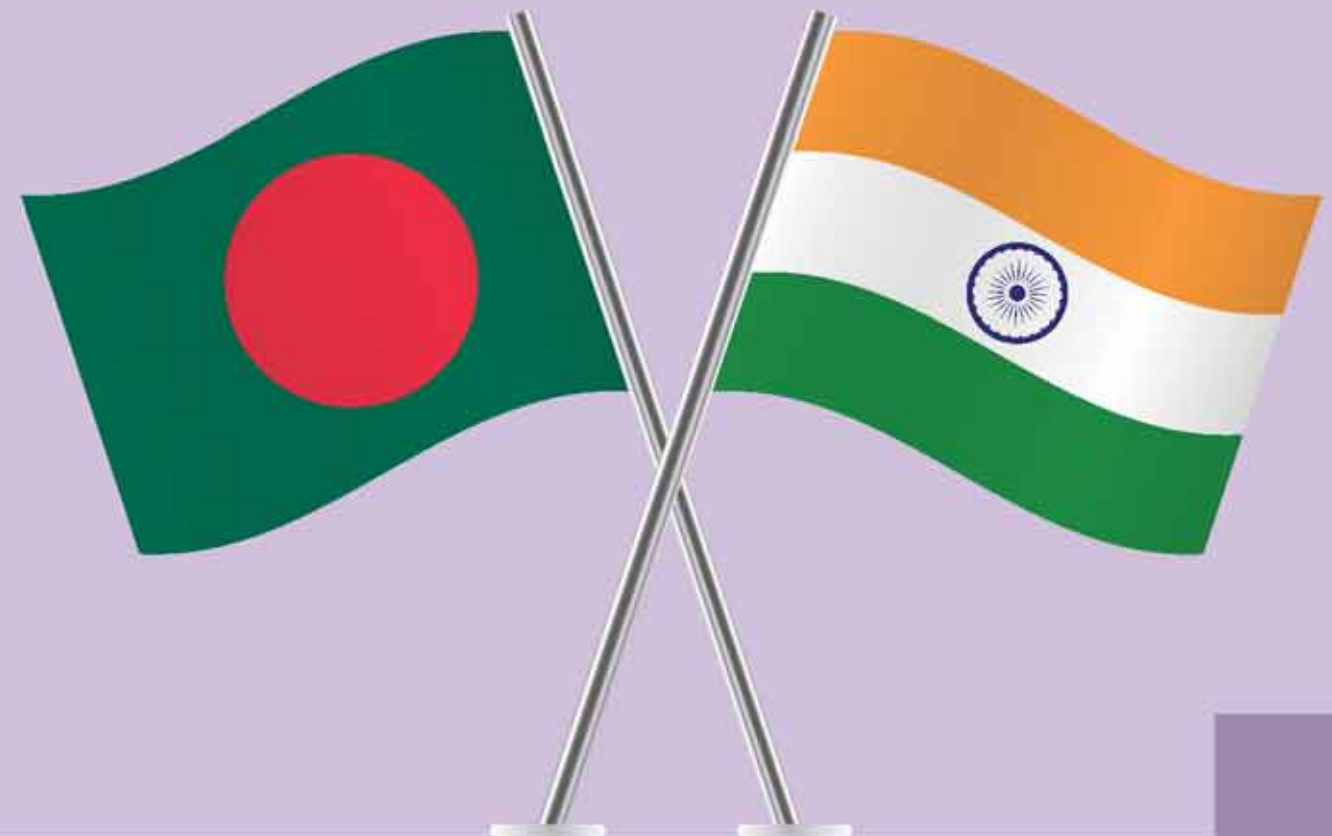
An MoU has been signed for the use of **Chittagong and Mongla** ports for the movement of goods to and from India.



An MoU has been signed that will allow Passenger and Cruise services on the Coastal and Protocol Routes between **India & Bangladesh**



An MoU has been signed for fairway development of the Ashuganj-Zakiganj stretch of **Kushiyara River and Sirajgunj-Daikhowa** stretch of the Jamuna River of Indo-Bangladesh Protocol to access North-Eastern Indian through Bangladesh





# COASTAL SHIPPING

## Benefits to North East

Enhance connectivity to the North-Eastern States of India through an alternative route via **coastal movement**.

Provide all-season fairway which will help in considerably lowering the logistics cost of cargo movement and reduce congestion through the **Siliguri corridor**.

Enhance trade, facilitate the movement of transit cargo and add to the **economic development** of both the countries.

Facilitate cross **border tourism**





## COASTAL BERTH PROJECTS





## 1 Accelerating today's growth momentum



Port Performance



Port Management



Port Connectivity

## 2 Driving sustainable growth, better development of India



Revitalised Infrastructure



Coastal Community Development

## 3 Transforming opportunities for sustainable growth



Internal Waterways



Coastal Shipping

## 4 Harnessing opportunities for the New India



Innovation, Research, Technology



Ship Repair & Ship Building



Cruise Shipping







**INNOVATION. RESEARCH. TECHNOLOGY.**  
State-of-the-art technical support for ports & maritime sector



## INNOVATION. RESEARCH. TECHNOLOGY.

### National Technology Centre for Ports, Waterways and Coasts (NTCPWC)



NTCPWC set up at IIT-Madras at an initial **cost of 70.53** crore was inaugurated on 26 February 2018. It aims at providing innovative and research-based engineering solutions for various issues related to ports, waterways and coasts in the country.



NTCPWC to provide R&D and technical consultancy support to all Major Ports, IWAI and other related institutions. Poised to be self-sustainable in three years through national and global industry consultancy projects.





## A FILLIP TO 'MAKE IN INDIA', BUILDING STRATEGIC STRENGTHS

Center of Excellence in Maritime and Shipbuilding (CEMS)

A world-class Center of Excellence in Maritime and Ship Building (CEMS) has been set up with investment of 770 Cr by Ministry of Shipping in collaboration with Siemens and Indian Register of Shipping (IRS).





# A FILLIP TO 'MAKE IN INDIA', BUILDING STRATEGIC STRENGTHS

## Center of Excellence in Maritime and Shipbuilding (CEMS)

A global hub for quality skill development in the port and maritime sector. CEMS is to provide skilled manpower for India's ship building and heavy industry.

### BENEFITS OF CEMS

End-to-end activities involved in Ship Design

**Manufacturing | Maintenance | Repairs and Operations**

**MRO | Port Logistics | Dry Dock related to Ports**

CEMS will provide skilled manpower for making vessels for inland waterways, ships, fishing boats and other ancillary manufacturing sectors.

The total strength of CEMS will be **10,512** students per year.







# SHIP REPAIRING AND SHIP BUILDING

A fillip to 'Make in India', building strategic strengths



## A FILLIP TO 'MAKE IN INDIA', BUILDING STRATEGIC STRENGTHS

### Ship Building Operations

#### Cochin Ship Yard (CSL)

#### New Dry Dock

Cochin Shipyard Limited is building an additional dry dock

size **310x75x60** meter

The project to be completed within **30** months

This third dry dock will be the largest dry dock in CSL

This enhanced capacity will enable the Yard to take up construction and repairs of larger vessels and offshore structures.





# A FILLIP TO 'MAKE IN INDIA', BUILDING STRATEGIC STRENGTHS

## Ship Building Operations

### Shipbuilding under the 'Make in India' initiative to boost Island Connectivity

- 2 passenger-cum-cargo vessels of 1200 passengers and 2 passenger-cum-cargo vessel of 500 passengers capacity are being built by Cochin Shipyard at a cost of Rs. 1,291 Cr for the Andaman and Nicobar administration

### Hooghly Cochin Shipyard Limited (HCSL)

- A new Joint Venture Company 'Hooghly Cochin Shipyard Limited' set up between CSL and Hooghly Dock & Port Engineers Ltd. (HDPEL), Kolkata
- The JV will concentrate on manufacturing the inland waterways transport vessel segment
- A new yard for the construction and repairs of vessels for Inland and Coastal segment will be set up





# A FILLIP TO 'MAKE IN INDIA', BUILDING STRATEGIC STRENGTHS

## Ship Repair Operations

Mumbai Port - Dry Dock  
MoU with CSL signed on  
11 January 2018

Ship repair facility being  
expanded in Port Blair  
and Guwahati

Netaji Subhash Dock -  
Kolkata Port - MoU with CSL  
signed on 17 March 2018

International Ship Repair  
Facility (ISRF) at Cochin  
being developed at a  
cost of 970 Cr





## A FILLIP TO 'MAKE IN INDIA', BUILDING STRATEGIC STRENGTHS

### International Ship Repair Facility (ISRF)

A contract worth **Rs. 970** Cr has been awarded for setting up ISRF, which is to be completed by May, 2020

ISRF is a greenfield ship repair yard being put up at Willingdon Island, Kochi on **42** acres of land leased from the Cochin Port Trust.

The facility will house a modern Ship Lift and Transfer System of **6,000** Tonnes capacity, which will cater to repairs of all types of small and medium sized vessels, including Navy and Coast Guard ships.







**CRUISE SHIPPING**  
India cruising ahead



# INDIA CRUISING AHEAD

## Boost to Cruise Shipping

World-class cruise terminal at Mumbai port

Cost **Rs. 300 Cr**

to be completed by December, 2019

New cruise terminals at Mormugao Port and Chennai Port

Increase in the number of cruise vessels visiting the five major ports:  
(Mumbai, Mormugao, New Mangalore, Cochin & Chennai)

**95** 2013-14 → **166** 2016-17

The number of cruise passengers has doubled

**82,600** → **1,91,835**  
2013-14 2016-17

STANDARD OPERATING PROCEDURE (SOP) FOR CRUISE VESSELS  
HAVE BEEN REVISED AND OPERATIONALIZED





# INDIA CRUISING AHEAD

## Boost to Cruise Shipping

### Promoting Cruise Shipping

- **E-Visa facility** for cruise vessels at five major ports: Mumbai, Mormugao, New Mangalore, Cochin and Chennai. Cruise tourists arriving with e-visa exempted from biometric enrolment for a period of three years i.e. till 31 December 2020.
- **Port charges reduced**; all major ports to charge a uniform single rate of \$0.35 per GRT for first 12 hrs of stay
- Facility for foreign flag passenger vessels to call at Indian ports without obtaining license from DGS extending from February, 2019 to February, 2024
- Costa Neo Classica cruise ship has made Mumbai Port its home port for the season 2016-17 and 2017-18.





## INTERNATIONAL CO-OPERATION IN PORTS & SHIPPING SECTOR

India re-elected to International Maritime Organisation Council

An MoU with Republic of Korea was signed on mutual recognition of Certificates of competency of seafarers.

Contract for interim agreement of Chabahar Port signed on 17 February 2018 and documents exchanged in the presence of the Prime Minister of India and the President of Iran.





## IMPROVING SERVICES TO SEAFARERS BY DG SHIPPING

- E-Governance system being revamped to make DGS **paperless and footfall free**
- **Online grievance**-cum-feedback system started in June 2016 with a turnaround time of less than 3 days
- Requirement to issue annual trading license for Indian flag ships done away
- The powers for registration, survey and certification of Indian fishing vessels delegated to respective State Governments/Union Territories
- Relief to Indian ship owners by doing away with dry docking requirement
- Application, processing and issuance of the chartering permissions made **online and e-payment enabled**
- E-learning module launched to enable Indian seafarers to prepare for Certificate of Competency
- Students benefitting from **Online Counseling**, initiated by IMU from 2014-15
- Employment of Indian seafarers on ship increased from 1,08,446 in 2013 to 154349 in 2017



