

Ministry of Ports, Shipping & Waterways Government of India





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Maritime sector in India has been the backbone of the country's trade and has grown manifold over the years. India has 7,500 km long coastline along with 14,500 km of potentially navigable waterways in strategic locations on key international maritime trade routes with 12 major ports and nearly 200 non major ports. Nearly 95% of India's trade by volume moves through sea route. Two – thirds of all global trade and 50 percent of container trade happens through the Indian Ocean. The Hon'ble Prime Minister of India, while addressing a gathering at the inauguration of Maritime India, said that for thousands of years, our ports have been important trading centres. Our coasts connected us to the world. India is very serious about growing in the maritime sector and emerging as a leading Blue Economy of the world. Our leading focus areas include: Upgrade current infrastructure. Create next-generation infrastructure. Boost the reform journey. Through these steps, we aim to give strength to our vision of AatmaNirbhar Bharat.

To make India one of the top maritime nations in the world, an overarching initiative, the Maritime India Vision 2030 was launched by The Hon'ble Prime Minister of India. It would help augment the infrastructure of major ports, enhance 'Ease of Doing Business', help in development of 'Green ports and Green Shipping', increase the share of renewable energy, promoting 'Waste to Wealth' through sustainable dredging and domestic ship recycling, enhance cruise infrastructure by developing dedicated cruise terminals, strengthen the maritime institutions to enhance India's training and development capabilities at par with global standards.

"The development of India's port is directly linked to creation of job, opportunities, boosting industrial development, increasing exports, and resulting in the overall improvement in the economy", Said the Hon'ble Prime Minister of India. It was rightly realised that there was a scope to enhance last mile connectivity and multi-modal integration. In order to realise this vision Hon'ble Prime Minister of India launched the PM Gatishakti National Master Plan which aims to provide systematic, multi modal connectivity to various economic zones for seamless movement of people, goods & services resulting in efficient conduct of logistics and economic activities and will result in ease of living for the common man and will provide huge employment opportunities.

Sagarmala, an overarching programme was also launched by The Hon'ble Prime Minister of India, for the development of port infrastructure to match global standards which includes development of new ports, enhancement of the connectivity network to the ports, including the last mile connectivity and overall port-led development. Sagarmala also to provide skill development and employment opportunities for coastal community. Finally, it focuses on developing infrastructure to improve the movement of cargo by sea along the coastal shipping routes and by inland waterways. This would help reduce the transportation cost close to global averages thus making Indian exports competitive and imports cheaper.

Over the past seven years, the Sagarmala programme has come a long way in meeting the objectives set out for it. India's commitment to port-led development can be seen through the Sagarmala scheme. Currently, Sagarmala programme has 802 projects with an estimated investment of Rs. 5.50 Lakh Cr. Progressive efforts are being made to implement Maritime projects through PPP wherever feasible. A total of 123 projects at an estimated investment of Rs. 2.65 Lakh Cr. are being implemented on PPP Mode, out of which 74 are being implemented by the Major Ports. Twenty-two projects of about Rs. 16,750 Cr. have already been completed. Further, Major ports are also implementing 232 projects on EPC mode, out of which 98 projects of the approx. value of Rs. 9,990 Cr. have already been completed.

All major ports and several non-major ports have witnessed extensive modernisation and capacity building, the aim being to raise the capacity. Similarly, infrastructure along the inland waterways is being developed and an impetus has been given to make this, preferred mode of transportation. This would divert cargo movement from roads to waterways in the form of Ro-Ro, containerized and bulk movement. The Indian ports capacity in the year 2015, before the implementation of Sagarmala programme, was 871 MTPA. As a major outcome of this project today the capacity has already been increased to 2400 MTPA by the year 2021. Going forward, Sagarmala aims to increase the capacity of our Indian ports to 3500 MTPA by 2030.

Scheme for grant in aid under Sagarmala programme has provided funding of 139 projects worth Rs. 8674 Cr. MoPSW has so far sanctioned Rs. 3483 Cr. Further, MoPSW has invested an amount of Rs. 542 crores in 5 projects through Sagarmala Development Company Limited (SDCL).

This book captures the progress of the program showcasing the rapid modernisation taking place at our ports along with measures that are being incorporated to harness the advantages of modern technological advancements presented with a backdrop of colourful and expressive images from across India.





The completion of 7 years of Sagarmala project and the publication of a booklet by Ministry of Ports, Shipping and Waterways to mark the occasion is heartening.

Maritime sector is crucial for the comprehensive growth of our economy. India has had a long, glorious maritime history. We remain firmly determined to build upon such rich traditions and further strengthen India's position among the leading maritime nations of the world.

Ports have been the gateways to socio-economic development since the earliest times. During the last few years, we have been tirelessly striving to modernize and enhance our port capacities. We firmly believe in the mantra of "Ports for Prosperity".

Our Government implemented Sagarmala project to usher in port-led development and further strengthen our coastal economy. The project covers a slew of initiatives, ranging from building new ports, better ports connectivity to modernisation of existing ports and terminals, inland waterways and industrialisation around ports.

Sagarmala is poised to yield manifold benefits, including enhanced employment opportunities in the coastal regions, making our exports competitive, facilitating ease of transportation and bring about a transformation for the fishermen community.

Our overarching vision of building a strong and self-reliant India places special emphasis on Blue economy, of which the maritime sector and Sagarmala are an integral component.

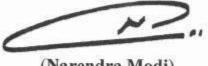
Greetings and best wishes to everyone associated with Sagarmala project. May the publication be widely read and liked.

New Delhi वैशाख 10, शक संवत् 1944 30<sup>th</sup> April, 2022



## प्रधान मंत्री **Prime Minister**

#### MESSAGE



(Narendra Modi)





#### सर्बानंद सोणोवाल SARBANANDA SONOWAL





#### MESSAGE

It gives me immense pleasure and satisfaction to release Achievement Book on completion of seven years of Sagarmala Programme. The book takes you through the journey of Sagarmala Programme and highlights the achievements of the Ministry of Ports, Shipping and Waterways.

Maritime trade in India dates back to 3,300 BC or the earliest known civilization - the Indus Valley Civilization. Maritime sector has been the engine of the country's trade and has grown manifold over the years. India has 7,500 km long coastline and 14,500 km of potentially navigable waterways to harness. Its location is strategic with key international maritime trade routes in the vicinity.

Vision of Sagarmala Programme is to reduce total logistics cost in the country by making interventions across the five pillars of the programme which are designed to enable the holistic development. The interventions include creation of coastal shipping and inland waterways infrastructure, enhancing last mile connectivity, development of RO RO and tourism jetties as well as development of fishing harbours and skill development centers for the coastal community. It envisions the development of port infrastructure to match global standards alongside development of new ports, enhancement of the connectivity network to the ports, including the last mile connectivity. Programme also aims to provide skill development and employment opportunities for coastal community. I am glad to inform that significant progress has been made since launch of the programme in 2015 with improvements across areas. Some of the interventions have improved the lives of fishermen and Coastal community as well as making total movement of goods easier and seamless. Many reforms have also improved Ease of Doing Business and provided the enabling environment of investment.

While we have covered lot of ground in these seven years, we still have a long way to go to make the country a leading maritime nation in the world as outlined in Maritime India Vision-2030. The vision document envisions an overall investment of Rs. 3-3.5 Lakh Cr. in the maritime sector which has the potential to create more than 20 Lakh jobs and unlock more than twenty thousand crore of potential revenue for Indian ports. It is targeted to increase the capacity of our Indian ports to 3500 MTPA by 2030. I am also happy to inform that we are taking various initiatives and are on track to achieve the Vision-2030.

I hope the book is an immersive reading experience for all the stakeholders and an encouragement to be part of the vision to make India a leading maritime nation in the world.





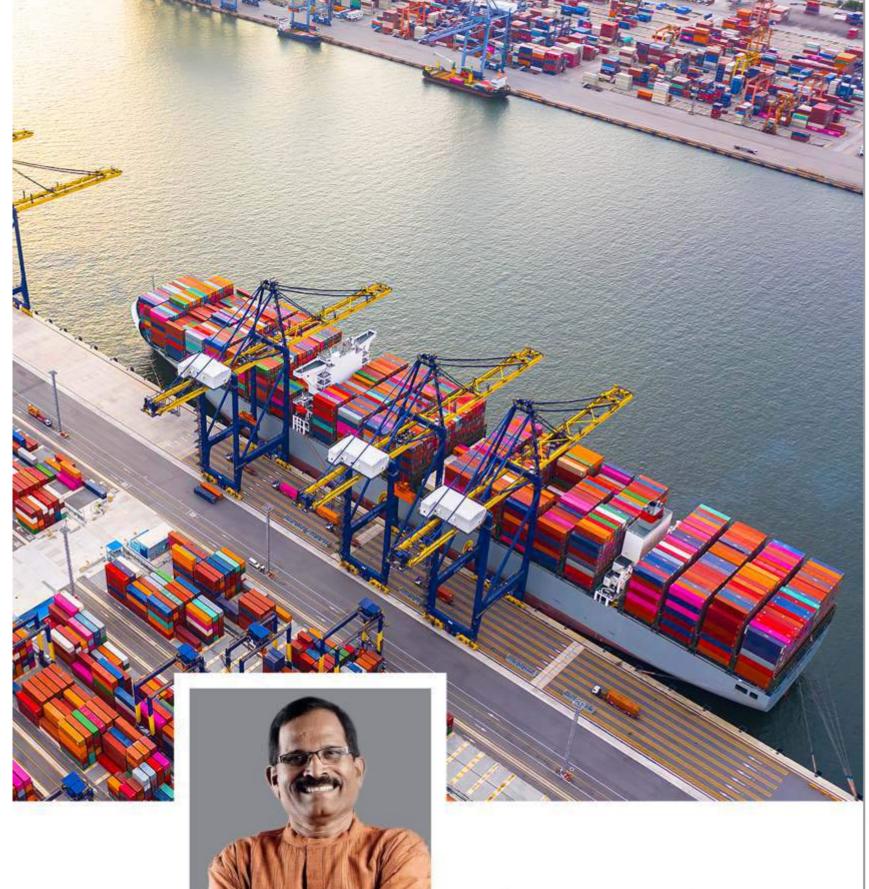
Room No. 201, Transport Bhawan, 1, Sansad Marg, New Delhi - 110001, Ph. : 011-23717422, 23717423, 23717424 (O), 23356709 (F) E-mail : minister-shipping@gov.in; Website : www.shipmin.gov.in Room No. 101, AYUSH Bhawan 'B' Block, GPO Complex, INA, New Delhi-110023, Tel.: 011-24651955, 24651935 E-mail : minister-ayush@nic.in; Website : www.ayush.gov.in

Shri Sarbananda Sonowal Hon'ble Union Minister, Ministry of Ports, Shipping and Waterways & AYUSH

मंत्री पत्तन, पोत परिवहन और जलमार्ग एवं आयुष भारत सरकार Minister Ports, Shipping & Waterways and AYUSH Government of India

(Sarbananda Sonowa





श्रीपाद नाईक राज्य मंत्री पतन, पोत परिवहन, जलमार्ग एवं पर्यटन भारत सरकार

MESSAGE

With majority of global trade carried by sea, ports are critical gateway infrastructures which connect entire region and its inland transportation network, viz., roads, rails & inland waterways, to the international market. Strong and well- functioning maritime transport infrastructure is the key element of economic growth of the country.

Transportation by waterways has historically remained underutilized in India although waterways are significantly cheaper compared to road & railways. The Sagarmala programme, led by the Ministry of Ports, Shipping & Waterways, aims to reduce logistics cost and lead-times and maintain good linkages between industrial and logistics infrastructure.

Several steps are being taken towards making major ports as smart ports including implementation of Port Community System: Logistics Data Bank Service; RFID Solutions; Enterprise Business Systems; Direct Port Delivery (DPD); Direct Port Entry (DPE); scanners/container scanners and simplifying the procedures.

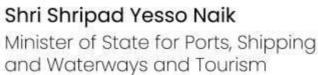
Besides, a centralized web-based Port Community System (PCS) has been commissioned across all major ports which enables smooth data flow between different stakeholders through a common interface.

The Sagarmala Programme also aims at developing opportunities for fishermen and other coastal communities as well as developments of numerous islands along India's coastline.

Thus, the Sagarmala Programme synergises logistics-intensive industries, efficient ports, seamless connectivity and requisite skill-base leading to the unlocking of economic value.

I am confident that this book will give you a glimpse into the Maritime transport in India and its huge potential.

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SHRIPAD NAIK Minister of State for Ports, Shipping, Waterways & Toursim, Government of India



(Shripad Yesso Naik)





#### Shri Shantanu Thakur Minister of State for Ministry of Ports, Shipping & Waterways

#### शातनु ठाकुर SHANTANU THAKUR

The Ministry of Ports, Shipping & Waterways recognizes the potential of India's vast inland waterways and over 7,500 km long coastline dotted with ports. The advantages that could accrue by increasing the cargo transported over these two modes include reduction in cost of transportation and a tremendous impact on the environment by reducing carbon emissions. Inland waterways and Coastal shipping were, thus given the desired impetus by a slew of measures that would benefit both, the shippers as well as the users.

2/ Some of the steps initiated by the Ministry include designating navigable rivers as National Waterways; developing infrastructure along the waterways, such as, new terminals, dredging all weather navigable channels, providing River Information System, safe navigation tools, etc.

3. There is an ardent need to boost the development of indigenous technology to enhance the efficiency of various activities in India's port and maritime sector.

Further, skill development is important for port-led development and has been included under the Sagarmala program. As part of the growth initiative under the programme, several steps have been taken towards strengthening India's skilled workforce by enhancing the indigenous technology.

4. To achieve the required technological inputs and necessary skill development, the Ministry has established several technological centres in association with the premier centres of learning. The National Technology Centre for Ports, Waterways & Coasts (NTCPWC) at IIT Madras, the Centre of Excellence in Maritime & Shipbuilding (CEMS) at Vizag & Mumbai and the Centre for Inland and Coastal Maritime Technology (CICMT) at IIT Kharagpur are facilitating training, research & development in the field of maritime sector.

5. To boost the operations and development of non-major ports, the coastal States that have traditionally been active in conducting maritime operations, have also set up Maritime Boards.

6. Among the several initiatives under the Sagarmala programme, the Port led industrial development for developing industrial cluster zones for regional and socioeconomic growth is one of the initiatives. Government is working pro-actively to achieve this target.

7. I am sure this book will give you a preview of all major initiatives undertaken by the Ministry of Ports, Shipping & Waterways.





(Shantanu Thakur)

Transport Bhawan, Parliament Street, New Delhi-110001, Tel.: 011-23710189, 23710356





#### डा. संजीव रंजन DR. SANJEEV RANJAN

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Maritime Transport is a critical infrastructure for the social and economic development of a country and India is blessed with 7,500 km long coastline, covering 13 states and Union Territories, and 14,500 km of potentially navigable waterways, besides being strategically located on key international maritime trade routes.

The Government of India has embarked on the ambitious Sagarmala Programme which aims to promote port-led development in the country. The Sagarmala Programme encompasses 802 projects worth investment of around Rs. 5.50 Lakh Cr. These projects are being implemented by relevant Central Ministries, State Governments, Major Ports and other agencies primarily through the private or PPP mode.

Main focus under the Sagarmala Programme is to undertake Port Modernization, New Port Development, Port Connectivity through Rail and Road, Port-led industrialization by developing Special Economic Zones, Smart Industrial Port City development, Coastal Community development through technology centres, skill development, modernizing existing Fishing Harbours and Fisheries, Coastal shipping, Inland Waterways & Transport development etc.

The Ministry of Ports, Shipping and Waterways has taken number of measures towards modernization, mechanization and digital transformation to reduce logistic costs and enhance efficiency to become competitive in international trade and also to improve ease of doing business. In this Book, you will get a glimpse of endeavours taken under Sagarmala towards developing world class maritime infrastructure and placing India on the Global Maritime Business landscape.

New Delhi March 22, 2022





Dr. Sanjeev Ranjan Secretary Minister of Ports, Shipping & Waterways



सचिव SECRETARY भारत सरकार **GOVERNMENT OF INDIA** पत्तन, पोत परिवहन और जलमार्ग मंत्रालय MINISTRY OF PORTS, SHIPPING AND WATERWAYS

#### MESSAGE

(Sanjeev Ranjan)

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Sagarmala is an ambitious national initiative aimed at bringing about a steep change in India's logistics sector performance, by unlocking the full potential of India's coastline and waterways. The vision of Sagarmala Programme is to reduce logistics cost for both domestic and EXIM cargo with optimized infrastructure investment.

The concept of "Port-led Development" is central to the vision of the Sagarmala Programme. Port-led development focuses on logistics-intensive industries that can be developed proximate to coast/waterways. They would be supported by efficient and modern port infrastructure and seamless multi-modal connectivity. Skilling the population in adjoining areas enabling their participation in economic opportunities would be an added benefit. Sagarmala synergises logistics-intensive industries, efficient ports, seamless connectivity and requisite skill-base leading to the unlocking of economic value.

# TRANSFORMATION

The mission of Sagarmala is to harness India's 7,500+ km long coastline, 20,000 km of potentially navigable waterways and its strategic location astride the key international maritime trade routes. It aims to bring a transformative impact on India's logistics competitiveness and the wider economy. Salient targets include : -

- Doubling the cargo carrying share of inland and coastal waterways.
- Boost to exports by implementation of Port Modernisation Projects worth Rs. 2.5 lakh Crore.

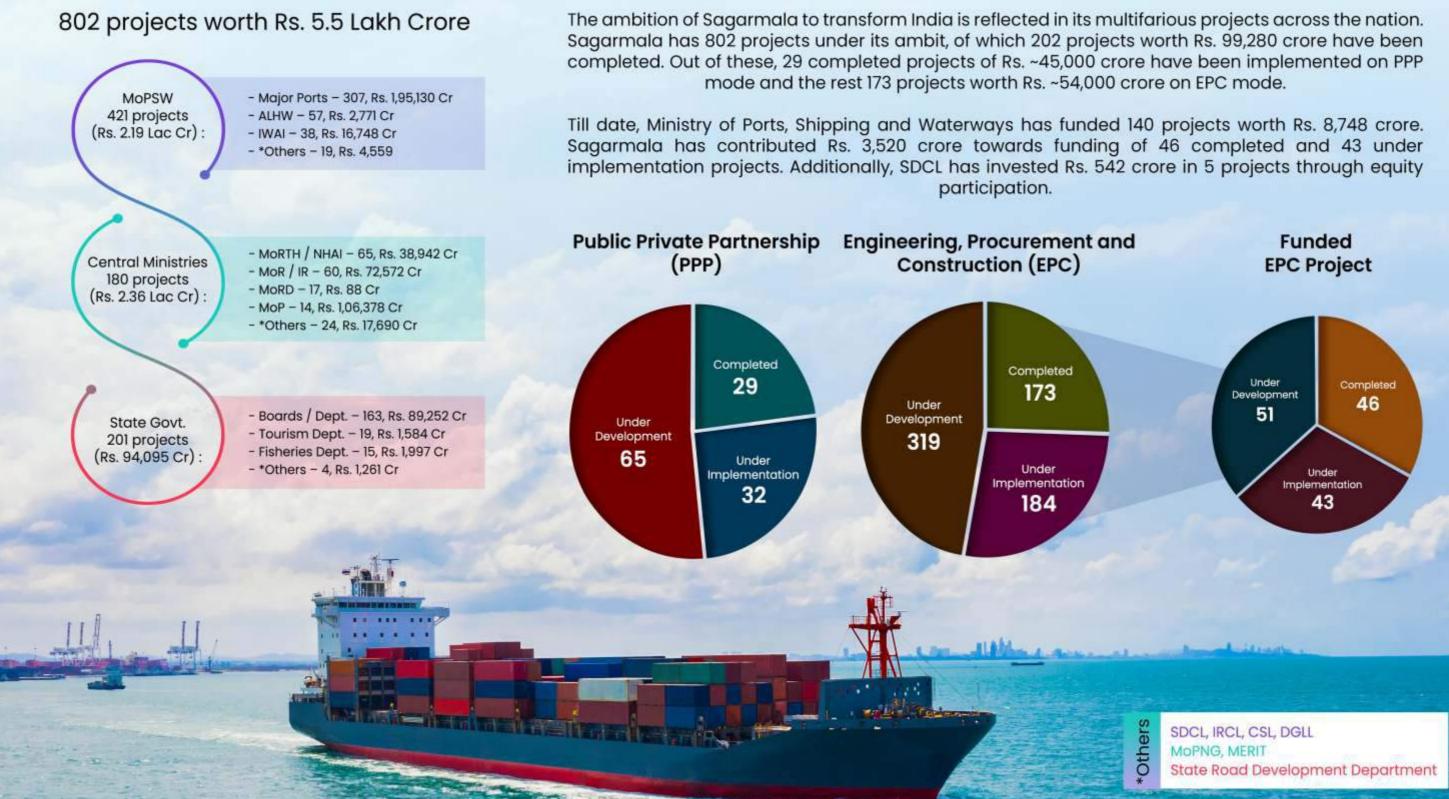
- Implementation of Port Connectivity Projects worth - Rs 1.39 lakh crores.





- 7500+ km of coastline
- 12 Major and 200+ Non-Major Ports 0
- More than 90% of country's trade by volume utilizes maritime transport
- Coastal traffic has grown at CAGR of 10.2% in 0 last 5 years
- 19% growth (CAGR) in cargo volumes over the last 5 years for Inland Waterways







# Our Major Ports at a glance





Mumbai Port Can handle POL 59.30 MMT and Bulk Cargo

23.55 MMT

Cochin Port

can handle POL 41.83

Bulk Cargo 15.58 MMT & Containers 13.86 MMT

Deendayal Port

MMT, Fertilizers 8.40 MMT Bulk Cargo 83.70 MMT & Containers 17.00 MMT

#### Kolkata Port

Bulk Cargo 10.50 MMT & Containers 11.80 MMT



#### **Chennai** Port

Can handle POL 32.40 MMT, Bulk Cargo 41.40 MMT & Containers 60.80 MMT



Can handle POL 29.70 MMT, Iron Ore 16.20 MMT, Coal 17.60 MMT, Fertilizer 1.60 MMT, Bulk Cargo 54.39 MMT and Containers 7.40 MMT





#### Paradip Port

Can handle POL 98.30 MMT, Iron Ore 60.00 MMT, Coal 41.20 MMT, Fertilizer 10.80 MMT, Bulk Cargo 44.20 MMT and Containers 5.00 MMT



#### VO Chidambaranar Port

Can handle POL 3.30 MMT, Coal 33.40 MMT, Bulk Cargo 39.40 MMT and Containers



#### Kamarajar Port

Can handle POL 9.06 MMT, Coal 44.82 MMT, Bulk Cargo 22.39 MMT and Containers 14.83 MMT

#### Mormugao Port

Can handle POL 4.88 MMT, Iron Ore 18.00 MMT, Coal 31.10 MMT, Fertilizers 0.42 MMT, Bulk Cargo 7.31 MMT and Containers 0.79 MMT

#### New Mangalore Port

Can handle handle POL 58.60 MMT, Iron Ore 7.20 MMT, Coal 27.91 MMT, Fertilizers 1.63 MMT, Bulk Cargo 11.57 MMT & Containers 5.60 MMT

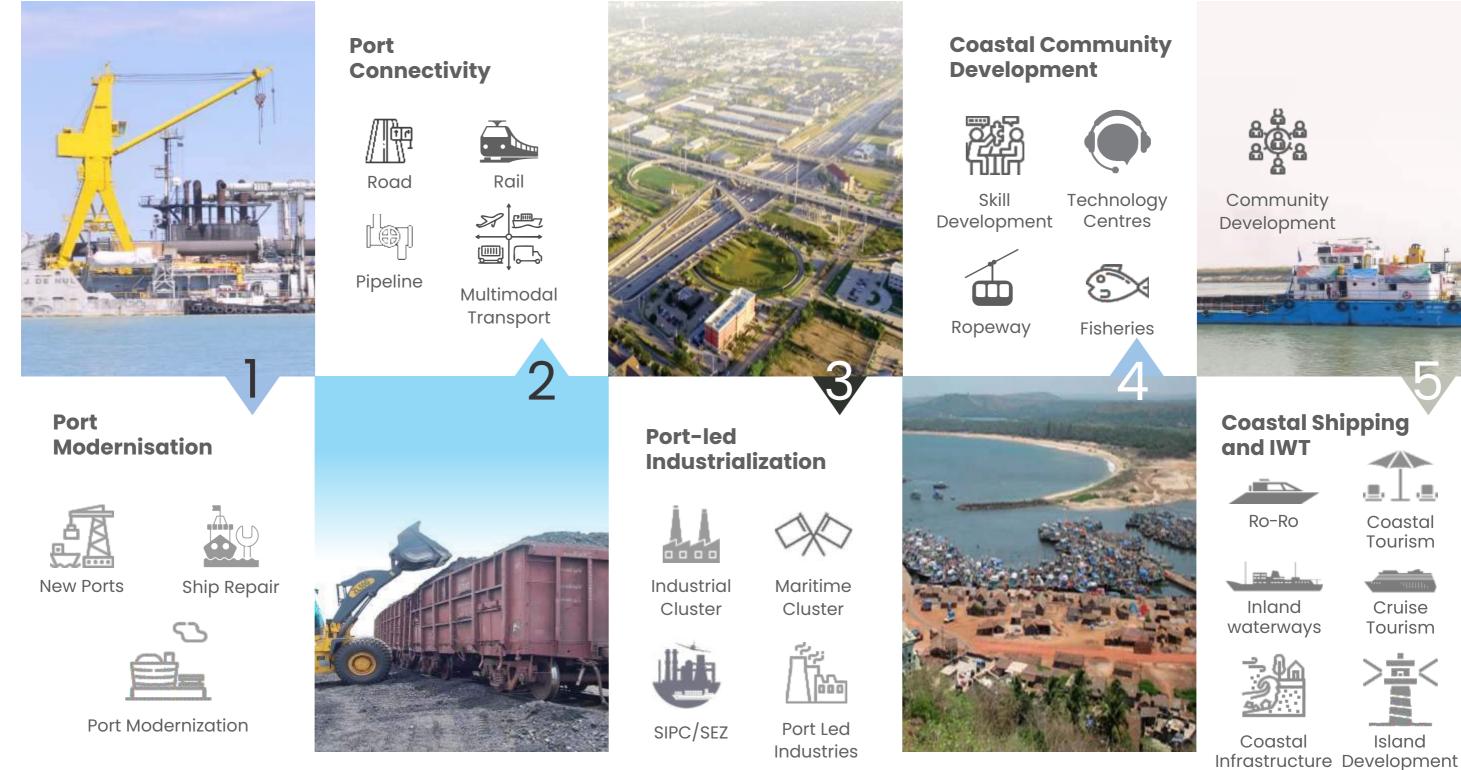


#### JNPA

Bulk Cargo 3.80 MMT and Containers 94.32 MMT

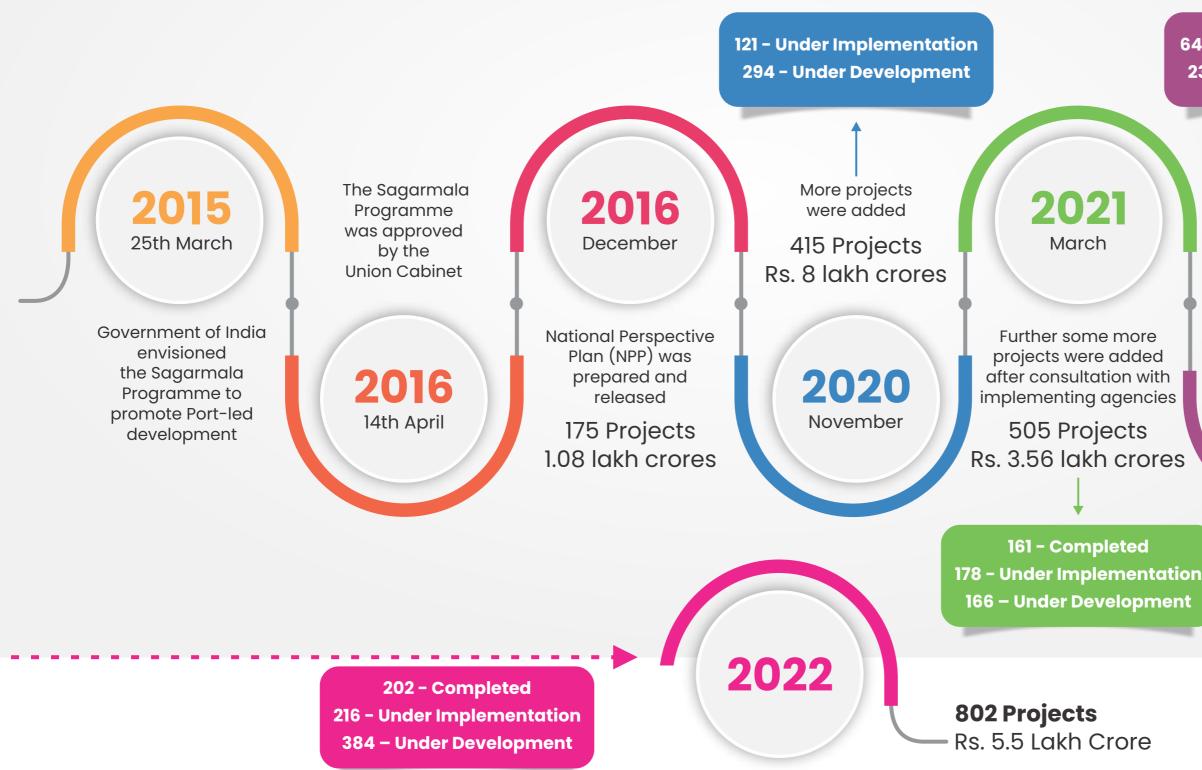


## Five Pillars of Sagarmala



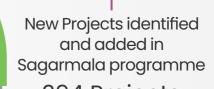


## सागरमाला के सफल सात साल









294 Projects Rs. 1.50 lakh Cr.

2021 November



## Port modernization & NEW PORT DEVELOPMENT

Ports are a significant source of revenue for coastal communities. The more commodities and passengers that move through each year, the more infrastructure, provisions, and related services are necessary. These will provide varied degrees of economic and national benefits including terminal capacity addition, reduction of turn around time, faster movements of goods with reduced handling cost and reduction in fuel cost.

Ports are also critical for supporting economic activities in the hinterland since they serve as a vital link between sea and land transit.

Giving special emphasis to modernization of Indian ports under Sagarmala, 237 projects at cost of Rs. 2,50,606 Cr. have been undertaken for implementation. Out of total 237 projects, 82 projects worth Rs. 29,575 Cr. have been completed and 56 projects worth Rs. 37,376 Cr are under implementation. Out of 170 projects being implemented at Major Ports, 80 projects worth Rs. 24,335 Cr. have been completed already resulting into port capacity addition for >230 MTPA.

## **DEVELOPMENT OF CONTAINER TERMINAL 4 - PHASE 1**

- ☑ Stackyard with 12 RMQCs, 36 RTGCs and 4 RMGCs increasing the capacity of 2.4 Million TEU each (total 4.8 MTEU)
- ☑ Operational capacity of 30 MTPA.
- ☑ Increase in overall Port handling capacity to 10 Million TEUs.
- Ø 90 Hectare land reclamation for railyard roads.



## **MECHANISATION OF EQ1- EQ2 AND EQ3 BERTHS**

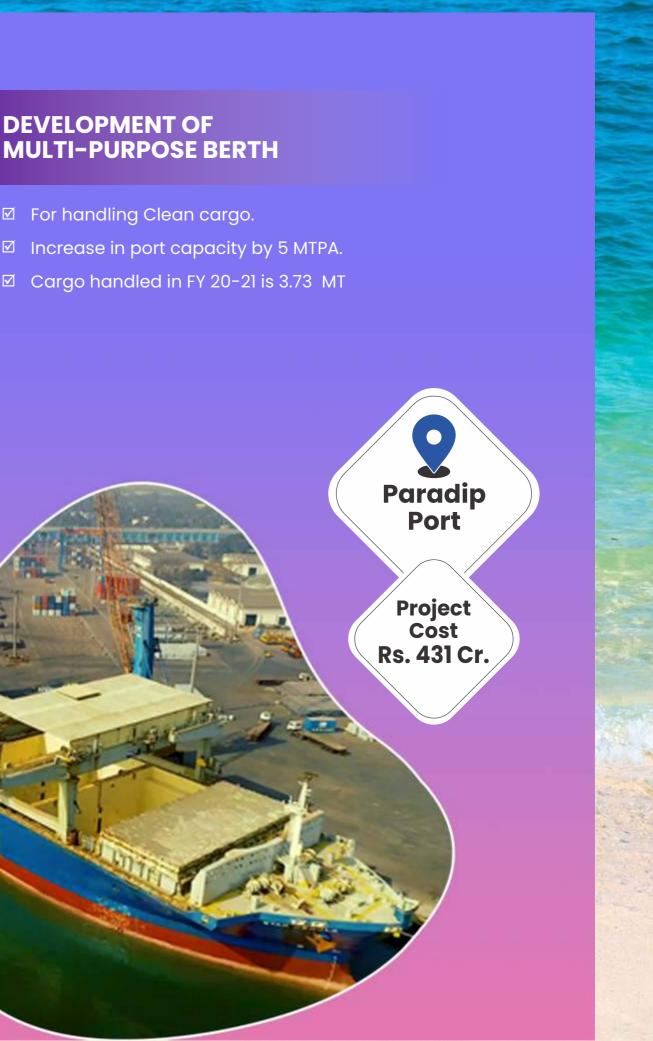
- ☑ Project implement on BOT Basis
- ☑ Strengthening and mechanisation of existing EQ berths for handling large size vessels.
- ☑ Increase in port capacity by 30 MTPA.



## **DEEP DRAFT IRON ORE EXPORT BERTH**

- ☑ Ability to handle cape size vessels upto 16m draft.
- ☑ Increase in port capacity by 10 MTPA.
- ☑ Cargo handled at the Berth in FY 20-21 is 8.42 MT.







### **PROCUREMENT OF 15 RTYGCS AT PORT OWNED CONTAINER TERMINAL**

- ☑ Deployment of E-RTGCs as against diesel Operated RTGCs.
- ☑ Integration of various yards for optimum utilization of E-RTGCs.
- ☑ Eco-friendly process.
- $\square$  Saving in fuel.



## **DEVELOPMENT OF CONTAINER TERMINAL** AT BERTH NOS. 11 AND 12 AT KANDLA

- ☑ Caters to vessel upto an LOA of 330 m, and draught of upto 13.5 m.
- ☑ This is expected to go up to 350 meters of LOA and 14 meters of draught.
- ☑ Reduction in truck turnaround time due to geographical proximity.
- ☑ Savings in time & cost.
- ☑ The terminal is providing employment to almost 215 people directly and 277 people indirectly.



Deendayal Port

Project Cost Rs. 160 Cr.

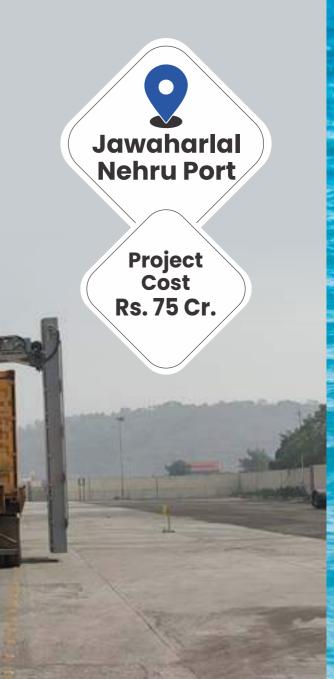
#### **DEVELOPMENT OF** MULTI CARGO TERMINAL

- ☑ To handle break bulk and project cargo like turbine & generators, windmill etc.
- $\square$  Equipped with harbour mobile cranes.
- ☑ Total backup area developed is 13.5 Hectare.

#### **INSTALLATION OF CONTAINER SCANNERS**

- ☑ Three Mobile X-Ray Container Scanners are Installed
- ☑ Resulting in Enhanced safety & security at the Port
- I Efficient movement of cargo and facilitating overall trade.





### RESTRUCTURING OF JAWAHARLAL NEHRU PORT YARD

- ☑ Avoiding long travel and sharing.
- ☑ Improvement in container handling performance.
- ☑ Integration of various yards for optimum utilization of E-RTGCs.
- ☑ Saving in fuel.



## DREDGING THE DOCK BASIN NEAR COASTAL CARGO BERTH

- ☑ Now vessels upto 9.00m can be handled easily.
- ☑ Reduction in turnaround time of coastal vessels.
- Around 7.5 Hac Area has been created by reclaiming the dredged materials.

be handled easily. of coastal vessels. In created by reclaiming



#### **DEVELOPMENT OF PAVED STORAGE YARDS**

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- ☑ Paved concrete storage yards at total extent of 11 hac constructed.
- ☑ The yard being utilized for stacking clean cargos like EXIM automobile, project cargo, break bulk such as granite, iron & steel, and dry bulk cargos, etc.
- ☑ To handle premium cargo including containers, cars and project cargo.



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minimum

#### **DEVELOPMENT OF CENTRAL TRUCK PARKING TERMINAL**

- ☑ The parking area is being developed in an area of 45 Ha for parking of 2,832 Trailers.
- ☑ Centralized Parking Plaza is well connected with National Highways and port terminals.
- ☑ Faster clearance and customs formalities enhancing overall trade.
- ☑ Single window operations for custom documentation, banking, cafeteria, and many other facilities.

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#### CONSTRUCTION OF BUNKER BERTH

- Construction of a 182m long and 16.45m
  wide Bunker Berth at Bharathi Dock with a
  7.95m wide and 175m long pipeline trestle.
- ☑ The new facility will enable handling of Bunker Tankers up to 10,000 DWT
- Serving the bunkering needs of vessels at the Port



#### INSTALLATION OF CONTAINER SCANNERS



- ☑ Scanning 20 containers per hour.
- ☑ Facilitating Direct Port Delivery (DPD).

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## **DEVELOPMENT OF TRUCK PARKING TERMINAL**

☑ Smooth evacuation of cargo has enhanced the port's operations.

> **V.O**. Chidambaranar Port

> > Project Cost

**Rs. 25 Cr.** 

- ☑ Convenient parking of trucks.
- $\square$  The export has increased from 3.6% to 5%.

## **REMOVAL OF MOORINGS IN THE AREA OF CRUISE BERTH**

- ☑ Facilitates easy maneuvering of large size cruise vessels.
- ☑ Port can handle Oasis type cruise vessels having more than 5000 passengers and crew members.
- ☑ Resulting in enhancement of economic activities at the port.
- ☑ Less Berthing and De-berthing Time.



Oil Berth at Jawahar Dweep Project Cost: INR 1050 Cr. Project Status: Completed



Redevelopment of Indira Dock at Mumbai Port Project Cost: INR 55 Cr. Project Status: Completed



Additional Transshipment at Goa Project Cost: INR 56 Cr. Project Status: Completed



Development of Storage area for container at Mormugao Project Cost: INR 15 Cr. Project Status: Completed



Removal of 2 Nos. Mooring of Spiral at Mormugao Project Cost: INR 13.87 Cr. Project Status: Completed



Extension of existing container terminal at VPA Project Cost: INR 633 Cr. Project Status: Completed



Development of Hughe Dry Dock at Mumbai Port Project Cost: INR 115 Cr. Project Status: Completed



Container Scanners at JNPA Project Cost: INR 75 Cr. Project Status: Completed



Construction of Hardstand inside HDC Project Cost: INR 51.02 Cr. Project Status: Completed



Reconstruction of Q1 Berth at Mattancherry Wharf Project Cost: INR 5.02 Cr. Project Status: Completed



Strengthening of existing revetment at Chennai Port Project Cost: INR 63 Cr. Project Status: Completed



Installation, Commissioning & maintenance of RFID for vehicle entry-exit at Cochin Port Project Cost: INR 1 Cr. Project Status: Completed

RFID Implementation, Mormugao Project Cost: INR 5 Cr. Project Status: Completed

Mechanisation of Berths at Paradip Port Project Cost: INR 1438 Cr. Project Status: Completed

Mechanization of Berth 14 and Backup area for handling Container Terminal at NMPA Project Cost: INR 258 Cr. Project Status: Completed

Installation of 2 MHCs at Berth 13, HDC Project Cost: INR 50 Cr. Project Status: Completed



RFID Implementation at KPL Project Cost: INR 12 Cr. Project Status: Completed



Construction of Berth at NMPA Project Cost: INR 94 Cr. Project Status: Completed



Implementation of RFID at NMPA Project Cost: INR 6.17 Cr. Project Status: Completed



Mechanization of Berth at VOCPA Project Cost: INR 93 Cr. Project Status: Completed



Supply, Erection, Testing and Commissioning of 2 HMCs at VPA Project Cost: INR 39 Cr. Project Status: Completed



Development of New EQ-10 berth at VPA Project Cost: INR 55.38 Cr. Project Status: Completed



Container Terminal at Kandla Project Cost: INR 160 Cr. Project Status: Completed



Installation of RFID facilities at HDC Project Cost: INR 16 Cr. Project Status: Completed



Deployment of 2 floating cranes at Sagar, HDC Project Cost: INR 65 Cr. Project Status: Completed



Mini Bulk Carrier Facility at HDC Project Cost: INR 73 Cr. Project Status: Completed



JNPA Container Terminal 4- Phase 1 Project Cost: INR 4719 Cr. Project Status: Completed



Procurement of 15 RTYGCs at port owned Container Terminal at JNPA Project Cost: INR 160 Cr. Project Status: Completed



Harbour mobile cranes at Paradip Project Cost: INR 70 Cr. Project Status: Completed

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Refurbishment and capacity enhancement of coastal liquid terminal at Chennai Port Project Cost: INR 20 Cr. Project Status: Completed

Replacement of Fendering System at HDC Project Cost: INR 28 Cr. Project Status: Completed

Multi Cargo Terminal at KPL Project Cost: INR 164.37 Cr. Project Status: Completed



Additional Coal Berth at Ennore Port Project Cost: INR 254.34 Cr. Project Status: Completed



Capital Dredging Phase 3 at KPL Project Cost: INR 334 Cr. Project Status: Completed



Installation of RFID at Paradip Project Cost: INR 10 Cr. Project Status: Completed



RFID - V. O .Chidambaranar Project Cost: INR 5 Cr. Project Status: Completed



Development & Operation of a full-fledged Truck Parking Terminal at VOCPA Project Cost: INR 25 Cr. Project Status: Completed



Deployment of Additional Harbour Mobile Cranes at VOCPA Project Cost: INR 29 Cr. Project Status: Completed



Strengthening of existing EQ-7 berth to handle vessels at Visakhapatnam Port Project Cost: INR 16.5 Cr. Project Status: Completed



RFID system -Visakhapatnam Port Project Cost: INR 7 Cr. Project Status: Completed



LNG Import Terminal at Mundra Project Cost: INR 5040 Cr. Project Status: Completed



Multi User Liquid Terminal at Puthuvypeen, Cochin Port Project Cost: INR 240 Cr. Project Status: Completed



Refurbishment of South Tanker Berth at Cochin Port Project Cost: INR 29.22 Cr. Project Status: Completed



Sprinkling system inside cargo jetty area at Deendayal Port Project Cost: INR 20.8 Cr. Project Status: Completed

Development of IWT Terminal at Paradip Port Project Cost: INR 80 Cr. Project Status: Completed

Conversion of 8th berth as container terminal at VOCPA Project Cost: INR 312 Cr. Project Status: Completed

Provision of Scanner, Cochin Port Project Cost: INR 15 Cr. Project Status: Completed

Deployment of two Mobile Harbour Cranes - Kandla Port Project Cost: INR 93 Cr. Project Status: Completed





Retrofitting of existing cargo berth no. 1 to 5 at Deendayal Port Project Cost: INR 34.19 Cr. Project Status: Completed



Truck parking at Liquid Storage Tank Farm area at Deendayal Port Project Cost: INR 10.27 Cr. Project Status: Completed



Construction of 16th berth for Multipurpose Cargo at Kandla Project Cost: INR 150 Cr. Project Status: Completed



Development of hardstand storage area Berth No. 13 at HDC Project Cost: INR 44 Cr. Project Status: Completed



Deepening and widening of JNPA and Mumbai Channel Phase-II Project Cost: INR 1963 Cr. Project Status: Completed



Construction of Container Pre-Stacking Yard at KPL Project Cost: INR 24 Cr. Project Status: Completed



LNG Import Terminal at Ennore Project Cost: INR 5151 Cr. Project Status: Completed



Bunkering Terminal at Jawahar Dweep Project Cost: INR 50 Cr. Project Status: Completed



Container scanners at Paradip Port Project Cost: INR 40 Cr. Project Status: Completed



Mobile rubber tyred electrically operated hopper at VOCPA Project Cost: INR 38.08 Cr. Project Status: Completed



Dredging the dock basin for coastal cargo berth at VOCPA Project Cost: INR 98 Cr. Project Status: Completed

Construction of 14th berth for Multipurpose Cargo at Kandla

Project Cost: INR 138 Cr. Project Status: Completed

Construction of Coal berth 4 at KPL Project Cost: INR 290.67 Cr. Project Status: Completed

Development of parking of Ro-Ro cargos and cars at NMPA Project Cost: INR 22 Cr. Project Status: Completed

Construction of NCB3 at VOCPA Project Cost: INR 37 Cr. Project Status: Completed



Construction of North Cargo berth at VOCPA Project Cost: INR 335 Cr. Project Status: Completed



Upgradation of OB 1 & 2 for Iron Ore Handling at Visakhapatnam Port Project Cost: INR 395 Cr. Project Status: Completed



Development of WQ N, WQ-7 & WQ-8 at Visakhapatnam Port Project Cost: INR 243 Cr. Project Status: Completed



Development of paved storage yard at Chennai Port for handling export cargo Project Cost: INR 54 Cr. Project Status: Completed



Restructuring of JNPA Yard for Optimal Yard Utilisation Project Cost: INR 115 Cr. Project Status: Completed



Construction of Central Truck Parking Terminal at JNPA Project Cost: INR 149 Cr. Project Status: Completed



Container Scanner at KoPA and HDC Project Cost: INR 40 Cr. Project Status: Completed



Reconstruction of Bay Number 4 & 5 at KoPA Project Cost: INR 12.44 Cr. Project Status: Completed



Mechanisation of Berth 18 now 16 for handling bulk cargo at NMPA Project Cost: INR 469 Cr. Project Status: Completed



Multi Purpose Berth to handle clean cargo at Paradip port Project Cost: INR 431 Cr. Project Status: Completed



Deep Draft Iron Ore Export Berth at Paradip Port Project Cost: INR 740 Cr. Project Status: Completed



Upgradation of Existing Coal Jetty at VOCPA Project Cost: INR 98 Cr. Project Status: Completed

Container scanners-Visakhapatnam Port Project Cost: INR 30 Cr. Project Status: Completed

Mobile X-ray Container Scanner at KPL Project Cost: INR 35 Cr. Project Status: Completed

Implementation of Mobile X-Ray Container Scanner at NMPA Project Cost: INR 40 Cr. Project Status: Completed

Conversion of existing berths EQ-2, EQ-3, EQ-4, EQ-5 into 2 numbers of berths at Visakhapatnam Port Project Cost: INR 182 Cr. Project Status: Completed



Offshore Container Terminal at Mumbai Port Project Cost: INR 1286 Cr. Project Status: Completed



Liquid Jetty in Andhra Pradesh Project Cost: INR 200 Cr. Project Status: Completed



Floating Jetty at River Mandovi & Chapora River, Goa Project Cost: INR 9.6 Cr. Project Status: Completed



Capital Dredging Phase 4 at KPL Project Cost: INR 153.5 Cr. Project Status: Under Implementation



Construction of Container Terminal Phase-1, Stage 1 and 2 at KPL Project Cost: INR 1270 Cr. Project Status: Under Implementation



Setting up of a Floating Storage and Regasification Unit at Mumbai Project Cost: INR 2600 Cr. Project Status: Under Implementation



Development of New Berth EQ 1A at Visakhapatnam Port Project Cost: INR 313 Cr. Project Status: Under Implementation

New Deep Draft Coal Import Berth at Paradip Port Project Cost: INR 656 Cr. Project Status: Under Implementation



Construction of Bunker berth at Chennai Port Project Cost: INR 44 Cr. Project Status: Under Implementation



Capital Dredging of BOT basin at Paradip Port Project Cost: INR 86 Cr. Project Status: Under Implementation



Drive through Container Scanner-1 at VOCPA Project Cost: INR 50 Cr. Project Status: Under Implementation



Development of Additional Liquid Cargo Jetty-JNPT Project Cost: INR 199.64 Cr. Project Status: Under Implementation

Setting up of Outer Terminal-2 for handling of liquid bulk cargo at Haldia Dock Complex Project Cost: INR 81.24 Cr. Project Status: Completed

Modification of existing Iron Ore Terminal to handle coal at KPL Project Cost: INR 228 Cr. Project Status: Under Implementation

LPG Terminal at South oil jetty at Paradip Port Project Cost: INR 690 Cr. Project Status: Under Implementation

Development of Container Terminal 4 (Phase 2) at JNPA Project Cost: INR 3196 Cr. Project Status: Under Implementation

Section 2



Development of Oil Jetty 7 at Old Kandla Project Cost: INR 42.38 Cr. Project Status: Under Implementation



Development of Liquid Terminal facilities at Vadinar Project Cost: INR 448 Cr. Project Status: Under Implementation



Development of Oil Jetty 8 at Old Kandla Project Cost: INR 99 Cr. Project Status: Under Implementation



Construction of dry dock at Cochin Shipyard Project Cost: INR 1799 Cr. Project Status: Under Implementation



Capital Dredging for Puducherry Port Project Cost: INR 45 Cr. Project Status: Under Implementation



New Port-Kakinada SEZ Project Cost: INR 2123 Cr. Project Status: Under Implementation

Connectivity of IOHP and MCHP at Paradip Port Project Cost: INR 66.47 Cr. Project Status: Under Implementation



Procurement of Rail Mounted Quay Crane at HDC Project Cost: INR 61.31 Cr. Project Status: Under Implementation



Tank Farm at MbPA Project Cost: INR 700 Cr. Project Status: Under Implementation



Setting up of Liquid Cargo Handling facilities at Shalukkhali, Haldia Dock Project Cost: INR 172.52 Cr. Project Status: Under Implementation



International Ship Repair Facility Project Cost: INR 970 Cr. Project Status: Under Implementation



Mechanized fertilizer handling facility at Berth No. 14, Deendayal Port Project Cost: INR 300.28 Cr. Project Status: Under Implementation



Ship Repair Operations & Management at Indira dock, MbPA Project Cost: INR 80 Cr. Project Status: Under Implementation

Construction of Breakwater Berth-1, Berth-2 and Capital Dredging at Cuddalore Port Project Cost: INR 135 Cr. Project Status: Under Implementation

Development of Ro-Ro Terminal cum GCB-2 at KPL Project Cost: INR 188.13 Cr. Project Status: Under Implementation

Reconstruction of South Coal Berth at Cochin Port Project Cost: INR 19.19 Cr. Project Status: Under Implementation

Extension of Southern and Northern break-water at Karwar Port Project Cost: INR 215 Cr. Project Status: Under Implementation



Construction of 1258m Wharf at Karwar Port Project Cost: INR 250 Cr. Project Status: Under Implementation



Development of a PPP berth for construction material at VOCPA Project Cost: INR 65 Cr. Project Status: Under Implementation



Development of Oil Jetty & Ship Bunkering Terminal at Old Kandla Project Cost: INR 233.5 Cr. Project Status: Under Implementation



Construction of Berth 17 at NMPA Project Cost: INR 225 Cr. Project Status: Under Implementation



Bulk terminal / Greenfield Port at Chhara Project Cost: INR 3322 Cr. Project Status: Under Implementation



Development of LNG terminal at Jafrabad Project Cost: INR 3976 Cr. Project Status: Under Implementation



Development of Private Jetty Project Cost: INR 166 Cr. Project Status: Under Implementation



Extension of Marine Dry dock Project Cost: INR 124 Cr. Project Status: Under Implementation



LNG regassification terminal at Chhara Project Cost: INR 5411 Cr. Project Status: Under Implementation



Modernisation of Marine Dockyard at Andaman & Nicobar Islands Project Cost: INR 100 Cr. Project Status: Under Implementation



Replacement and revamping of pipeline projects in oil jetty area at Kandla Project Cost: INR 170 Cr. Project Status: Under Implementation

Building barge jetty for Coal in KPD II at KoPA Project Cost: INR 25 Cr. Project Status: Under Implementation

Development of Captive Jetty at Kori Creek Project Cost: INR 845 Cr. Project Status: Under Implementation

Improving the capacity utilisation of OR-I & OR-II berths at Visakhapatnam Port Project Cost: INR 168 Cr. Project Status: Under Implementation

Development of LNG Terminal, Maharashtra Project Cost: INR 2200 Cr. Project Status: Under Implementation



Completion of balance work of breakwater at Maharashtra Project Cost: INR 610 Cr. Project Status: Under Implementation



Development of Honavar Port Project Cost: INR 525 Cr. Project Status: Under Implementation



Construction of additional berths at Maharashtra Project Cost: INR 400 Cr. Project Status: Under Implementation



Mechanization of Berth 5 & 6 Project Cost: INR 100 Cr. Project Status: Under Implementation



Private Jetty at Magdalla Project Cost: INR 166 Cr. Project Status: Under Implementation



Malabar Cement Terminal at Cochin Port Project Cost: INR 160 Cr. Project Status: Under Implementation



Stacking platforms at Okha Port Project Cost: INR 15 Cr. Project Status: Under Implementation



Upgrading of existing ship recycling yard at Alang Project Cost: INR 715 Cr. Project Status: Under Development



Re-development of Ore & multipurpose and barge berths at Mormugao Project Cost: INR 1145 Cr. Project Status: Under Development



Development of drainage network at Dock Zone HDC Project Cost: INR 31 Cr. Project Status: Under Development



Development of paver block inside dock zone HDC Project Cost: INR 25 Cr. Project Status: Under Development



Multi-User Liquid Terminal-II at Ennore Project Cost: INR 393 Cr. Project Status: Under Development

Development of LPG Terminal at Maharashtra Project Cost: INR 400 Cr. Project Status: Under Implementation

Construction of Jetty and allied facilities for Indian Coast Guard at Cochin Port Project Cost: INR 120 Cr. Project Status: Under Implementation

Construction of IOCL Oil jetty at KPL Project Cost: INR 921 Cr. Project Status: Under Development

Capital Dredging Phase-V for providing water depth at KPL Project Cost: INR 250 Cr. Project Status: Under Development

Construction of Container Terminal Phase 2 at KPL Project Cost: INR 2000 Cr. Project Status: Under Development



Redevelopment of Berth & barge jetties at Mormugao Port Project Cost: INR 842 Cr. Project Status: Under Development

Dredging at Diu port Project Cost: INR 45.9 Cr. Project Status: Under Development

Capital Dredging at Old Mangaluru Port Project Cost: INR 29 Cr. Project Status: Under Development



Ro-Ro and General Cargo Berth-3 at KPL Project Cost: INR 350 Cr. Project Status: Under Development



Operation and maintenance of Berth nos. 10 & 11 at Mormugao Port Project Cost: INR 200 Cr. Project Status: Under Development

Mechanisation of Berth 3 at HDC Project Cost: INR 298.26 Cr. Project Status: Under Development

Balagarh Project Cost: INR 320 Cr. Project Status: Under Development

Extended port gate at



Development of Dry Dock at Timber Pond-Boat basin at Chennai port Project Cost: INR 315 Cr. Project Status: Under Development



Development of Western Dock Basin-2 at Paradip Port Project Cost: INR 3004.63 Cr. Project Status: Under Development

New Port at Vadhavan Project Cost: INR 65544.55 Cr. Project Status: Under Development

Setting up of LNG facilities at HDC Project Cost: INR 700 Cr. Project Status: Under Development Setting up of two covered storage sheds inside dock zone Project Cost: INR 35 Cr. Project Status: Under Development

Dredging at Vanakbara Port of Daman & Diu Project Cost: INR 46.44 Cr. Project Status: Under Development

Improvement of Kakinada Anchorage Ports infrastructure in Andhra Pradesh Project Cost: INR 100 Cr. Project Status: Under Development

Construction of captive jetty in Gujarat Project Cost: INR 249 Cr. Project Status: Under Development



Construction of Third Chemical Berth at Pirpau, MbPA Project Cost: INR 116 Cr. Project Status: Under Development



Development of greenfield ports at Bhavanapadu, Andhra Pradesh, Project Cost: INR 5390 Cr. Project Status: Under Development



Development of Ramayapatnam Ports, Prakasam at Andhra Pradesh Project Cost: INR 5000 Cr. Project Status: Under Development



Development of deep water ports at Machilipatnam, Andhra Pradesh, Project Cost: INR 4500 Cr. Project Status: Under Development



Development of third jetty in Gujrat Project Cost: INR 2100 Cr. Project Status: Under Development



Development, Operation & Maintenance of container terminal at Deendayal Port Project Cost: INR 2000 Cr. Project Status: Under Development



LPG terminal in Gujrat Project Cost: INR 1400 Cr. Project Status: Under Development



Major Harbour at Diglipur Project Cost: INR 800 Cr. Project Status: Under Development



Mechanisation of EQ-7 Berth / Multiple Cargos at Visakhapatnam Port Project Cost: INR 200 Cr. Project Status: Under Development



Oil Jetty No.11 at Deendayal Port Project Cost: INR 361.7 Cr. Project Status: Under Development



Construction of Oil Jetty 9 at Kandla, Project Cost: INR 123.4 Cr. Project Status: Under Development



Port-based gas/LNG terminals Project Cost: INR 2000 Cr. Project Status: Under Development

Development of captive SPM terminal near old Mundra Ports, Kutch, Project Cost: INR 2781 Cr. Project Status: Under Development

Floating dry dock at Port Blair harbour Project Cost: INR 60 Cr. Project Status: Under Development

Oil Jetty No.10 at Deendayal Port Project Cost: INR 123.12 Cr. Project Status: Under Development

Rejuvenation of Khidderpore Docks (KPD-I WEST) Project Cost: INR 181.81 Cr. Project Status: Under Development

Transshipment Port at South Bay-Phase-I Project Cost: INR 5000 Cr. Project Status: Under Development



Construction of covered storage sheds at Visakhapatnam Port Project Cost: INR 160 Cr. Project Status: Under Development



Construction of 2 cargo berths in Maharashtra Project Cost: INR 100 Cr. Project Status: Under Development



Setting up of LNG terminal, Puducherry Project Cost: INR 265 Cr. Project Status: Under Development



West Berth Extension, Andhra Pradesh Project Cost: INR 90 Cr. Project Status: Under Development



West Berth Mechanization, Andhra Pradesh Project Cost: INR 200 Cr. Project Status: Under Development



Development of an All Weather Green Field Port at Pavinakurve, Karnataka Project Cost: INR 1767 Cr. Project Status: Under Development



Expansion of existing jetty, Maharashtra Project Cost: INR 150 Cr. Project Status: Under Development



Development of 9th berth at VOCPA Project Cost: INR 435 Cr. Project Status: Under Development

Mechanisation of SQB berth at Paradip Port Project Cost: INR 75 Cr. Project Status: Under Development



Development of Container Terminal at JNPA Project Cost: INR 661 Cr. Project Status: Under Development



Berth at Beypore Project Cost: INR 52 Cr. Project Status: Under Development

New Captive Port (Trestle Jetty) to handle Coal in Tamil Nadu Project Cost: INR 1902 Cr. Project Status: Under Development



Phase-II of Wagon Loading Station, Andhra Pradesh Project Cost: INR 20 Cr. Project Status: Under Development



Mechanization of NCB III for dry bulk cargos at VOCPA Project Cost: INR 420 Cr. Project Status: Under Development

Berth for 10000 DWT vessels, Kerala Project Cost: INR 46 Cr. Project Status: Under Development

Captive jetty at Korlai in Revdanda Creek Project Cost: INR 437 Cr. Project Status: Under Development



Captive jetty at Nandgaon, Maharashtar Project Cost: INR 672 Cr. Project Status: Under Development



Captive jetty at Nate near Ambolgad Bay, Maharashtra Project Cost: INR 279 Cr. Project Status: Under Development

Floating crane facility at Diamond Harbor, KoPA Project Cost: INR 66 Cr. Project Status: Under Development



FSRU for LNG handling at NMPA Project Cost: INR 710 Cr. Project Status: Under Development



Gopalpur LNG Terminal Project Cost: INR 700 Cr. Project Status: Under Development



KPCL Phase-III development, Andhra Pradesh Project Cost: INR 12256 Cr. Project Status: Under Development



LNG terminal at VOCPA Project Cost: INR 1000 Cr. Project Status: Under Development



Port at Redi, Maharashtra Project Cost: INR 700 Cr. Project Status: Under Development



Ship building/repair/ recycling facilities at Karaikalport Project Cost: INR 200 Cr. Project Status: Under Development



LPG import & storage terminal, Tamil Nadu Project Cost: INR 204.5 Cr. Project Status: Under Development



Development of a container terminal at Tuna-Tekra, Kandla Project Cost: INR 4243.64 Cr. Project Status: Under Development

Container Yard at Mayabunder Project Cost: INR 5 Cr. Project Status: Under Development

Hooghly Ship Building, KoPA Project Cost: INR 150 Cr. Project Status: Under Development

Manki Captive Jetty, Karnataka Project Cost: INR 300 Cr. Project Status: Under Development

CNG Terminal at Bhavnagar Port Project Cost: INR 1900 Cr. Project Status: Under Development

Development of berthing facilities at Kandla Project Cost: INR 1100 Cr. Project Status: Under Development



Development of multipurpose cargo at Kandla Project Cost: INR 1552.57 Cr. Project Status: Under Development



Upgradation of the facilities at Berth No.9 at New Mangalore Port Project Cost: INR 100 Cr. Project Status: Under Development



Refurbishing of Berth NO.11 for dedicated usage of MRPL at New Mangalore Port Project Cost: INR 50 Cr. Project Status: Under Development



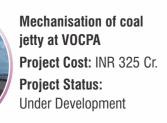
Strengthening and Mechanization of Berth 7, 8 NSD at Kolkata Port Project Cost: INR 340 Cr. Project Status: Under Development



Mechanization of Berths 4 & 5 NSD at Kolkata Port Project Cost: INR 270 Cr. Project Status: Under Development

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Mechanization of Berth No. 10 at HDC Project Cost: INR 350 Cr. Project Status: Under Development





Mechanization of Berth No. 5 at HDC Project Cost: INR 325 Cr. Project Status: Under Development



Mechanization of CQ-1 & 2 at Paradip Port Project Cost: INR 1103 Cr. Project Status: Under Development



Operation and Maintenance of International Cruise Terminal, Mumbai Port Project Cost: INR 192 Cr. Project Status: Under Development



Mahanadi Riverine Port (Phase-I), Paradip Port Project Cost: INR 2562 Cr. Project Status: Under Development

Refurbishing of Berth No.10 for dedicated usage of MRPL at New Mangalore Port Project Cost: INR 50 Cr. Project Status: Under Development

Construction & Mechanization of Container berths at KDS Outer Terminal Project Cost: INR 182 Cr. Project Status: Under Development

Conversion of 1, 2, 3, & 4 berths at VOCPA Project Cost: INR 2144 Cr. Project Status: Under Development

NCB Berth at Cochin Port Project Cost: INR 100 Cr. Project Status: Under Development



Mechanisation of WQ-7 & WQ-8 berths at Visakhapatnam Port Project Cost: INR 288.47 Cr. Project Status: Under Development



Development of Cruise Terminal at Visakhapatnam Port Project Cost: INR 103 Cr. Project Status: Under Development



Award of WQ6 at Visakhapatnam Port Project Cost: INR 250 Cr. Project Status: Under Development



Upgrading Berth WQ 2,5 to handle Panamax ships at Visakhapatnam Port Project Cost: INR 600 Cr. Project Status: Under Development



Deepening of NCB III and IV at VOCPA Project Cost: INR 900 Cr. Project Status: Under Development



Upgradation of Inner Harbour and Deep Draft Bulk Berth at VOCPA Project Cost: INR 330 Cr. Project Status: Under Development



Container Transshipment hub at Vizhinjam Project Cost: INR 1635 Cr. Project Status: Under Development



Installation of Fire Fighting Equipment at Karwar Port in Karnataka Project Cost: INR 19 Cr. Project Status: Under Development



Upgradation of berth no 7 at NSD, KoPA Project Cost: INR 80.74 Cr. Project Status: Under Development



Development of Outer Container Terminal at HDC Project Cost: INR 980 Cr. Project Status: Under Development



Modification for handling Iron Ore fines & Iron Pellets Project Cost: INR 50 Cr. Project Status: Under Development



Development and mechanisation of EQ6 berth at Visakhapatnam Port Project Cost: INR 250 Cr. Project Status: Under Development

Port at Kanyakumari Project Cost: INR 27570 Cr. Project Status: Under Development

Reconstruction of Berth No 6 at NSD, KoPA Project Cost: INR 17.94 Cr. Project Status: Under Development

## Port connectivity ENHANCEMENT

Boosting of the country's total freight efficiency necessitates the implementation of road and rail connectivity projects. The Sagarmala Programme has identified connectivity between ports and domestic production and consumption centers, through Rail, Road, Pipeline, Multi Modal Logistics Parks (MMLP) under the pillar of port connectivity. Enhanced port connectivity has led to faster evacualtion of goods ensuring end to end connectivity with reduced logistics cost.

The pillar comprises of 213 projects in total worth Rs. 1.38 lakh Cr.. Out of these 213 projects, 57 projects worth Rs. 20,958 Cr. have been completed and 71 projects worth Rs. 84,140 Cr. have been awarded and currently under implementation.

Further, it is very much necessary to create capacity in hinterland which provides efficient transportation channel with sea ports for movement of cargoes and containers. There are 13 MMLP worth Rs. 2624 Cr. being implemented across India. Out of which, MMLP at Pantnagar in Uttrakhand, Naya Raipur in Chhattisgarh, Jharsuguda in Odisha and Phase II of Multi Model Logistics Hub at Visakhapatnam Port have been completed.

Large number of direct and indirect jobs have been created through implementation of connectivity projects under Sagarmala Programme. For instance, for construction of one kilometre (km) of port connectivity project of railway line creates approximately 24000 mandays job and so far more than 1000 kms of rail port connectivity projects have been completed by Indian Railways.

#### **DEVELOPMENT OF ROB CUM FLYOVER OVER** THE EXISTING LEVEL CROSSING AT **RANICHAK, HALDIA**

- ☑ 4 lanes elevated RoB cum Flyover of 1.392 Km.
- ☑ Resulting in faster movement of container trucks.
- Improving the Traffic circulation from all directions towards HDC Port area as well as to the Industrial area.



#### **CONSTRUCTION OF FLYOVER NEAR NORTH GATE COMPLEX**

- ☑ Dedicated in and out road for movement of traffic.
- ☑ Reduction in traffic congestion.
- ☑ Faster evacuation of containerized cargo from North gate.
- $\square$  Saving in fuel.



#### **DEVELOPMENT OF 2ND RAILWAY LINE FROM EXISTING TAKE-OFF POINT WITHIN** HALDIA DOCK COMPLEX

- ☑ Faster evacuation of cargo resulting in overall capacity enhancement of Haldia port.
- ☑ The double line provides smooth train operation and avoids extra detention of trains.
- ☑ Resulting in reduction in Congestion on the existing route.



### **DEVELOPMENT OF FLYOVER AT JAWAHARLAL NEHRU PORT Y JUNCTION**

- $\square$  The congestion at Y junction is eliminated and there is smooth flow of traffic now.
- ☑ Reduced travel time for the outbound traffic flow from Central/South gate.
- ☑ Saving in fuel.



#### **RAIL CONNECTIVITY TO 4TH TERMINAL**

- ☑ Faster movement of cargo.
- 🗹 Saving in fuel.
- ☑ Extensive ground improvement using geocells & geo-textiles.



Project Cost Rs. 50 Cr.

#### WIDENING OF KORAMPALLAM SURPLUS **COURSE BRIDGE & ROB AND WIDENING OF ROAD FROM WESTERN BOUNDARY TO TTPS**

- ☑ Existing Korampallam Bridge and RoB have been widened on either side to 8.5 meters for a length of 277 meters.
- ☑ Widening of existing road leading to the bridge to 10.30 meters for a length of 1.577 Km.
- Quick movement of containers into the port leading to faster delivery of imports.





#### **ROAD CIRCULATION PLAN FOR EASE OF MOVEMENT OF BREAK BULK CARGO**

- ☑ Ease of movement of breakbulk cargo.
- $\square$  Reduction in Dust pollution.
- ☑ Improvement in port's efficiency.

#### **DEVELOPMENT OF FULL RAKE WAGON HANDLING LINE**

- ☑ 30 m wide paving is also provided alongside.
- ☑ Reduction in detention time.
- ☑ Improvement in rake handling capacity.
- ☑ Increased train movement from Vasco to Hubli.





#### **CONSTRUCTION OF APPROACH ROAD TO KHARWADESHWARI JETTY**

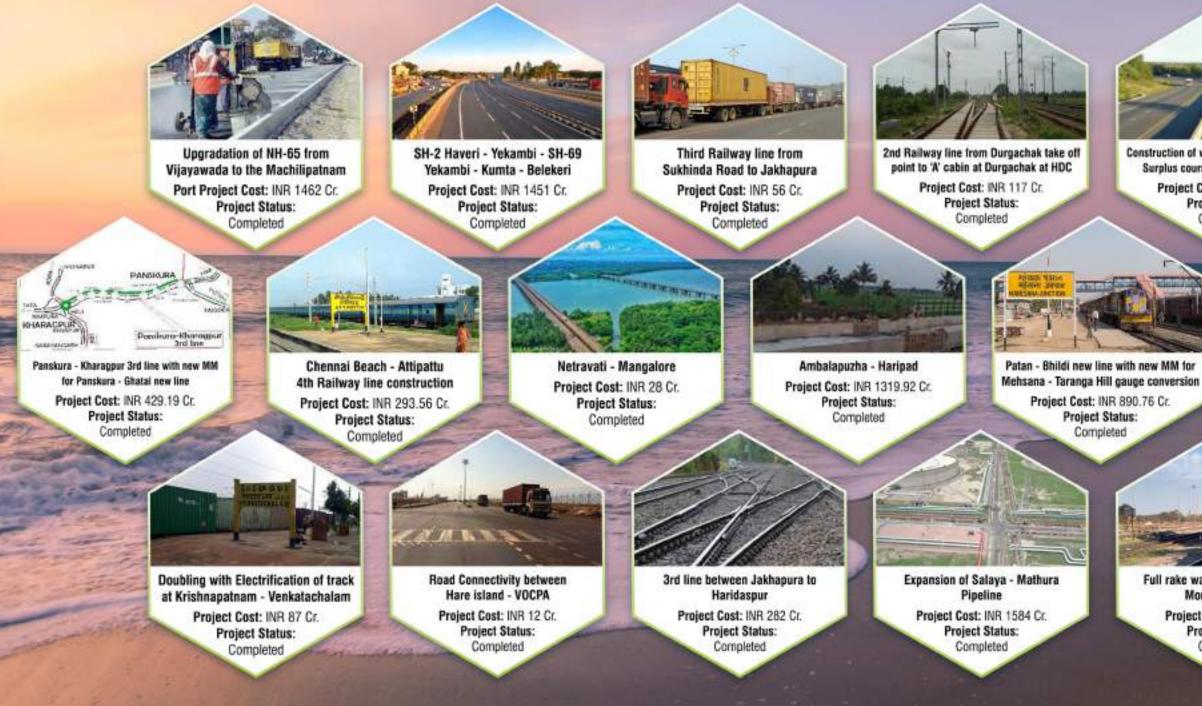
- ☑ 1.7Km concrete road to connect the Ro-Ro Jetty to existing road.
- ☑ Travel time between Palghar from Virar and Vasai reduced to 60 minutes.
- Reduced Distance to Palghar from Virar and Vasai by 43Kms.



### **CONSTRUCTION OF APPROACH ROAD, SLOPING BERTH UPTO JETTY AT BHAYANDER**

- ☑ Construction of Pile Jetty 95m X 10m, sloping berth and approach road at Bhayander.
- ☑ Reduction in travel time between Vasai & Bhayander by 50 minutes.
- ☑ Travel distance reduced by 30km.
- ☑ Ro-Ro ferry service started between Vasai & Bhayander.

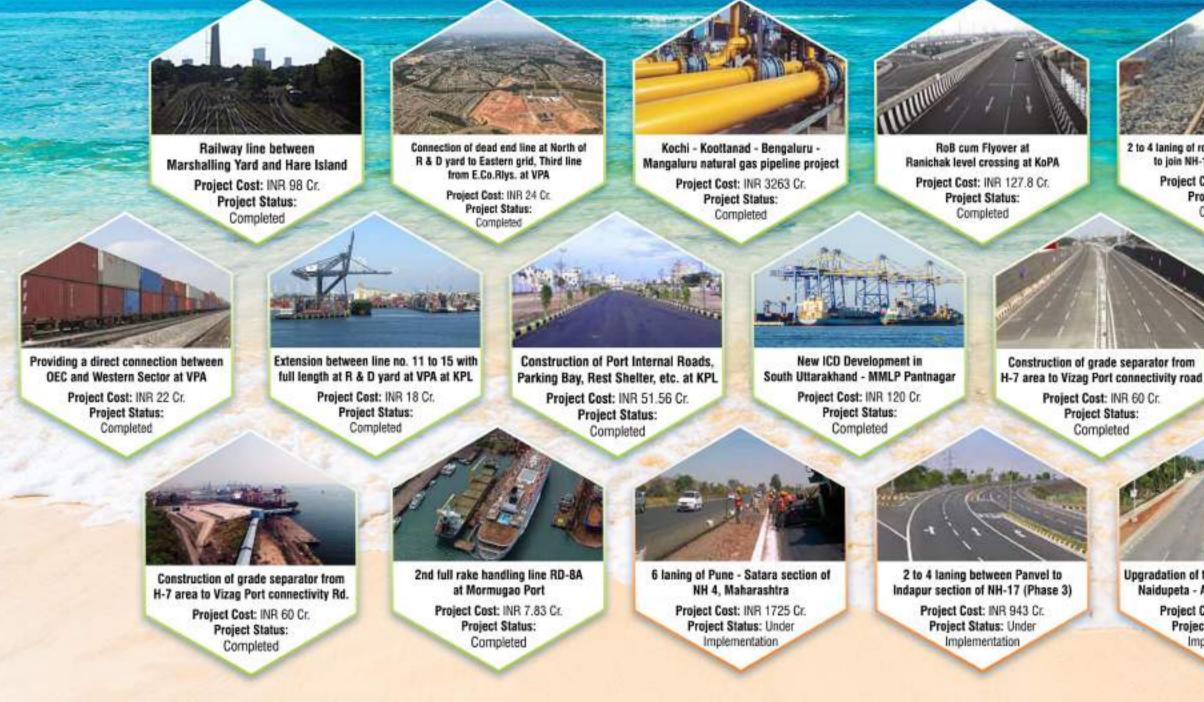




Construction of widening the Korampallam Surplus course - RoB in Tamil Nadu Project Cost: INR 41.55 Cr. **Project Status:** Completed Providing Signal & Tele Comm. System for Railway Network at Mormugao Port Project Cost: INR 14 Cr. Project Status: Completed Full rake wagon handling line at Mormugao Port Project Cost: INR 18 Cr. Project Status: Completed







2 to 4 laning of road connecting Achampeta to join NH-16 at Kathipudi in AP Project Cost: INR 1845 Cr.

Project Status: Completed

**Development of Rail Connectivity** at Paradip Port Project Cost: INR 79.7 Cr. Project Status: Completed

Upgradation of the Hinterland road from Naidupeta - AP to Krishnagiri - TN

> Project Cost: INR 3000 Cr. Project Status: Under Implementation







from Bellary to Krishnapatnam Project Cost: INR 2440 Cr. Project Status: Under Implementation

6 to 8 laning of NH-4B - SH-54 and Amra Marg, JNPA Project Cost: INR 2052 Cr. Project Status: Under Implementation



4 Laning and Concretizing of Shiradi Ghat Road, Karnataka Project Cost: INR 1200 Cr. Project Status: Under Implementation



6 laning between Pune - Satara section of NH-4, Maharashtra Project Cost: INR 1725 Cr. Project Status: Under Implementation

Upgradation of the hinterland road between Naidupeta - AP to Krishnagiri - TN Project Cost: INR 3000 Cr. Project Status: Under Implementation

6 to 8 laning of NH-4B - SH-54 and

Amra Marg at JNPA Project Cost: INR 2025 Cr. Project Status: Under Implementation

Doubling of southern rail connectivity to KPL

Project Cost: INR 75 Cr. Project Status: Under Implementation



Doubling of line Vijaywada - Gudivada -Bhimavaram - Narasapur - Gudivada -Machlipatnam & Bhimavaram - Nidadavolu

Project Cost: INR 3458 Cr. Project Status: Under mplementation



Dedicated line between Wadala and Kurla for freight movement from MbPA

> Project Cost: INR 176.81 Cr. Project Status: Under Implementation

Road cum Flyover serving as 2nd exit to the Paradip port Project Cost: INR 93 Cr. Project Status: Under Implementation

Improvement of road connectivity to facilitate trade at KoPA (Phase 2) Project Cost: INR 88 Cr. Project Status: Under Implementation

Banspani - Daitari - Tomka -Jakhapura Project Cost: INR 1552 Cr. Project Status: Under Implementation



Kirandul - Jagdalpur Project Cost: INR 1289.34 Cr. Project Status: Under Implementation



**Doubling of Railway line between** Jagdalpur and Koraput Project Cost: INR 1192.25 Cr. Project Status: Under Implementation



Vizianagram - Titlagarh - Sambalpur **Railway line** Project Cost: INR 2575 Cr. Project Status: Under Implementation



3rd & 4th line between Jarapaada -Budhapank with flyover at Talcher Project Cost: INR 810 Cr. Project Status: Under Implementation



Kottavalasa - Jagdalpur - Koraput **Railway line** Project Cost: INR 2500 Cr. Project Status: Under Implementation

Koraput - Singapur Road Project Cost: INR 2362 Cr. Project Status: Under Implementation



Kharagpur - Narayangarh 3rd line Project Cost: INR 270 Cr. Project Status: Under Implementation

Doubling of Railway line between Madurai - Maniyachi - VOCPA Project Cost: INR 1536 Cr. Project Status: Under

Implementation



Doubling of Railway line between Kankanadi and Panambur Patch Project Cost: INR 350.2 Cr. Project Status: Under Implementation

Doubling of Railway line between

Ernakulam and Kumbalam Patch Project Cost: INR 275.21 Cr. Project Status: Under Implementation

**Doubling of Railway line between** Kumbalam and Thuravur Patch Project Cost: INR 369 Cr.

Project Status: Under

Implementation

Viramgam - Samakhiali epc between Sukhpur - Samakhali in year 2011-12 Project Cost: INR 1383.68 Cr. Project Status: Under Implementation

Palanpur - Samakhayali n - KRCL Project Cost: INR 2538 Cr. Project Status: Under Implementation

3rd line in balance section between Bhadra - Vizanagagram

> Project Cost: INR 5260 Cr. Project Status: Under Implementation

4 to 6 laning of road connecting VPA East breakwater to Sheela Nagar

> Project Cost: INR 2907.7 Cr. Project Status: Under Implementation

> > and the second second

Doubling of broad gauge single line section at Surendranagar - Rajkot

Project Cost: INR 1002.39 Cr. Project Status: Under Implementation



Talcher - Bimlagarh Project Cost: INR 1928.07 Cr. Project Status: Under Implementation



Kakinada - Pithapuram Project Cost: INR 220 Cr. Project Status: Under Implementation



Gudur - Durgarajapatnam Project Cost: INR 761.37 Cr. Project Status: Under Implementation



Chennai - Cuddalore via Mahabalipuram Project Cost: INR 1205 Cr. Project Status: Under Implementation



Restoration of Needamangalam -Mannargudi line & Mannargudi - Pattukkottai with Thanjavur - Pattukottai

> Project Cost: INR 2950 Cr. Project Status: Under Implementation



Tiruchchirapalli - Nagore - Karaikal -Nagapattinam - Velankani - Tiruturaipundi -MM Karaikudi - Paralam

> Project Cost: INR 1720 Cr. Project Status: Under



Rajkot - Veraval, Wansjaliato Jetalsar with new MM for Shapur - Saradiya & Somnath - Kodinar

> Project Cost: INR 1329 Ct. Project Status: Under Implementation

Bhuj - Naliya with extension from Naliya to Vayor Project Cost: INR 484 Cr.

Project Status: Under

Implementation

Construction of approach road to Ro-RO jetty at Karanja Project Cost: INR 9.68 Cr. Project Status: Under Implementation

New ICD Development in North Bengal, Darjeeling Project Cost: INR 85 Cr. Project Status: Under Implementation 2nd full rake handling line RD-8A at Mormugao Port Project Cost: INR 7.83 Cr. Project Status: Under Implementation Pipeline from Paradip to Hyderabad Project Cost: INR 2321 Cr. Project Status: Under Implementation Multi Modal Logistics Park at Paradip Port Project Cost: INR 200 Cr. Project Status: Under Implementation





Milavittan railway station to Marshalling to **Tuticorin station** 

> Project Cost: INR 150 Cr. Project Status: Under Implementation

Upgradation of rail network inside Cargo jetty Project Cost: INR 45.51 Cr. Project Status: Under Implementation



Upgradation and modification of track in KPL Project Cost: INR 18.92 Cr. Project Status: Under Implementation



**ONGC Bridge Extension work inside** JNPA holding yard Project Cost: INR 12.5 Cr. Project Status: Under Implementation



S & T Maintenance work in KPL for three years Project Cost: INR 7.96 Cr. Project Status: Under Implementation

Construction of balance portion of 4 lane ports connectivity at Mormugao Port

1400

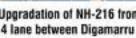
Project Cost: INR 546 Cr. Project Status: Under Implementation



Inspection, Measurement, Correction and Recouping deficient components of rail tracks at KDS

> Project Cost: INR 14.04 Cr. Project Status: Under neismentation

2 to 4 laning of road connecting Kakinada port to NH-16 at Rajanagaram Project Cost: INR 1074 Cr. Project Status: Under Implementation



Road circulation plan (ease of movement) of break bulk cargo at Mormugao Port Project Cost: INR 31 Cr. Project Status: Under Implementation Upgradation of NH-216 from 2 lane to Upgradation of the proposed NH-67 from Bellary to Krishnapatnam 4 lane between Digamarru to Ongole Project Cost: INR 2440 Cr. Project Cost: INR 3731 Cr. Project Status: Under Project Status: Under Implementation Implementation Alternative road between Bhavnagar to Sosiya to Alang Ship Recycling Yard Project Cost: INR 71 Cr. Project Status: Under Development



4 laning of Shiradi Ghat Road (Concretizing) Project Cost: INR 1200 Cr. Project Status: Under Implementation

and a series

2 to 4 laning of NH-169 between Mangalore to Mudabidri to Karkala Project Cost: INR 1067 Cr.

Project Status: Under Development

Linking of NH-4 and NH-8 Project Cost: INR 72 Cr. Project Status: Under Development

4 to 6 laning of road from Northern gate of Ennore port to Thachur - outer ring corridor Project Cost: INR 2673 Cr. Project Status: Under **Development** 

- C.



Widening of road connecting between Kollam port and NH Project Cost: INR 50 Cr. Project Status: Under Development



Southern port access road connectivity to Ennore port Project Cost: INR 195 Cr. Project Status: Under Development



Connectivity to Katupalli through Ponnani Project Cost: INR 200 Cr. Project Status: Under Development



Connectivity to Enayam through Nagarcoll Project Cost: INR 86 Cr. Project Status: Under Development



Upgrading of existing R&B road between Chilakaru cross (NH-16) & Power Plants

> Project Cost: INR 300 Cr. Project Status: Under Development

Upgradation of SH-164 between Jaigad Port and NH-17 at Nivali Project Cost: INR 235 Cr.

Project Status: Under Development



Gangavaram port in Vizag Project Cost: INR 80 Cr. Project Status: Under Development

4 lane Beach Rd. connecting Gangavaram Port to the SEZ proposed at Achuthapuram

Project Cost: INR 138 Cr. Project Status: Under Development

4 to 6 laning of road between NH-16 at Gajuwaka to Gangavaram Port Project Cost: INR 50 Cr. Project Status: Under Development



road to Beypore port Project Cost: INR 50 Cr. Project Status: Under Development

6 laning for NH-4 from Kalamvoli to Mumbra Project Cost: INR 45 Cr. Project Status: Under Development

Road Puducherry - Marakkanam - Sadaras - Kovalam - Coromandel - Chennai - NH-32 Project Cost: INR 1440 Cr. Project Status: Under Development

**Connectivity of Vadhavan to NH-8** Project Cost: INR 200 Cr. Project Status: Under

Development





Flyover bridge betweeen Sea - horses Jn. area and dock area at Vizag Port

Project Cost: INR 277 Cr. Project Status: Under Development



Last mile rail connectivity to Enayam Port in Kanyakumari district Project Cost: INR 300 Cr. Project Status: Under Development



Northern Rail Link connecting North of Minjur to KPL Project Cost: INR 300 Cr. Project Status: Under Development



**Rail Connectivity to Belekeri Port** Project Cost: INR 400 Cr. Project Status: Under Development



**Development of Dry port cum** Multi - Modal terminal at Jolarpet

> Project Cost: INR 200 Cr. Project Status: Under Development



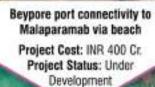
By Pass Rd. from NH to Belekeri Port & Rail connectivity (Harwada to Belekeri) Project Cost: INR 75 Cr. Project Status: Under Development



Road connectivity from Kasarkad side of Honnavar Port to NH Project Cost: INR 50 Cr. Project Status: Under Development



Azhikkal Port (Proposed NH) Bypass and widening Project Cost: INR 61 Cr. Project Status: Under Development





**Dry Port at Wardha** Project Cost: INR 469.92 Cr. Project Status: Under Development





Nathayyapalem - Mindi on NH-16 Project Cost: INR TBD Cr. Project Status: Under Development



Construction of flyover - underpass at Vizag airport junction at NH-16 Project Cost: INR 100 Cr. Project Status: Under Development

**Development of road connectivity** betweeen Cuddalore and Sirkhazi Port

> Project Cost: INR 100 Cr. Project Status: Under Development

Dry Port at Niphad in Nashik district Project Cost: INR 235 Cr. Project Status: Under Development

Road connectivity to **Old Mangalore Port** Project Cost: INR 98 Cr.

Project Status: Under Development



**Road connectivity from Cuddalore** Port to NH-45A with RC Over bridge Project Cost: INR 400 Cr. Project Status: Under Development



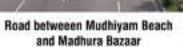
Cross and Chintawaram (Package II) in AP Project Cost: INR 332.87 Cr. Project Status: Under Development



Road betweeen Payikulangara and Alappuzha Byass Project Cost: INR 324.7 Cr. Project Status: Under Development



Road from SH-Alappuzha Bypass Intersection Project Cost: INR 228.11 Cr. Project Status: Under Development



Project Cost: INR 261.42 Cr. Project Status: Under Development



Road betweeen Madhura Bazaar and Chullikad Project Cost: INR 161.49 Cr. Project Status: Under Development

Road betweeen Payyambalam and Azhikkal Project Cost: INR 173.63 Cr. Project Status: Under Development

Road betweeen Azhikkal and Puthuvalappu Project Cost: INR 132.39 Cr. Project Status: Under Development





Various Signalling works at VPA Project Cost: INR 24 Cr. Project Status: Under Development

4 laning of Port connectivity road betweeen East Break Water and Convent Junction Project Cost: INR 70 Cr. Project Status: Under Development

Visakhapatnam Port Road Project Cost: 80 Cr. Project Status: Under Development

Port road to Krishnapatnam Port (Pkg I)

Project Cost: INR TBD Cr. Project Status: Under Development

Road from Fort Vypin to Matysyafed Tourist Office

Project Cost: INR 133.38 Cr. Project Status: Under Development

4 to 6 laning of NH-53 connecting Paradip port Project Cost: INR 600 Cr. Project Status: Under Development

Trapaj - Manar Project Cost: INR 70 Cr. Project Status: Under Development



of the local division in which the

**Electrification of VPA railway lines** Project Cost: INR 20 Cr. Project Status: Under Development

Construction of approach road to facilitate Ro-Ro at Narangi Project Cost: INR 29.9 Cr. Project Status: Under Development

4 Janing of Kakinada Anchorage Port Uppada beach road connecting NH-16 Project Cost: INR 980 Cr. Project Status: Under Development

4 laning of road betweeen Nellore city and Krishnapatnam port to NH-5

> Project Cost: INR 300 Cr. Project Status: Under Development



**Road Connectivity betweeen Gopalpur** Port and NH-5 from Chhatrapur Project Cost: INR 49 Cr. Project Status: Under

Development

Four laning of Jhamujhadi - Dhamra road at Dhamra Port Project Cost: INR 1411 Cr. Project Status: Under Development

**Rail Connectivity to Azhikkal port** Project Cost: INR 600 Cr. Project Status: Under Development

Maduravoyal Elevated Road **Corridor Project** Project Cost: INR 1815 Cr. Project Status: Under Development

Dry Port at Ranjani Village in Sangli district Project Cost: INR 214 Cr. Project Status: Under Development

Paradip Port to Numaligarh Refinery Project Cost: INR 6000 Cr. Project Status: Under Development

New ICD Development in Hyderabad - MMLP Nagulapally

> Project Cost: 102 Cr. Project Status: Under Development

Rail to the plant from nearby Gummidipoondi station on Chennai Central - Gudur line Project Cost: INR 160 Cr. Project Status: Under

**Development** 

Greenfield Rd. connecting north & south industrial cluster of Khandaleru Creek

> Project Cost: INR 580 Cr. Project Status: Under Development

> > Improvement of road connecting KoPA to NH-6 Project Cost: INR 60 Cr.

Project Status: Under Development

A Road cum Flyover crossing the BOT Rail Tracks to have access to MCHP Areas

> Project Cost: INR 38.18 Cr. Project Status: Under Development

LOI



Rail connectivity to Chhara Port, Gujarat Project Cost: INR 326 Cr. Project Status: Under Development



Rail Connectivity to Hazira Port Project Cost: INR 1600 Cr. Project Status: Under Development



Track Renovation including other related Ancillaries Civil work in KoPA Project Cost: INR 15.1 Cr. Project Status: Under Development



Road Connectivity betweeen Outer Harbour and Port Connectivity Junction (B) Project Cost: INR 500 Cr. Project Status: Under Development



Widening of HHE Road into 4 lane configuration Project Cost: INR 30 Cr. Project Status: Under Development



Upgradation to 4 lane of Belagavi - Panjim - NH-4A Project Cost: INR 1332 Cr. Project Status: Under Development

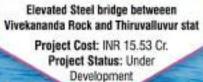


Construction & Upgradation of level crossing at different areas of KDS

> Project Cost: INR 4.47 Cr. Project Status: Under Development

Providing broad Gauge Rail linkages to Old Bedi Port Project Cost: 70.33 Cr.

Project Cost: 70.33 Cr. Project Status: Under Development





New ICD Development in South Uttarakhand - MMLP Pantnagar Project Cost: INR 120 Cr. Project Status: Under Development Road connecting Vizag Port from Sheela Nagar Jn. to NH-16 - Former NH-5 Project Cost: INR 2352 Cr. Project Status: Under Development New Road from L-Arm rd. Jn. to Dummulapeta Beach Rd. & bridge on Dummulapeta Creek at Kakinada Anchorage Port

> Project Cost: INR 50 Cr. Project Status: Under Development

4 to 6 laning of road connecting Krishnapatnam Port to NH-5 in AP

> Project Cost: INR 315 Cr. Project Status: Under Development

New 4 lane road connectivity between Harbour Extention Road & NH-7A Project Cost: INR 36 Cr. Project Status: Under Development **Renovation of Bascule Bridge at** Kolkata Dock System of SMPA Project Cost: INR 40.32 Cr. Project Status: Under Development Setting up of railway line from Basulya Sutahata to Shalukkhali Project Cost: INR 110 Cr. Project Status: Under Development



### Port-led INDUSTRIALISATION

When compared to other modes of transportation, seaborne transportation is the most cost-effective and efficient. Industries need a secure and cost-effective way to export completed goods and import raw materials. As a result, the bulk of industries in the globe are concentrated along coastlines and near large ports. These industries, in turn, have an impact on the lives of employees as well as indirect beneficiaries.

Port-led industrialization focuses on reducing logistics costs by locating industries at the vacinity of ports. It has resulted in making the country's exports competitve. There are overall 33 projects worth Rs. 1.19 lakh Cr. have been identified for implementation under Sagarmala. Out of which, 9 projects worth Rs. 45,865 Cr. have been completed and 21 projects worth Rs. 72,706 Cr. are under implementation.

Special Economic Zone at JNPT in Maharashtra is one-of-a-kind 277 hectares multi-sector SEZ project is located next to Jawaharlal Nehru Port. This industrial hub, inaugurated by Hon'ble PM of India in 2014, is meticulously designed with state-of-the-art infrastructure to boost export-oriented industries and in India. Being close to JNPT, the project promises ready availability of raw material, access to global markets, and strong multi-modal connectivity. The SEZ will generate more than 50,000 direct and indirect employment when fully operational.

#### **DEVELOPMENT OF SEZ**

- ☑ A multi-product Special Economic Zone (SEZ) has been developed on 277 hectare area
- ☑ All activities like manufacturing, logistics, warehousing, trading, IT/ITES services etc are permissible.
- Access to upcoming multi-modal infrastructure projects including New Mumbai airport, DFC rail corridor, Transharbour road link.
- ☑ Establishing JNPT SEZ as a manufacturing destination.
- $\square$  Leading to major employment generation in the region.
- ☑ Port led industrialization.
- ☑ Boost to EXIM trade.



# Over All Projects Details Port Led Industrialisation

**Development of SEZ at JNPA** Project Cost: INR 565 Cr. Project Status: Completed



**Simhapuri Thermal Power** Station at AP Project Cost: INR 3091 Cr. Project Status: Completed



Tuticorin JV, Tamil Nadu Project Cost: INR 6603 Cr. Project Status: Completed



**Mutiara Thermal Power** Plant at Tamil Nadu Project Cost: INR 7870 Cr. Project Status: Completed



Cuddalore (Tuticorin) Project Cost: INR 10600 Cr. Project Status: Completed



Mega Aqua Food Park, **Andhra Pradesh** Project Cost: INR 373 Cr. Project Status: Completed



**Greenfield Electronics** Manufacturing Cluster in Tuem-Pernem Taluka - Goa Project Cost: INR 161.32 Cr. Project Status: Under Implementation



**KSIDC Mega Food Park at** Pallippuram in Kerala Project Cost: INR 128.49 Cr. **Project Status: Under Implementation** 



Damodaram Sanjeevaiah Thermal Power Station (Ph-II) Project Cost: INR 6034 Cr. **Project Status:** Under Implementation



**Smart Industrial Port City** at Kandla Project Cost: INR 1147 Cr. **Project Status:** Under Implementation



Expansion of Ennore **Thermal Power Station** Project Cost: INR 4956 Cr. **Project Status:** Under Implementation



Project Cost: INR 9755 Cr. Project Status: Completed

**Painampuram Thermal Power Plant, Andhra Pradesh** Project Cost: INR 6869 Cr. Project Status: Completed

Mega Food Processing Park at Satara Project Cost: INR 139 Cr. Project Status: Completed

**Development of Smart** Industrial Port City at Paradip Project Cost: INR 7600 Cr. **Project Status: Under Implementation** 

**Ennore Super Critical Thermal Power Plant** Project Cost: INR 9800 Cr. **Project Status:** Under Implementation

### Over All Projects Details Port Led Industrialisation



North Chennai Thermal Power Plant (St-III) Project Cost: INR 6376 Cr. Project Status: Under Implementation



Thamminapatnam Thermal Power Station (Ph-II) Project Cost: INR 5055 Cr. Project Status: Under Implementation



Tuticorin Thermal Power Plant (Stage-IV) Project Cost: INR 3514 Cr. Project Status: Under Implementation



Uppur Thermal Power Project at Tamil Nadu Project Cost: INR 12778 Cr. Project Status: Under Implementation



Mega Food Park, Andhra Pradesh Project Cost: INR 375 Cr. Project Status: Under Implementation



Greenfield Electronics Manufacturing Cluster in Chittor, Andhra Pradesh Project Cost: INR 56.75 Cr. Project Status: Under Implementation



Greenfield Electronics Manufacturing Cluster in Infovalley Bhubaneswar Industrial Park, Khurda Project Cost: INR 200.76 Cr. Project Status: Under Implementation



Greenfield Electronics Manufacturing Cluster in Kakkanad Village, Kerala Project Cost: INR 140.01 Cr. Project Status: Under Implementation



Greenfield Electronics Manufacturing Cluster in Naihati Town, West Bengal Project Cost: INR 58.31 Cr. Project Status: Under Implementation



Greenfield Electronics Manufacturing Cluster in Tunda Village, Gujarat Project Cost: INR 745.14 Cr. Project Status: Under Implementation



Greenfield Electronics Manufacturing Cluster in Vikruthamala Village, Andhra Pradesh Project Cost: INR 339.8 Cr. Project Status: Under Implementation



Tamil Nadu Maritime Cluster Project Cost: INR 500 Cr. Project Status: Under Development

Coastal Employment Unit at VOCPA Project Cost: INR 500 Cr. Project Status: Under Development

Udangudi Super Critical Thermal Power Project at Tamil Nadu Project Cost: INR 13076.7 Cr. Project Status: Under Implementation

Greenfield Electronics Manufacturing Cluster in Falta Industrial Growth Centre, West Bengal Project Cost: INR 58.86 Cr. Project Status: Under Implementation

Greenfield Electronics Manufacturing Cluster in Renigunta & Yerpdeu Mandal, Andhra Pradesh Project Cost: INR 104.41 Cr. Project Status: Under Implementation

> Desalination plant at VOCPA Project Cost: INR 275 Cr. Project Status: Under Development

## Coastal community DEVELOPMENT

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

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Around 77 projects at cost of Rs. 10,135Cr. have been undertaken for implementation. Out of total 77 projects, 18 projects worth Rs. 1,423 Cr. have been completed and 19 Projects worth Rs. 2,351 Cr. are under implementation. This pillar has resulted in improved lives of fishermen, better facilities for parking their baots which has reduced time taken for the fish to reach the markets.

Ministry of Ports , Shipping and Waterways has collaborated with Ministry of Rural Development (MoRD) to enable skilling of coastal population under DDU-GKY Sagarmala Convergence Programme.

Under this convergence, the entire funding support is being provided by MoPSW and implementation and management is carried out by MoRD. More than 3,000 candidates have been trained and ~1700 placed till date under the convergence. Multi Skill Development Centre (MSDC) for training are already operational at Jawaharlal Nehru Port Trust (JNPT) and Chennai Port Trust (ChPT). More than 1200 candidates have been trained in these centres.

Further, Ministry has setup Centre of Excellence in Maritime and Shipbuilding, 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. Institute provides more than 50 courses at its campuses for engineering, polytechnic, and graduate students and has trained more than 5000 candidates.

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#### **DEVELOPMENT OF FISHING HARBOUR AT KARANJA**

- ☑ Direct and indirect employment generation to 10,000 people approx.
- ☑ Provides berthing facility to 150 180 Boats at a time.



Project Cost Rs. 150 Cr.

#### **CONSTRUCTION OF A FISHING HARBOUR AT** POOMPUHAR

- Problem of berthing of boats at Pazhayar and Nagapattinam is being reduced considerably.
- ☑ Fishing harbour can accommodate 350 MFV's and 350 FRP boats.



# Coastal community DEVELOPMENT



Fishing harbour at Kuthakal Project Cost: INR 74 Cr. Project Status: Completed



CEMS 18 out of 24 labs in AP Project Cost: INR 574 Cr. **Project Status:** Completed



CEMS 6 out of 24 labs in Maharashtra Project Cost: INR 191 Cr. Project Status: Completed



Multi-Skill Development Centre at JNPA Project Cost: INR 3 Cr. **Project Status:** Completed



**Construction of Fishing Harbour** at Thalai, Kerala Project Cost: INR 35 Cr. **Project Status:** Completed



**Coastal Districts Skill Development** Program (Phase I), Andhra Pradesh Project Cost: INR 0.28 Cr. **Project Status:** Completed



**Coastal Districts Skill Development** Program (Phase I), Karnataka Project Cost: INR 2 Cr. **Project Status:** Completed



**Coastal Districts Skill Development** Program (Phase I), Tamil Nadu Project Cost: INR 3 Cr. Project Status: Completed





Fishing harbor at Mookaiyur, Tamil Nadu Project Cost: INR 113.9 Cr. **Project Status:** Completed



Modernisation of the existing fishing harbour at Amadalli Project Cost: INR 19 Cr. **Project Status:** Completed



Harbour (Stage II) in Ratnagiri District Project Cost: INR 75 Cr. Project Status: Completed



Program (Phase I), Maharashtra Project Cost: INR 6 Cr. Project Status: Completed

# Coastal community DEVELOPMENT



River mouth dredging of Mahanadi at Paradip fishing harbour Project Cost: INR 21 Cr. **Project Status:** Completed



3rd stage expansion of existing fishing harbour of Malpe, Karnataka Project Cost: INR 50 Cr. Project Status: Under Implementation



Modernisation of Sassoon Dock Fishing Harbour Project Cost: INR 92 Cr. Project Status: Under Implementation



Skill development of workers in ship recycling activities at Alang Project Cost: INR 30 Cr. Project Status: Under Implementation



Fishing harbour (Phase - 3) at Mangrol, District Junagadh Project Cost: INR 158 Cr.

Project Status: Under Implementation



**Development of Fishing Harbour in** Juvvaladinne, AP Project Cost: INR 288 Cr. Project Status: Under Implementation

**Development of Fishing Harbour** at Karanja, Raigad Project Cost: INR 150 Cr.

Project Status: Under

Implementation



**Development of Fishing Harbour in** Anandwadi - Sindhudurg Project Cost: INR 88.44 Cr. Project Status: Under Implementation





Project Cost: INR 15.1 Cr. Project Status: Under Implementation

**Coastal Districts Skill Development** Program (Phase 2), Kerala Project Cost: INR 4.8 Cr. Project Status: Under Implementation



Project Cost: INR 6 Cr. Project Status: Under Implementation



**Coastal Districts Skill Development** Program (Phase 2), Andhra Pradesh

Project Cost: INR 6 Cr. Project Status: Under Implementation

## Coastal community DEVELOPMENT



Port Hospital at Mumbai Port Project Cost: INR 693 Cr. Project Status: Under Implementation



Marine Enginnering Training Institute (Vigyana Sagar) Project Cost: INR 27.5 Cr. Project Status: Under Implementation



Development of amenities under 12.5% scheme of Maharashtra Govt. to JNP PAPs Project Cost: INR 358 Cr. Project Status: Under Implementation



Fish processing centre at Vizhinjam Project Cost: INR 4 Cr. Project Status: Under Implementation

**Construction of Major Fishing** Harbour at Vasco Bay, MoPA Project Cost: INR 104 Cr. Project Status: Under Development



National Maritime Heritage Museum **Complex at Lothal** Project Cost: INR 573.72 Cr. Project Status: Under Development

Project Cost: INR 260 Cr.

Project Status: Under

Development

Fishing harbour (Phase - 2) at Veraval - District Gir Somnath



Construction of fishing harbour at Chandipur Project Cost: INR 50 Cr. Project Status: Under Development



Ropeway at Kanyakumari from Mainland to Vivekananda Rock Project Cost: INR 100 Cr. Project Status: Under Development



National Technology Center for Ports, Waterways and Coasts

Project Cost: INR 70.53 Cr. Project Status: Under Development



Project Status: Under Development

**Coastal Districts Skill Development** Program (Phase 2), Karnataka Project Cost: INR 6 Cr. Project Status: Under Development

**Coastal Districts Skill Development** Program (Phase 2), Odisha Project Cost: INR 6 Cr. Project Status: Under Development

Setting up of CICMT at IIT Kharagpur, West Bengal Project Cost: INR 76.2 Cr. Project Status: Under

Implementation

**Fishing Harbour** at Navabandar, Gir Somnath Project Cost: INR 295.85 Cr. Project Status: Under Development

**Coastal Districts Skill Development** Program (Phase 2), Puducherry Project Cost: INR 3 Cr.

Project Status: Under Development





Program (Phase 2), Andaman Project Cost: INR 3 Cr. Project Status: Under Development



**Coastal Districts Skill Development** Program (Phase 2), Lakshadweep Project Cost: INR 3 Cr. Project Status: Under Development



**Construction of Dr. Babsheb Ambedkar Convention Centre, Gandhidham** Project Cost: INR 33.08 Cr. Project Status: Under Development



Ropeway between Sewri fort and Elephanta Island in Mumbai harbour Project Cost: INR 700 Cr. Project Status: Under Development



Berm Park To Bhavani Island Project Cost: INR 80 Cr. Project Status: Under Development



Fish Jetty at Mallet Bunder, Mazgaon Project Cost: INR 96.6 Cr. Project Status: Under

Development



Fish Landing Centre at Rathikkal Project Cost: INRv 8 Cr. Project Status: Under Development



Development of Passenger Ropeway and Allied Tourism Activities between Panjim and Reis Magos- Goa

> Project Cost: INR 12 Cr. Project Status: Under Development,





Modern Fishing Harbor at Biyyaputhippa, West Godavari Project Cost: INR 429.43 Cr. Project Status: Under Development

Modern Fishing Harbor at Budagatlapalem, Srikakulam Project Cost: INR 365.81 Cr. Project Status: Under Development

Modern Fishing Harbor at

Kothapatnam, Prakasam Project Cost: INR 392.45 Cr. Project Status: Under Development



Modern Fishing Harbor at Pudimadaka, Visakhapatnam Project Cost: INR 405 Cr. Project Status: Under Development

Project Cost: INR 350 Cr. Project Status: Under Development





Port Hospital at Port Blair Project Cost: INR 50 Cr. Project Status: Under Development



Port Museum at Port Blair Program (Phase 2), Lakshadweep Project Cost: INR 25 Cr. Project Status: Under Development



Rope Way at Cochin between Marine drive and Fort Kochi Project Cost: INR 96 Cr. Project Status: Under Development



Ropeway at Cellular Jail and Ross Island (Port Blair) Project Cost: INR 12 Cr. Project Status: Under Development



Ropeway at Kovalam Beach - Kovalam Lighthouse Project Cost: INR 12 Cr. Project Status: Under Development



Ropeway between Thiruvallur statue and Marine Bridge Project Cost: INR 115 Cr. Project Status: Under Development



**Ropeway between** Rushikonda beach and Kailashgiri Hill Project Cost: INR 12 Cr. Project Status: Under Development



Program (Phase 2), Goa Project Cost: INR 3 Cr. Project Status: Under Development



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Modernisation of **Chennai Fishing Harbour Project** Project Cost: INR 99.85 Cr. Project Status: Under Development





Upgradation and Modernization of Fishing Harbour at Paradip in Odisha

Project Cost: INR 99.75 Cr. Project Status: Under Development

## Costal shipping and INLAND WATER TRANSPORT

Cargo movement through coastal shipping and inland waterways are sustainable and environment friendly. Hence, an impetus has been given in the Sagarmala Programme to undertake projects which will result in shift of cargo from land-based transportation to coastal and inland waterways mode.

242 projects at cost of Rs. 29,382 Cr. have been undertaken for implementation. Out of total 242 projects, 28 projects worth Rs. 1,178 Cr. have been completed and 51 projects worth Rs. 15,954 Cr. are under implementation.

Ro-Pax service is a water transport service which benefits reduction in the travel time, vehicular emission and traffic on the road. Indian with long coastline and riverine connections, has too much potential for executing such projects. MoPSW in association with Deendayal Port Trust (DPT) is implementing the project of RoPax Ferry services between Ghogha and Hazira in Gulf of Cambay. The distance between the two places by road is around 370 km with an average travel time of 10 to 12 hrs. However, through the sea route, distance between Ghogha and Hazira gets reduced to only 90 km with average transit time of about 4 hrs.

This Ro-Pax ferry has already made more than 500 trips in which it carried over 12,000 trucks, 30,000 cars, 1,90,000 passengers, and around 10,600 two wheelers.

Maharashtra Maritime Board (MMB) in association with Mumbai Port Trust and MoPSW initiated RoPax ferry service on Mumbai – Mandwa route. The Project resulted in saving of 140 km of road travel against 10 nautical miles of travel by sea route, there is significant saving in travel time as well by saving of around 3 hours of road travel against 45 minutes by sea route. More than 5 lakh passengers have availed this RoPax service and over 1 lakh vehicles have been transported. The project has resulted in contributing towards clean environment and public welfare.



#### **CONSTRUCTION OF TOURISM JETTY AT BELAPUR**

- $\square$  The water taxi service has been started with eight boats, including seven speedboats with a capacity of 10 to 30 pax each and a catamaran with a capacity of 56 pax.
- ☑ Parking area for 75 cars and 85 two-wheelers.
- ☑ Travel time to Bhaucha Dhakka reduced to 45 minutes.

## Belapur Maharashtra

Project Cost **Rs. 8 Cr.** 

#### **DEVELOPMENT OF MULTIPURPOSE BERTH AT KOLLAM**

- ☑ 101 meter long and 12 meter wide Multipurpose Berth was constructed.
- ☑ Can handle vessels from 187 m to 288 m.
- ☑ Separate berth space for small Coastal Cargo/ Passenger vessel.
- ☑ Capacity added of 0.1 MTPA.
- ☑ Employment generation for approximately 5 people per ship visit.



#### **COASTAL BERTH WITH DREDGED DEPTH OF 10 M TO HANDLE VESSELS UP TO 15000 DWT**

☑ Modifying existing finger jetty by providing additional piled wharf with RCC deck slab and dredging to (-) 10.00m depth

**V.O**. Chidambaranar

Port

Project

Cost

Rs. 36 Cr.

- ☑ Cater to 15,000 DWT vessels for a draft of 9.00m.
- Dedicated berth to handle coastal cargo with Ro-Ro provision.
- ☑ Port capacity addition of 1 MMTPA.

Reduce TRT of coastal vessels and reduction in logistics cost.

#### **CONSTRUCTION OF COASTAL BERTH**

- ☑ Construction of 260 m long and 18 m wide coastal berth with 8m with backup area of 16,000 Sq.m.
- ☑ Reduction in traffic congestion.
- ☑ Connectivity to the hinterland and neighbouring ports through road and rail network.
- ☑ Faster movement of cargo through coastal shipping.
- ☑ Two berths can accommodate 2 coastal vessels of 10,000 DWT each.
- Exclusive use of coastal shipping vessels easing the customs and immigration formalities.
- ☑ Encourage movement of coastal cargo including Ro-Ro traffic, reduced logistics costs.



#### **CONSTRUCTION OF RO-RO JETTY** AND BREAKWATER AT MANDWA

- $\square$  Travel time reduced by 2:30 hrs.
- ☑ Around 20 lakh passenger travelled per annum.
- ☑ Decongestion of traffic in Mumbai, Navi Mumbai and Panvel.



#### DEVELOPMENT **OF COASTAL BERTH**

- ☑ Capacity addition of 2.5 MTPA.
- ☑ Further facilitate setting up of permanent structures like storage silos and tank farms for liquid storage within the vicinity of the berth.

## ☑ Facilitating the easy handling of liquid & cement cargo.







Construction of Coastal Berth at JNPA Project Cost: INR 143 Cr. Project Status: Completed



Tourism Jetty at Belapur in Navi Mumbai Project Cost: INR 8.54 Cr. Project Status: Completed



Development of NW 37 Gandak River at Bihar Project Cost: INR 12.91 Cr. Project Status: Completed



Construction of Ro-Ro jetties at Naringi-Virar, Maharashtra Project Cost: INR 6.75 Cr. Project Status: Completed



Construction of jetties at Malvan-Sindhudurg, Maharashtra Project Cost: INR 10.23 Cr. Project Status: Completed



Development of Cruise Berthing Facilities at Cochin Project Cost: INR 28 Cr. Project Status: Completed



Capital Dredging for Ro-Ro Pax Services at Mandwa, Maharashtra Project Cost: INR 18 Cr. Project Status: Completed



Development of Cruise Passenger Facilitation Centre at Chennai, Project Cost: INR 18 Cr. Project Status: Completed



Construction of Passenger Boat Landing Jetty at Kanhoji Angre Island, Mumbai Project Cost: INR 7.68 Cr. Project Status: Completed



Construction of coastal Berth at VPA Project Cost: INR 43 Cr. Project Status: Completed



Development of Kakinada Hope Island Konaseema as World Class Coastal in AP Project Cost: INR 70 Cr. Project Status: Completed



Construction of Breakwater at Mandwa, Maharashtra Project Cost: INR 72 Cr. Project Status: Completed

Construction of Ro-Ro jetties at Bhayander, Maharshtra Project Cost: INR 14 Cr. Project Status: Completed

Alappuzha-Kottayam-Athirampuzha Canal Boat Jetty at NW 9 in Kerala Project Cost: INR 1.6 Cr. Project Status: Completed

Coastal Berth with Dredged Depth at VoCPA Project Cost: INR 36 Cr. Project Status: Completed

Construction of Multipurpose Coastal Berth at Kollam, Kerala Project Cost: INR 19 Cr. Project Status: Completed





Dredging of Ro-Pax Ferry Services between Gogha and Dahej, Gujarat Project Cost: INR 234 Cr. Project Status: Completed



Ro-Ro service at Mandwa-Phase 2, Maharashtra Project Cost: INR 63 Cr. Project Status: Completed



Development of Domestic Cruise Terminal, Mumbai Project Cost: INR 15 Cr. Project Status: Completed



Floating Restaurants at Gateway of India, Mumbai Project Cost: INR 40 Cr. Project Status: Completed



Coastal Cargo Berth at Chennai Port Project Cost: INR 80 Cr. Project Status: Completed



International Cruise Terminal at Ernakulam Wharf, Cochin Project Cost: INR 25.72 Cr. Project Status: Completed



Providing additional approach berthing wharf at Little Andaman Project Cost: INR 45.55 Cr. Project Status: Completed



Port Cornwallis (Ross Island) Lighthouse Project Cost: INR 0.211 Cr. Project Status: Completed



Multi-Modal Terminal at Pandu across NW 2, Guwahati Project Cost: INR 103 Cr. Project Status: Completed



Improvement and Deepening for facilitating bigger vessel, Goa Project Cost: INR 13.164 Cr. Project Status: Completed



Up-gradation of existing RCC jetty, Andaman Project Cost: INR 1.39 Cr. Project Status: Completed



NW-27 Cumberjua- NW68 Mandovi- NW111 Zuari Project Cost: INR 15.83 Cr. Project Status: Under Implementation

Floating Restaurant at Girgaum Chowpatty, Mumbai Project Cost: INR 10 Cr. Project Status: Completed

Ferry Service from Baina to Panaji, Goa Project Cost: INR 5 Cr. Project Status: Completed

Inter Modal Terminal at Dhubri across NW 2, Assam Project Cost: INR 48 Cr. Project Status: Completed

Upgrading and Modernisation of International Cruise Terminal at Mumbai Project Cost: INR 303 Cr. Project Status: Under Implementation





Develop NW5 -Talcher to Dhamra & Paradip on Brahmani & Mahanadi Rivers Phase-1-from Pradip-Dhamra to Pankapal Project Cost: INR 1462 Cr. Project Status: Under Implementation



Develop NW1-from Allahabad to Haldia on ganges-Jal Marg Vikas Project-JMVP Project Cost: INR 5369 Cr. Project Status: Under Implementation



Develop NW4-from Vijayawada to Galagali on Krishna river Kakinada-Vijayawada-Muktyala-Vijayawada to Thada Project Cost: INR 7002 Cr. Project Status: Under Implementation



Development of Coastal Circuit-Long Island-Ross Smith Island-Neil Island-Havelock Island-Baratang Island-Port Blair in Andaman & Nicobar Project Cost: INR 42 Cr. Project Status: Under Implementation



Development of Sea Port Terminal at Havelock Swaraj Dweep Project Cost: INR 25 Cr. Project Status: Under Implementation



Re-construction of Navigational Lock at Thrikkunnapuzha in NW-3 Project Cost: INR 38 Cr. Project Status: Under Implementation

Barak River-NW-16 Project Cost: INR 76.01 Cr. Project Status: Under Implementation



Develop NW-86 -Rupnarayan River Project Cost: INR 24 Cr. Project Status: Under Implementation

Development of Ro-Ro Service at Rewas in Maharashtra Project Cost: INR 25.07 Cr. Project Status: Under Implementation



Develop NW–97-Sunderbans waterways Project Cost: INR 18.1 Cr. Project Status: Under Implementation



Construction of Ro-Ro jetties at Gorai in Maharashtra Project Cost: INR 6.9 Cr. Project Status: Under Implementation



Tourism Jetty at Kashid in Maharashtra Project Cost: INR 99.8 Cr. Project Status: Under Implementation

Development of Coastal Tourism Circuit in Sri Potti Sri Ramulu Project Cost: INR 60 Cr. Project Status: Under Implementation

Tourism Jetty at Veldur in Maharashtra Project Cost: INR 7.99 Cr. Project Status: Under Implementation

Construction of Passenger Jetty at Ambavane Shigwan in Maharashtra Project Cost: INR 7.91 Cr. Project Status: Under Implementation

Construction of Ro-Ro jetties at Vasai in Maharashtra Project Cost: INR 6.73 Cr. Project Status: Under Implementation





**Construction of Ro-Ro jetties** at Kharwadeshwari-Palghar in Maharashtra Project Cost: INR 12.92 Cr. **Project Status:** Under Implementation



**Construction of Ro-Ro jetties** at Manori in Maharashtra Project Cost: INR 6.59 Cr. **Project Status:** Under Implementation



Construction of jetties at Ghodbunder in Maharashtra Project Cost: INR 7.5 Cr. **Project Status:** Under Implementation



Construction of passenger jetty at Bhavani in Andhra **Pradesh** Project Cost: INR 22 Cr. **Project Status:** Under Implementation



**Construction of coastal cargo** berth at Old Mangaluru Port Project Cost: INR 65 Cr. **Project Status:** Under Implementation

**Development of Puducherry** as Tourist Circuit Project Cost: INR 85 Cr. **Project Status: Under Implementation** 



Development of lighthouse in Kanhoji Angre Island, Mumbai Project Cost: INR 47 Cr. **Project Status:** Under Implementation



North side berth of existing Govind ghat at Okha Port Project Cost: INR 29.75 Cr. **Project Status: Under Implementation** 



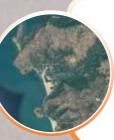
South side berth of existing Govind ghat at Okha Port Project Cost: INR 14.1 Cr. **Project Status:** Under Implementation



Project Cost: INR 85 Cr. Project Status: Under Implementation

**Development of Beach Circuit**,

West Bengal



**Development of Sindhudurg** coastal tourism circuit, Maharashtra Project Cost: INR 19.06 Cr. **Project Status:** Under Implementation



**Development of NW 2** Project Cost: INR 461 Cr. **Project Status:** Under Implementation



Construction of jetties at Borivali in Maharashtra Project Cost: INR 15.47 Cr. **Project Status:** Under Implementation

Chennai-Mamallapuram-Rameshwaram-Manpadu-Kanyakumari as coastal circuit Tamil Nadu Project Cost: INR 72.26 Cr. **Project Status:** Under Implementation

**Restoration of Breakwater** at Kalpeni Project Cost: INR 34.56 Cr. **Project Status:** Under Implementation

Maintenance of dredging of navigational area inside MUS Harbour in Car Nicobar Project Cost: INR 10 Cr. **Project Status:** Under Implementation



Floating Jetty at Aberdeen in South Andaman Project Cost: INR 7 Cr. Project Status: Under Implementation



Development of Dwarka Lighthouse Tourism, Gujarat Project Cost: INR 5 Cr. Project Status: Under Implementation



Development of Gopnath Lighthouse Tourism, Gujarat Project Cost: INR 5 Cr. Project Status: Under Implementation



Inter modal terminal at Kalughat across Nw1 Project Cost: INR 92.5 Cr. Project Status: Under Implementation



Inter modal terminal at Badarpur across Nw16 Project Cost: INR 2.69 Cr. Project Status: Under Implementation



Inter modal terminal at Karimganj across Nw16 Project Cost: INR 2.83 Cr. Project Status: Under Implementation



Extension of Existing Jetty at Kadmatin, Andaman Project Cost: INR 4.48 Cr. Project Status: Under Implementation



Extension of Berthing head of Northern Jetty at Kalpeni, Andaman Project Cost: INR 3.65 Cr. Project Status: Under Implementation



Water Sports, Yacht Marina Parking & Adventure Tourism, Puducherry Project Cost: INR 3 Cr. Project Status: Under Implementation

Modernization of Fire fighting system at dock zone, HDC Project Cost: INR 30 Cr. Project Status: Under Implementation



Berthing facility for Ro-Pax/Ro-Ro vessel at JNPA Project Cost: INR 46.34 Cr. Project Status: Under Implementation



Construction & Maintenance of Ro-Pax Facility at Hazira, Gujarat Project Cost: INR 69.06 Cr. Project Status: Under Implementation



Development of Kaup Lighthouse at Karnataka Project Cost: INR 5 Cr. Project Status: Under Implementation

Development of Suratkal Point Lighthouse at Karnataka Project Cost: INR 5 Cr. Project Status: Under Implementation

Construction of Jetty at Dering in Andaman Project Cost: INR 3 Cr. Project Status: Under Implementation

Development of International and Domestic Cruise Terminal at Mormugao Port Project Cost: INR 153 Cr. Project Status: Under Implementation

Over All Projects Details IWT



Providing separate approach way of cargo movement in Havelock jetty Project Cost: INR 13.47 Cr. Project Status: Under Implementation



Construction of Jetty at Arnalafort, Thane, Maharashtra Project Cost: INR 9.94 Cr. Project Status: Under Implementation



Coastal jetty at Navlakhi in Gujarat Project Cost: INR 108 Cr. Project Status: Under Implementation



Cruise-cum-coastal cargo terminal at VPA Project Cost: INR 77 Cr. Project Status: Under Development



Develop NW74 -78 km from Arabian Sea at Bengre to Netravathi Dam-Dharmsthala on Netravathi river Project Cost: INR 500 Cr. Project Status: Under Development



Develop NW51 -23 km from Kabini Dam to Beeramballi on Kabini river Project Cost: INR 200 Cr. Project Status: Under Development



Coastal berth for passengercargo at Porbandar Port Project Cost: INR 37 Cr. Project Status: Under Development



Tourism Jetty at Durgadi-Kalyan in Thane District Project Cost: INR 9.12 Cr. Project Status: Under Development



Tourism Jetty at Underi in Raigad District, Maharashtra Project Cost: INR 9.12 Cr. Project Status: Under Development



Tourism Jetty at Suvarnadurg in Ratnagiri District, Maharashtra Project Cost: INR 8.8 Cr. Project Status: Under Development



Tourism Jetty at Chivla in Sindhudurg District, Maharashtra Project Cost: INR 9.46 Cr. Project Status: Under Development



Extension of berthing jetty at Campbell bay in Great Nicobar Island Project Cost: INR 49 Cr. Project Status: Under Development



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Extension of passenger berthing facility at Kanyakumari Port Project Cost: INR 20 Cr. Project Status: Under Development

Development of Sea Port Terminal at Phoenix Bay Harbour-Port Blair Project Cost: INR 27 Cr. Project Status: Under Development

Tourism Jetty at Padmadurg in Raigad District, Maharashtra Project Cost: INR 8.3 Cr. Project Status: Under Development

Construction of Passenger Jetty at Devichapada Dombivali, Maharashtra Project Cost: INR 12.68 Cr. Project Status: Under Development



Construction of Coastal Berth-Dredging and Break-water at Azhikkal Port, Kerala Project Cost: INR 496 Cr. Project Status: Under Development



Construction of Passenger Jetty at Baruva in Andhra Pradesh Project Cost: INR 59 Cr. Project Status: Under Development



Construction of Tourism Passenger Jetty at Manginapudi-Krishna in Andhra Pradesh Project Cost: INR 74 Cr.

Multipurpose Jetty at

Chhoti Chowpatty at

Marine Drive, Mumbai

Project Cost: INR 45 Cr.

**Project Status:** 

**Project Status:** 

Under Development

**Under Development** 



Management, Operation and Maintenance of Kanhoji Angre Island, Mumbai Project Cost: INR 50 Cr. Project Status: Under Development



Construction of Tourism Passenger Jetty at Kothapatnam- Prakasam in Andhra Pradesh Project Cost: INR 62 Cr. Project Status: Under Development



Development of Passenger Jetty-Sea Plane Jetty at Kakinada in Andhra Pradesh Project Cost: INR 72.48 Cr. Project Status: Under Development



Construction of a passenger Jetty at Bheemunipatnam in Andhra Pradesh Project Cost: INR 78.99 Cr. Project Status: Under Development



Construction of a passenger Jetty at Kalingapatnam in Andhra Pradesh Project Cost: INR 72.45 Cr. Project Status: Under Development



Construction of jetties at Shiroda, Goa Project Cost: INR 12.48 Cr. Project Status: Under Development



Construction of jetties at Durbhat, Goa Project Cost: INR 5.2 Cr. Project Status: Under Development



Construction of jetties at Cortalim-Rassaim, Goa Project Cost: INR 6.01 Cr. Project Status: Under Development

Capital dredging at Versova, Maharashtra Project Cost: INR 37 Cr. Project Status: Under Development

Construction of Tourism Passenger Jetty at Maypadu-SPS Nellore Project Cost: INR 58 Cr. Project Status:

Under Development

Construction of Coastal cargo berth at Karwar Port, Karnataka Project Cost: INR 61 Cr. Project Status: Under Development

Construction of jetties at Aldona, Goa Project Cost: INR 8.17 Cr. Project Status: Under Development



Construction of jetties at Sanvordem, Goa Project Cost: INR 6.56 Cr. Project Status: Under Development



Construction of jetties at Raibander, Goa Project Cost: INR 7.11 Cr. Project Status: Under Development



Construction of jetties at Old Goa-Divar Project Cost: INR 6.17 Cr. Project Status: Under Development



Construction of jetties at Pilgao, Goa Project Cost: INR 11.45 Cr. Project Status: Under Development



Development of coastal circuit in Odisha Project Cost: INR 76 Cr. Project Status: Under Development

Development of Tourism Jetty at Ratnagiri, Maharashtra Project Cost: INR 69.82 Cr. Project Status: Under Development



Tourism Jetty at Guhagar in Ratnagiri District, Maharashtra Project Cost: INR 8.46 Cr. Project Status: Under Development



Development of Cortalim Fishing Jetty Project Cost: INR 3.5 Cr. Project Status: Under Development



Upgradation of ports Project Cost: INR 30 Cr. Project Status: Under Development



Operationalization of coastal berth at JNPT Project Cost: INR 125 Cr. Project Status: Under Development



Passenger Jetty at Vasco Bay-MoPA Project Cost: INR 21 Cr. Project Status: Under Development



Jetty at Nariman Point, Mumbai Project Cost: INR 393.23 Cr. Project Status: Under Development

Construction of jetties at Banastarim, Goa Project Cost: INR 9.89 Cr. Project Status: Under Development

Tourism Jetty at Diveaagar in Raigad District, Maharashtra Project Cost: INR 7.81 Cr. Project Status: Under Development

Construction of Open Jetty at Kalpeni Island, Lakshadweep Project Cost: INR 27.21 Cr. Project Status: Under Development

Development of Beachfront and ancillary infrastructure at Bengre Project Cost: INR 10 Cr. Project Status: Under Development





Jetty at Radio club near Gate Way of India, Mumbai Project Cost: INR 98.59 Cr. Project Status: Under Development



Minicoy Lighthouse, Lakshadweep Island Project Cost: INR 3 Cr. Project Status: Under Development



Oyster Rock Lighthouse at Karwar Project Cost: INR 6 Cr. Project Status: Under Development



Development of Multi Purpose Harbour at Malpe in Udupi District Project Cost: INR 313.38 Cr. Project Status: Under Development



Coastal Tourism at Puducherry Project Cost: INR 150 Cr. Project Status: Under Development



Development of Sea Plane at Andaman & Nicobar Project Cost: INR 200 Cr. Project Status: Under Development



Development of Sea Plane Mumbai and Ganpatipule Project Cost: INR 200 Cr. Project Status: Under Development

Development of Sea Plane from Surat to Kandla Project Cost: INR 200 Cr. Project Status: Under Development



Development of Sea Plane from Mumbai to Lonavala Project Cost: INR 200 Cr. Project Status: Under Development



Development of Sea Plane from Mumbai to Shirdi Project Cost: INR 200 Cr. Project Status: Under Development



Development of Sea Plane from Surat to Mandvi Project Cost: INR 200 Cr. Project Status: Under Development



Watertaxi: Domestic cruise terminal-Vashi Sagar-Airoli Hovercraft- Thane Jetty Hovercraft Project Cost: INR 400 Cr. Project Status: Under Development

Floating approach jetty at Ross & Smith Island at Andaman and Nicobar Islands Project Cost: INR 15.78 Cr. Project Status: Under Development

Development of Sea Plane at Lakshwadeep and adjoining Islands Project Cost: INR 200 Cr. Project Status: Under Development

Development of Sea Plane from Surat to Dwarka Project Cost: INR 200 Cr. Project Status: Under Development

Watertaxi: Fort Gateway Hovercraft ramp-Domestic cruise terminal-Belapur jetty Project Cost: INR 400 Cr. Project Status: Under Development





Watertaxi: Belapur jetty-Kalamboli Panvel Project Cost: INR 400 Cr. Project Status: Under Development



Yatch marina at Mithakhari Project Cost: INR 78 Cr. Project Status: Under Development



Sunderbans river cruise tour Project Cost: INR 20 Cr. Project Status: Under Development



Operation, management and development of multi-modal terminal at Haldia Project Cost: INR 100 Cr. Project Status: Under Development



Operation, management and development of multi-modal terminal at Sahibganj Project Cost: INR 376 Cr. Project Status: Under Development



Operation, management and development of multi-modal terminal at Varanasi Project Cost: INR 555 Cr. Project Status: Under Development



Construction of approach way from old jetty to new jetty Great Nicobar Project Cost: INR 7.02 Cr. Project Status: Under Development



Improvement to Existing jetty by providing Break water and Fishing Harbour at Minicoy Project Cost: INR 500 Cr. Project Status: Under Development



Construction of Breakwater at Shaheedweep (Neil) Island Project Cost: INR 300 Cr. Project Status: Under Development



Construction of sea port passenger terminal at Havelock, Andaman & Nicobar Islands Project Cost: INR 37.47 Cr. Project Status: Under Development



Construction of Eastern Side Jetty at Kadmat Island Project Cost: INR 40 Cr. Project Status: Under Development



EXTENSION OF KATCHERY JETTY AT MINICOY ISLAND Project Cost: INR 5.68 Cr. Project Status: Under Development

Development of freight village at Varanasi Project Cost: INR 165 Cr. Project Status: Under Development

Reconstruction of jetty at Netaji Subhas Chandra Bose Island Project Cost: INR 24 Cr. Project Status: Under Development

Extension of jetty by 150 mtrs x 20 mtrs and 08 Navigational aids Project Cost: INR 94.74 Cr. Project Status: Under Development

Construction of Eastern Side Jetty at Chetlath Island, Lakshadweep Project Cost: INR 36.92 Cr. Project Status: Under Development



Construction of Eastern Side Jetty at Kiltan Island in Lakshadweep Project Cost: INR 36.63 Cr. Project Status: Under Development



Development of modern passenger hall along with other passenger amenities Project Cost: INR 10.48 Cr. Project Status: Under Development



Construction of Tourist waiting facility hall with basic amenities at Yeratta Island Project Cost: INR 30 Cr. Project Status: Under Development

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Tourist waiting facility at Sagar Dweep Project Cost: INR 4 Cr. Project Status: Under Development



Construction of passenger waiting facilities at Mayabunder Island Project Cost: INR 7 Cr. Project Status: Under Development



Construction of passenger waiting facilities at Aves Island Project Cost: INR 3.5 Cr. Project Status: Under Development



Extension of jetty at Rangat Bay Project Cost: INR 5 Cr. Project Status: Under Development



Providing RCC floating jetty at Thinnakara Island Project Cost: INR 4.6 Cr. Project Status: Under Development



Construction of approach jetty, dredging and navigational aids at Suheli Cheriyakara Island Project Cost: INR 28.2 Cr. Project Status: Under Development

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Providing RCC floating jetty at Bangaram Project Cost: INR 3.6 Cr. Project Status: Under Development



Construction of approach jetty, dredging and navigational aids at Cheriyam Island Project Cost: INR 28.2 Cr. Project Status: Under Development



Constructiion of water aerodrome/floating jetty at Long Island Project Cost: INR 8.23 Cr. Project Status: Under Development



Construction of Tourist waiting facility hall with basic amenities at Ariel Bay Islands Project Cost: INR 8 Cr. Project Status: Under Development

Construction of floating jetty at Merk Bay and Guitar Island in Long Island Project Cost: INR 2 Cr. Project Status: Under Development

Providing RCC floating jetty at Suheli Valiyakara Island Project Cost: INR 4.6 Cr. Project Status: Under Development

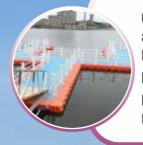
Construction of water aerodrome/floating jetty at Swaraj Dweep, Project Cost: INR 13.34 Cr. Project Status: Under Development

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Over All Projects Details



Construction of water aerodrome/floating jetty at Shaheed Dweep Project Cost: INR 36.67 Cr. Project Status: Under Development



Construction of water aerodrome/floating jetty at Hut Bay Island Project Cost: INR 8.64 Cr. Project Status: Under Development



Construction of water aerodrome/floating jetty at Junglighat in Port Blair Project Cost: INR 10.74 Cr. Project Status: Under Development



Construction of water aerodrome/floating jetty at Makachuva Project Cost: INR 27 Cr. Project Status: Under Development



Construction of water aerodrome/floating jetty at Pilollo Project Cost: INR 18 Cr. Project Status: Under Development



Construction of water aerodrome/floating jetty at Aberdeen Project Cost: INR 8.64 Cr. Project Status: Under Development



Construction of water aerodrome/floating jetty at Baratang Project Cost: INR 8.64 Cr. Project Status: Under Development

Construction of water aerodrome/floating jetty at Pilloponja Project Cost: INR 14.5 Cr. Project Status: Under Development

Construction of water aerodrome/floating jetty at North Bay Project Cost: INR 14.5 Cr. Project Status: Under Development



Construction of water aerodrome/floating jetty at Chidiyatapu Project Cost: INR 30 Cr. Project Status: Under Development



Construction of water aerodrome/floating jetty at Kalappathar Project Cost: INR 17.8 Cr. Project Status: Under Development



Development of Marina at Princess Dock, Mumbai Project Cost: INR 364.84 Cr. Project Status: Under Development



Construction of water aerodrome/floating jetty at Tapong Village Project Cost: INR 12.74 Cr. Project Status: Under Development

Construction of water aerodrome/floating jetty at Thilagchang Project Cost: INR 14.5 Cr. Project Status: Under Development

Construction of water aerodrome/floating jetty at Wandoor Project Cost: INR 14.5 Cr. Project Status: Under Development

Construction of water aerodrome/floating jetty at Rutland Project Cost: INR 8.64 Cr. Project Status: Under Development



Construction of water aerodrome/floating jetty at Foreshore Road at Haddo Project Cost: INR 30 Cr. Project Status: Under Development



Construction of Trestle Jetty and other infrastructure at Rameshwaram Project Cost: INR 20 Cr. Project Status: Under Development



Construction of water aerodrome/floating jetty at Tee-Top and Lapathy in Car Nicobar Project Cost: INR 50 Cr. Project Status: Under Development



Ro Ro Jetty at Elephanta Caves Project Cost: INR 67 Cr. Project Status: Under Development



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Ro Ro Jetty at Janjira Project Cost: INR 8 Cr. Project Status: Under Development

**Construction of Passenger** 

Jetty near Mukkundaraya

Chattram, Rameshwaram,

Project Cost: INR 44 Cr.

Tamil Nadu

**Project Status:** 



Ro-Pax jetty at Datiware Project Cost: INR 20 Cr. Project Status: Under Development



Ro-Pax Jetty at Murbe Project Cost: INR 10 Cr. Project Status: Under Development



RoRo Terminal at JNPA Project Cost: INR 100 Cr. Project Status: Under Development



Ro-Pax Jetty at Naigaon Project Cost: INR 10 Cr. Project Status: Under Development



Development of Multi Purpose Harbour at Baindur in Udupi District Project Cost: INR 228.78 Cr. Project Status: Under Development



RoRo Terminal at at Deendayal Port Project Cost: INR 100 Cr. Project Status: Under Development

Construction of Trestle Jetty and other infrastructures at Pamban Project Cost: INR 20 Cr. Project Status: Under Development

Ro Ro Jetty at Mora Project Cost: INR 89 Cr. Project Status: Under Development

RoRo Terminal at Cochin Port Project Cost: INR 100 Cr. Project Status: Under Development

Ro-Ro Terminal at Syama Prasad Mookerjee Port Project Cost: INR 100 Cr. Project Status: Under Development





Ro-Ro Terminal at VoCPA Project Cost: INR 100 Cr. Project Status: Under Development



Ro-Ro Terminal at VPA Project Cost: INR 100 Cr. Project Status: Under Development



Industrial cum Logistic Park at Sahibganj Project Cost: INR 72 Cr. Project Status: Under Development



Inter modal terminal at Kottapuram across Nw3 Project Cost: INR 1.49 Cr. Project Status: Under Development



Inter modal terminal at Kayamkulam across NW3 Project Cost: INR 1.53 Cr. Project Status: Under Development



Inter modal terminal at Maradu across Nw3 Project Cost: INR 2.65 Cr. Project Status: Under Development



Inter modal terminal at Cherthala across Nw3 Project Cost: INR 1.2 Cr. Project Status: Under Development



Inter modal terminal at Thirukunnapuzha across Nw3 Project Cost: INR 1.78 Cr. Project Status: Under Development



Inter modal terminal at Alapuzha across Nw3 Project Cost: INR 9.3 Cr. Project Status: Under Development



Inter modal terminal at Muktiyala across Nw4 Project Cost: INR TBD Cr. Project Status: Under Development



Inter modal terminal at Kayamkulam (Ayiram Thengu) across Nw3 Project Cost: INR 1.53 Cr. Project Status: Under Development



Inter modal terminal at Ibrahimpatnam across Nw4 Project Cost: INR TBD Cr. Project Status: Under Development

Inter modal terminal at Ghazipur across Nw1 Project Cost: INR TBD Cr. Project Status: Under Development

Inter modal terminal at Vaikkom across Nw3 Project Cost: INR 1.63 Cr. Project Status: Under Development

Inter modal terminal at Kollam across Nw3 Project Cost: INR 6.11 Cr. Project Status: Under Development

Inter modal terminal at Harishchandrapuram across Nw4 Project Cost: INR TBD Cr. Project Status: Under Development





Ropax jetty and allied facilities at Kaninali & Talchua, Odisha Project Cost: INR 110.06 Cr. Project Status: Under Development



Construction of jetty at Dombivali, Dist Thane- NW-53 Project Cost: INR 21.3 Cr. Project Status: Under Development



Construction of jetty at Kalher, Dist Thane NW-53 Project Cost: INR 23.55 Cr. Project Status: Under Development



Construction of Ro-Ro / Ro-Pax Facility at Muldwarka, Gir Somnath, Gujarat Project Cost: INR 144.3 Cr. Project Status: Under Development



Integrated Development of Tadadi - Aghanashini Waterway in Kumta Taluka of Uttar Kannada District Project Cost: INR 20 Cr. Project Status: Under Development



Gurupur River Islands Development in Dakshina Kannada District Project Cost: INR 50 Cr. Project Status: Under Development

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Deepening of channel from 5m to 7m at Ghogha Project Cost: INR 29 Cr. Project Status: Under Development



Development of Coastal Berth at Gangoli Project Cost: INR 95.88 Cr. Project Status: Under Development



Construction of jetty at Kolshet, Dist Thane NW-53 Project Cost: INR 30.36 Cr. Project Status: Under Development



Construction of Ro-Pax jetty at Balugaon in Khurda District & Krushnaprasad Gada in Odisha Project Cost: INR 54 Cr. Project Status: Under Development



Development of Waterways on Gurupur River-NW-43 Project Cost: INR 29.62 Cr. Project Status: Under Development



Development of Coastal Berth at Hangarkatte Project Cost: INR 78.28 Cr. Project Status: Under Development

Construction of jetty at Mira-Bhayander, Dist Thane NW-53 Project Cost: INR 24.46 Cr. Project Status: Under Development

Construction and Maintenance of Ro-Pax Facility at Pipavav, Gujarat Project Cost: INR 170.06 Cr. Project Status: Under Development

Development of waterways from Almatti to Bagalkot in Karnataka Project Cost: INR 12.2 Cr. Project Status: Under Development

Development of Multi Purpose Harbour at Mangalore Project Cost: INR 100 Cr. Project Status: Under Development



**AND COASTAL** MARITIME **TECHNOLOGY** 

Centre for Inland and Coastal Maritime Technology (CICMT) at IIT Kharagpur has been set up to serve as the technology arm of the Ministry to provide research, testing and experimentation facility to IWAI, shipyards and ports.

A state-of-art Deep and Shallow Water Seakeeping and Maneuvering Basin (DSW-SMB) is being setup to facilitate ship model testing facility for shallow water. Additionally, wave flume and equipment for measurement of sloshing in LNG tanks will also be set up.

# NATONALTECHNOLOGY

## **CENTRE FOR PORTS,** WATERWAYS AND COASTS

research

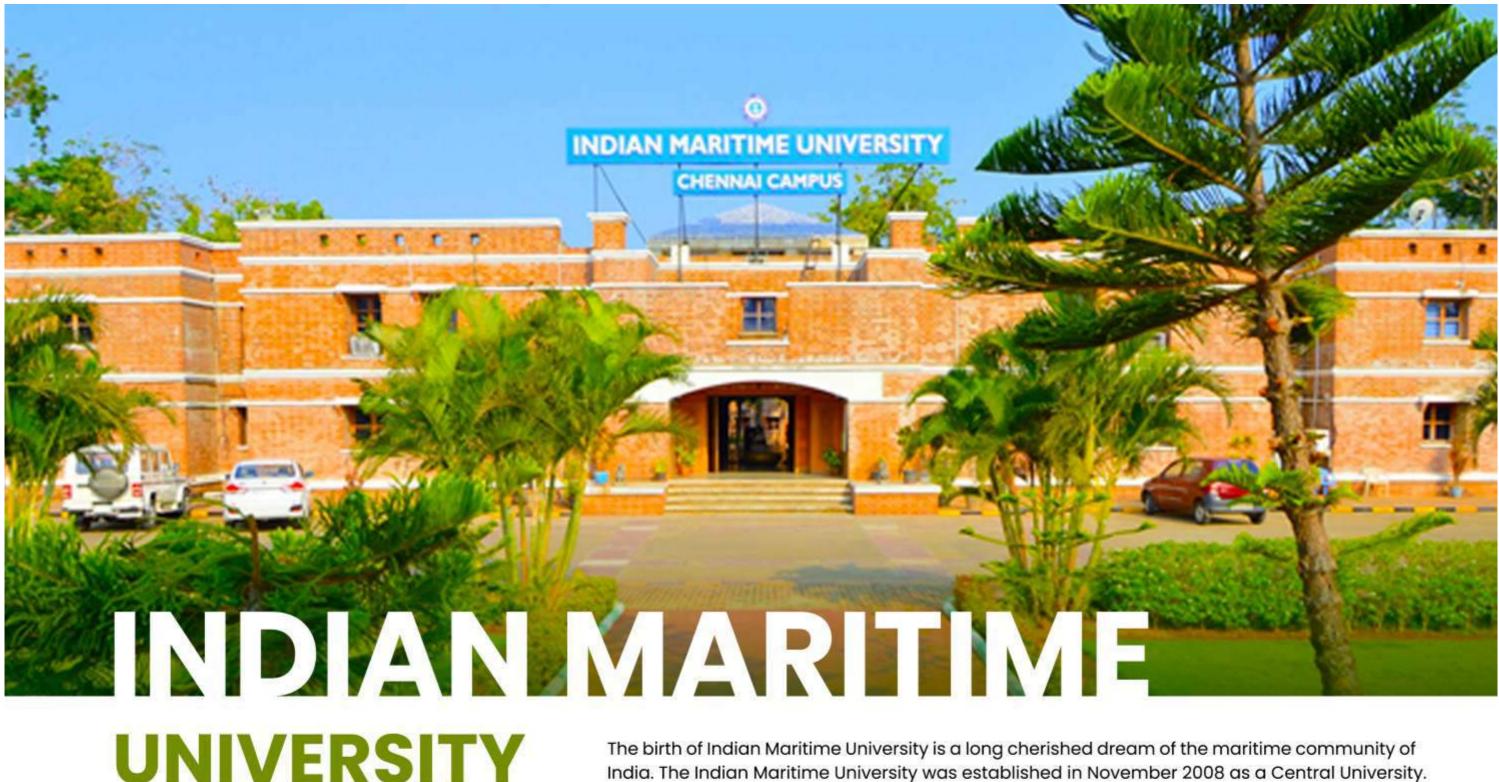
park

National Technology Centre for Ports, Waterways & Coasts (NTCPWC) has been envisioned as the centre for technological innovations and evolution of new ideas and breakthroughs for the port and maritime sector.

National Technology Centre for Ports, Waterways and Coasts (NTCPWC) at IIT Madras was setup to provide innovative and applied research-based engineering solutions.

Institute has carried out more than 70 research and technical support projects related to ports and waterways Institute has excelled in indigenous products and solutions such as unmanned surface vessel for autonomous hydrographic and oceanographic surveys, real-time underwater keel clearance, Night Navigation Solution - National Waterway 2, and online dredging monitoring dashboard.





It is poised to facilitate and promote maritime studies, training, research and extension work with focus on emerging areas of studies like oceanography, maritime history, maritime laws, maritime security, search and rescue, transportation of dangerous cargo, environmental studies and other related fields and to promote advanced knowledge by providing institutional and research facilities and to make provisions for integrated courses in Science and other key and frontier areas of Technology and allied disciplines. IMU Campuses are based at following 6 cities: Chennai, Kochi, Kolkata, Mumbai Port, Navi Mumbai and Visakhapatnam.

### CENTRE OF EXCELLENCE IN MARITIME & SHIPBUILDING



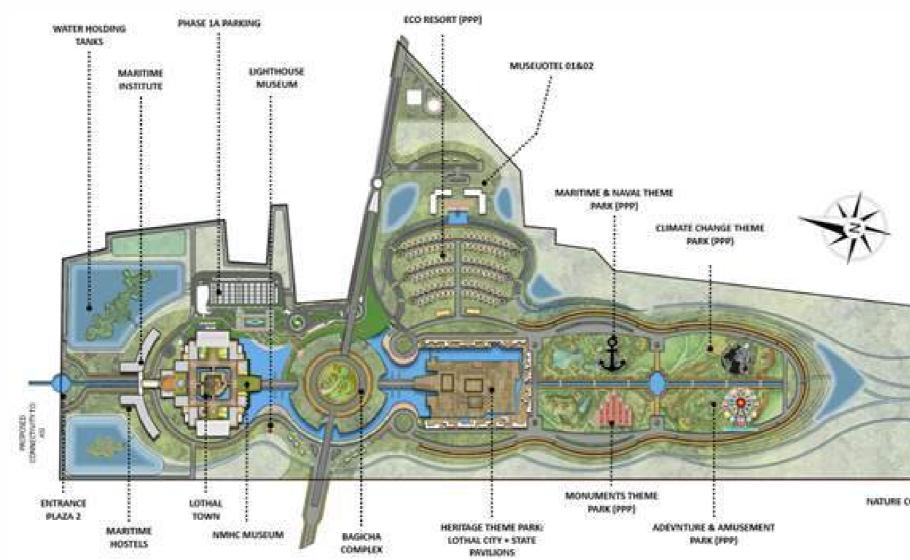
CEMS has been set up to bridge the skill gap between academics and industry requirements. CEMS aims to provide skilled manpower for Manufacturing, Shipping, Aerospace and Automotive sectors. CEMS has state of the art labs at Visakhapatnam and Mumbai.

CEMS focuses extensively on the end-to-end activities involving Design, Manufacturing, Operations, MRO, Logistics, Factory Layouting, Automation, Piping, Heating Ventilation and Air Conditioning (HVAC), Electrical, Pumps and Motors.

CEMS is equipped with a world-class infrastructure in its labs located at Visakhapatnam and Mumbai having a cyberphysical infrastructure involving the following labs in functional domains of learning: Product Design and Validation, Advanced Manufacturing, Test and Optimisation, Dimensional Accuracy Control System, Nesting Productivity Improvement, Hull Design, Research Machine Shop, Automation, Mechatronics, Robotics, Process Instrumentation, Electrical and Energy Saving, Pneumatics and Hydraulics, Pumps Training Systems, Piping Training Systems, Radars, Virtual Reality and Welding Technology.

CEMS has been setup to function as a Hub and Spoke Model to support work integrated education and training so as to enable successful and smooth post college transitions to employment for young adults/youth. CEMS would be the main "Hub" focused to skill students for relevant growth in Shipbuilding and associated industry. "Spokes" would be the other training centres across the country that would be associated with CEMS and access CEMS labs and its resources to provide high end training on pan India basis.

CEMS has commenced its operations with effect from 01 April 2019 and trained 5028 students in various domains till date. CEMS has a strong industry connect to facilitate industrial visits, internships, projects and placement assistance. CEMS has also successfully placed 164 ITI students in welding and CNC programmer/operation jobs and 10 students in PLM domain.



## NATIONAL MARITIME HERITAGE COMPLEX, LOTHAL

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

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



NATURE CONSERVATION PARK

## **ABBREVIATIONS**

BPX: Business Process Expert	IWT: Inland Waterways Transport
BOT: Build - Operate - Transfer	JMVP: Jal Marg Vikas Project
CEMS: Centre of Excellence in Maritime & Shipbuilding	JNPA: Jawaharlal Nehru Port Authority
CAGR: Compound Annual Growth Rate	KDS: Kolkata Dock System
CICMT: Centre for Inland and Coastal Maritime Technology	KPA: Kamarajar Port Authority
CPA: Cochin Port Authority	KoPA: Kolkata Port Authority
ChPA: Chennai Port Authority	MbPA: Mumbai Port Authority
DADF: Department of Animal Husbandry & Dairying	MCHP: Mechanised Coal Handling Plant
DCT: Domestic Cruise Terminal	MMT: Million Metric Tonnes
DPA: Deendayal Port Authority	MOHP: Mechanical Ore Handling
DPD: Direct Port Delivery	MoPSW: Ministry of Ports, Shipping & Waterways
DPE: Direct Port Entry	MoRD: Ministry of Rural Development
DSW - SMB: Deep & Shallow Water Seakeeping & Maneuvering Basin	MoU: Memorandum of Understanding
DWT: DeadWeight Tonnage	MPA: Mormugao Port Authority
EQ: East Query	MTPA: Million Tonnes Per Annum
HDC: Haldia Dock Complex	NH: National Highway
HVAC: Heating Ventilation and Air Conditioning	NMHC: National Maritime Heritage Museum
IMU: Indian Maritime University	NMPA: New Mangalore Port Authority
IOHP: Iron Ore Handling Plant	NTCPWC: National Technology Centre for Ports Waterways & Coa
ISPS: International Ship and Port Facility Security	NW: North West

PBD: Pre - Berthing Delays PCC: Pure Car Carriers PCS: Port Community System PPA: Paradip Port Authority PPP: Public Private Participation RCC: Reinforced Cement Concrete Ro - Ro: Roll On - Roll Off SEZ: Special Economic Zone SIPC: Smart Industrial Port City TRT: Turn Around Time WQ: West Query

- **OSBD:** Output per Ship BerthDay
- OTDC: Odisha Tourism Development Corporation
- PAPs: Pre Arrival Processing System
- Ro Pax: Roll On Roll Off Passenger
- SMPA: Syama Prasad Mookerjee Port Authority
- UCLVs: Ultra Large Container Vesselst
- VPA: Visakhapatnam Port Authority
- VoCPA: V.O. Chidambaranar Port Authority

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