# **PORTS**





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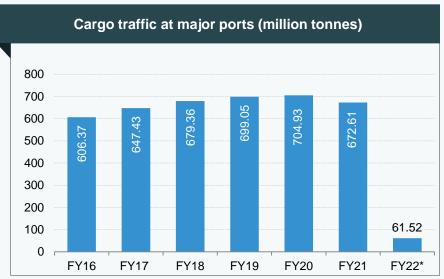


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### **Executive summary**







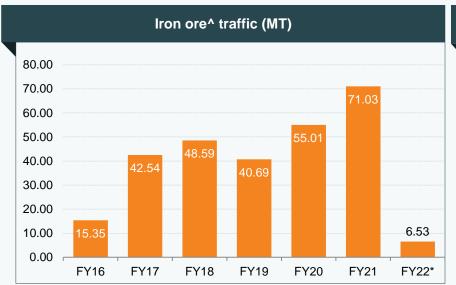
- Ports in India handle around 95% of international trade volume of the country. Increasing trade activities and private participation in port infrastructure is set to support port infrastructure activity in India.
- India has 12 major ports. Under the National Perspective Plan for Sagarmala, six new mega ports will be developed in the country.
- India's key ports had a capacity of 1,534.91 million tonnes per annum (MTPA) in FY20.
- In FY20, all key ports in India handled 704.93 million tonnes (MT) of cargo traffic.
- In Union Budget 2020-21, the total allocation for the Ministry of Shipping was Rs. 1,702.35 crore (US\$ 233.48 million).
- In November 2020, Prime Minister, Mr. Narendra Modi, renamed the Ministry of Shipping as the Ministry of Ports, Shipping and Waterways.

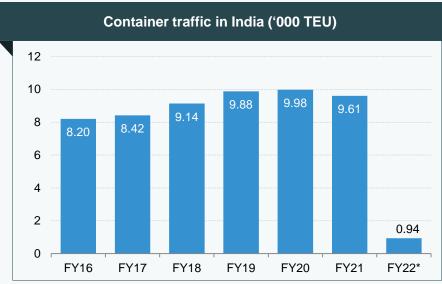
Note: \*- Until April 2021

Source: Ministry of Shipping - GOI, Care Ratings, Indian Ports Association

### **Executive summary**







- Out of India's 204 non-major ports, 44 are functional and strategically located on the world's shipping routes.
- Trade will boost demand for containers. In FY20, container traffic in India (for major ports) reached 9.98 TEUs, implying a growth of 1.12% y-o-y.
- Infrastructural development will increase demand for iron and steel. In FY20, iron ore^ traffic at major ports reached 54.99 MT.
- In November 2019, JSW Infrastructure commissioned a new iron ore terminal at Paradip port in Odisha with a capacity to handle up to 18 million tonnes of cargo per annum.
- In November 2020, Mormugoa Port Trust (MPT), operator of the western Indian port of Mormugoa, extended concessions on iron ore imports and export freight traffic until June 2021 to help ease India's iron ore shipping trade amid the COVID-19 pandemic.
- In December 2020, DP World-operated International Container Transshipment Terminal (ICTT), at Cochin, achieved its all-time highest monthly throughput of >66,000 TEUs in November 2020, registering a 43% y-o-y growth.

Notes: TEU - Twenty Foot Equivalent Unit, ^ - Including pellets, \*- Until April 2021 Source: Ministry of Shipping - GOI, Indian Ports Association, News Articles

# Advantage India





## Advantage India



### 2. ATTRACTIVE OPPORTUNITIES

- Total investment in Indian ports is estimated to reach US\$ 43.03 billion in 2020.
- The key ports are expected to deliver seven projects worth more than Rs. 2,000 crore (US\$ 274.31 million) on a publicprivate partnership basis in FY22.
- The Finance Minister proposed to double the ship recycling capacity of ~4.5 million light displacement tonnes (LDT) by 2024; this is expected to generate an additional ~1.5 lakh employment opportunities in India.
- India is expected to begin full operations in Iran's Chabahar Port by the end of May 2021. India is building two terminals at the port and will operate them for 10 years.

#### 3. POLICY SUPPORT

- In Union Budget 2021, the government announced subsidy funding worth Rs. 1,624 crore (US\$ 222.74 million) to Indian shipping companies to encourage merchant ship flagging in the country.
- In February 2021, the Major Port Authorities Bill, 2020 was passed by the Parliament of India. The bill aims to reorient the governance model in central ports to align with international best practices.

### 1. ROBUST DEMAND

 In FY20, major ports in India handled 704.82 million tonnes of cargo traffic, implying a CAGR of 2.74% in FY16-20.



# 4. COMPETITIVE ADVANTAGE

- India has a coastline which is more than 7,517 kms long, interspersed with more than 200 ports.
- Most cargo ships that sail between East Asia and America, Europe and Africa pass through Indian territorial waters.

Note: NMDP - National Maritime Development Programme, FDI - Foreign Direct Investment, MMT - Million Metric Tonnes

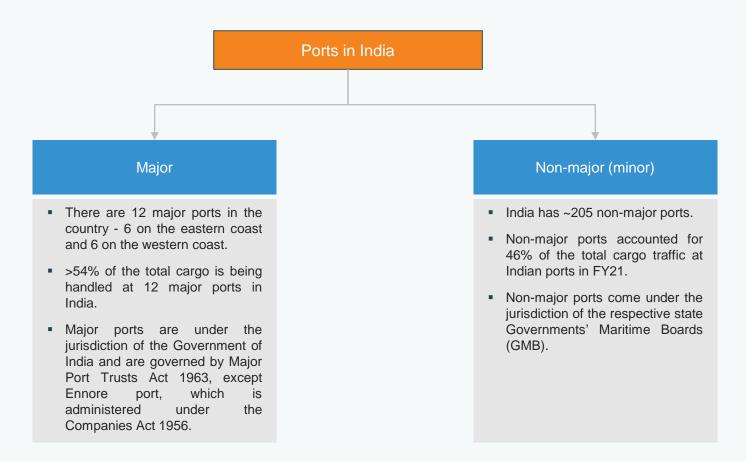
# **Market Overview**





## Categories of ports in India

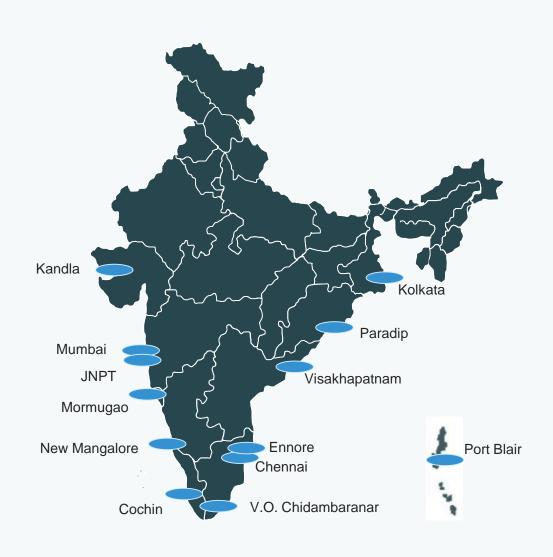




Source: Ministry of Shipping

# **Major ports in India**





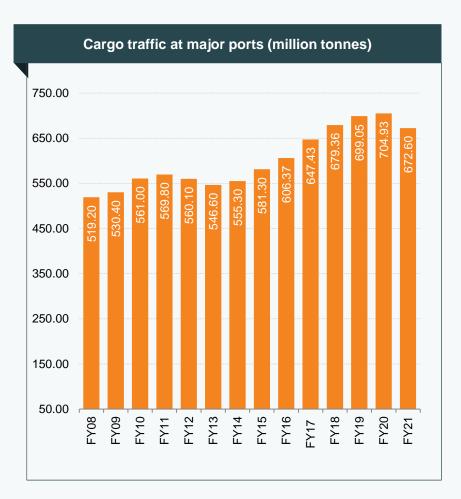
Note: JNPT - Jawaharlal Nehru Port Trust

### Cargo traffic is on the rise... (1/2)



#### Cargo traffic at major ports in India:

- In August 2019, India became the first country in the world to issue Biometric Seafarer Identity Document (BSID), capturing the facial biometric data of seafarers.
- November 2019 witnessed the first ever movement of container cargo on Brahmaputra (National Waterway 2), focused on improving the connectivity to Northeast Region (NER).
- In 2019, upgraded Port Community System was introduced for all ports.
- As per studies conducted under the Sagarmala Programme, cargo traffic at ports is expected to be ~2,500 MMTPA by 2025, while the current cargo handling capacity of ports is only 2,406 MMTPA.
  - To cater to the growing need of traffic, a roadmap has been prepared to enhance capacity of the Indian ports to 3,300+ MMTPA by 2025.
     This includes port operational efficiency improvement, capacity expansion of existing ports and new port development.
  - There are 206 port modernisation projects worth Rs. 78,611 crore (US\$ 10.71 billion). Of which, 81 projects worth Rs. 24,113 crore (US\$ 3.29 billion) have been completed and 59 projects worth Rs. 24,288 crore (US\$ 3.31 billion) are being implemented.



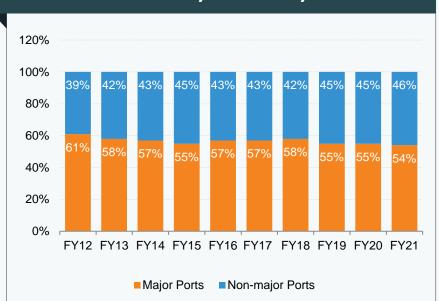
Note: FY - Indian Financial Year (April-March), ^CAGR is up to FY20, \*\*T- Tentative, \*- Until March 2021

Source: Ministry of Shipping

## Cargo traffic is on the rise... (2/2)



#### **Market Share of Major and Non-Major Ports**



#### Non-major ports are evolving faster than major ports

- Non-major ports are gaining share and a major chunk of traffic has shifted from major ports to non-major ports.
- The contribution of non-major port traffic to the total traffic rose to 46% in FY21.

#### **Cargo Traffic at Non-major Ports (million tonnes)**



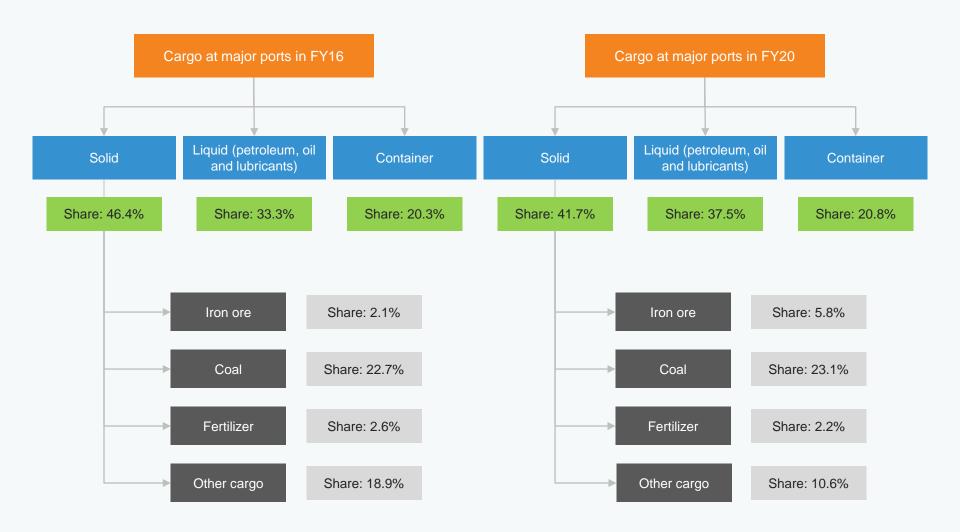
### Cargo traffic at non-major ports -

- Reached 575 million tonnes in FY21.
- Increased at 4.3% CAGR between FY16-FY21.

Note: P - Provisional, \*- Until December 2019 Source: Ministry of Shipping Annual Report 2019-20

# Cargo profile at major ports in India... (1/2)



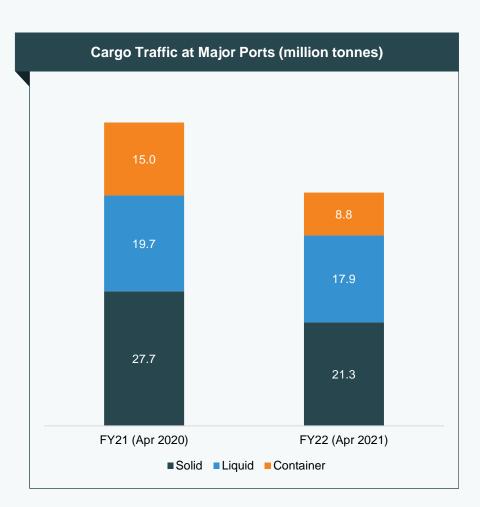


Source: Ministry of Shipping

## Cargo profile at major ports in India... (2/2)



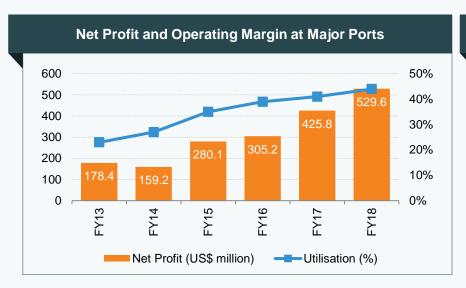
- Solid cargo contributes the largest share to all traffic handled at major ports in India, followed by liquid cargo and containers.
- Solid, liquid and container cargo traffic in FY22 (April 2021) stood at 21.3 MT, 17.9 MT and 8.8 MT, respectively.
- Adani Port and Special Economic Zone (APSEZ) became the first Indian port operator to handle cargo movement of 200 million tonnes (MT) in FY19.
- Ease of Doing Business-Implementation of Radio Frequency Identification (RFID) based Port Access Control System (PACS) at Kolkata Dock System (KDS) was introduced in October 2019. Rabindra Setu and three Truck Parking Terminals at KDS were also inaugurated in 2019.
- 12 major ports were identified under Sagarmala project for cargo handling until 2035. The objective of this project is to promote port led development and to provide infrastructure to quickly transport goods to and from ports, with higher efficiency and at lower cost.
  - In line with this, 69 port capacity expansion projects worth Rs. 37,441 Crore (US\$ 5.10 billion) were identified for implementation. Of these, 30 projects have been completed, 26 projects are under implementation and 13 projects are under various stages of development. Four projects have been completed in FY 2019-20 and 18.23 MTPA capacity has been added at major ports.

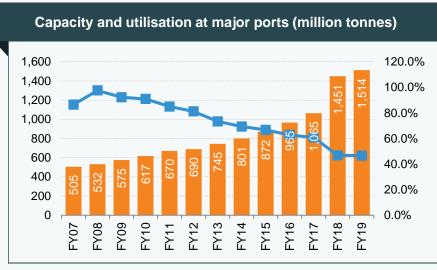


Source: Ministry of Shipping; Indian Ports Association

## Increase in capacity and profits over the years







- Net profits at the major ports increased from Rs. 1,150 crore (US\$ 178.4 million) in FY13 to Rs. 3,413 crore (US\$ 529.6 million) in FY18, while operating margin increased from 23% to 44%.
- To meet the growing cargo traffic, capacity of ports was increased to 1,514 million tonnes in FY19, from 505 million tonnes in FY07.
- Utilisation rates of major ports in India, such as JNPT port, Kandla port, and Ennore port, are much above the world's average.
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- On May 10, 2021, JNPT and New Mangalore Port handled 120 tonnes of medical oxygen on a priority basis owing to the COVID-19 pandemic.
- Shapoorji Pallonji Group expects Gopalpur port capacity to reach 55 million tonnes (mt) by 2025.

**Note:** Capacity utilisation for major ports has been calculated by dividing capacity by traffic **Source:** Ministry of Shipping; Indian Ports Association (IPA), Ministry of Shipping Annual Report 2019-20

## **Drop in turnaround time**



- Average turnaround time is influenced by factors such as type of cargo, parcel size and entrance channel.
- Turnaround time at major ports in India has decreased at a rapid pace from 82.32 hours in FY17 to 59.51 hours in FY19.
- Turnaround time at major ports was 62.16 hours in FY21.



Note: Turnaround time - Total time spent by a ship from entry into port until departure, P- Provisional

Source: Ministry of Shipping, Indian Port Association, News articles

# **Recent Trends and Strategies**





### Notable trends... (1/3)



1

### Increasing private participation

- Strong growth potential, favourable investment climate and sops provided by state governments have encouraged domestic and foreign private players to enter the Indian ports sector. In addition to the development of ports and terminals, the private sector has extensively participated in port logistics services.
- The Indian government has invited bids to sell its 63.75% stake in the Shipping Corporation of India (SCI) to private investors.
- The Indian government announced that seven major ports worth US\$ 274 million will commence operations under the public-private partnership model in 2021-22.

2

### **Setting up of port-based SEZs**

- SEZs are being developed near several ports, thereby providing strategic advantage to industries within these zones. Plants being set up include -
  - Coal-based power plants to take advantage of imported coal.
  - · Steel plants and edible oil refineries.
  - Development of SEZs in Mundra, Krishnapatnam, Rewas and few others is underway.

3

### Focus on draft depth

- All the greenfield ports are being developed at shores with natural deep drafts and existing ports are investing on improving their draft depth.
- Higher draft depth is required to accommodate large sized vessels. Due to the cost and time advantage associated with the large sized vehicles, much of the traffic is shifting to large vessels from smaller ones, especially in coal transportation.

## Notable trends... (2/3)



4

### Ports to operate on green energy

- Government of India is targeting to make the country the first in the world to operate all 12 major domestic Government ports on renewable energy. The Government plans to install almost 200 Mega Watt (MW) wind and solar power generation capacity by 2019 at the ports. The energy capacity could be ramped up to 500 MW in future years.
- In February 2021, JNPT (Jawaharlal Nehru Port Trust) launched a comprehensive solid waste management project as a part of its green port initiatives.

5

### IT solutions

- In September 2020, the Ministry of Shipping launched a dispute redressal portal, 'SAROD-Ports (Society for Affordable Redressal of Disputes Ports). This portal will help develop confidence in the private sector, as ports are shifting to landlord models
- In October 2020, the Ministry of Shipping launched an indigenous software solution for vessel traffic services (VTS) and vessels traffic monitoring systems (VTMS).

6

### **Specialist terminal-based ports**

- Terminalisation: focus on terminals that deal with a particular type of cargo.
- This is useful for handling specific cargo such as LNG that requires specific equipment and hence high capital costs. Forming specialist terminals for such cargo result in optimal use of resources and increased efficiencies.
- Examples of specialist terminals: ICTT in Cochin and LNG terminal in Dahej Port.

7

### Rising traffic at non-major ports

In 2019, non-major ports traffic comprised 45% of the total cargo, due to a significant shift of traffic from the major ports to the non-major ports

## Notable trends... (3/3)



8

### **Sanitation**

• Haldia port in West Bengal was rated as the cleanest port among all the major ports in the 1st ever ranking by the Ministry of Shipping. The ranking of major 12 Indian ports was conducted by the Quality Council of India (QCI) in the 'Swachhta Pakhwada'.

9

### Landlord port model

- To promote private investment, the Government has reformed the organisational model of seaports -
- From: A 'service port' model where the port authority offers all the services.
- To: A 'landlord port' model where the port authority acts as a regulator and landlord while port operations are carried out by private companies.
- Major ports following 'landlord port' model: JNPT, Chennai, Visakhapatnam and Tuticorin.

10

### **National Logistics Portal**

- In October 2020, the Ministry of Shipping announced plans to develop a National Logistics Portal (Marine) with end-to-end logistics solutions to help exporters, importers and service providers.
- The Indian Ports Association has invited bids for design, development, integration, implementation, operation and maintenance of the National Logistics Portal (Marine) Version 1.0.

## Strategies adopted... (1/2)





#### **ACQUISITION**

- In April 2021, the Competition Commission of India (CCI) approved the plan to acquire 89.6% Gangavaram Port Limited by Adani Ports and Special Economic Zone Limited (APSEZ).
- In April 2021, Adani Ports signed an agreement with Vishwa Samudra Holdings Pvt. Ltd., to acquire 25% stake of Adani Krishnapatnam Port Limited (Krishnapatnam Port) for a consideration of Rs. 2,800 crore (US\$ 226.4 billion).
- In November 2020, JSW Infrastructure completed the acquisition of Chettinad Group's port business for ~Rs 1,000 crore (US\$ 135.50 million).



#### **EXPANSION**

- In January 2020, DP World launched a new rail service between Kochi and Bangalore to lower costs and reduce transit time between the two cities by >40%.
- In March 2021, Adani Ports announced to partner with John Keells Holdings and Sri Lankan Ports Authority to develop and operate the West Container Terminal of the Colombo Port in Sri Lanka for 35 years.



#### GEOGRAPHIC DIVERSIFICATION

- On July 16, 2020, the first trial container ship was flagged off from Kolkata to Agartala through Chattogram Port of Bangladesh. It will provide an alternate and shorter route to connect the Northeast region through Bangladesh and open doors of new opportunities for both the countries.
- In August 2020, the government announced its plan to invest Rs. 10,000 crore (US\$ 1.4 billion) to build transshipment port at the Great Nicobar Island in the Bay of Bengal to provide shippers an alternative ports in the region. The Transshipment port will enable big ships to anchor and raise India's share in maritime trade due to its proximity to the East-West international shipping route.

## Strategies adopted... (2/2)





#### DIRECT PORT ENTRY FACILITY

In October 2020, the Minister of Ports, Shipping and Waterways, Mansukh Mr. Mandaviya inaugurated the 'Direct Port Entry Facility' at the V.O. Chidambaranar port. This facility will enable direct movement of containers from without intermediate factories. handling at any CFS (Container Freight Station). facilitating shippers to get their exports directly to the container terminal (24x7), thereby increasing efficiency and ease of doing business.



#### INLAND WATER TRANSPORT

- In November 2020, Prime Minister Mr. Narendra Modi inaugurated the Ro-Pax terminal at Hazira and flagged off the Ro-Pax ferry service between Hazira and Ghogha in Gujarat.
- An MoU between Inland Waterways Authority of India and the Government of Assam signed on October 22, 2020 for operations and management of 4 Ro-Pax vessels.
- In December 2020, Mr. Mansukh Mandaviya, the Minister of Ports, Shipping and Waterways, stated that 'Ramayan Cruise Tour' on the Saryu river in Ayodhya will be launched soon.



#### **SHIPBUILDING**

In line with the 'Make in India' policy of the Government of India and to boost shipbuilding, the Ministry of Shipping reviewed the ROFR (Right of First conditions Refusal) licensing October 22, 2020 for chartering vessels/ships through the tender process for all types of requirements. To promote the demand for ships built in India, priority for chartering of vessels is given to vessels built in India, flagged in India and owned by Indians as per amendments in the guidelines of ROFR (Right of First Refusal).

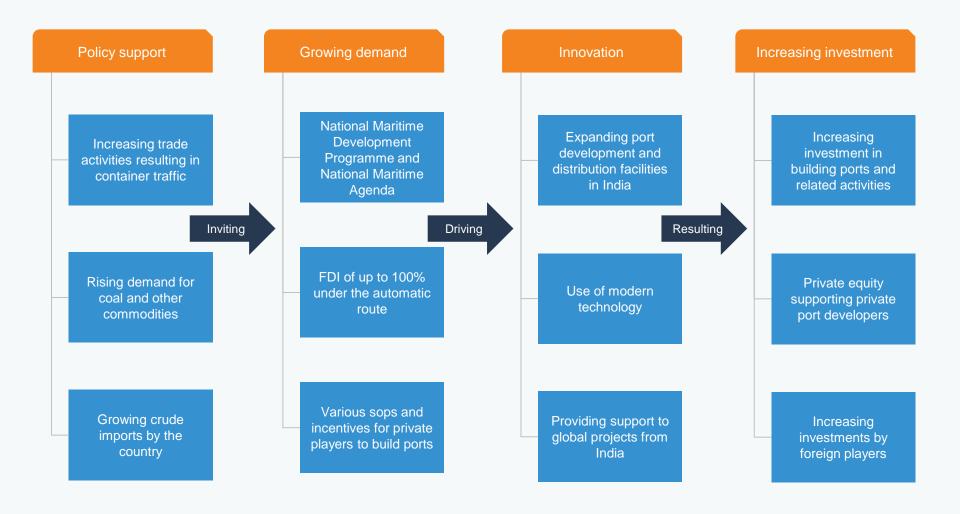
# **GROWTH DRIVERS AND OPPORTUNITIES**





# Sector benefits from strong demand, private participation

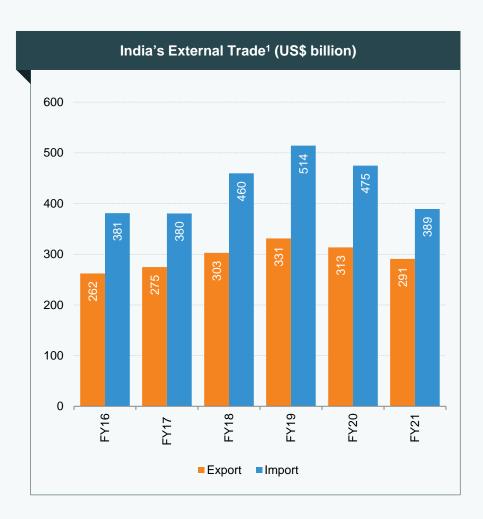




### India's ports are benefitting from strong growth in external trade



- Indian Ports handle almost 95% of trade volumes, and therefore, rising trade has contributed significantly to the cargo traffic.
- Merchandise exports reached US\$ 290.63 billion in FY21.
- Increasing trade is translating into higher demand for containerisation due to their efficiency.
- In June 2020, the volumes handled at major ports in the country increased by 8% month-on-month, even after clearing consignments imported from China that was delayed.
- In November 2020, the Jawaharlal Nehru Port Trust (JNPT) recorded overall 9.04% of container growth in November 2020. It handled 5.70 million tons of containers in November 2020, against 5.22 million tons in November 2019.

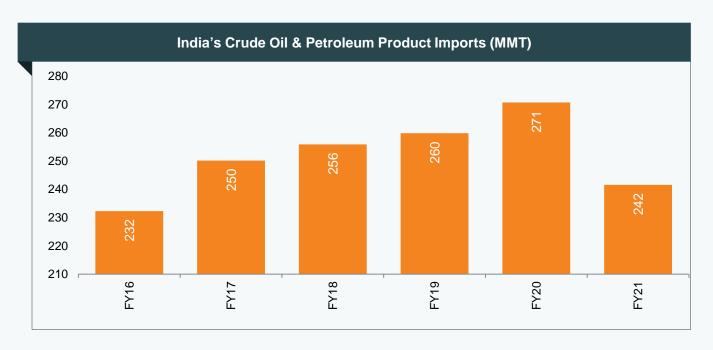


Notes: 1 merchandise trade,

Source: Ministry of Commerce and Industry - GOI

## Ports to benefit from growing crude imports





- A consequence of strong GDP growth has been the rise in energy demand. As of 2019, the country met about 84% of the total crude oil demand by import.
- India's crude oil & petroleum products import totalled 242 million metric tonnes in FY21, indicating a CAGR of 0.8% over FY16-FY21.
- Private ports have been especially good at attracting crude import traffic.
- Government plans to reduce India's crude oil import by 10% by 2022.

Notes: MMT - Million Metric Tonnes POL - Petroleum, Oil, and Lubricant

Source: Handbook of Indian Statistics (RBI), Petroleum Planning and Analysis Cell, Ministry of Shipping

### Increasing connectivity



#### Road Connectivity Projects under Sagarmala

State	Number of projects	Length (kms)	Cost (US\$ billion)	
Gujarat	4	690	3	
Maharashtra	14	2,351	8.33	
Goa	2	110	0.21	
Karnataka	7	781	0.95	
Kerala	21	220	0.69	
Tamil Nadu	19	1,913	8.50	
Andhra Pradesh	36	2,184	4.68	
Odisha	4	62	0.10	
West Bengal	5	275	1.44	

#### Rail Connectivity Projects under Sagarmala

Status	Number of projects	Length (kms)	Cost (US\$ billion)
Completed	13	426	0.40
Under Implementation	27	1,967	2.92
Pre-Implementation	30	1,854	3.93

#### Multi modal Logistics Parks under Sagarmala

Status	Number of parks	Cost (US\$ million)
Completed	1	18.62
Under Implementation	9	267.65
Pre-Implementation	5	266.41

- As of 30 September 2019, 121 projects worth Rs. 30,228 crore (US\$ 4.33 billion) have been completed and 201 projects worth Rs. 309,048 crore (US\$ 44.22 billion) are being implemented.
- Road connectivity projects worth Rs. 179,761 crore (US\$ 27.89 billion) are being implemented in coastal states.
- Government of India have undertaken 55 rail projects worth Rs. 45,883.2 crore (US\$ 6.57 billion) and 15 road projects worth Rs. 2,899 crore (US\$ 0.41 billion) for improved port connectivity at various major and minor ports.
- Approximately 10,000 jobs were created through projects initiated under Sagarmala in the last three years.
- India's second riverine multi-modal terminal, built at Sahibganj in Jharkhand, was introduced on September 12, 2019.

Source: Ministry of Shipping

### **Maritime India Summit 2021**



### 1. Domestic waterways

 Domestic waterways have found to be a cost-effective and environmentally sustainable mode of freight transportation. The government aims to operationalise 23 waterways by 2030.

## 2. Increasing investment

- In Maritime India Summit 2021, the Ministry of Ports, Shipping and Waterways identified a total of 400 projects worth Rs. 2.25 lakh crore (US\$ 31 billion) investment potential.
- As part of the Sagarmala project, more than 574 projects worth Rs. 6 lakh crore (US\$ 82 billion) have been planned for implementation between 2015 and 2035.

# 3. Renewable energy

 The government is focusing on building solar and wind-based power systems at all the country's key ports, with the aim of increasing renewable energy consumption to more than 60% of the total energy by 2030, in three phases.

### 6. Maritime trade hub

 To establish Odisha as the hub of maritime trade, the government plans to support the state's industrial growth with sectors such as roads, rail and ports. The multi-modal rail, road, and air linkages with sea and riverine ports would unlock the potential for port-led 'Blue Economy', allowing minerals and goods to be transported at much lower logistics costs.



 The government plans to establish Chabahar Port project as transit hub for cross-connectivity between India and Eurasia.

## 4. Indian ports measures

6

 For efficient operations, the Indian ports have implemented various measures such as an upgraded 'Port Community System' (PCS) for easy data flow, 'Direct Port Delivery' and 'Direct Port Entry'.



### Favourable policies assisting the port sector



### 1. FDI

- The government has allowed FDI of up to 100% under the automatic route for projects related to the construction and maintenance of ports and harbours.
- Indian ports received cumulative FDI inflow worth US\$ 1.64 billion between April 2000 and December 2020.

### 2. Price flexibility

 Private ports enjoy price flexibility as the Government allows non-major ports to determine their own tariffs in consultation with the State Maritime Boards. At major ports, tariffs are regulated by the Tariff Authority for Major Ports (TAMP).

# 3. Model Concession Agreement (MCA)

- MCA was finalised to bring transparency and uniformity to contractual agreements that major ports would enter with selected bidders for projects under the build, operate and transfer model.
- In March 2018, a revised MCA was approved by the Government of India to make major ports in the country more investor friendly.



### 4. Major Port Authorities Bill, 2020

 in February 2021, the Major Port Authorities Bill, 2020 was passed by the Parliament of India. The bill aims to decentralise decision-making and reinforce excellence in major port governance.

# 7. De-licensing and tax holidays

 A 10-year tax holiday to enterprises engaged in the business of developing, maintaining and operating ports, inland waterways and inland ports

### 6. Project UNNATI

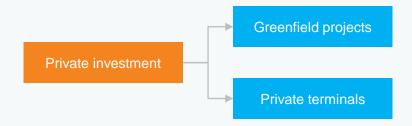
 Project UNNATI was started by the Government of India to identify opportunity areas to improve operations of key ports. Under the project, 116 initiatives were identified, out of which, 98 initiatives have been implemented, as of September 2020.

# 5. Guidelines of floating structures

 In February 2021, the Ministry of Ports, Shipping and Waterways finalised and released guidelines for floating structures, with the aim to establish modern floating infrastructures along the coastline, in future projects that follow provisions set as per the guidelines.

## Strong private sector participation in ports projects... (1/2)





- Private sector investments in ports have steadily increased over the last five years, touching an all-time high of US\$ 2.35 billion by 2020.
- 39 PPP projects are operational at a cost of around US\$ 2219.4 million and capacity of 240.72 Million Tonnes Per Annum (MTPA). 32 PPP projects at an estimated cost of around US\$ 3917.6 million and capacity of 264.77 Million Tonnes Per Annum (MTPA) have been awarded and are under implementation.
- National Green Tribunal has given nod for construction of multi-crore 'Vizhinjam International Seaport Ltd (VISL)'. The port is being developed by Adani Group in collaboration with Kerala Government.
- As of May 2019, Maharashtra Maritime Board (MMB) started building a new private port at Vadhawan in Palghar district based on the PPP model.
- On 30 October 2018, Inland Waterways Authority of India (IWAI) gave operations and management of its terminal in Kolkata to Summit Alliances
  Port East Gateways Pvt. Ltd. (SAPEL).
- As of November 2019, number of projects have been awarded in the last three years with a total project cost of Rs. 13,308.41 crore (US\$ 1.90 billion) for upgradation of major ports.
- The government has floated the concept of undertaking channel deepening and maintenance works at major port trusts through public-private-partnerships (PPP). Significant capital dredging is required at major ports in 3-5 years to handle the anticipated container vessels of 20,000 twenty-foot equivalent units (TEUs) capacity and bulk cargo carrying Capesize vessels.

**Note:** PPP - Public Private Partnership **Source:** Ministry of Shipping, EY

# Strong private sector participation in ports projects... (2/2)



Terminals in major ports with private sector involvement	Port agency	Estimated cost (US\$ million)	Key private sector companies	Ports they developed
Container terminal, Ennore	Ennore	293.1	Maersk	JNPT (Mumbai)
LNG terminal, Cochin	Cochin Port Trust	729.1	DOO Doots	INIDT (Marrahai and Ohannai)
Container terminal, NSICT	JNPT	156.3	P&O Ports	JNPT, (Mumbai and Chennai)
Oil jetty related facilities (Vadinar)	Kandla Port Trust	156.3	Dubai Ports International	(Cochin and Vishakhapatnam)
Third container terminal	JNPT	407 E	PSA Singapore	Tuticorin
(Mumbai)	JINPT	187.5	Adani	Mundra
Crude oil handling facility (Cochin)	Cochin Port Trust	146.5	Maersk	Pipavav
ICTT at Vallarpadam (Cochin)	Cochin Port Trust	262.9	Navyuga Engineering Company Ltd	Krishnapatnam
Construction of SPM captive berth (Paradip)	Paradip Port Trust	104.2	DVS Raju group	Gangavaram
		103.1	JSW	Jaigarh
Development of second container terminal (Chennai)	Chennai Port Trust		Marg	Karaikal

Note: NSICT - Nhava Sheva International Container Terminal, Mumbai, ICTT - International Container Transshipment Terminal, SPM - Single Point Mooring

Source: Indian Ports Association

### **Opportunities**



### 1 Port support services

- Operation and maintenance services such as pilotage, dredging, harbouring and provision of marine assets such as barges and dredgers are expected to increase in coming years.
- Increasing investment and cargo traffic point to a healthy outlook for port support services.
- These include Operation and Maintenance services like pilotage, harbouring and provision of marine assets like barges and dredgers.
- Government plans to replace old Lighthouse Act, 1927, with Aids to Navigation Bill, 2020, and incorporate global best practices, technological developments and India's International obligations in the field of Aids to Marine Navigation.



### 2 Ship repair facilities at ports

- Dry docks are necessary to provide ship repair facilities. Out of all the major ports, Kolkata has 5 dry docks, Mumbai and Visakhapatnam have 2. The rest have 1 or no dock at all.
- Given the positive outlook for cargo traffic and the resulting increase in number of vessels visiting ports, demand for ship repair services will go up. This will provide opportunities to build new dry docks and setup ancillary repair facilities.

# 3 Increasing Scope for Private Ports

- With rising demand for port infrastructure due to growing import (crude, coal) and containerisation, public ports (major ports) will fall short of meeting demand.
- This provides private ports an opportunity to serve the spill-off demand from major ports and increase their capacity in line with new demand.
- Cochin Port Trust (CPT) announced measures to increase its revenue by generating higher container traffic and increasing the number of passenger liners. CPT is also planning to setup a small industrial port at the southern end of Willingdon Island to boost business.

# **Key Industry Contacts**





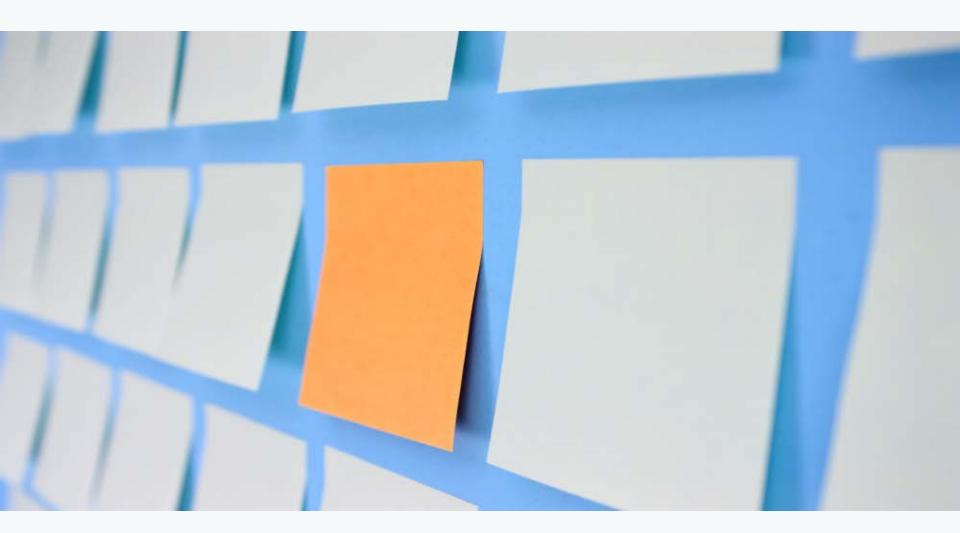
# **Key industry organisations**



	Agency	Contact Information
SOLTS ASSOCIATION OF THE PROPERTY OF THE PROPE	Indian Ports Association (IPA)	Address: 1st floor, South Tower, NBCC Place Bhishma Pitamah Marg, Lodi Road New Delhi - 110 003 Phone: 91-11-24369061, 24369063, 24368334 Fax: 91-11-24365866 E-mail: ipa@nic.in, ipadel@nda.vsnl.net.in Website: http://www.ipa.nic.in/
IPPTA	Indian Private Ports and Terminals Association	Address: Darabshaw House, Level-1, N.M. Marg, Ballard Estate, Mumbai 400 001, India Tel. No: 022-22610599 Fax. No: 022-22621405 Email: <a href="mailto:secygen@ippta.org.in">secygen@ippta.org.in</a> Website: <a href="mailto:http://www.ippta.org.in/">http://www.ippta.org.in/</a>

# Appendix





### **Glossary**



- FY: Indian Financial Year (April to March) So FY11 implies April 2010 to March 2011
- US\$: US Dollar
- FDI: Foreign Direct Investment
- IPA: Indian Ports Association
- NMDP: National Maritime Development Programme
- POL: Petroleum, Oil and Lubricants
- SEZ: Special Economic Zone
- CAGR: Compounded Annual Growth Rate
- ICTT: International Container Transshipment Terminal
- TEU: Twenty-Foot Equivalent Unit
- MMTPA: Million Metric Tonnes Per Annum
- MMT: Million Metric Tonnes
- GOI: Government of India
- NSICT: Nhava Sheva International Container Terminal, Mumbai
- OandM: Operation and Maintenance services
- LNG: Liquefied Natural Gas
- Wherever applicable, numbers have been rounded off to the nearest whole number

# **Exchange rates**



### **Exchange Rates (Fiscal Year)**

### **Exchange Rates (Calendar Year)**

Year	Rs. Equivalent of one US\$	Year	Rs. Equivalent of one US\$
2004-05	44.95	2005	44.11
2005-06	44.28	2006	45.33
2006-07	45.29	2007	41.29
2007-08	40.24	2008	43.42
2008-09	45.91	2009	48.35
2009-10	47.42	2010	45.74
2010-11	45.58	2011	46.67
2011-12	47.95	2012	53.49
2012-13	54.45	2013	58.63
2013-14	60.50	2014	61.03
2014-15	61.15	2015	64.15
2015-16	65.46	2016	67.21
2016-17	67.09	2017	65.12
2017-18	64.45	2018	68.36
2018-19	69.89	2019	69.89
2019-20	70.49	2020	74.18
2020-21	73.20	2021*	74.94

Note: As of April 2021

Source: Reserve Bank of India, Average for the year

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