



WELCOME TO

POST-PANDEMIC ERA: REBOUND AND REFOCUS



YEAR-ON-YEAR CONTAINER THROUGHPUT GROWTH IN MAJOR REGIONS OF THE WORLD



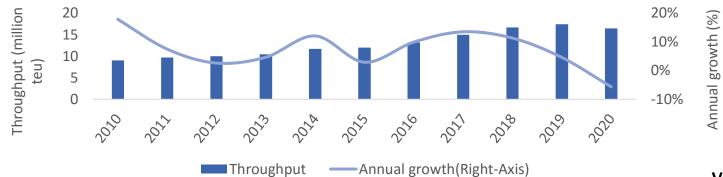
- Estimated worldwide container port throughput in the second quarter increased by 13.8% year-on-year.
- Port activity in South Asia surged by over 40% between April and June, catering to the consumer demand in Europe and the USA.
- South Asia's surge in 2Q volume was the highest among all other regions in the world.

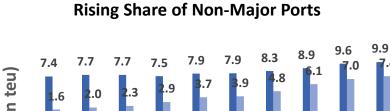


Source: Container Forecaster, Quarter 3, September 2021, Drewry Maritime Research



DEVELOPMENT OF CONTAINER TRAFFIC IN INDIA







Major Non-Major





Source: Drewry Maritime Research, 2021

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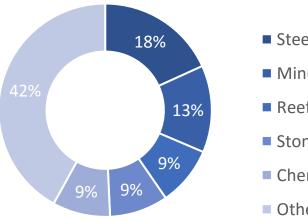
2020

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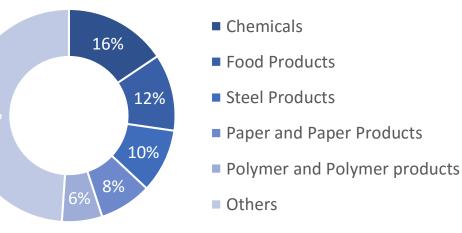
INDIAN MAJOR EXPORT AND IMPORT COMMODITIES IN 2020

Major commodities exported from India 2020



- Steel Products
- Minerals
- Reefer food products
- Stones
- Chemicals
- Others

Major commodities imported to India 2020



In 2010, major products exported from India were Steel Products (25%), Fabric/Yarn(12%), Reefer food products(10%), Sugar(7%), and Polymer and Polymer products(5%).

In 2010, major products imported into India were Chemicals(13%), Food Products(10%), Steel Products(20%), Paper and Paper Products(6%), Polymer and Polymer products (5%).

Source: Drewry Maritime Research, 2021





INDIA'S TOP 20 EXPORT DESTINATIONS & IMPORT SOURCES in 2020 (based on volume/tonnage)

India's Top 20 export destinations in 2020

Country	2010	2020	2010	2020	
country	Share	Share	Rank	Rank	
China	11.9%	18.7%	1	1	
Bangladesh	5.0%	10.1%	3	2	
United States	4.9%	5.6%	4	3 4	
Nepal	1.0%	4.6%	25	4	
Vietnam	4.5%	4.1%	6	5	
United Arab					
Emirates	4.4%	3.8%	7	6	
South Korea	4.8%	3.8%	5	7	
Saudi Arabia	2.4%	3.0%	12	8	
Indonesia	3.1%	3.0%	10	9	
Malaysia	3.1%	2.9%	11	10	
Oman	0.7%	2.4%	32	11	
Maldives	0.1%	2.4%	79	12	
Japan	4.3%	1.7%	8	13	
Italy	2.0%	1.7%	15	14	
United Kingdom	1.9%	1.6%	16	15	
Thailand	2.2%	1.6%	14	16	
Sri Lanka	2.4%	1.5%	13	17	
Iran	1.7%	1.2%	17	18	
Belgium	3.2%	1.2%	9	19	
Qatar	0.3%	1.2%	57	20	
Others	35.9%	24.0%			

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India's Top 20 import sources in 2020

Country	2010 Share	2020 Share	2010 Rank 202	20 Rank
China	14.5%	12.7%	1	1
United States	7.9%	6.5%	2	2
United Arab				
Emirates	2.7%	6.4%	10	3
Indonesia	7.5%	6.2%	3	4
Saudi Arabia	3.3%	4.4%	7	5
Malaysia	3.1%	4.2%	8	6
South Korea	4.3%	3.9%	4	7
Canada	3.7%	3.1%	6	8
Oman	2.9%	3.1%	9	9
Russian Federation	4.2%	3.0%	5	10
Singapore	2.0%	2.8%	18	11
Ukraine	2.7%	2.4%	11	12
Argentina	1.4%	2.4%	20	13
Brazil	2.5%	2.4%	12	14
Japan	2.2%	1.9%	16	15
Thailand	2.0%	1.9%	17	16
Qatar	1.0%	1.8%	24	17
United Kingdom	2.2%	1.7%	15	18
Vietnam	0.4%	1.4%	40	19
Egypt	0.2%	1.3%	59	20
Others	29.1%	26.4%		

Source: UNCOMTRADE data compiled by Drewry Maritime Research, 2021



TOP EXPORT PRODUCTS AND THEIR RESPECTIVE TOP DESTINATIONS, 2020 (MILLION TONNES)

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	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Exports to World	Top 5 share
Steel Products	China	Vietnam	Nepal	United Arab Emirates	Italy		
	6.0	2.5	2.0	1.4	1.2	22.5	58.1%
Minerals	China	Korea, Rep.	Japan	Bangladesh	Indonesia		
	4.7	2.1	1.3	0.8	0.8	16.3	59.9%
Reefer food products	Maldives	Oman	Bangladesh	Nepal	United Arab Emirates	i	
	2.3	1.8	0.9	0.6	0.6	11.1	55.6%
Stones	China	Bangladesh	Maldives	United Kingdom	United States		
	5.1	3.9	0.5	0.5	0.2	11.0	93.1%
Chemicals	China	Saudi Arabia	United States	Indonesia	Malaysia		
	2.4	1.0	0.7	0.7	0.7	10.8	50.8%
Sugar	Iran, Islamic Rep.	Sudan	Indonesia	Sri Lanka	Somalia		
	1.0	1.0	0.6	0.6	0.5	8.0	46.9%
Fabric/Yarn	China	Bangladesh	United States	Turkey	Vietnam		
	1.0	0.8	0.4	0.3	0.2	4.9	54.7%
Polymer and Polymer products	China	United States	Bangladesh	Nepal	Turkey		
	1.2	0.3	0.2	0.2	0.2	4.7	44.3%
Ores And Concentrates	Bangladesh	Nepal	Saudi Arabia	China	United States		
	3.0	0.8	0.1	0.1	0.1	4.7	88.4%
Ceramic products	Saudi Arabia	Nepal	United States	United Arab Emirates	Iraq		
	0.6	0.3	0.3	0.2	0.1	4.1	38.7%

Source: UNCOMTRADE data compiled by Drewry Maritime Research, 2021





TOP IMPORT PRODUCTS AND THEIR RESPECTIVE TOP SOURCES, 2020 (MILLION TONNES)

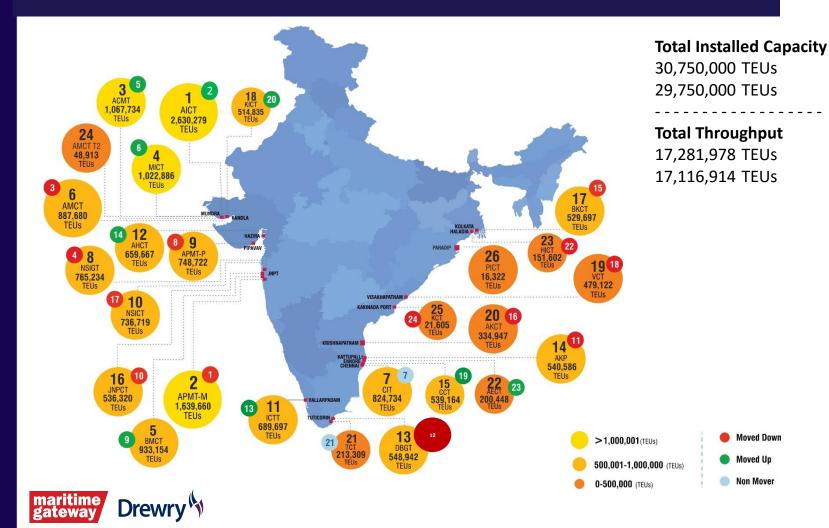
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	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Exports to World	Top 5 share
Chemicals	China	United States	Saudi Arabia	Singapore	Malaysia		
	2.7	2.6	1.7	1.2	1.1	19.2	49.0%
Food Products	Indonesia	Argentina	Malaysia	Ukraine	Russian Federation		
	4.8	2.9	2.2	1.9	0.5	14.3	85.3%
Steel Products	Korea, Rep.	China	United Arab Emirates	United States	Japan		
	2.1	1.5	0.9	0.8	0.7	11.9	49.7%
Paper and Paper Products	United States	United Kingdom	Canada	Netherlands	Russian Federation		
	2.4	1.0	0.8	0.4	0.4	9.8	51.2%
Polymer and Polymer products	China	Korea, Rep.	United Arab Emirates	United States	Singapore		
	1.1	0.8	0.7	0.6	0.6	7.5	49.8%
Minerals	United Arab Emirates	Bhutan	Qatar	Oman	China		
	3.0	1.2	0.6	0.4	0.3	7.1	77.6%
Reefer food products	Canada	Myanmar	Tanzania	United States	Mozambique		
	1.0	0.5	0.4	0.3	0.3	4.8	49.8%
Wood & wood products	Uruguay	New Zealand	Malaysia	Belgium	Papua New Guinea		
	0.9	0.6	0.3	0.2	0.1	3.7	53.6%
Sugar	Brazil	South Africa	United States	Germany	Netherlands		
	2.0	0.0	0.0	0.0	0.0	2.1	97.6%
Aluminum & aluminum							
products	United States	China	United Arab Emirates	United Kingdom	Malaysia		
	0.3	0.2	0.2	0.1	0.1	1.9	50.4%

Source: UNCOMTRADE data compiled by Drewry Maritime Research, 2021

CONTAINER TERMINALS RANKING (FY 2021)



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AICT	: Adani International Container Terminal
APMT-M	: APM Terminals Mumbai
 ACMT	: Adani CMA Mundra Terminal
 MICT	: Mundra International Container Terminal
BMCT	: Bharat Mumbai Container Termainal
AMCT	: Adani Mundra Container Terminal
CIT	: Chennai International Terminal
NSIGT	: Nhava Sheva India Gateway Terminal
APMT-P	: APM Terminals Pipavav
NSICT	: Nhava Sheva International Container Terminal
ІСТТ	: Vallarpadam International Container Transshipment Terminal
AHCT	: Adani Hazira Container Terminal
DBGT	: Dakshin Bharat Gateway Terminal
AKP	: Adani Kattupalli Port Container Terminal
ССТ	: Chennai Container Terminal
JNPCT	: Jawaharlal Nehru Port Container Terminal
BKCT	: Bharat Kolkata Container Terminal
KICT	: Kandla International Container Terminal
VCT	: Visakha Container Terminal
AKCT	: Adani Krishnapatnam Container Terminal
тст	: PSA SICAL Tuticorin Container Terminal
AECT	: Adani Ennore Container Terminal
HICT	: Haldia International Container Terminal
AMCT T2	: Adani Mundra Container Terminal
КСТ	: Kakinada Container Terminal
PICT	: Paradip International Cargo Terminal



INDIAN CONTAINER TERMINALS PERFORMANCE – THROUGHPUT (TEUS) VS Y-O-Y GROWTH (%) IN FY (2021)

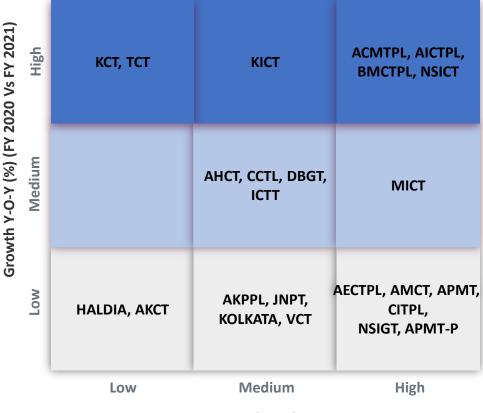
High Throughput, High Growth Terminals ACMTPL, AICTPL, BMCTPL, NSICT

Medium Throughput, High Growth Terminals **KICT**

Low Throughput, High Growth Terminals KAKINADA, TCT

	Throughput (TEUs)	Growth (Y-O-Y)(%)	
High	>500,000	>12%	
Moderate	500,000- 100,000	1%-12%	
Low	>100,000	>1%	

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Throughput (TEUs), FY 2021

APMT : APM Terminals Mumbai AICTPL: Adani International Container Terminal AMCT : Adani Mundra Container Terminal NSIGT : Nhava Sheva India Gateway Terminal ACMTPL : Adani CMA Mundra Terminal MCIT : Mundra International Container Terminal CITPL : Chennai International Terminal **APMT-P: APM Terminals - Pipavav BMCTPL** : Bharat Mumbai Container Terminals JNPT : Jawaharlal Nehru Port Container Terminals AKPPL : Adani Kattupalli Port Private Limited DBGT : Dakshin Bharat Gateway Terminal Private Ltd ICTT : Vallarpadam International Container **Transhipment Terminal** AHCT : Adani Hazira Container Terminal KOLKATA : Syama Prasad Mukherjee Port AKCT : Adani Krishnapatnam Container Terminal NSICT : Nhava Sheva International Container Terminal : Visakha Container Terminal VCT CCTL : Chennai Container Terminal KICT : Kandla International Container Terminal TCT : PSA SICAL Tuticorin Container Terminal HALDIA: Haldia Dock Complex AECTPL: Adani Ennore Container Terminal KCT: Kakinada Container Terminal

Source: Maritime Gateway

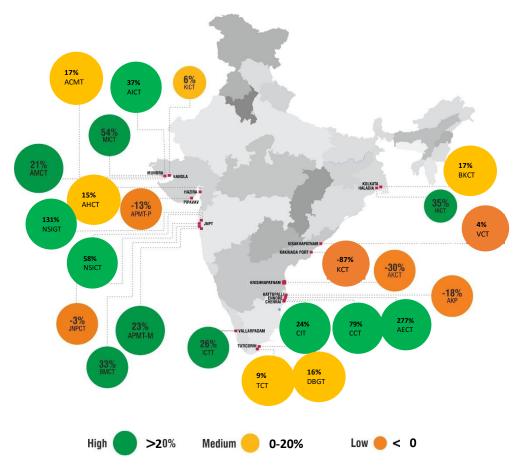


COVID IMPACT ON INDIAN CONTAINER THROUGHPUT IN FY 2022 (APRIL - SEPTEMBER)

AICT : Adani International Container Terminal

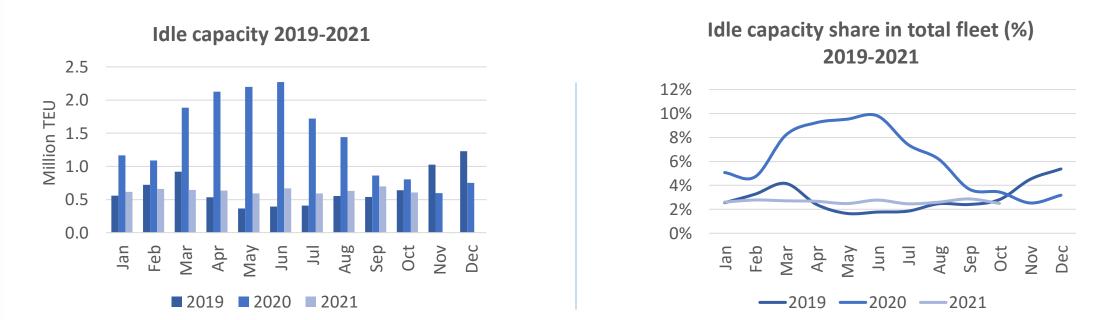
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IDLE SHIP CAPACITY 2019-2021



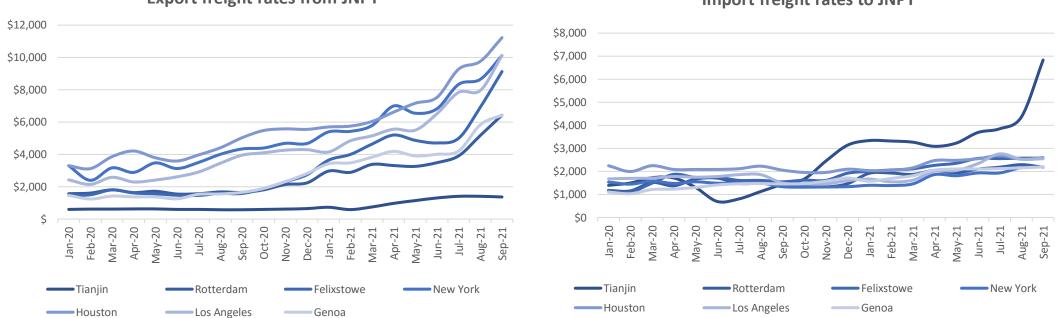
- Due to chaos and lockdowns in most of the world, idling was very high during the first eight months of 2020.
- With the growing demand during the later part of 2020, the idling activity declined considerably by the end of 2020.
- Due to the high freight rates and charter rates in late 2020 and 2021 (Jan-Oct), many ships came out of idling and were deployed across all the major trade routes.



Source: Drewry Maritime Research

RISE IN EXPORT & IMPORT FREIGHT RATES AT JNPT





Export freight rates from JNPT

Import freight rates to JNPT

Freight rates are soaring until last three weeks with a slowdown. The bull run in container spot rates in 1H21 appears to have plateaued, thanks to carriers' intervention to not levy any further rate rises over the next few months. But this does not guarantee that there will be no spike in spot rates. Strong demand, low supply and port congestions at major ports across the globe still remain the most significant issues.



Source: Container Freight Rate Insight, September 2021, Drewry Maritime Research

RISE IN EXPORT & IMPORT FREIGHT RATES AT JNPT



Number of times increase in freight rates to/from JNPT (Sep 2021/Sep 2019, 40ft box)

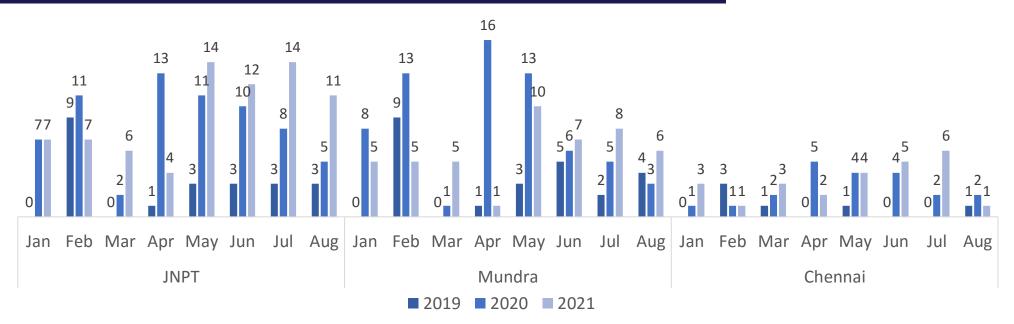
- Rates from/to JNPT to/from major sources/destinations have increased many folds during the last two years impacting Indian shippers heavily
- The impact doubles for Indian shippers who are dealing with both imports and exports
- The bull run we saw in container spot rates in 1H21 appears to have plateaued in October on major trade routes.
- Despite the continuation of the heavily undersupplied container market, two of the world's top container lines have announced not to levy any further rate rises for the next few months
- Port congestion at major ports in the US and massive power cuts in China have disrupted supply chains across the Pacific.



Source: Container Freight Rate Insight, September 2021, Drewry Maritime Research



MISSED SHIPS 2019-2021



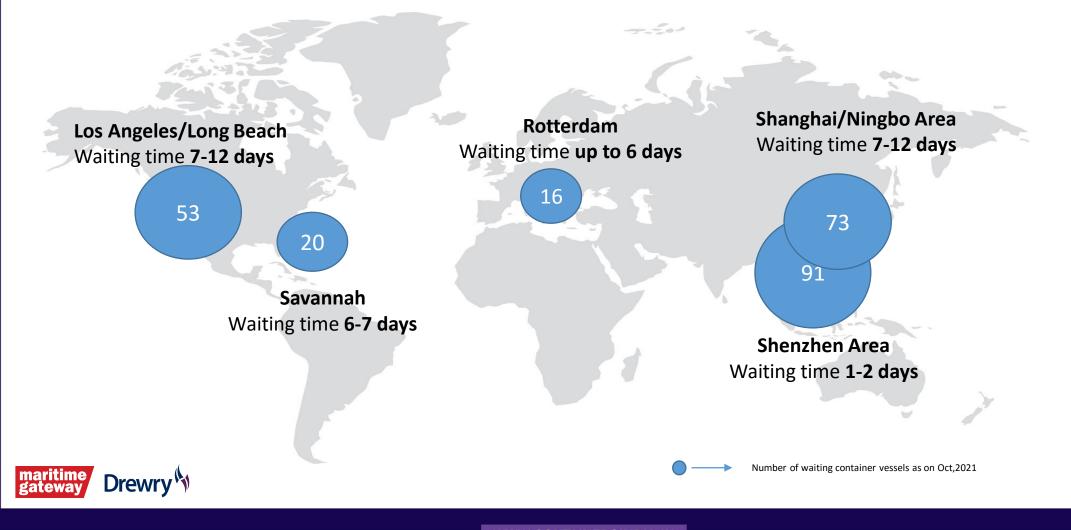
- Transpacific route attracts small carriers from intra-Asia because of strong demand, rising freight rate and scarcity of container boxes.
- Port congestion and vessel delays consistently disrupt liner schedules on high traffic routes like Asia-Europe and transpacific.
- Few 9,000 plus teu ships cascaded from 'India to Europe' and 'India to North America' to transpacific route because of the high demand of medium-size ships there.
- Indian port also saw a rise in weekly loops from Asia in 2021 because of swift demand recovery.



Source: Drewry Maritime Research

WAITING VESSELS AT BUSSIEST PORTS



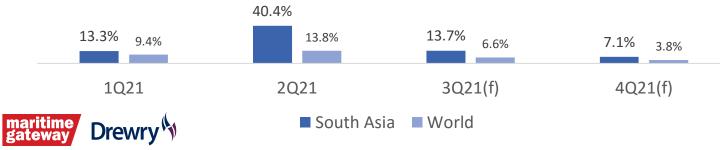


CONTAINER THROUGHPUT GROWTH FORECAST - OUTLOOK



Container throughput growth forecast at major regions

Quarterly forecast of container throughput growth in South Asia and World



- Despite ongoing supply chain misery, world port handling is expected to grow by 8.2% in 2021.
- Fleet growth will lag behind that of demand until 2023
- Operational normalcy won't happen until the end of 2022
- South Asia is likely to continue posting massive cargo handling. We expect South Asia port throughput to rise by 17% in 2021. However, it is likely to normalise in 2022 with a growth rate of 7.1%.

Source: Container Freight Rate Insight, September 2021, Drewry Maritime Research

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CFS CHANGE IN BUSINESS MODEL

Impact of DPD on CFSs:

- DPD grew from **7** % in **2016** to **~60** % in **JNPT** (and about **50**% in other ports) just within a short span of ~5 years that has brought a paradigm shift in handling Import containers in India.
- This drastic rise in DPD volumes hit hardly on the CFSs business and forced to re-engineer their business strategies to create sustainable business model despite they continue to offer certain services even to the DPD customers.
- The Ports like JNPT were conceptualized on CFS model where in all vessel related activities need to take place in the terminals, and the rest of cargo related services like grounding of container, seal cutting, cargo examination, re-stuffing, and delivering the cargoes efficiently at CFSs.
- Barring 6-7 % Importers who take direct delivery from the Port under the concept (DPD-DPD) and the balance DPD importers rely on of CFSs for better evacuation and storage under (DPD-CFS) concept.
- The evacuation by CFSs is much faster vis-a-vis DPD importers seeking delivery directly from the port. CFSs do an enblock movement of import containers is about 25 hrs, whereas the average time for delivery to a (DPD-DPD) box is about 50 hrs.
- Due to space constraint, Importers prefer to take deliveries from CFSs in 3-4 days by paying a nominal ground rent.



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CFS CHANGE IN BUSINESS MODEL

Changing Business Model of CFS as warehouse/logistic parks/FTWZ:

- CFS are highly capital intensive state-of-the-art infra projects and adopting a "warehousing" model alone is not sustainable.
- CFSs being short transit points designed to handle majority of the cargo in containers without destuffing them. So the majority of the developed area in CFS though fully paved is more of open space for faster turn around. CFSs with good infra and modern IT support systems, the extra space needs to be utilized by allowing them to carry out alternative activities.
- India becoming a major cargo hub and constructing new airports to cater the rising demand, where in existing CFSs can easily serve "Air Freight stations". Along with Port related activities, if CFSs allowed to handle "Domestic cargo" could be a game changer. Transformation of capable CFSs as Logistics parks or as FTWZ would also much helpful for the trade.
- In addition to the EXIM cargoes, the value added services like packaging, re-packaging, labelling, bar-coding etc can easily be done in CFSs. In addition some MSME related activities which are environment friendly also should be permitted.





GATISHAKTI AIMS TO ACHIEVE - SYNCHRONOUS DECISION MAKING TO CREATE SEAMLESS MULTI-MODAL TRANSPORT NETWORK

- Gati Shakti will boost economic growth, attract foreign investments and enhance the country's global competitiveness thereby enabling smooth transportation of goods, people and services and creating employment opportunities.
- Through this program, all existing and proposed economic zones are mapped with the multimodal connectivity infrastructure in a single platform.
- It will help raise the global profile of local manufacturers and help them compete with their counterparts worldwide. It also raises possibilities of new future economic zones.
- It will help India to increase both manufacturing and exports. Every product that is sold globally from India is attached to India.
- The plan includes 11 industrial corridors, achieving a Rs 1.7 lakh crore turnover in defence production and having 38 electronics manufacturing clusters and 109 pharma clusters by 2024-25.
- For Railways, the target by 2024-25 is to handle cargo of 1,600 million tonnes from 1,210 million tonnes in 2020, decongesting 51 per cent of the Railway network by completing additional lines and implementation of two Dedicated Freight Corridors (DFCs).
- In Civil Aviation, the target is to double the existing aviation footprint to have a total of 220 airports, heliports and water aerodromes by 2025.
- Industrial parks and logistics parks need to grow in size to be globally competitive. The National Industrial Corridor Development Corporation (NICDC), formerly DMIDC will work in close coordination with state governments to develop these industrial corridors.



INDIA- CHINA TRADE

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- India's biggest exports to China annually are iron ore, cotton, and other raw material-based commodities.
- India imports mechanical and electrical machinery in large quantities from China, while imports of medical supplies have soared in the past two years.
- India has become the fastest-growing trade partner for China. China's total trade was up 22.7% year-on-year, while bilateral figures with the three biggest trading partners, ASEAN, the EU and the U.S., were up 21.1%, 20.5%, and and 24.9% respectively.

Pandemic Period:

- India- China two-way trade reached \$87.6 billion, down by 5.6% in 2020.
- India's imports from China accounted for \$66.7 billion, declining by 10.8% year-on-year and the lowest figure since 2016.
- India's exports to China, however, rose to the highest figure on record, for the first time crossing the \$20 billion-mark and growing 16% last year to \$20.86 billion.
- The trade deficit, a source of friction between India and China, declined to a five year-low of \$45.8 billion, the lowest since 2015.

Post Pandemic Period:

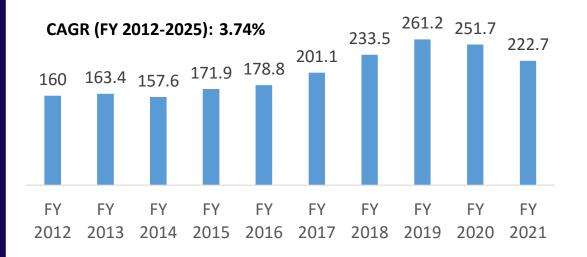
- As on Oct,2021, India's trade with China is set to cross the \$100 billion mark for the first time in 2021.
- Two-way trade after nine months reached \$90.37 billion, up 49.3% year-on-year. India's imports from China reached \$68.4 billion, up 51.7% year-on-year, while India's exports amounted to \$21. 9 billion, up 42.5%.
- Two-way trade was substantially higher than pre-pandemic levels, with bilateral trade up 29.7% compared to the same period in 2019, with India's imports up 21.5% and exports to China up 64.5%.





COASTAL SHIPPING – USHERING INDIAN DOMESTIC TRADE

Indian Coastal Shipping - Volume (million tons) and Growth during FY 2012-21



India has the potential to increase its coastal cargo to ~320 million tonnes by 2025

- The share of coastal cargo in the total cargo handled at Indian ports stood at ~16.34 % (2014-15).
- In 2020-21, the share of coastal cargo stood at ~22%, a marginal decline over 2019-20 (22.63%) on account of the spread of Covid-19.
- The year-on-year growth in coastal traffic has remained positive for years. However, due to the outbreak of the Covid-19 pandemic and the lockdown the traffic dipped by 3.34 %.
- Commodity-wise, the current Indian coastal cargo mainly consists of petroleum, oil and lubricants (POL), iron ore, pellets, coal and fertilisers for the use of PSUs.
- In 2019-20, POL and thermal coal together accounted for a large share of ~60 % in the total coastal traffic. However, the overall share of both the commodities has declined in the past five years (2014-15 to 2019-20).

DIGITAL FREIGHT FORWARDERS



The convenience of booking cargo door-to-destination, involving multi-modal transportation is attracting the customers to show interest in this digital platforms

Digital freight forwarders handles complete logistics process including:

- Cargo query management,
- Price comparisons,
- e-booking,
- Freight forwarding,
- Transportation,
- Customs clearance,
- Automated documentation
- and Online payment gateways.

Competitive Landscape:

Zipaworld, a startup founded by Ambrish Kumar, has already scaled up to over 40 customers in less than a year of operations.

Freightify, formerly known as Frieghtbro, has a strong team of 80+ tech and logistics professionals from India, Europe, and the USA. The digital platform enables customers to automate all these manual tasks and save 70 percent of the time invested while cutting down 50 percent of the cost just at the click of a button. Freightify handled 10,000 TEUs in 18 months period during 2016-2018. Freightify's attempts at turning the logistics and cargo business into a digital store has taken form and shape at its offices in Chennai and Mumbai, which the company says accounts for 70 percent of cargo traffic to and from India.



KEY INSIGHTS

- Mundra Port, has overtaken Jawaharlal Nehru Port Trust (JNPT) with about 18 % growth, handling 5.65 million teus in the Financial Year 2021. In comparison, JNPT handled only around 4.67 million TEUs in FY21, recording a decline of 7.04% over FY20.
- Boxes unavailability attributed to the rise of transportation cost which hit shippers hard as they forced to pay premium price.
- Slot availability were not ensured by the shipping lines due to the supply chain disruptions even by paying premium.
- Carriers were avoiding long term contracts till very recently.
- Rebate provided by Concor was a relive for Indian shippers.
- With restriction on inland movements and due to limited availability of lorry drivers, rail gained higher shares during the first phase of lockdown. As reported by CRISIL, the share rail in total container haulage at JNPT increased from 15% in Feb 2020 to 22% in Apr 2020.
- Congestion at major importing ports in USA and Europe are adversely impacting the already imbalanced supply chain systems due to rising demand, carriers are pushing more tonnage at the Transpacific trade especially along the USWC corridor and that has simply exacerbated the congestion at American ports. The congestion has been exacerbated by a long line of one-off loaders as well as some of the smaller participants such as Wan Hai and Zim adding new loops Additionally, bad weather, labour disputes, shortage of truckers, etc are adding to the pressure.







THANK YOU