

# CHALLENGES AND OPPORTUNITIES IN SUSTAINABLE PORT DEVELOPMENT

**3rd – 4th April 2019**  
**BANGKOK**

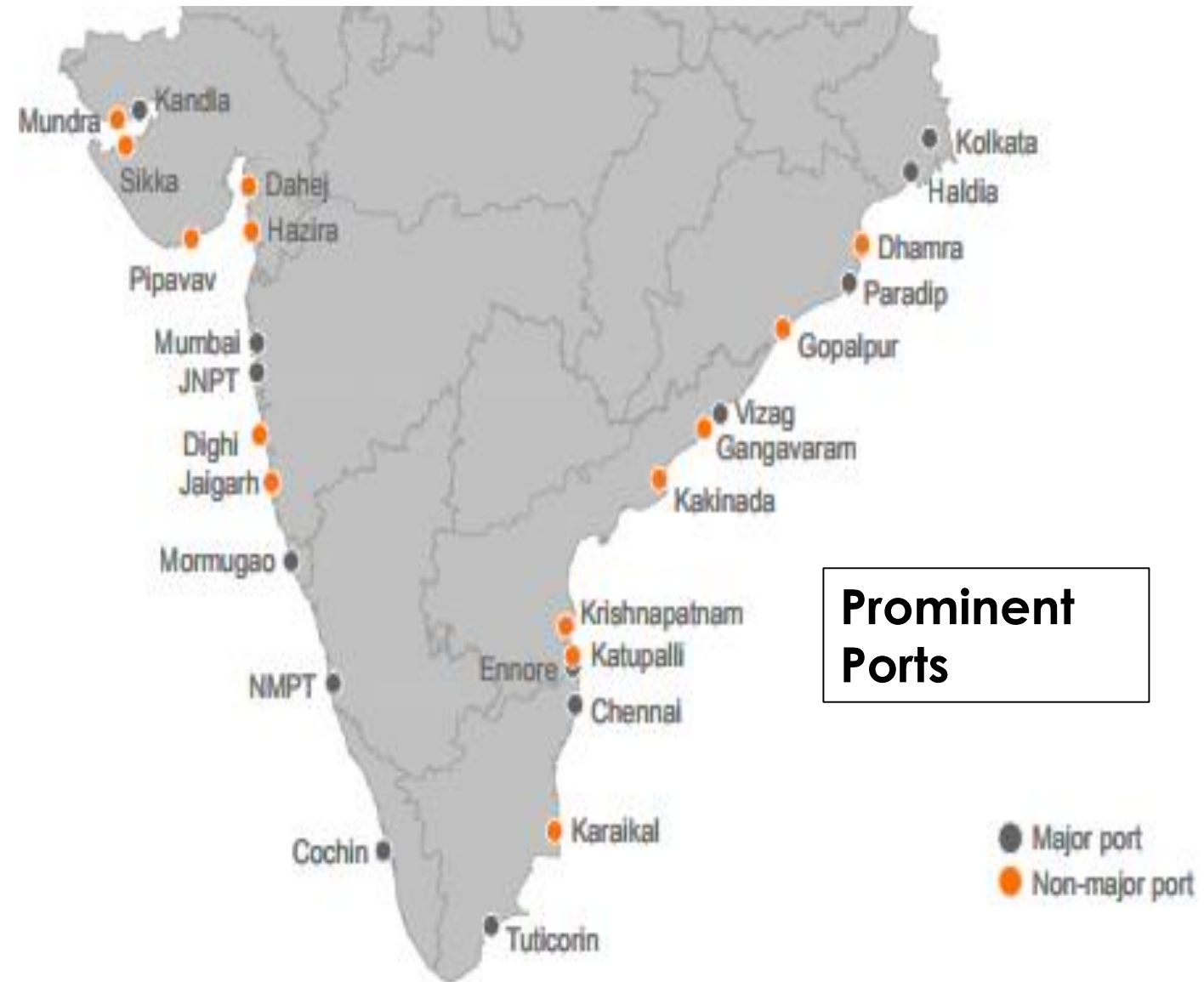
**M S Balani**  
Traffic Manager  
CHENNAI PORT TRUST  
**INDIA**



# **EXISTING PORT INFRASTRUCTURE**

# Indian Ports at a glance

- 95% of India's trading by volume & 70 % by value is done through maritime transport.
- 12 major, 200 minor ports.
- 16<sup>th</sup> largest maritime country in the world, with a coastline of about 7,517 km

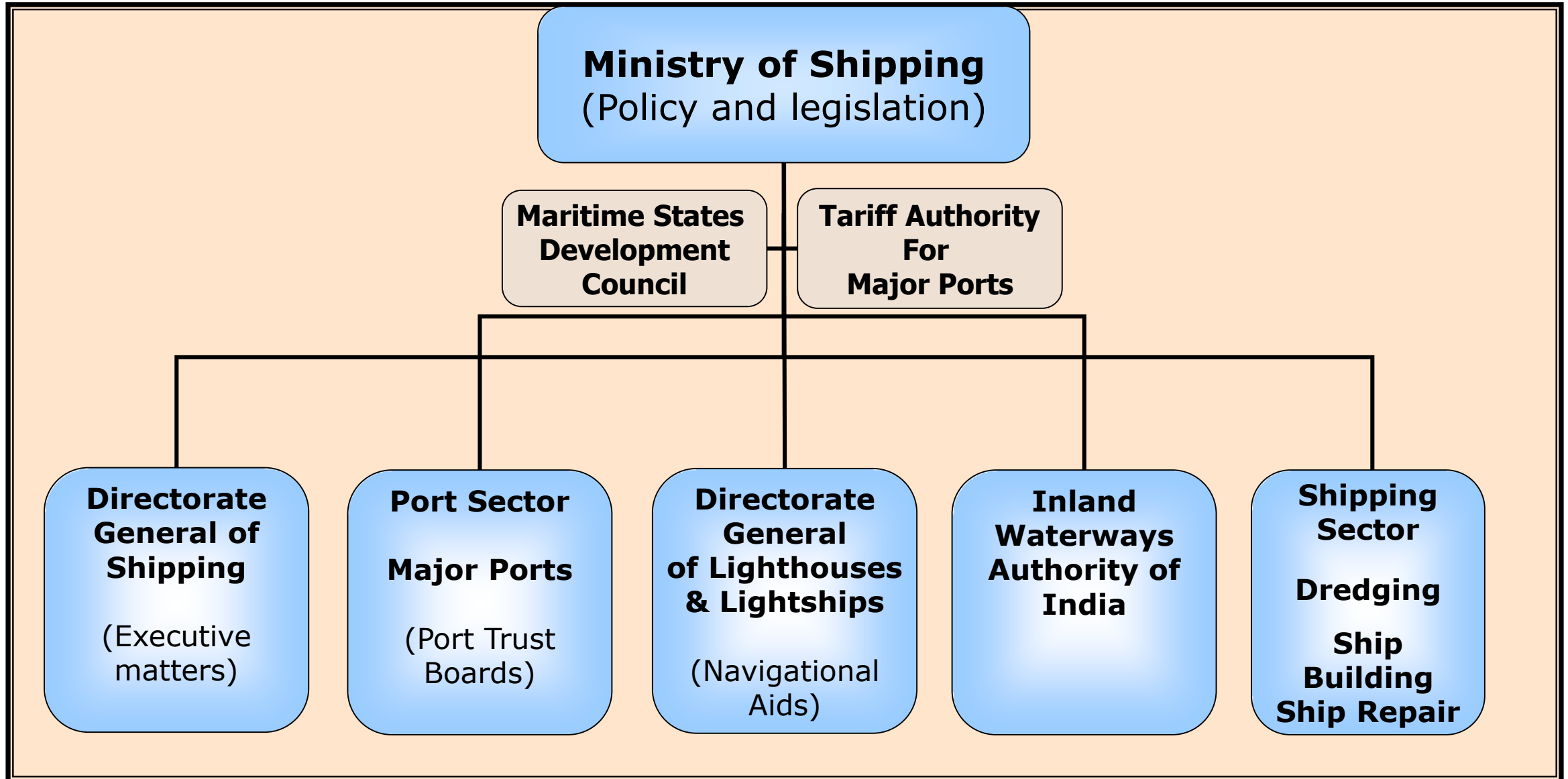


# Port Sector – An Overview

- Indian Coast Line : 7,517 km.
- Length of Inland Waterways : 20,000 km
- Ports in India

Ports in India	No. of Ports	Capacity (MTPA)	Traffic handled (2017-18) MT
Ports under Central (Federal) Government (Major Ports)	12	1451.19	679.37
Ports under State (Provincial) Government (Non-Major Ports)	200	832.19	529.10
Total	212	2283.38	1,208.47

# Administrative Set-up



# Business Model

Major Ports – Combination of Service Port and Landlord Port Model.

Service port model - Port authority offers all the services.

Landlord port model - Port authority acts as a regulator and landlord.  
Port operations carried out by private companies.  
Increasingly, emphasis is on landlord port model.

Non-major ports – Largely given to private parties on concession for periods ranging up to 30 years while ownership remains with the concerned Provincial Government.  
Includes ports developed by corporate houses for captive use.

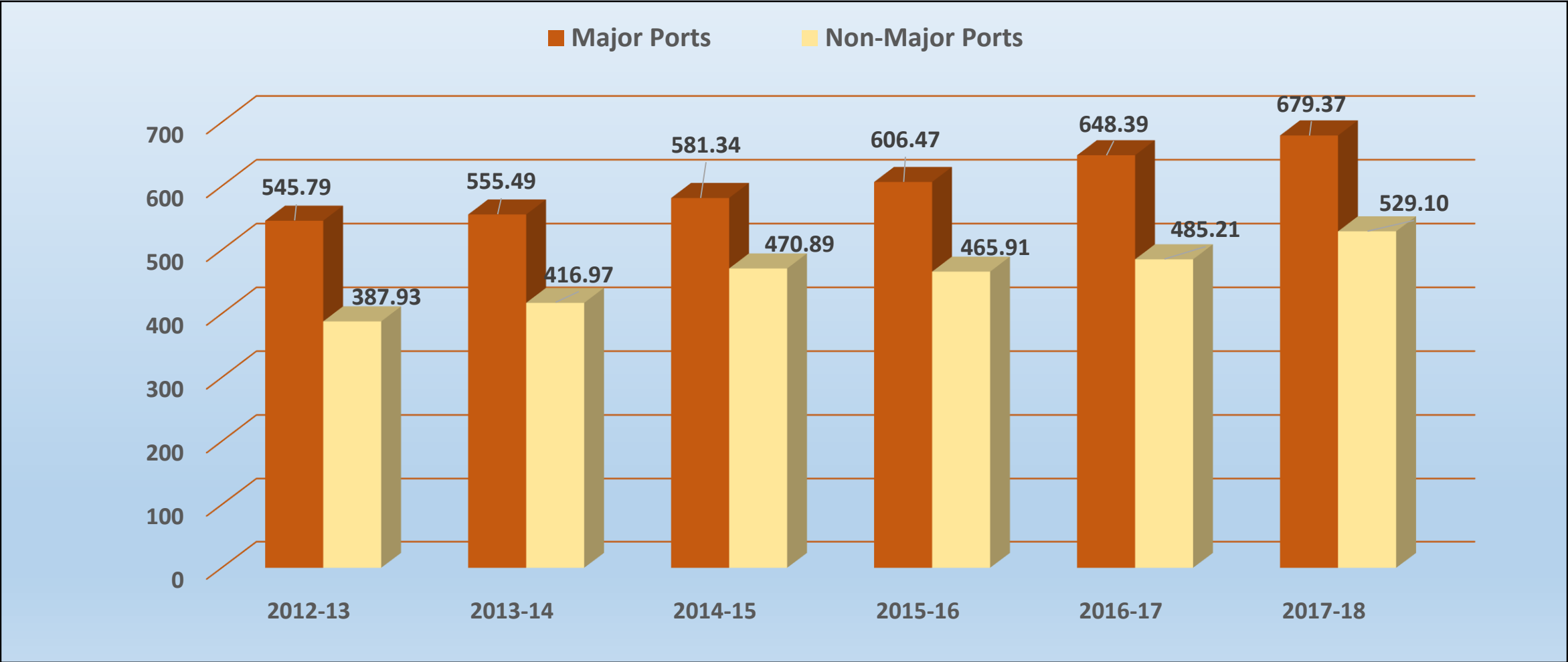
# Cargo traffic at Major & Non-Major Ports (MMT)

The growth in cargo handled at Indian Ports in 2017-18, was 6.5%. Trend in traffic handled at Major and Non-Major Ports is given below.

(In Million Tonnes)

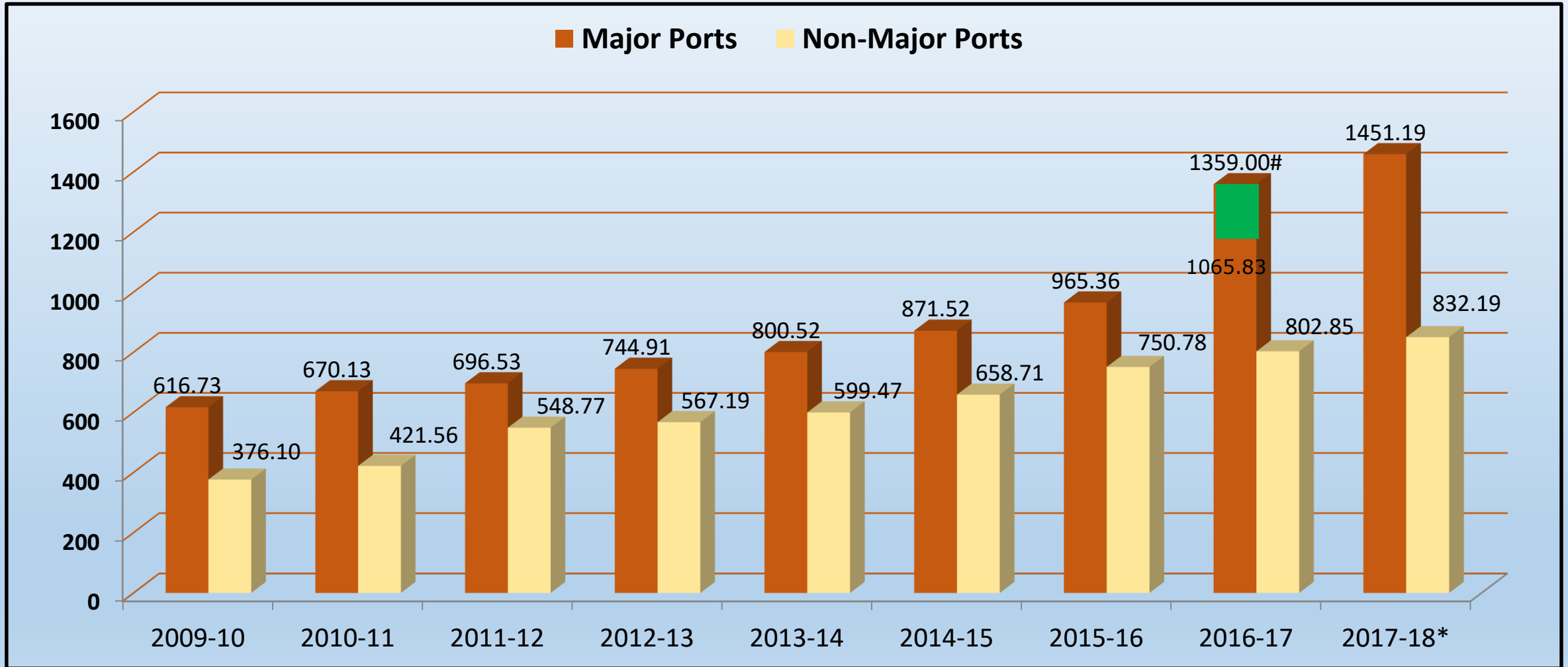
Year	Traffic handled at Major ports	Traffic handled at Non-major ports	Total Traffic at All Indian Ports
2012-13	545.79	387.93	933.72
2013-14	555.49	416.97	972.46
2014-15	581.34	470.89	1052.23
2015-16	606.47	465.91	1072.38
2016-17	648.39	485.21	1133.60
2017-18	679.37	529.10	1208.47

# Traffic handled at Major and Non-Major Ports from 2012-13 to 2017-18



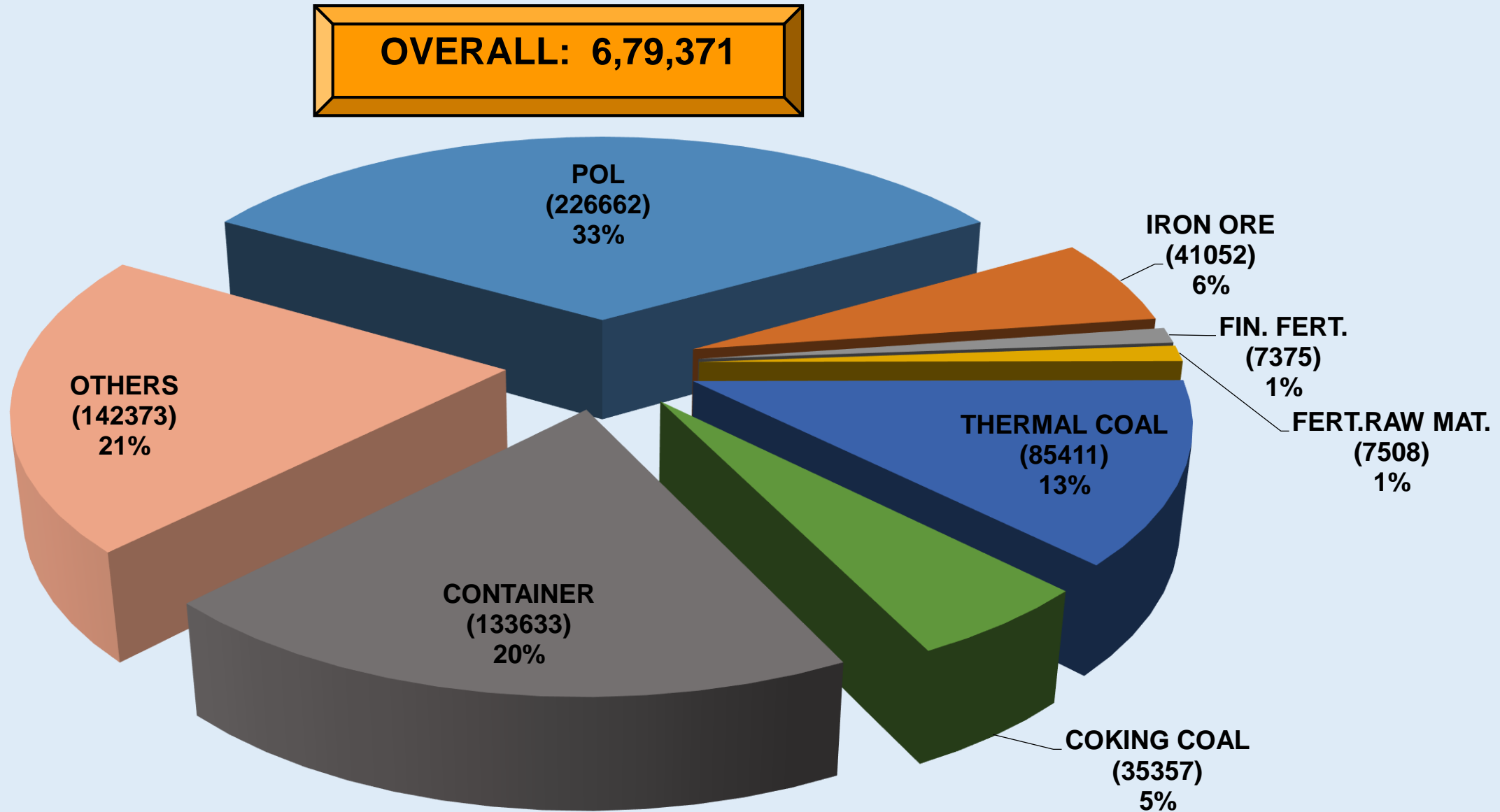


# Capacity at Major and Non-Major Ports from 2009-10 to 2017-18



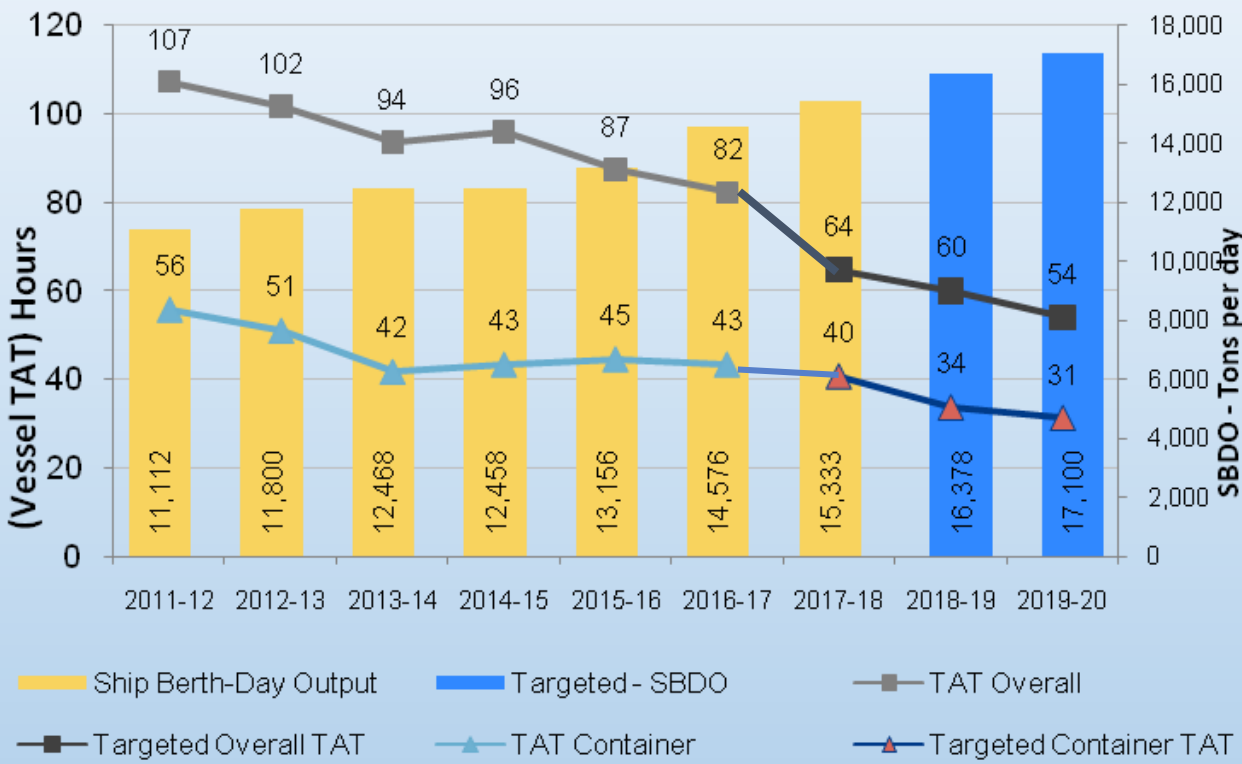
(\* ) Estimated Capacity    (#) Re-rated Capacity

# SHARE OF PRINCIPAL COMMODITIES HANDLED AT MAJOR PORTS 2017-18

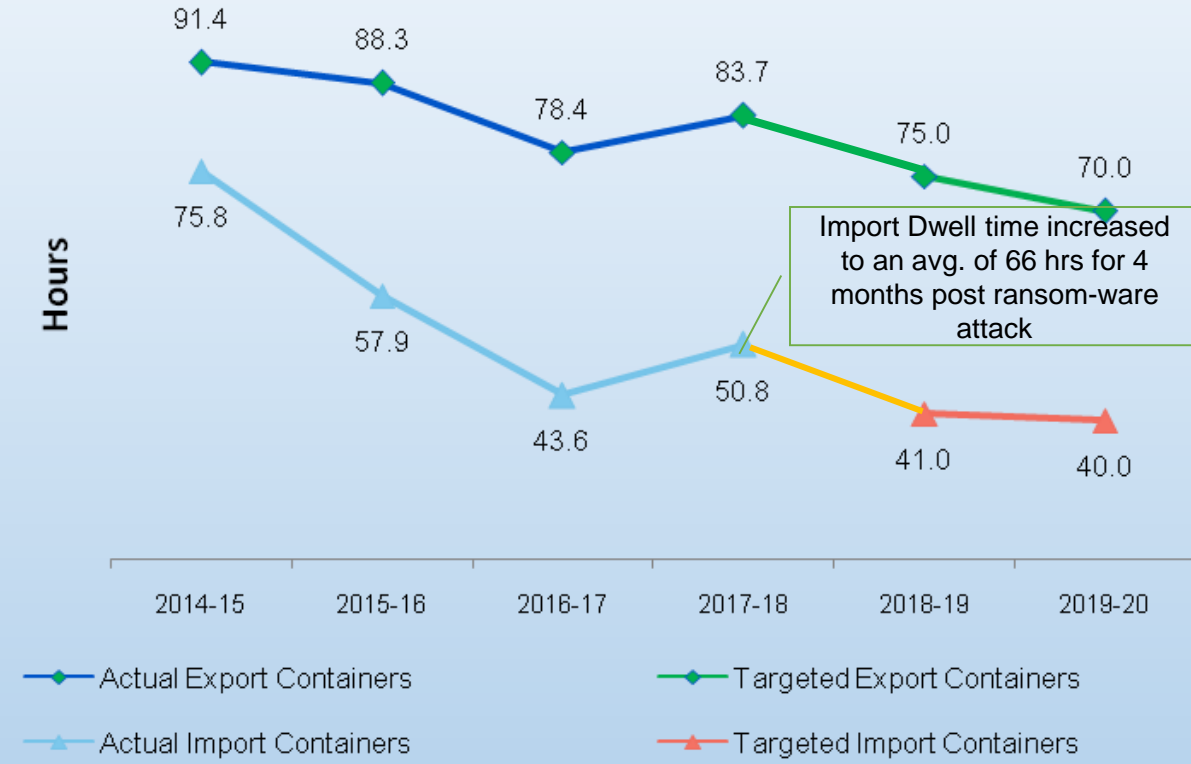


# Operational Efficiency at Major Ports steadily improving

## Turn Around Time and Ship Berth-day Output at Major Ports



## Dwell Time for containers at JNPT

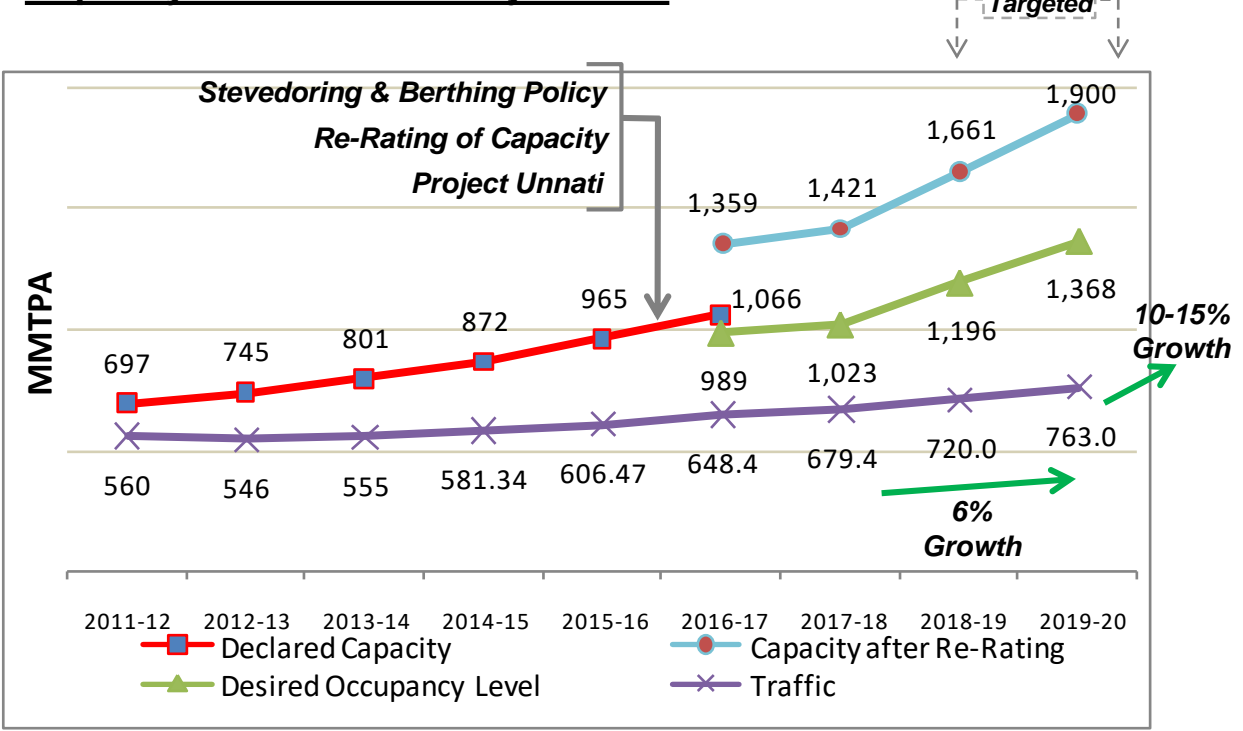


- Globally, Vessel Turn Around Time (TAT) is available for container which is less than 1 day for Shanghai, Jabel Ali & Rotterdam and 1-1.5 days in Antwerp, Colombo and Singapore
- Ship-Berth Day Output (SBDO) is a better measure for port efficiency as it factors in large vessels that need higher TAT
- Efforts have been made to reduce TAT in pilot movement, mooring and berthing, reduction of non-working time and e-clearance of cargo

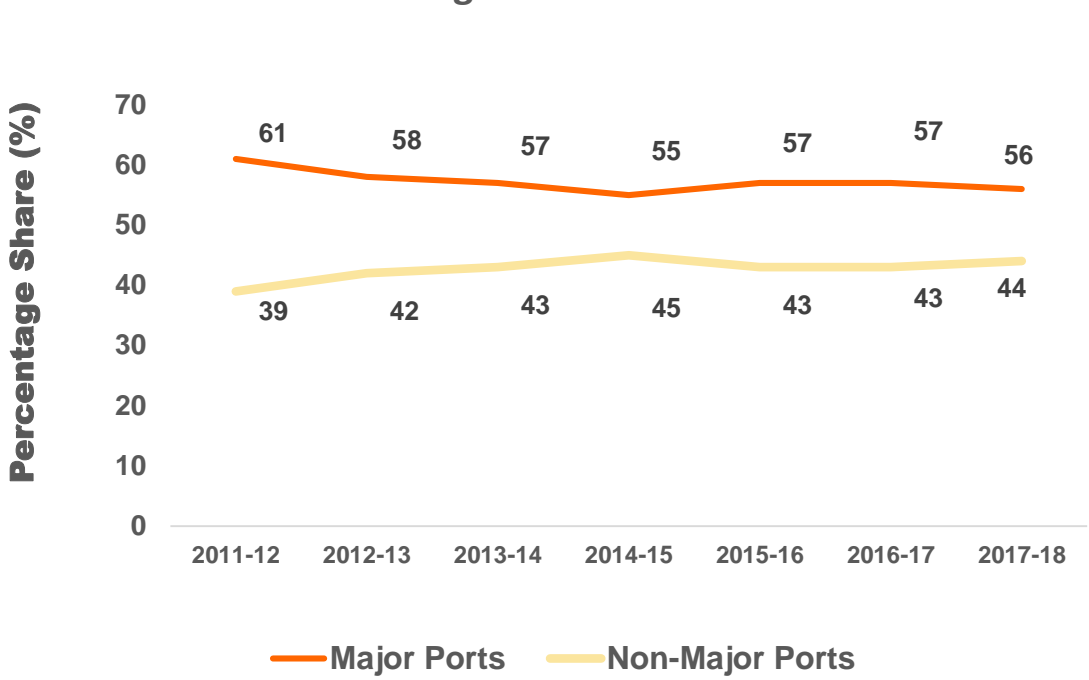
# ISSUES

# Substantial increase in Major port capacity and market share

**Capacity and Traffic at Major Ports**



**Percentage of Share of Traffic**



- Significant increase of 55% in capacity of Major Ports in last 3 years due to efficiency improvement, productivity norms and infrastructure projects
- Unlocking of capacity through 116 efficiency initiatives under Project Unnati
- Sufficient capacity to cater to future traffic even at 10%-15% growth rate for next 4-6 years
- Declining trend in market share of Major ports halted and reversed since 2014-15Z

**Notes:**

1. Capacity of 1,421 MMTPA is after re-rating and traffic of 679.4 MMT for 2017-18 is annualized

# ISSUES

- Capacity utilization under severe stress – robust traffic study and financial viability essential for future investments
- Transshipment of container cargo through foreign ports of Colombo, Singapore, Jebel Ali and Port Klang
  - International container transshipment hub
  - JNPT at West and Chennai in addition Tuticorin at East Coast.
  - Relaxation of Cabotage Law for EXIM containers and empties.
- Cargo generation for traffic at Ports
  - Aggressive promotion of coastal shipping
  - Major ports to strive towards becoming supply chain partners for end clients
  - Relaxation of Cabotage Law for agricultural commodities and fertilizers, etc.
- Streamlining of end-to-end Eco System of service providers to undertake movement of cargo via coastal shipping.
- Rationalization of Tariff at Ports

# INITIATIVES

## Sagarmala Programme

- Sagarmala Development Company Ltd. set up to provide funding support for project SPVs and residual projects
- Master Plans finalized for major ports: 142 projects (Rs. 91,434 cr) identified for implementation till 2035; 46 projects already under implementation / awarded
- Perspective plans prepared for 14 Coastal Economic Zones (CEZs); Master planning of 4 CEZs in Phase I
- Scope of Coastal Berth Scheme expanded and integrated into Sagarmala;
- SEZ at JNPT, Smart Industrial Port Cities at Kandla and Paradip being implemented
- Coastal Community Development
  - ✓ JNPT-APEC Training Centre inaugurated in collaboration with Port of Antwerp
  - ✓ Skill gap study initiated in 21 coastal districts; District-wise skill action plans under preparation
  - ✓ Multi-Skill Development Centre at JNPT, Centre of Excellence in Shipbuilding at Vizag and Mumbai
  - ✓ 8 fishing harbour projects funded in convergence with DADF

# INITIATIVES contd...

## Digitization

- 100 % Cashless Transactions in Major Ports
- Port Community System implemented and integrated with IceGate in all Major Ports
- Radio Frequency Identification (RFID) implemented
- Container Scanner- mobile scanners being installed in Ports
- Digitization of all Land Records and uploaded on GLIS
- Increasing Direct Port Delivery (DPD) from 37% to 80% – DPD default mode / mandatory for AEO; Providing space for container inspection in port area and facilities at Govt. Container Freight Stations (CFS) for Risk Management System (RMS) storage



## INITIATIVES contd...

- E-invoice, E-payment, and E- Delivery Order to be made mandatory for shipping line – facility on Port Community System (PCS)
- Inland Container Depots (ICDs) need rationalization (CONCOR, Customs)
- PCS 1x implemented
- PCS 2.0 Business Process Re-engineering (BPR) and Service Provider vis-à-vis Off-the-Shelf product with customization model – is in the process.
- E-visa facility and deduction of port charges for cruise ships
- Creation of Logistic Data Bank, tagging of Containers for tracking movement.
- ERP being implemented.

# INITIATIVES contd...

## Others

1. Revised MCA approved to enhance confidence of Investors
2. Major ports being benchmarked to international standards – 92 of 116 initiatives introduced in major ports.
3. New Legislation for Major Ports to bring more autonomy and flexibility.
4. Development of smart industrial port city (DPT & PPT)
5. Development of Port based SEZ & MMLP

# INITIATIVES contd...

## Others

6. Largest four container terminal of JNPT capacity of 4.8 TEU inaugurated by Hon'ble Prime Minister of India on 18.02.2018 (largest FDI project worth 7915 crores)
7. World class cruise terminals at Mumbai Port costing Rs. 300 crores to be completed by March 2020.
8. Relaxation in Cabotage Policy.

# Inland Water Transport

- **National Waterways Act, 2016 declaring 111 National Waterways enforced w.e.f 12.4.2016**
- **National Waterway (NW)-1 Jal Marg Vikas Project on Ganga**
  - Project to be completed in 2021-2022 with investment of Rs 5869 cr.
- **NW-2 (Brahmaputra)**
  - Additional Ro Ro services to be introduced and Ship repair facility to be provided
- **NW-4 (Godavari, Krishna, Kakinada and Puducherry canal)**
  - SPV between IWAI and Govt. of Andhra Pradesh for development of NW 4
- **NW -5 (Brahmani, Mahanadi and East coast canal)**
  - Finalization of DPR for fairway development and structures from Pankopal to Paradeep-Dhamra
- **New NWs**
  - Undertake development of 15 NWs in the next two years subject to their technical and economic viability
  - Commence integrated development of fairway and structures of the 12 NWs out of the 15 NWs in 2017-18
- Proposal finalized to introduce Inland Vessels Bill, 2017 in Parliament to replace Inland Vessels Act, 1917

# Promotion of Cruise Shipping

- High Priority to promote cruise tourism due to employment potential in close association with M/o Tourism.
- Major Ports to provide the following incentives to cruise ships :
  - A minimum rebate of 30% on port charges.
  - Cabotage relaxation extended till 2024 for cruise ships.
- Standardized Operating Procedures (SOPs) for handling cruise vessels operationalized.
- First time cruise ship has made Mumbai Port its Home - Port for 3 months.
- Mumbai Port to develop new cruise terminal.

# TO SUM UP AND WAY FORWARD....

- ❖ **Rapid Mechanisation of the Port Operation System**
- ❖ **Increase draft to accommodate larger vessels**
- ❖ **To bring Indian Ports at par with International Standards**
- ❖ **Seamless connectivity to and from the Ports for faster evacuation of the Cargo**
- ❖ **More investment through PPP to have modern operation and management system**
- ❖ **Simplified documentation procedures**

**Thank you**

