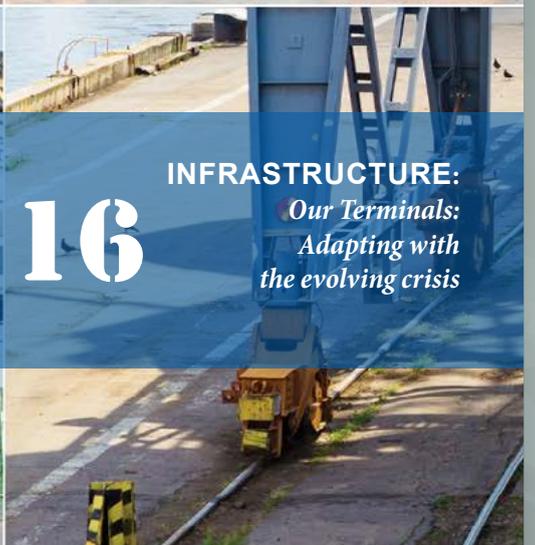


# TIDINGS

ISSUE XXX

JULY 2020

GET  
**INDIA**  
MOVING



05

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### EDITORIAL TEAM:

Mr Nandan Yalgi  
Mr K K Krishnadas  
Capt. Tamal Roy  
Mr Sushil Mulchandani  
Capt. Sunil Chopra  
Mr Siddhartha Roy  
Cdr. Sunil Dhulekar  
Mr Shirishchandra Shah  
Mr Rajnish Khandelwal  
Mr Keki Master  
Mr Samir Shah  
Mr Sunil Shetty  
Ms Meera Kumar  
Mr Ajay Tolani  
Mr Ashish Sharma  
Ms Shwetal Kharbari

### DESIGN TEAM:

Ms Dhara Kapadia  
Mr Jayakumar Ramajayam  
Ms Shilpa Nalavde

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J M BAXI GROUP

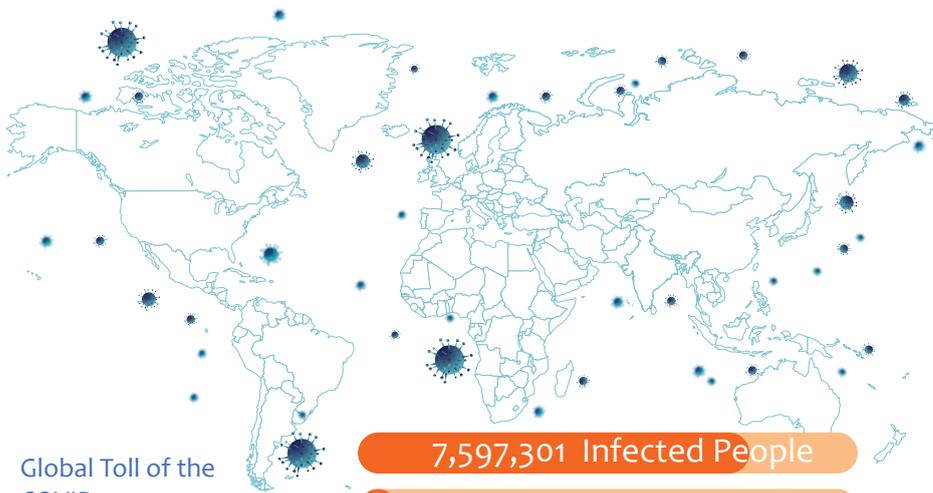
A: Dubash House, 15, J. N. Heredia Marg, Ballard Estate, Mumbai - 400 001. Maharashtra. INDIA.  
B: +91 . 22 . 22104444 | F: +91 . 22 . 22616222 | E: [corp@jmbaxi.com](mailto:corp@jmbaxi.com) | W: [www.jmbaxigroup.com](http://www.jmbaxigroup.com)

# From the Quarter Deck

**D**ear Friends and Colleagues,  
A message from the Quarter Deck has seldom started on such a dismal and despairing note, but this time, there is, indeed, no other way.

The global toll of the COVID-19 pandemic at the time of going to press was:

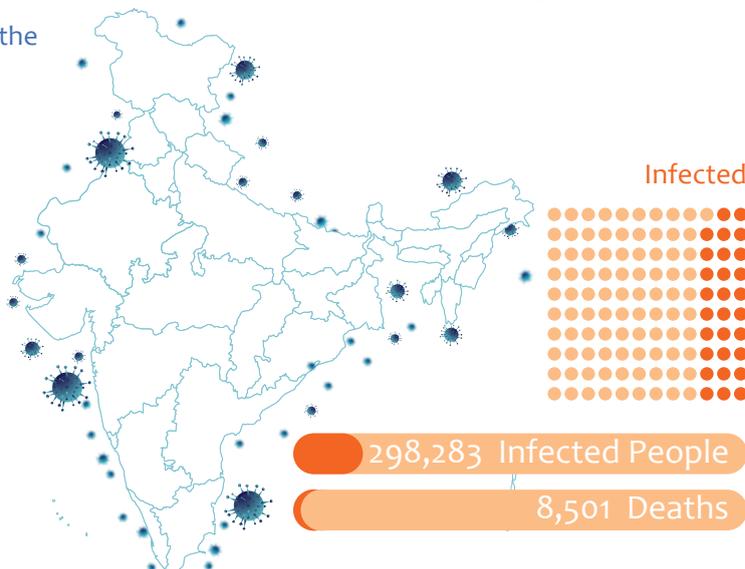
- Infected people: 7,597,301
- Deaths: 423,844



Whereas in **India:**

- Infected persons: 298,283
- Deaths: 8,501

INDIA Toll of the COVID-19



India chose to be cautious, so as not to endanger human life and thus, went for a total lockdown. The nation went into lockdown on 25<sup>th</sup> March 2020. The government tentatively declared that it would remain in place until 14<sup>th</sup> April 2020. However, the number of cases kept rising and the death toll also kept rising, so the lockdown was extended until 3<sup>rd</sup> May. It was further extended until 17<sup>th</sup> May and then to 31<sup>st</sup> May.

When we studied the situation closely, it became clear that starting

back after the lockdown was not going to be a question of just opening our doors and resuming work. The virus is still around, so living with it is going to be an



ongoing part of our lives. We need to adopt a whole new lifestyle and a whole new way of working.

Social distancing, video calls, webinars, digital and paperless processes, e-commerce, emails, e-learning, digital workplaces: this is our new normal. Actually, after the ABC of life, we seem to be in the D and E of our life's journey!

So, if A is for ADAPT, B is to be BRAVE and C is for CHANGE, the D is for DIGITAL and E is for ELECTRONIC.

We must **adapt** to the changes,

**be brave** in the face of **change**,

and accept that **digital** and **electronic** working is the change

To put things in perspective, just before this lockdown in India started, the on-again off-again US-China trade and tariff wars were ongoing. The trade volumes, on the main trade routes, were beginning to see a dip. This was aggravated by the lockdowns in Wuhan and then the rest of China. Simultaneously, the shipping world had shifted to the new standards for fuel to reduce



## From the Quarter Deck

SO<sub>x</sub> emissions (0.50% m/m). The new fuel costs \$200 per tonne more than conventional fuel. Moreover, several hundred ships were awaiting to be fitted with scrubbers at various shipyards. And then the crude oil price wars broke out, with crude oil prices falling below the \$20 per barrel mark, which reduced the differential between conventional fuel and SO<sub>x</sub>-compliant fuel. This also created a huge market for VLCCs and other crude carriers, which are used as floating storage facilities for the cheap crude oil. And to add to this volatile cocktail of events, these last few months have seen hundreds of blank sailings, and at some ports, established services have changed or reduced their frequency from weekly to fortnightly.

This has, obviously, resulted in some ships being laid up, some ships steaming slowly and some ships even choosing to bypass the Suez Canal by taking the Cape of Good Hope route.

Against this backdrop, the global pandemic has shut down city after city and country after country. Many businesses, especially in retail, including several major global brands, have gone insolvent or into administration, or even filed for Chapter 11 bankruptcy. Needless to say, this will impact manufacturing and export firms globally, as these are the suppliers for the retail outlets.

With the shutdown, various domestic industries and businesses have been temporarily shut, thus leading to temporary unemployment and a massive migration of labour from the cities to the hinterland. Several renowned global economists, consultancy and advisory firms, and educational institutions have done studies and reports that analyse the economic turmoil and also the likelihood of an imminent recession. They suggest that the recovery may be V-shaped or U-shaped or W-shaped or L-shaped. Whatever shape it is, the next 1 to 2 years

are expected to be grim. Most governments around the world have implemented stimulus packages to keep their citizens and their economies afloat.

Shipping ports and logistics are an essential part of the economy for any country, just as much as food, healthcare, electricity, clean water, etc. This is exactly what we at the J M BAXI GROUP of companies do for a living. This issue of **Tidings** focuses solely on the impact that COVID-19 is having on our business and the response, the resilience and the relevance of our group of companies and our people.

We are grateful to our clients and principals for having given to us this opportunity of being of service to them during these unprecedented times. Our shipping services division and companies have handled ships, undertaken crew changes, helped to bring Indian seafarers home, delivered coastal cargoes especially grain from one coast to another, and assisted in ensuring that our working environments are safe for the officers and crews of ships as well as port staff.

Our logistics division and companies have ensured that critical project cargo and packages are being delivered. We have worked hard to ensure that fertiliser movements to farmers are uninterrupted for the coming sowing season and continued to transport many important agricultural products, such as sugar, wheat and rice. Our various terminals have continued to handle ships and keep trade flowing, despite shortages of transport, labour and storage areas. Our technology and digital companies have continually endeavoured to enable remote working and online processes, especially since it has not been possible for the various stakeholders of the logistics world to be physically present in their workplaces. Finally, one of our companies has successfully introduced new

products, such as thermal cameras, to enhance safety and security.

This issue of **Tidings** is an update from the ground for our principals, clients, customers and colleagues. Regular readers of this column know that one of the major guiding principles of J M BAXI GROUP has been to work closely with our clients and principals and to understand their needs.

This global pandemic and the resultant lockdown have actually made us closer to our clients and principals. It reminds one of the saying: "Distance makes the heart grow fonder". This period is, actually, seeing the birth of a new normal.

This period is defining the additional roles that we will need to undertake for our clients and principals. There will be new and enhanced expectations, which we must respond to. There will be enhanced roles and responsibilities, for each of us. There will be new challenges and opportunities, for each of us.

It would be foolhardy, if not downright foolish, for us not to recognise the scale and scope of the challenges ahead of us. It is no small matter that global GDP is expected to shrink, for the coming year and beyond. Both demand and supply have been gravely disrupted. Liquidity will be an ongoing challenge and coping with costs, in these times of low productivity, will be a massive challenge.

But, that is for another time.

Before I conclude, I would like to thank each and every one of my colleagues for acting as frontline warriors on behalf of all our clients and principals, and also for all the regulatory authorities and government organisations ■

**Krishna B. Kotak**  
Chairman - J M BAXI GROUP



## In Conversation

# With HON. MINISTER Shri. MANSUKH L. MANDAVIYA

**S**ir, at the outset, may we congratulate you for having “fought from the front and leading from the front” at this unprecedented and extremely difficult period for our nation as well as the world. Thank you and congratulations. Sir, to put it in perspective, you ensured that ports functioned, we have not had a single death in the shipping and ports sector, through the quarantine laws you ensured the safe return of Indian seafarers home, you assisted trade with proactive assistance from the port authorities and other stakeholders to the trade and much more.

**Q: Sir, now with the slow and gradual opening up of the economy and our nation what do you see as the major challenges that will confront you in the port sector, on the shipping sector, on the port connectivity and evacuation activity, on the coastal shipping front, on**

**the shipbuilding and repairs front and on the inland water transport front?**

**Ans:** At the outset, let me express my thanks for my team at the central ministry level, as well as our teams at port level ably, led by the chairman, Dy. chairman and all the employees of the ports as also the stakeholders of our close-knit maritime community.

Yes it is indeed a giant challenge ahead of us across all the sectors that you have mentioned.

As you may be already aware that we are already working on a “2030 Maritime Vision” document which will be completed shortly. This challenge of COVID-19 that we have faced and will continue to face has probably given us an opportunity to reset ourselves. The fact is India has to be prepared to be a \$5 trillion economy. Port, Maritime, Shipping and Logistics has a large role to play in making

that happen. Productivity, efficiency, competitiveness, ease of doing business, and growth are the cornerstones of our guiding principles. Ports, terminals, connectivity projects, shipyards, coastal shipping, and inland water transport will all be nurtured, encouraged, and pushed to follow the principles that I have mentioned above.

**Q: Sir, one of the expected consequences is a major slowdown of the economy which is likely to take some time to recover, resulting in a sharp decline in volumes of cargo at all our Indian ports. Energy commodities like POL and coal which constitute almost 50%-55% of commodity mix have seen a large drop, container traffic too has seen a large drop, and cruise shipping has been completely stopped. Sir, how do you view the revival?**

**Ans:** On the one hand, yes, it is true that there has been a major effect on our sector due



## In Conversation

to a sharp drop and decline in volumes. On the other hand, one should also remember that there have been several sectors which have been less affected and showing a quicker sign of revival such as fertilizer, agriculture products or the steel sector, especially on the east coast of India. To give you a live example even during the lockdown period transportation by barges of fly ash from India to Bangladesh continued to happen after just a short break. This was in the inland waterways sector. You can be rest assured that we, as the Government of India, are cognizant of the challenges that we all face and shall put in effort to surmount these challenges.

Let us also not forget that the whole world is combating these challenges together. Take cruise shipping, for example, international operators have been establishing new SOP's and protocols which should enable the cruise industry to restart. As India, we should be ready to welcome those ships when they restart.

**Q: Sir, a large part of our industry is highly capital intensive. This applies to ports and terminals, Inland container and cargo terminals, ship owning, shipyards, railway and transport fleet, etc. Due to the loss of volumes and the expected slow recovery time for volume normalcy to be restored, many businesses are getting into financially stressed conditions. The industry would have no other option but to look to you for guidance, leadership, and help?**

**Ans:** Yes, we are very much aware of that and as you may know, we have been having discussions with various affected stakeholders with problems. At the very outset, we had asked the ports to give relaxation for payment of lease rentals, also revenue share of payments, and also MGT payments. We will continue to be engaged with all the participants to find as many solutions as possible.

**Q: Sir, with the new type of business and social interaction that is expected to be the new normal, digitalization and E work will be mandatory.**

**How do you see the Indian Maritime sector preparing for that?**

**Ans:** As you know that since the last year or so we have worked to get all our ports working digitalized for their processes and accounting and documentation. You will also see that our inland water transport sector has seen the significant deployment of digital technology across the rivers and also land-based operations. Our port community system has been implemented and it is gratifying to know that some other countries would also like to adopt our system. We are quickly expanding the port community system to also enable the complete chain of E-documentation whether it be E B/L, E D/O, E L/C. We are also getting our Directorate General of shipping to be fully digital. So yes, your point is very correct and we are working on the same.

**Sir we thank you for having spared this time for our readers and on behalf of them and trade we wish you SAFETY and SUCCESS ■**



## In Conversation



Mr. Mansukh Mandaviya is the Minister of State (Independent Charge) for Ministry of Shipping and Minister of State for Chemical & Fertilizers in Government of India. Mr. Mandaviya was born in a small village named Hanol in Palitana district of Gujarat state in a middle-class farmer's family. He holds a Postgraduate degree in Political Science from Bhavnagar University.

Mr. Mandaviya was very active in politics and serving people since his youth. He became a member of Akhil Bharatiya Vidyarthi Parishad (ABVP) and soon he grabbed his position as a state executive committee member of ABVP, Gujarat unit. Seeing his intellect, skills and the zeal to work hard he was appointed as a leader of Yuva Morcha and then the president of Palitana BJP unit. He also holds a record of being the youngest MLA in Gujarat.

Working hard to serve the people and uplifting them was his only goal and thus he organized two Padyatras of 123 km and 127 km for the cause of Girl Education, Beti Bachao, Beti Padhao and

Vayasan Hatao. At a young age of 38, he was elected as a member of Rajya Sabha. He was also a part of various standing committees in various fields.

With his hard work and intelligence, he was appointed as Secretary for state unit BJP in 2013 and General Secretary in 2014. Later in 2014, he was appointed as Gujarat State Incharge of BJP's High-tech & Mega Membership Drive Campaign which led to 1 crore people joining BJP in Gujarat.

Mr. Mandaviya is well known for his intellectual analysis and thought leadership, which he also exhibited in his speech on "2030 Agenda for Sustainable Development" at the United Nations. He has travelled to lot many countries to explore their policies and management to help India grow at the fastest pace.

On 5<sup>th</sup> July 2016, he sworn in as a Minister of State for Road Transport & Highways, Shipping and Chemical & Fertilizers in Government of India. Serving as a minister, he has implemented a lot of plans and thoughts to get the work done quickly and efficiently.

He was re-selected for the second term for Member of Parliament, Rajya Sabha during March, 2018.

With his decisive and bold leadership, he has helped increasing the per day road

construction speed, decreasing the cost of Urea and other fertilizers, establishing more than 4000 Jan Aushadhi stores to provide more than 800 medicines at affordable rates and reducing the cost of heart stent and knee implants. Above this, he has not left any stone unturned to help the common man, farmers and businesses.

Mandaviya has been a part of various delegations, twice with the President and once with vice president to sign MOUs and develop bilateral relations with other Nations. In the Asian continent he has visited China, Israel, Oman, Nepal, Dubai and Uzbekistan. He also visited European countries like England and Germany, South American countries like Brazil and Argentina. He has visited lot many countries of Africa like Kenya, Uganda, Tanzania, Rwanda, Algeria, Hungary, Equatorial Guinea, Swaziland and Zambia. In an Oceania Region Shri Mandaviya visited New Zealand, Tonga, Fiji and Australia.

He has played a vital role in the growth and development of New India with his hard work, organizational skills and intellect.

Again in 2019, he sworn in as a Minister of State (Independent Charge) for Ministry of Shipping and Minister of State for Chemical & Fertilizers in Government of India.



## Agency & Services

# Crew Changes – The JMB Way

**S**eamen leave their families behind to sail on the high seas, working on ships that bring us our essentials and the many other goods that we need every day. Maintaining a relatively low profile, seafarers spend the majority of their time in the middle of the ocean with no land in sight, missing their loved ones. With COVID-19, seafarers are even more anxious, since they do not know when or how they can return home due to the non-availability of international flights and various restrictions at ports.

J. M. Baxi & Co. is a premier shipping agency house in India with a 104-year-old legacy. Since the DG Shipping issued an order on 22<sup>nd</sup> April, 2020 to allow crew changes, J M BAXI set to work within 24 hours by carrying out the first ever crew sign-off for an Indian crew from the cruise ship Marella Discovery, which occurred at Mumbai on 23<sup>rd</sup> April, 2020. The company has been in the forefront ever since, effecting several crew changes at many Indian ports using its network of branch offices. We adhered to the guidelines and the Standard Operating Procedure (SOP), which entailed coordination with COVID-19 testing facilities, quarantine centres, the local police and district authorities, in addition to the usual port, customs and immigration organizations.

Our sincere thanks and heartfelt gratitude go to all these authorities for their kind support and cooperation in our endeavours.

J. M. Baxi & Co. has been the first agency to undertake a crew change since the lockdown in the country at ports of Mumbai, Goa, Sikka, Hazira, New Mangalore, Cochin anchorage, Kolkata, Haldia, Paradip, Cuddalore and Tuticorin anchorage. At Visakhapatnam, Gangavaram and

Dhamra, we were actively involved in coordinating with the relevant authorities to formulate the SOP and pave the way for crew changes. So whether it was in the shelter of a port, in the choppy waters at Mumbai anchorage or in the rough weather and heavy rains at Cochin anchorage, our teams bravely, efficiently and safely executed the sign-on and sign-off of the crews.

Impressed by our services and by our transparent and competitive charges, various shipowners, ship operators and ship management companies have tasked us with managing crew changes.

The safety of the crew is always of high priority. We provide them with the right Personal Protective Equipment (PPE), including face masks, gloves, full body suits, goggles and sanitizers, and if the crew change occurs at anchorage, life jackets are also provided.

Our job is not over once the crew has disembarked, since the next challenge is to get them home, even when that is in a far-flung part of the country, like Kanyakumari in the South, West Bengal, Sikkim and Arunachal Pradesh in the East, Delhi, Uttar Pradesh, Uttarakhand and Himachal Pradesh in the North or Gujarat and Goa in the West. As domestic flights are suspended, the crew travels safely by road in specially sanitized buses and cars with drivers who have tested negative for COVID-19. We obtain all the permissions and paperwork necessary for crossing various districts and state checkpoints.

The smiles on the seafarers faces when they walk down the gangway, the relief they show as they wave goodbye from the window of the car or bus as it departs to their

hometowns from the port and their overwhelming sentiments in the thank you messages they send us after reaching home safely makes us forget all the troubles we have overcome for them.

We shall continue to bring more smiles in our traditional and humane way, the JMB way ...



## Agency & Services

“

Under the prevailing circumstances the crew change was a tough task, however you and your team did a good job, I appreciate you and your entire team.

Thanks and Best Regards,

Capt. Rajiv Kumar  
Master, M.V. Ocean Knight.

”

“

We are very pleased with your close follow-up to effect the joining of our sea staff in a record time. It was very pleasant talking to you yesterday evening. This is the first normal crew change post Covid-19 at this port and were facing lot of challenges, however we always had faith in J M BAXI. Same way Paradip crew change on our other tanker Sunlight Express was done in a very professional manner. Your close follow-up and personal presence during the event has ensured that the crew could join the vessel in time. Thanks a lot!!!! Will await update on off signers, which please arrange only upon vessel's departure to have maximum handover time.

Thanks and Best Regards,

Capt. Arun Kumar Sharma,  
General Manager  
Anglo-Eastern Ship Management  
(India) Private Limited

”

“

As you are aware the last of the off-signers from Eagle Victoria AB Jesuvadian Santhanaraj reached his hometown Tuticorin at 0200 hours today. As per local regulations he has been advised to stay in a Government Quarantine facility for 14 days. With this we may close the WhatsApp group created for daily update and monitoring purpose. We would like to place on record our sincere thanks for all your assistance at each stage of the operation in carrying out the crew change operation safely and smoothly during lockdown and that too at Outer Port Limits which was a first of its kind. The optimism and promptness with which you were able to meet all allied requirements for the operation which included providing sanitized transport driven by COVID-19 tested drivers from faraway places (drive time in excess of 24 hours in some cases), arranging COVID-19 test for the sea staff, arranging Transit pass etc. is indeed commendable. Of course it goes without saying that without the active support and cooperation of our head office, our sea and shore staff, this would not have been possible. A BIG THANK YOU to everyone. While wishing J. M. Baxi & Co. continued success, we look forward to working with you and your team in future too, the very next operation being the crew change on Bunga Kasturi on or around the 4<sup>th</sup> June 2020 at Mumbai inner anchorage.

Thank You and Best Regards,

Capt. Balaram Mahapatra  
Head Manning Operations  
Eagle Star Marine India Pvt.Ltd.

”



“

Thanks to you and team for exceptional coordination in order to make this change happen without any delays to the vessel.

Looking forward to change on Bloom now, reverting with details.

Kind Regards

Capt. Vishal Breja  
Searland ■

”

You  
Tube

## Logistics

# Keeping The Wheels Going During COVID-19

**B**oxco Logistics lived up to its reputation of being the most dependable heavy-lift logistics provider, even in challenging circumstances. The COVID-19 pandemic caused a sudden disruption of life in general. In particular, the transportation of heavy-lift and over-dimensional cargo (ODC), which requires an immense amount of precision planning, was affected by the commencement of a countrywide lockdown from 25<sup>th</sup> March 2020.

Moving massive heavy-lift and ODC packages on multiple axles on roads in these circumstances has numerous challenges, especially in the initial phases of the lockdown when nothing was allowed to move. Fortunately, the impending disruption was read well by the management, and business continuity plans were in place.

Boxco Logistics takes great pride in being a part of India's success story for over three decades. The equipment that we deliver ensures that our country's refineries, power plants, steel plants and other important projects are completed on time. This is our humble contribution to reducing the impact that the pandemic has had on the nation's economy. When nothing was allowed



to move, it was indeed a challenge to convince the security personnel on the ground of the importance of moving these massive pieces of equipment.

However, as has been said many times by many people, nobody alive has seen such a situation, but the teams went the extra mile and used all the available resources to achieve the group's goal of keeping the wheels moving under any adverse conditions.



To give an example, the first two packages moved during the lockdown were two heavy-lift columns using 16-axle and 12-axle lines, respectively, from the manufacturing facility in Tarapur to Bhatinda, a good 1500 km away.

The lockdown was announced when these packages were already en route at the Sirsa bypass in Haryana. The cargo, however, was critical for the refinery expansion project, and Boxco, as the service provider, was under immense pressure from the client to get the columns moving.

The Boxco Logistics team, with good support from the clients, was eventually able to convince the authorities to allow the movement. One advantage of the lockdown was



that the roads were relatively empty. The remaining distance of 100 km to Bhatinda was completed in 6 hours.

With the first packages delivered, we went about moving the other packages with confidence.

Boxco also successfully delivered a gas phase reactor weighing 85 MT on a 10-axle line along with other packages from Mumbai Port to Bhatinda.

The story does not end here, as Boxco teams are currently moving the top and bottom sections of a reactor weighing 205 and 150 MT, respectively, on 16-axle and 12-axle lines from Tarapur in Maharashtra to Bhatinda.

In the super ODC segment, the team also delivered a 40-metre-long package weighing 621 MT on 24 parallel SPMT lines.

Boxco Logistics takes great pride in its operations team, which is today considered the best heavy-lift team in the country. More importantly, the team members have braved the challenges of the lockdown, convincing numerous authorities and fighting the lack of local support while ensuring they have adequate resources and at the same time



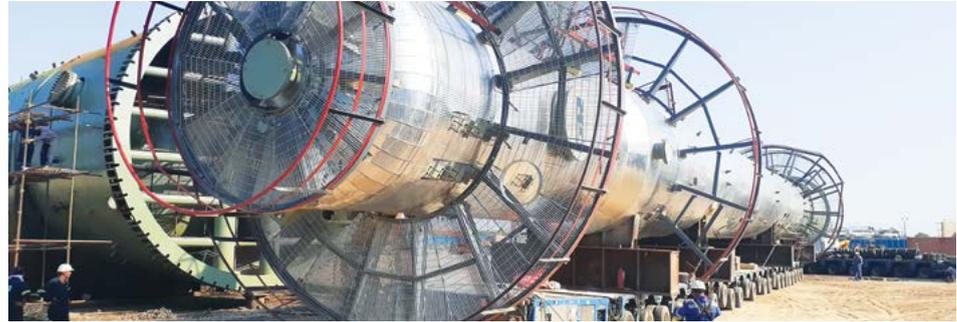
# Logistics

ensuring they are safe and protected. The safety of the operators is paramount for Boxco Logistics, and hence, all the movements were undertaken with the minimum number of experienced staff.

This adds to the long list of ODCs moved in challenging conditions by Boxco Logistics.

Boxco also moved a 150 MT granite block to be used for the construction of the Mahakaleshwar Temple in Gurupura in Karnataka. The block was moved on 10 axles.

Amongst Boxco's varied activities, the Customs Clearance and Forwarding Department is also extensively connected with both internal and numerous external bodies. The C&F department strategised that, irrespective of the lockdown, whatever came within the ambit of Boxco's functions should continue uninterrupted as before. Thus, vital office systems were carefully taken home by staff. Thereafter, the follow-up of tasks from home offices, on the ground and with other stakeholders was then possible, as circumstances and government stipulations permitted.



The field staff was given clear instructions to minimise risks. Daily coordination discussions helped to optimise staff deployment and travel arrangements. Evening briefings ensured that the team was fully aware of the ground situation and difficulties at various places. Various government departments, including customs, helped to facilitate the processes. The department obtained, as a priority, essential service passes for its field staff right from the start of the lockdown. Also, it set up a protocol for communicating with customs officers by email.

Thus, work that was previously done by people sitting within a few desks of each other is now being seamlessly handled by personnel spread all across the city and hinterland. Boxco has continued

to deliver its customs clearance function effectively, as before, limited only by the capabilities of its clients and other organizations. Initially, the team witnessed the surreal atmosphere of vacant and locked customs offices at various places and an almost nil evacuation from ports, and often had to return from the field without having achieved anything although being fully prepared to execute. From the first stirrings of activity to the issues now unfolding due to a shortage of labour and drivers for trucking, team Boxco is geared up to deliver through it all. Clearances, despite the lack of original documents, which are often mandatory, were executed by communicating appropriately with the hierarchy in Customs and Shipping Lines. Solutions were found on a case-by-case basis by making meaningful substitutions and undertakings from the client. Almost all types of cargo, including steel, coils, plates, tubes, project equipment, machinery, sugar, rice and chemicals, and the vessels themselves, have been cleared and delivered during the lockdown across the ports in India, quite often surpassing the expectations of the clients.

The challenges due to the lockdown have been huge, and the extensive arrangements may still have fallen short, but for the strong commitment to deliver made by the team across all levels at Boxco. For now, it seems that the most stringent phase of the lockdown is over, but we are not letting our guard down, and we are further sharpening our operations as we go forward with confidence and pride ■

THE PACKAGES MOVED BY BOXCO DURING THE LOCKDOWN

Client	Cargo	Length (m)	Width (m)	Height (m)	Volume	Weight (tonnes)	Proposed axle combination	Route
GR Engineering	837-TR-C-10 Top section	23.2	5.5	5.8	740	205	16	Tarapur to HMEL Bhatinda
	837-TR-C-10 Bottom section	20.6	5.4	5.8	639	150	12	Tarapur to HMEL Bhatinda
	911-EE-5001 (Propylene refrigeration condensers)	16.6	4	4	266	149	10	Tarapur to HMEL Bhatinda
	837-TR-C-20 Top section	21.8	4.5	5.5	540	W65	12	Tarapur to HMEL Bhatinda
	837-TR-C-20 Bottom section	30.3	5.4	6.3	1021	116	16	Tarapur to HMEL Bhatinda
ISGEC	PV 0562	40.1	9.5	11	4190	621	24 + 24	ISGEC Bhatinda to HMEL Bhatinda
Tecnimont	Gas phase reactor	19.7	4.9	5	484	87	10	Mumbai Port to HMEL Bhatinda
Vardhamana Trust	Temple stone	25	3	3	225	150	10	Mangalore



## Logistics

# Temperature-Controlled Warehousing And Reefer Forwarding During COVID-19

### A Silver Lining During The Recession

One of the takeaways of the pandemic is the increase in demand for high-technology temperature-controlled warehousing, which needs to expand and work round the clock to ensure there are enough fresh and frozen products for people to buy in supermarkets and grocery stores, for home delivery or otherwise.

Cold-chain companies will play an important role through and after the COVID-19 pandemic. Food manufacturers, distribution centres and cold-storage warehouses will need to go hi-tech to meet rising consumer demand.

Moreover, cold-chain operations will need to adhere to the highest hygiene standards. The old Mandi system (with local market aggregation centres) for the movement of fresh and frozen foods will come under increased scrutiny as modern e-commerce and convenience stores will bring in stringent COVID-19 guidelines for temperature, workforce, hygiene, safety, packaging and speed to ensure the flow of fresh and frozen foods to convenience stores, food manufacturers and consumers.

Food, medicine and vaccines are essential commodities that need state-of-the-art cold chains to ensure just-in-time distribution. Hence, India will need to increase its capacity of hi-tech temperature-controlled warehousing and reefer trucks. Warehouses need to reskill their staff so that they can provide value-added

services, like sorting, consolidating and repackaging for the last-mile delivery.

Warehouses need to adopt cold-chain technologies, such as cloud-based warehouse management systems, Radio-frequency identification (RFID), sensor tags, automated guided vehicles, Internet of things (IoT) and mobile racking to enhance overall warehouse operations, improve efficiency and seamlessly integrate every step of the cold-chain process.

Responding to COVID-19 is challenging and cold-storage companies must revisit their supply-chain strategies, accelerate the adoption of cold-storage technologies and implement supply-chain risk management and business continuity strategies. Cold-chain companies need to improve continuously by embracing automation and digitisation to reduce costs and increase efficiency.

### Cold-Chain Imports Of Fruit Amidst COVID-19

Boxcold, the cold-chain division of Boxco Logistics, has been slowly building up volumes of cold-chain imports through Inland Container Depots (ICD), specifically of apples and kiwi fruit. Reefers arrive from supplying countries at Kandla/Mundra and are then transported by rail to ICD Sonepat, where the goods are stored in a temperature-controlled warehouse for onward shipment to consumer points.

However, importing fruit in reefers has been very adversely affected, as most of the supplying countries have been hit hard by COVID-19. The most

popular fruit imported into India are apples, though this trade has declined due to:

- ▶ The import ban on Chinese apples after China was struck with COVID-19.
- ▶ The increase in customs duty on US apples.
- ▶ The decline in domestic demand, which has created a local apple glut due to the oversupply of apples from Kashmir.

Countries such as Italy, Poland and Turkey are currently trying to fill the gap created by the reduction in supply from the US and China, especially for high-quality apples. The lockdown in India has, however, significantly hampered this trade.

The other main imports are kiwi fruit from New Zealand, Chile and the Middle East. Imports of high-quality kiwis from the Middle East have gathered steam in the last 2-3 years. However, the imports are seasonal and occur between September and May, and the last two months of this current season were wiped out due to COVID-19 and the lockdown in India.

The new normal post-COVID-19 will see an increase in demand for good-quality, cleaner and well-packaged fruit, especially immunity-boosting fruits like kiwis. Hence, volumes of these fruits from the supplying countries referred to above are expected to rise considerably in the new season beginning in September 2020.



# Logistics

## Cold-chain transparency and visibility post-COVID-19

In the current landscape, it is very critical for cold-storage operators to monitor the inventory available in their value chains. Providing visibility across the supply chain will give customers better transparency, allowing them to formulate more effective supply-chain strategies.

Technology needs to be employed that will help to identify supply-chain disruptions so that operators can respond proactively. Customers want real-time and comprehensive overviews of the status of their cold-chain shipments. With the right information, the appropriate team in the chain can respond immediately to mitigate a disruption before it becomes a problem. Customers also

need updated standards for storage, hygiene, temperature control and human interventions.

## Conclusion

Overall, post-COVID-19, there will be many opportunities for cold-chain businesses and the industry will surely transform for the better ■



# Infrastructure

# COVID-19-Impact On Steel And Fertilizer Industry

The Novel Coronavirus (COVID-19) pandemic has had severe health and economic impact in almost all countries. In the immediate aftermath, India and several other nations have prioritized citizen health over economic activity to contain the spread.

The COVID-19 pandemic surfaced in India and sparked off a crisis of significant proportions. By the third week of March 2020, this began impacting economic activity with the announcement of a nationwide mandatory and complete lockdown.

Economic activities have come to a standstill and are returning to the new normal in a staggered manner since April 20, 2020. It is expected that any kind of demand recovery will take many months as overcoming challenges in the form of getting migrant labourers back into manufacturing / construction zones, resetting disrupted supply chains and overcoming liquidity constraints of particularly towards working capital needs, cannot be accomplished overnight.

The lockdown, which undeniably was the need of the hour, was also one of the severest responses to Covid-19 worldwide and has singularly led to depressed demand across sectors.

## STEEL SECTOR

Plummeted demand in end-use segments has impacted the steel industry and trade estimates show a slump in domestic steel demand in the range of 12% to 20% in FY 2020-21. The slowdown in economic activity in key-end use sectors, primarily

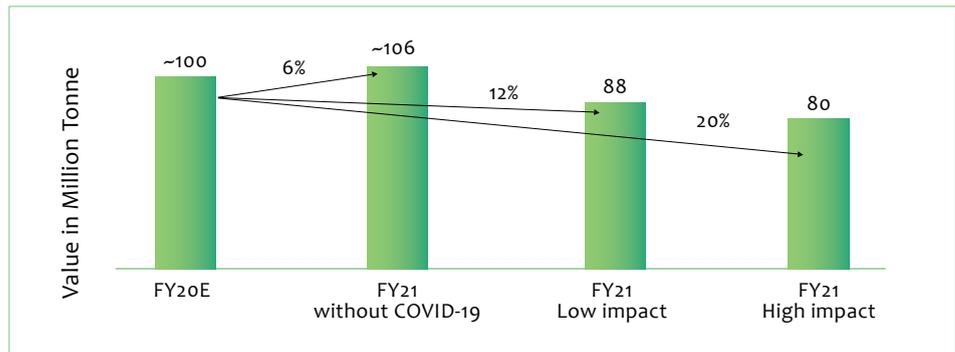


Fig. 1: Steel Demand Forecast

construction, infrastructure and automotive, which accounts for nearly 72% of total steel consumption, has led to a sharp fall in steel demand.

With the decline of domestic consumption, Indian steel mills are focusing on exports for at least six months and are currently producing exclusively for exports taking advantage of the drop in local iron ore prices and imported coking coal rates, together with a weaker Indian currency will make exports more competitive.

Mills are gearing up for an increase in demand from overseas buyers as the COVID-19 outbreak has choked supplies from global steel producing companies especially China.

China is recovering from a brutal lockdown and has been slowly returning to full-scale production of crude steel. So non-integrated steel mills in China and southeast Asia that depend on Chinese crude steel are now turning to imports. In China and South Asia, there's a lot of demand for semis while in markets in Europe, where the entire steel industry has stopped functioning, there's a demand for finished products.

MAJOR INDIAN STEEL EXPORTS	
COUNTRY	CARGO
China & South East Asia	Pig Iron, Billets
Europe (Germany, Denmark, Italy, Spain)	Plates, Billets, Rail Blooms, Coils (CRC)
Middle East	

## CHALLENGES FOR EXPORTS

- Realisation Decline**  
 Currently, steel makers are exporting at prices they are able to clutch, as keeping cash flow is more important in the current scenario and companies are not looking at the margins over exports. Trade estimates, the realisation to fall about 15% Y-O-Y as export prices are down about 25% compared to FY 2019-20.
- Congestion At Ports**  
 As more manufacturers focus on exports, there is higher traffic congestion at the ports which are already operating under reduced capacity due to lockdown restrictions.



# Infrastructure

## JMB LEVERAGE - STEEL EXPORTS

The J M BAXI GROUP's multipurpose terminal at Paradip Port, Paradip International Cargo Terminal (PICT) is completely geared up to handle the increased traffic. The terminal has a quay length of 450 meters and depth of 17.0 meters capable of handling Cape-sized vessels upto 1,25,000 DWT.

## FERTILIZER SECTOR

Fertilizer sector falls under the Essential Commodities Act and hence was exempted from lockdown restrictions. But the lockdown posed a number of challenges for the continuous operation of fertilizer plants as listed below:

- Operations with limited manpower and sourcing of raw materials.
- Availability of labour at plant sites for loading and unloading at destination points.
- Limited storage capacity resulting in pressure on the evacuation of material.
- Availability of consumable materials such as bags and chemicals.
- Ministry of Finance put monthly and quarterly restriction on the disbursement of funds as part of its cash management measures. Industry was already starved of its working capital due to huge unpaid subsidy dues.

## SALES

Despite lockdown measures, the demand for fertilizers had peaked predicting the considerable monsoon and demand from dealers to stock up in anticipation of kharif season. Further, migrant workers who have returned to rural areas are also the

participants of the agrarian economy and are expected to engage in more farm activities thus pushing for more fertilizer demands.

This trend is expected to continue increasing, with offtake set to remain strong through the kharif season, (April to September). Fertilizer sales increased by ~ 45% in April, 2020. (Refer table below)

The industry managed with the supplies in Q1 (FY 2020-21) due to carried forward inventories of Q4 (FY 2019-20) which was an off-season period.

## IMPORTS

With manufacturing units working on lower capacity and fertilizer sales in India typically peaking in July-August with the onset of the monsoon season, Imports are expected to surge through Indian ports.

Paradip International Cargo Terminal has geared up to meet the challenges faced due to the lockdown and expected to handle imports of 1 million MTs of finished fertilizer for bagging and onward dispatch to the hinterland ■

### ALL INDIA FERTILIZER RETAIL SALES (LAKH TONNES)

Month	2018-19	2019-20	%Growth
October	48.37	45.17	-6.62
November	63.26	73.84	16.72
December	70.86	87.08	22.89
January	58.04	64.5	11.13
February	30.39	46.61	53.37
March	24.6	28.96	17.72
April	14.17*	20.56**	45.1
*April 2019, **April 2020		Source: Department of Fertilizers	



## Infrastructure

# Our Terminals: Adapting With The Evolving Crisis

The global health crisis caused by the outbreak of Covid-19 has landed shipping trade into disarray. Ships carrying oil and cargo are stranded at sea for months due to lack of clarity from ports on vessel quarantine, crew change policy and Health and Safety Executive (HSE) checks at ports which, in turn, has pushed the international supply chain towards economic slowdown. This situation eventually left Indian ports in chaos as COVID-19 lockdown hit operations, affecting the ability of traders to move the cargo in and out of the country.

J M BAXI GROUP which operates 5 container and bulk terminals at various ports, namely, Visakhapatnam, Haldia, and Paradip are on the East coast of India and Kandla and Rozi on the West coast. In addition, it operates Container Freight Station (CFS) at Mumbai and Visakhapatnam and at Inland Container Depot (ICD) Sonapat near Delhi. Three of the facilities at Mumbai, Sonapat and Haldia because of high incidence of COVID-19 patients were declared as Red Zone, thus making operations difficult to continue despite of the logistics being categorized as an ESSENTIAL SERVICES. Volumes took a plunge, given the first-mile (cargo evacuation from port) and the last-mile (supply-chain between ICDs to company warehouses) being severely restricted which posed immense challenges.

### Waiver of Demurrage Charges at Ports

Immediate impact of COVID-19 lockdown lead to a slump in trade demand and traders were left with no option but to shut industrial production. Acute shortage of

drivers to move cargo and labour to de-stuff the cargo also leads to a closure of a number of warehouses. This also resulted in the importers unable to custom clear their landed laden consignments and on the other hand export consignments were also held up as a number of vessels skipped vessel calls for fear of subsequent penalties. However, the Government of India which was in constant touch with the maritime community took actions wide and issued an advisory for non-charging of detention charges, ground rent or any similar penal charges from 22<sup>nd</sup> March 2020 to 14<sup>th</sup> April 2020 for containerized cargo and extension upto 3<sup>rd</sup> May 2020 ( i.e the period of lockdown) for non-containerized cargo. This, however, lead to another challenge as container and cargo piled up at the terminals leading to congestion in a matter of just 3 to 7 days from the lockdown issue order.

### Shortage of Truck Drivers and Labours at the terminals

The container and truck moving IN and OUT of the terminal fell by 50% due to reduced number of trailers and unavailability of drivers. Though the government allowed movement of cargo trailers under essential goods and services, the ground reality was far from satisfactory. The truckers were stopped at every check-point just a few kilometers apart making cross-border and provincial border travel challenging. And with the lockdown shutting down highway food establishments and workshops, truckers couldn't get the services they needed even if they were on the road. ICD and CFS operations on the other hand, were adversely affected due to the slowdown/shutdown of factories owing to non-availability of labour.

Fear psychosis due to COVID-19 virus, absence of work, entry restriction from local villagers, and lack of sustenance in the cities and transportation hubs had created panic amongst most drivers and labour who then started moving back to their native places.

### Lack of Storage Yard Capacity at the Terminals

Congestion at the terminals increased as import containers moved to the nearby CFS's were not being cleared by the importers and custom house agents to combat the spread of COVID-19 during the lockdown period. This resulted in a pile-up of a large number of import laden inventory in the CFSs and ICDs, and with only a fraction of the imports being gated-out by the trade, these terminals were facing an unprecedented challenge as most of them reached their "holding capacity". Empty depots with no operational staff lead to an increase in empty boxes at the terminals.

### Increased Load on Rail Traffic and Congestion

With a shortage of truck drivers for road delivery, it leads to the movement of hinterland container traffic by rail. This surge in rail traffic chocked up storage capacities at all ICD terminals with limited operational resources, non-availability of custom authorities and truck drivers for evacuation and local hinterland delivery to consumption centers.

### Challenge on Equipment availability, repair and maintenance

With terminal facilities overloaded with import consignments and clearance issues stressed up



# Infrastructure

available container and cargo handling equipment. It was difficult to add on handling equipment capacity or mobilize from a distance where equipment were available due to provisional border restrictions and drivers' availability. Routine maintenance and an Annual Maintenance Contract (AMC) support was critical to keep equipment running but with the lockdown the availability of consumables locally and maintenance support from vendors was next to impossible due to quarantine measures and closed establishments.

## Challenge on safety measures and supplies

The imposition of a sudden lockdown and a quarantine advisory increased demand for sanitizers, thermal screening instruments and personal protective kits. With most of the required essentials being out-of-stock for weeks, operational safety was a major concern at ICT terminals leading to hinderance in vessel operations and gate movements. Outside staff, drivers and labours were reluctant to perform normal work under such a severe situation.

## Operating in Extreme Conditions

Natural conditions added non-advantage during this crisis as temperature rose every day after relaxation; tremors of earthquake, rain and storm affected working scenarios also.

Despite challenges the staff at ICT terminals complied with all regulatory precautions and safety measures to ensure the port and inland terminals at respective locations remain fully operational with minimum on-site working staff and rest to operate from home.

## Sorting Storage Concerns

In limited time all ICT Terminals with pro-active moves and innovation ramped-up cargo storage capacities. ICT CFS at Mumbai was the first to

obtain permission from Customs to allow storage of import containers in non-custom bonded facilities used for container operations. Additional space arrangements at nearby CFS for overflow containers was also resorted to. ICD Sonepat and ICT Paradip terminals ramped up facilities including development and having it custom notified within 15 days under adverse quarantine conditions with limited resources but with complete safety measures to create additional storage capacities. The empty containers at CFS and ICD were relocated to nearby yards for ease of operations. These measures enabled ICT terminals to respond to congestion issues right in time.

## Boost Cargo Evacuation and Last Mile Deliveries

ICT teams also embarked on moving food grains and other essentials for million of Indians that rely on services which connect these terminals to remote hinterland. ICT terminals through the network of port authorities, suppliers, drivers and manufacturers, even struck key player partnerships to pool resources to ensure that movement could continue, from cross-border to intra-state and last-mile deliveries. Terminals coordination with railway authority came very handy as the tracks were totally free of passenger traffic and the railways were able to move the cargo from gateway ports to the hinterland, taking away some of the load from the ports. For container traffic, railways announced free of cost empty container and flat movement during the second and third phase of lockdown which helped operators to move rakes swiftly on the railways network which ensured customers timely cargo movements to and from ports.

## Safety Measures to Build Confidence in Drivers, Security and Staff Members

Operations Team at ICT CFSs and ICD went all out to hold and bring

back available drivers assuring them of their health and safety, while evacuating containers from the terminals so as to minimise the impact as 50% of them left for their homes before the lockdown. Drivers were incentivized on per trip basis to increase participation. Terminals made sure sufficient sanitization and personal protective kits were made available despite scarcity in the local market to terminal staff, vessel crew, drivers and labours to perform normal operations. Conducted an awareness session on the lockdown guideline and social distancing at all terminals. Offered food and essential supplies to drivers and labours at the terminal to assure them protection without quitting their work.

ICT on-site employees were provided with the required Personal Protective Equipment, Sanitizers etc. Terminal premises and the offices were quarantined on a periodic basis. Personnel arriving in the terminal are thermally screened at the entry as a precautionary measure. Terminals marked all the interaction places, like service centre, warehousing, customs area, customer service, rail yard, CFS and cargo examination area.

## Mobilize and Add Equipment Handling Capacity during critical times

In the month of April - May 2020, Paradip Terminal saw a spike in steel volumes. With scarcity of handling equipment locally, cranes were sourced and mobilized from West Bengal and Visakhapatnam to Paradip despite quarantine restriction on road movements and managed to maintain the cargo handling rate at the terminal. Additional reach stackers were quickly mobilized from nearby locations which were underutilized to maximize yard handling capabilities for faster turnaround and ease congestion. The teams showed exceptional skills to manage spares and consumable supplies to equipment, undertake maintenance



# Infrastructure

works without AMC support and ensured no equipment breakdown during such critical times.

Promoted Digital Mode to speed up transactions

ICT terminals urged all stakeholders including importers, carriers, truckers and custom agents to adopt digital mode for online payment transfers, invoices, delivery orders and out of charge receipts for final container delivery. To support the trade all documentation / delivery / payment counters at ICT CFSs and ICD were kept open for normal working hours to maintain streamline communication at all times.



Delhi International Cargo Terminal

DICT known as ICD Sonapat which is strategically connected to the country's northern hinterland was severely affected by the lockdown but continued to operate despite limited manpower, over capacity, liaised with local authority to ensure all permissions were in place to enable normal operations and now are handling an average of 3 rakes on a daily basis.



Visakha Container Terminal

VCT handled the highest rail bound container movements during the lockdown month of April 2020. 60 rakes were handled during the month carrying 8,446 TEUs which is the highest number of rakes and rail bound container volumes handled in a month till date.



Paradip International Cargo Terminal

PICT a multipurpose terminal could manage to handled 2.25 lakh metric tonne with 86 steel rakes amidst lockdown and endless restrictions.



Haldia International Container Terminal

HICT container terminal was in a

red zone and despite the lockdown it ensured pick and drop facility and deployment of skeletal staff to have continuity in operations. The terminal resumes operations in 32 hours after Cyclone Amphan crossed West Bengal.



HICT Engg team developed in-house Contact Free Hand-wash System at Haldia Dock Complex. Inaugurated by Shri. A. K. Dutta (GM - M&S) and Mr. A. K. Mahapatra (GM - Traffic) and other senior representatives from Haldia Dock Complex and HICT.



MICT CFS is committed for safety and health of working staff and our values customers. Carried out the complete facility disinfection.



A relative approach by Quality, Health, Safety and Environment Management (QHSE) to combat COVID-19 and appropriately served Hot Milk + Bournvita health drink with banana fruit to every individual associated with KICT.



Social distancing while break-bulk cargo operations, at toolbox meeting and at work followed by PICT terminal staff.



Use of mobile public announcement system by MICT CFS each hour from 10:00 hrs to 20:00 hrs to spread awareness and precautions to be taken.

YouTube, Twitter, Facebook, Menu, Arrow, Arrow

# Infrastructure



**ICT Terminals**  
Fighting COVID-19 Crisis

## Sector Recovery

Ports that have a significant exposure to the affected cargo categories could see a near-term impact on their cargo volumes. From the lows of April, there has been mild recovery in the month of May with lockdown relaxation. While cross border restriction for road movement remains affected, the move towards the coastal movement will pick up taking momentum. As a step towards a self-reliant economy, domestic sourcing and consumption

will increase for industries and end users, which will further strengthen the supply chains.

Furthermore, the immediate term growth prospects of the sector also remain subdued and the domestic logistics sector is expected to contract in the current fiscal. The extent of the impact will depend on the duration of the slowdown in consumer demand and industrial activities due to COVID-19 and the pace of the subsequent recovery.

An innovative approach, optimizing operations digitally, and relying on flexible and scalable business continuity and contingency plans seems to be the best way ahead for stakeholders in shipping and logistics.

Amidst all these challenges, compared to other ports on the West and East Coast of India, it is prudent to say that ICT Terminals are COVID-19 proof with records growing even during these testing times ■



## Technology

# COVID-19 – The Impact On ARYA COMMUNICATIONS

**C** COVID-19 has impacted lives and livelihoods and continues to do so in many communities around the world. Although the full implications of the pandemic are far from certain, it is already clear that its economic consequences are dire and we will soon see major changes in consumer behaviour and an acceleration of digital trends that were in motion even before the pandemic was upon us. Thus, we believe that we are at a digital inflection point. Our B2B sales operations will look fundamentally different from what they were before the pandemic.

### The crisis has impacted us from different angles

-  **Disrupted logistics** - Increased hurdles to transporting goods over long distances or internationally through border closures (long traffic jams) and the shutting down of logistics hubs (e.g. seaports, terminals, harbours and airports)
-  **Constrained or shutdown suppliers** - Reduced supplier reliability because of short-time working, workers being absent through sickness, factories being closed, entire supply chain being affected due to countrywide lockdown, unavailability of raw materials, longer lead times, etc.
-  **Transformed demand** - Increased customer demand for certain products (e.g. sanitizers, masks and long-lasting staple foods) and reduced demand for others (e.g. travel accessories and fashion items).

In the face of the COVID-19 crisis, Aryacom had to act quickly to optimise the company's resilience by rebalancing for risk and liquidity,

while assessing opportunities for growth, ironically due to the downturn.

Our current and future viability depended on swift management action and intervention, including near-term actions to ensure our stability and strategic moves that will create a new future with different companies and industries.

### We have taken several strategic initiatives in response to the prevailing situation

**Thinking laterally** - Interacting with customers, System Integrators (SI) and partners through Zoom conferences to brief them on product features and explain various technical and operational aspects. Organizing training sessions from our existing OEMs and partners on the products and solutions that are marketed or sold by Aryacom's team to enhance their existing knowledge.

**Investing time** - The time saved on travel is being utilised to up-skill and to learn about new sectors and industries that we have previously not catered for.

**Educating customers** - Circulating newsletters and emails to share success stories of how customers are being helped with new products or solutions.

### Responding appropriately

-  Aryacom has responded by supporting the immediate needs of its customers, such as through changes to products and pricing (for example, with thermal cameras and other healthcare products and solutions).
-  Aryacom has shifted to digital communications.

-  We have monitored and re-prioritized sales.
-  We have armed our teams with remote selling tools.

### Reflecting internally and externally

-  We have revisited our business plans to prepare for various scenarios.
-  We have further analyzed our customer base and reprioritised the needs of different market segments.

### Reimagining

-  We have digitised our 'GO TO' market strategies.
-  We have updated our offerings and prices.
-  We have recreated our foundation based on data and Customer Relationship Management (CRM).

### Rebound

-  We are focussing on digital and inside sales.
-  We have integrated our marketing and sales tactics.
-  We have established a cross-functional team to ensure we can respond rapidly.

### Analysis

In line with the above, there are three emergent themes that we will continue to track post COVID-19:

1. Spending - Companies are generally reducing their spend.
2. Digitalization - B2B companies believe that digital interactions are two to three times more important to their customers than traditional sales interactions.

# Technology

1. Remote working - Almost 90 percent of sales activities have moved to a video conferencing, phone or web sales model. Although there is still some scepticism, more than half of the sales team believes that this is equally or more effective than the sales models used before COVID-19.

Aryacom has introduced the following products to support organisations and satisfy our customers' current needs during and post-COVID-19.

## Thermal Camera

We focused on using thermal imaging technology to identify a raised body



temperature, which is an indicator of fever and therefore, infection. These are dual-sensor (thermal + visual) IP cameras for measuring someone's temperature. They are calibrated by inputting an offset.

## Features

- Dual-sensor (thermal + visual) IP camera
- Three-mode display (visual, thermal and overlay)
- Compatible with all Network Video Recorder (NVR) and Virtual Machine Scale Sets (VMSS)
- Dedicated temperature monitoring
- Special aluminium body for outdoor use
- Fully waterproof (IP66)
- Range: The camera can detect people 1-4 m away and automatically measures their body temperature and gives real time alerts and notifications for deviations observed.

## Healthcare Solutions: Positive Patient Identification



From admission to discharge, Zebra's patient identification solutions confirm a patient's identity and enable access to essential patient information throughout the entire care journey. Zebra helps to minimise errors and protect patients with solutions that integrate hospital wristband printers, label printers, mobile computers and barcode scanners designed specifically for the healthcare environment.

## Plant Worker Tracking System



This system tracks the location of plant workers using radio frequency technology. It helps to keep them safe, by, for example, ensuring that social distancing rules are being followed by everyone. A supervisor is alerted if there are any deviations. The system records how much time a worker spends in each workplace location.

## Wearable Technology

We have identified that wearable technology can provide centralised, accurate and real-time tracking of workers as well as monitor the critical health parameters of COVID-19 warriors to proactively help them by preventing the spread of disease and saving lives.

This unique and specialised system is designed for health, safety and performance monitoring, not only for first responders (police, fire and health) but also for other industrial workers and those working with chemical, biological, radiological, nuclear or explosive materials.



The device measures the motion, posture, heart rate, breathing rate and temperature of mobile staff and staff in the field. This data is stored on the sensor and can be transmitted wirelessly to a mobile phone or computer. By assessing heat stress in real time, it ensures the safety and performance of employees on active duty.

## Conclusion

Aryacom, in its own small way, has contributed with solutions that specifically address the requirements arising out of COVID-19, such as its dual-sensor thermal cameras, which have been supplied to various customers in several industry segments through our registered system integrator network ■

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## Technology

# Bills Of Lading And The Era Of Paperless Trade Document Transfer

### eBL vs Paper BL

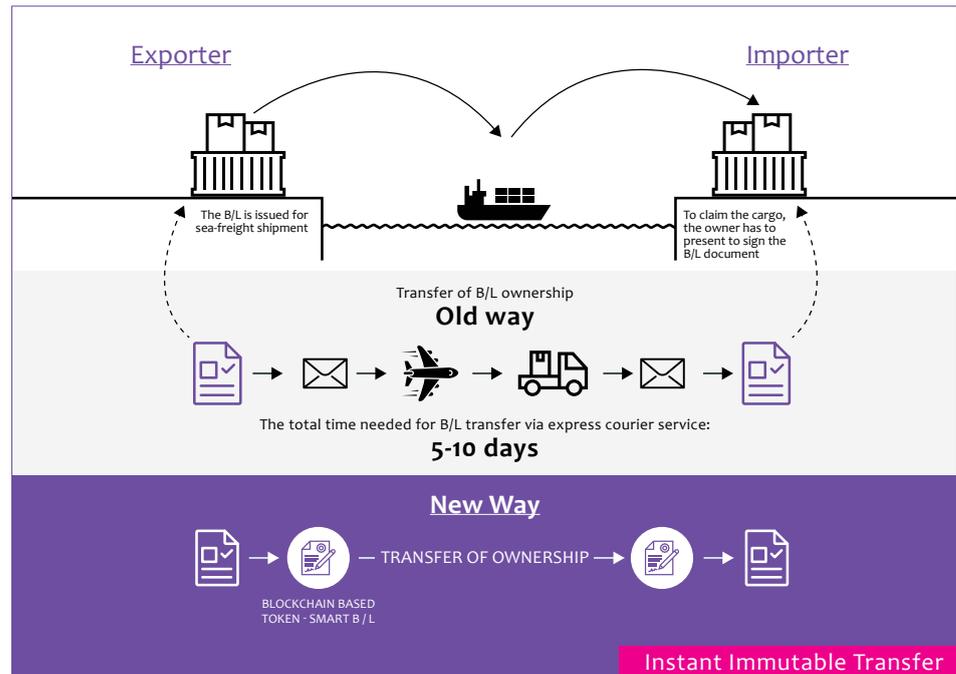
The Bill-of-Lading (BL); the backbone of global trade documentation; has three important roles - receipt of goods, contract of carriage, and document of title.

This critical document helps trade contracts be executed through a complex series of steps (hops) that it must undertake along its journey from shipper to receiver, and undoubtedly causes beginners and professionals alike a few sleepless nights learning what is often depicted as a 12+ step process. Taking the process out of the classroom and into the real world, where 3 original Bills of lading traverse each of these steps across continents, legislative and regulatory frameworks and countless stakeholders, does NOT make things easier!

This is where electronic Bill-of-Lading (eBL) providers are hoping to make a difference. The Cambridge Business Dictionary and Longman Business Dictionary defines e-Bills simply as “a B/L that is sent and stored by a computer rather than on paper”. BL is only one of the several documents though that must be implemented in an electronic format to bring full digitalisation to the shipping and logistics industry. Such digitalisation will benefit all parties involved: customers will see a significantly improved experience; regulators – and especially customs authorities – will benefit from improved targeting; container carriers will become more efficient; and vendors will be able to sell their solutions to many more industry participants.

HUGE Value benefit - Research indicates the total cost of processing paper bills is almost three times that of eBLs. At a global economic growth rate of 2.4% through 2030, one study forecasted that the industry can potentially save more than \$4 billion per year if just 50% eBL adoption is achieved.

in the carrier’s office or (at best) printed remotely in the shipper’s office. Despite huge risks with paper as a medium for such critical documents that can be lost, tampered with, delayed in transit, carry contagion, add to carbon footprint etc., we have thus far cited legal and policy framework as a



### Is this a 'Futuristic' or 'Utopian' idea?

Over 20 years ago global carriers attempted to move to ecommerce and digitising the Bills of Lading. Some third party technology providers even spent years trying to get the solution right; but alas it was an idea whose time had not come.

Even today though we talk casually about eBLs and eDOs - both documents are still printed either

reason not to digitise the BL and other trade documents; but

its certainly not a futuristic vision; colleagues in global trade have been **trying in vain** to make this happen for over two decades now.

**The COVID-19 pandemic in this context is proving to be a catalyst** for the carriers, banks, governments and trade in general reigniting the need to move to a paperless regime for documents.



# Technology

## Legal, Liability And Policy Framework

Carriers liability and Legal recourse of the title owner.

With coverage of the IG P&I (International group of P&I clubs) which underwrites liability for 90% of the global maritime tonnage, electronic documents and its transfer has been legally protected for over ten years now.

There are however only six globally recognised independent providers of digital documents who have liability cover from IG P&I clubs. essDocs, Bolero, eTitle, edoxOnline, Wave, and CargoX. There are also a couple of Carrier owned platforms like Tradelens, and GSBN that are gearing up to offer wholly digital documents and document transfer.

The United Nations Commission on International Trade Law (UNCITRAL), plays an important role in developing a framework in pursuance of its mandate to further the progressive harmonization and modernization of the law of international trade.

In the field of e-commerce, UNCITRAL has released four texts in the last two decades or so. The first legislative text was the Model Law on Electronic Commerce (1996). Subsequently, Model Law on Electronic Signatures (2001), the Electronic Communications Convention (2005) and more recently, the Model Law on Electronic Transferable Records (2017). These texts intend to facilitate e-commerce transactions by establishing rules to allow the electronic equivalent of paper-based documents to be legally recognised, thereby removing obstacles encountered by the use of electronic means.

On the lines of the UNCITRAL model laws each nation was expected to prepare its own framework and the Information Technology Act was enacted in 2000, by India, as amended to the Information

Technology (Amendment) Act 2008. An Act to provide legal recognition for transactions carried out by means of electronic data interchange and other means of electronic communication, commonly referred to as “electronic commerce”, which involves the use of alternatives to paper-based methods of communication and storage of information, to facilitate electronic filing of documents with the Government agencies and further to amend the Indian Penal Code, the Indian Evidence Act 1872, the Bankers’ Books Evidence Act 1891 and the Reserve Bank of India Act 1934 and for matters connected there with or incidental thereto.

CHAPTER III of the Information Technology Act details about Electronic Governance and provides inter alia non discrimination to electronic documents as long as the document is

- » Rendered or made available in an electronic form; and
- » Accessible so as to be usable for a subsequent reference.

**Chapter 111 also outlines** the legal recognition of Digital Signatures. The various provisions further elaborate on the use of Electronic Records and Digital Signatures in Government Agencies.

And so at least from the year 2000 India has **had** the base legal framework to support electronic commerce and electronic documentation and electronic contracts of carriage. Other relevant Acts- Indian Contract Act 1872, Sale of Goods Act 1930 and the Indian Evidence Act 1872 - all have landmark judgements citing that electronic documents, contracts and evidence have admissibility and will be carefully assessed by the courts for authenticity just as paper documents and evidence is assessed.

Indian Customs also is progressive and moving closer to a paperless system, and right from the start there is no demand for original paper B/L for customs clearance in India.

## Emergence Of Blockchain As A Secure Transfer

A public blockchain-based B/L platform not only inherits advantages over existing e-Bills but also overcomes most of its disadvantages. It consistently hits all of the tests for electronic document exchange.

Neutrality, immutability therefore transparency; authenticity and validity of electronic signatures as well as coverage under the legal framework.

Further several blockchain - based fintech platforms are being created by consortiums of global banks who have integrated to receive digital documents and run their trade finance divisions with them.

## Portall And The Digital Documentation Drive In India

The data shows that in many developing countries the **costs** for **document** preparation are the biggest **costs** factor in the export process. For example, Indian exporters experienced **costs** of \$350 for **document** preparation, \$120 for Customs clearance, \$150 for port and terminal handling and \$200 for inland transport.

Jan 3, 2011

unctad.org > en > Docs > TN13\_DocumentSimplification ▾ PDF

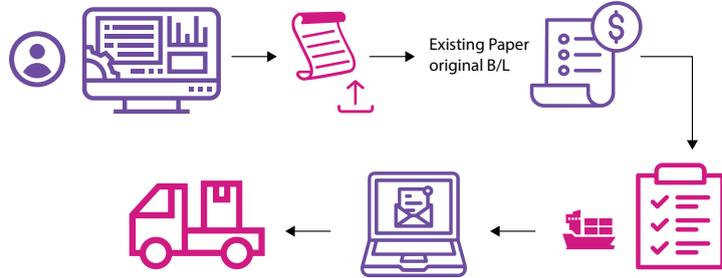
As the first lockdown hit; and cargo was stuck in ports across the country due to documents being held up at various points - Portall joined hands with Indian Ports Association (IPA) and with the various trade associations to play an important role in solutioning. For obvious reasons i.e., carrier’s liability in the scenario of three original paper BLs - only a few carriers were able to offer the above solution and not for the long term. Portall thereon undertook to study



# Technology

Key critical changes were effected in the PCS1x as requested by Brihanmumbai Custom Brokers Association (BCBA), Federation of Freight Forwarders' Associations in India (FFFAI) and other trade bodies, in order to create new functionality quickly - for customs brokers to upload the scanned paper Original Bill of Lading (OBL) front and reverse and submit with a request for e-invoice and eDO.

Carriers can verify and (with the Know Your Customer (KYC) related security of the PCS1x user) release goods to the Customs Broker (CB) against a Letter of indemnity or letter of assurance - which can also be uploaded and shared via PCS1x.



the global options available and signed on with CargoX, one of the six global companies who offer wholly digital documentation exchange platforms for trade. One more of the top six will shortly join us in our curated marketplace P-CaSo which has been latched on to PCS1x.

## P-CaSo Latch-On Services Offered Via PCS1x

- eBL** - Public neutral block chain based BL and trade document exchange, for use by Carriers and Exporters.
- Trade Documents** - Trade documentation drafting and sharing – for use by banks, importers and exporters.
- Certificate of Origin** - Certificate of Origin services with authentication for use by Chambers of Commerce and Exporters.

\* P-CaSo also offers trucking and eVGM services via established digital service providers.

## Getting Traction, Speeding Adoption Of Digital Documents

Despite the clear win-win of this proposition, lack of knowledge; worry of claims and lack of clear governmental drive to digitising documents still keeps many players in

Administrative costs are lower and less revenue is lost through fraud and non-compliance. **Paperless trade** allows Governments to reduce delays and costs at the border, and increase their services for **trade**.

[www.unece.org](http://www.unece.org) > fileadmin > DAM > cefact > publica > ece\_trd\_371e > PDF

**A Roadmap towards Paperless Trade - unece**

global trade feeling locked in to paper. Educating people is empowering them to experiment and make the shift in a step by step approach.

Each contract of sale in global trade is a private contract and all parties (including banks) can agree to adopt a paperless transaction. Once consensus is reached; the platform can be tried and experienced to build confidence, until such time (inevitably) that governments mandate electronic documentation and ban paper. Early adopters will gain and pass on the value to their customers and vendors, they will also participate in the maturing of the business models and delivery mechanisms of digital trade documents.

## Conclusion

For India to lead with fastest adoption, certain mandates may be

required as also advisories and policy guidelines to banks, carriers and other stakeholders to embrace the move. Most recently post-COVID-19; The International Chamber of Commerce (ICC), has called on governments to enable an “immediate transition” to paperless trading.

In a direct call to action, the ICC has requested governments and central banks to take emergency measures to void any and all existing legal prohibitions on the use of electronic trade documentation, removing requirements for key trade documents such as bills of lading, bills of exchange, promissory notes and commercial invoices to be presented in paper format.



Efficiencies and costs released to the ecosystem with digital documentation

**There is no better time than now for the trade and governments to work together and transform the paper intensive world of global trade to a sleek digital experience for all ■**

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# Port Statistics

## INDIA Port Performance

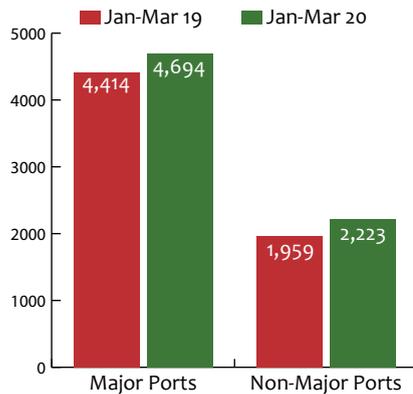
The following is an analysis of data for the period of January to March 2020 compared to the period of January to March 2019.

### Ship calls

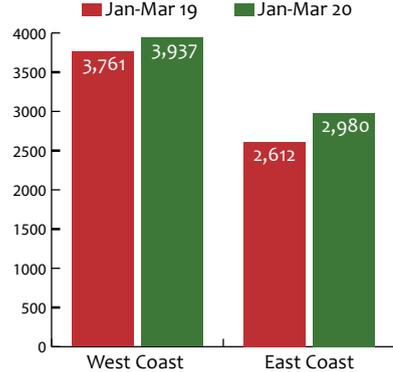
During the period of Jan-Mar 2020, a total of 6,917 ships called on Indian ports, an increase of 10% over the same period last year (corresponding increase in total cargo volume is 1.4%). 68% of the ships called on Major Ports with the balance 32% calling on Non-Major Ports. Major and Non-Major Ports saw an increase of 6% and 13% respectively. The west coast saw a 5% increase and the east coast saw a 14% increase in ship calls.

Kolkata Port saw the most decline in ship calls at (-43%) followed by Mormugao (-32%), Hazira (-28%) and Chennai (-23%). Gangavaram Port saw the highest increase in ship calls at 85% followed by Tuticorin 83%, Visakhapatnam 46% and Mundra 35% during the period of Jan-Mar 2020 when compared to the same period last year.

Ship Calls at Major and Non-Major Ports



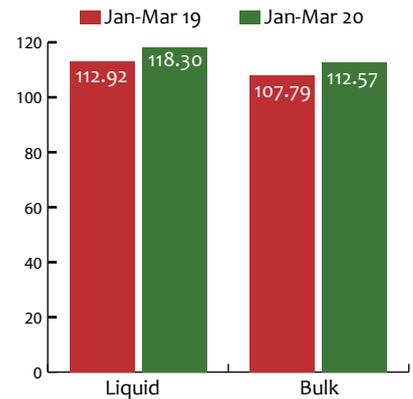
Ship Calls in West and East Coast of India



### Liquid, Bulk and Container Cargo Trends

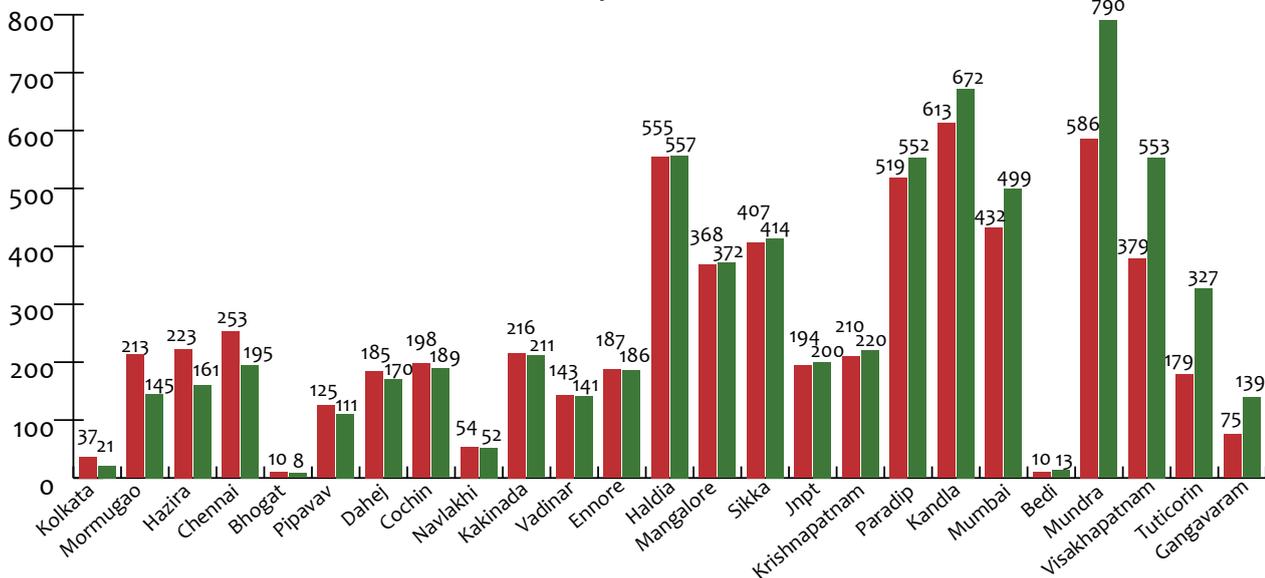
A total of 231 million tonnes (liquid and bulk cargo excluding containers) handled during the period of Jan-Mar 2020, a 4.6% increase from the same period last year. 118 million tonnes of liquid cargo and 113 million tonnes of bulk cargo was handled, an increase of 4.8% and 4.4% respectively when compared with same period last year.

Liquid and Bulk Cargo Handled (Million Tonnes)



### Portwise ship calls

Jan-Mar 19 Jan-Mar 20



The port data considered for analysis is for the period of Jan-Mar 2020 and compared with data for the same period last year. The analysis, hence, considers pre-COVID-19 period and aligned with previous port traffic trends.



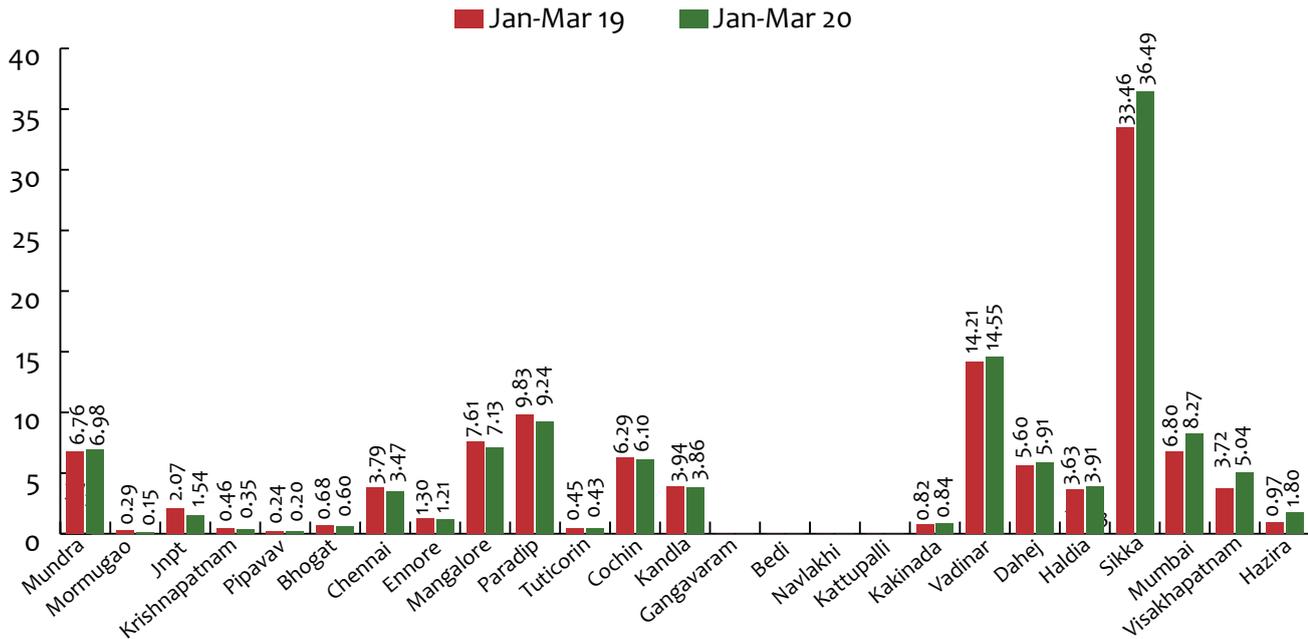
# Port Statistics

Visakhapatnam 35% saw the most increase in liquid cargo handled followed by Mumbai 22% and Sikka 9%. Chennai (-8%), Mangalore (-6%) and Kandla (-2%) saw moderate dip in cargo

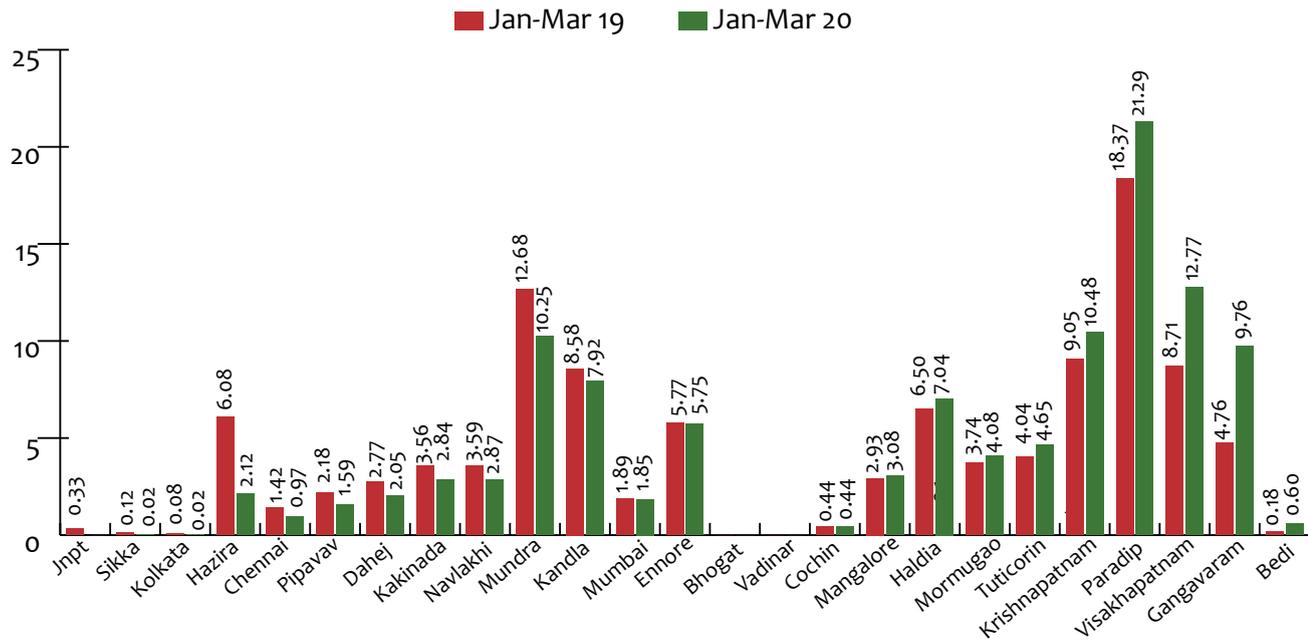
volumes handled. In the bulk cargo segment, Hazira saw a decline of (-65%) in volumes handled and Kakinada, Navlakhi and

Mundra experiencing a (-20%) decline. Gangavaram 105%, Visakhapatnam 47% and Paradip 16% recorded a steep increase in bulk cargo handled during the period.

Liquid Cargo handled at various ports (Million Tonnes)



Bulk Cargo handled at various ports (Million Tonnes)



A total of 5.74 million TEUs were handled in Jan-Mar 2020, a 33% increase over the same period last year. Kandla saw the most increase in

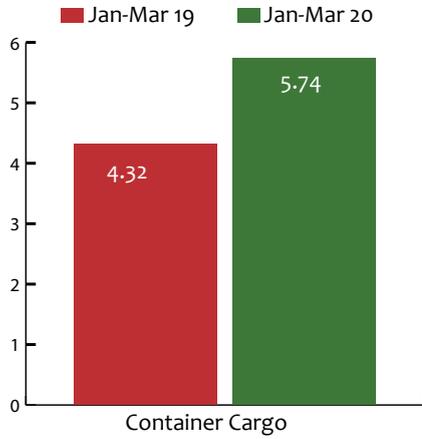
container cargo handled at 85% with other ports also recording significant increase in cargo volumes. JNPT (1.68 million TEUs) and Mundra (1.65

million TEUs) continued to handle most of the country's container volumes with 27% and 40% increase in cargo volumes, respectively.

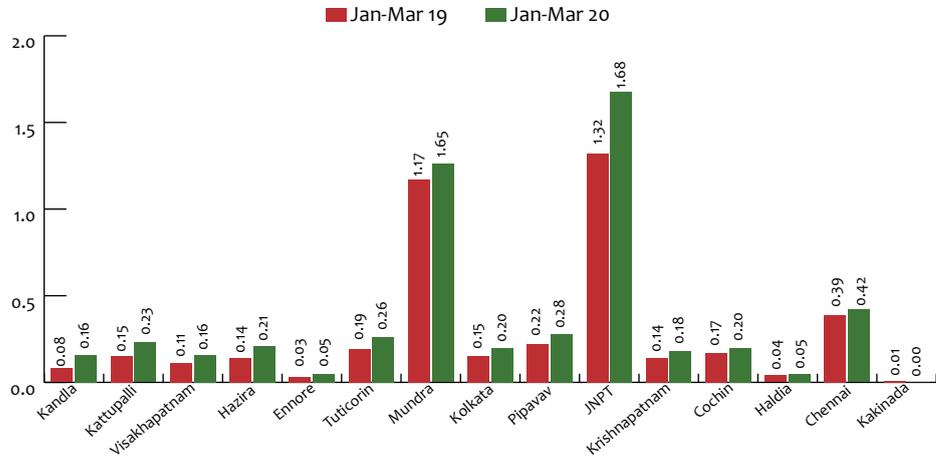


# Port Statistics

Container Cargo Handled (Million TEUs)



Container Cargo handled at various ports (Million TEUs)

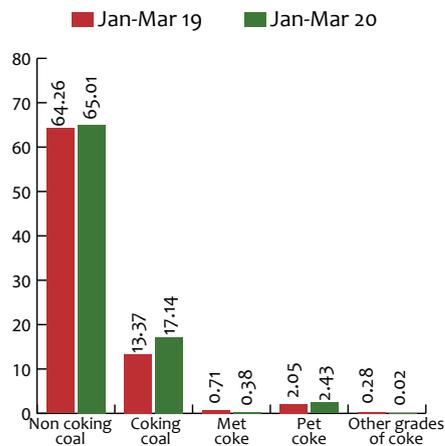


## Key Cargo Performance

### Coal and Coke

A total of 85 million tonnes of coal and coke was handled in Jan-Mar 2020 (including coastal volumes). Non-coking coal 77% and coking coal 20% constituted the primary products handled. Met coke saw the most decline at (-47%) while coking coal 28% and pet coke 19% saw an increase in volume handled during the period of Jan-Mar 2020 compared to the same period last year. Non-coking coal volumes remained the same.

Coal & Coke (Million Tonne)

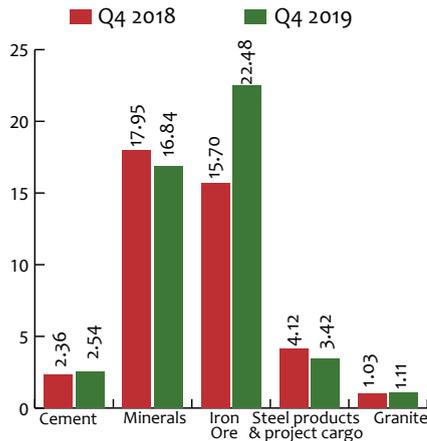


### Other bulk and breakbulk

Iron ore handling saw an increase of 43%, while steel and project cargo saw a decline of (-17%) in Jan-Mar 2020 compared to the same period

last year. Cement and granite saw an increase of 8%.

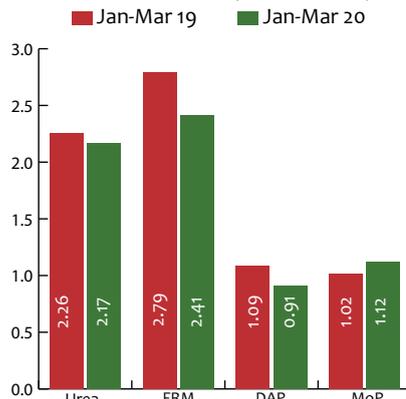
Other Bulk & Break Bulk (Million Tonne)



### Finished fertilizers and FRM

A total of 6.6 million tonnes of fertilizers and FRM was handled in Jan-Mar 2020, a decrease of (-8%) compared to the same period last year.

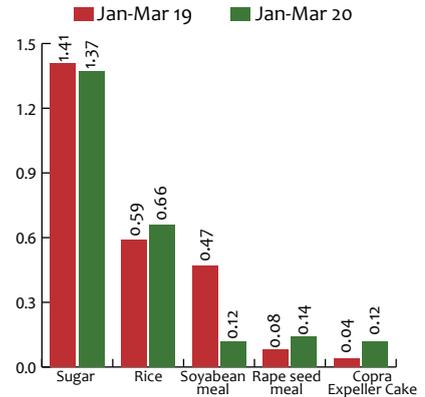
Finished Fert & FRM (Million Tonne)



### Agriproducts

Volume of agriproducts decreased by (-7%) at 2.4 million tonnes handled during Jan-Mar 2020.

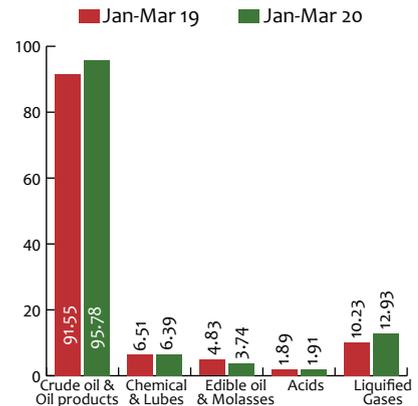
Agriproducts (Million Tonne)



### Liquids and gases

Volume of liquids and gases increased by 5% with total volumes handled at 121 million tonnes. Liquified gases saw an increase of 26% while edible oil and molasses saw a decline of (-23%)

Liquids & Gases (Million Tonne)



# Port Statistics

## SHIPPING & CARGO PERFORMANCE

QUARTERLY UPDATES ON INDIAN MAJOR & MINOR PORTS (QTY IN MILLION TONNES)

JANUARY - MARCH 2020 (IV<sup>th</sup> QUARTER) 2019 - 2020 / JANUARY - MARCH 2019 (IV<sup>th</sup> QUARTER) 2018 - 2019 (QTY IN MT)

### AGRICULTURAL PRODUCTS & EXTRACTIONS

	SUGAR		RICE		SOYA BEAN MEAL		RAPE SEED MEAL		COPRA EXPELLER CAKE	
	IV <sup>th</sup> Qtr'20	IV <sup>th</sup> Qtr'19								
No. of Ships called	49	37	32	26	3	16	3	2	10	6
Total Cargo Handled	1.370	1.410	0.660	0.590	0.120	0.470	0.140	0.080	0.120	0.040
Import	0.020	0.670	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.040
Export	1.350	0.730	0.660	0.590	0.120	0.470	0.140	0.080	0.120	0.000

### FINISHED FERTILIZERS & FERTILIZER RAW MATERIALS

	UREA		SULPHUR		ROCK PHOSPHATE		DAP		MOP	
	IV <sup>th</sup> Qtr'20	IV <sup>th</sup> Qtr'19								
No. of Ships called	49	49	11	18	52	55	24	29	34	31
Total Cargo Handled	2.170	2.260	0.420	0.620	1.980	2.170	0.910	1.090	1.120	1.020
Import	2.080	2.210	0.150	0.510	1.980	2.170	0.910	1.070	1.120	1.020
Export	0.090	0.050	0.270	0.110	0.000	0.000	0.000	0.020	0.000	0.000

### COAL

	NON COKING COAL		COKING COAL		MET COKE		PET COKE		OTR GRADES OF COKE	
	IV <sup>th</sup> Qtr'20	IV <sup>th</sup> Qtr'19								
No. of Ships called	920	985	324	321	16	29	57	43	2	11
Total Cargo Handled	65.010	64.260	17.140	13.370	0.380	0.710	2.430	2.050	0.020	0.280
Import	57.140	55.620	16.980	13.120	0.370	0.670	2.320	2.040	0.010	0.280
Export	7.860	8.640	0.160	0.250	0.010	0.040	0.110	0.000	0.010	0.000

### OTHER BULK & BREAK BULK CARGO

	CEMENT		MINERALS		IRON ORE		STEEL PRODUCTS & PROJECT CARGO		GRANITE	
	IV <sup>th</sup> Qtr'20	IV <sup>th</sup> Qtr'19	IV <sup>th</sup> Qtr'20	IV <sup>th</sup> Qtr'19	IV <sup>th</sup> Qtr'20	IV <sup>th</sup> Qtr'19	IV <sup>th</sup> Qtr'20	IV <sup>th</sup> Qtr'19	IV <sup>th</sup> Qtr'20	IV <sup>th</sup> Qtr'19
No. of Ships called	171	135	436	470	424	265	429	489	66	53
Total Cargo Handled	2.540	2.360	16.840	17.950	22.480	15.700	3.420	4.120	1.110	1.030
Import	1.270	1.100	12.380	12.390	5.880	7.020	1.580	2.130	0.030	0.000
Export	1.270	1.260	4.460	5.560	16.590	8.680	1.840	1.990	1.080	1.030

### LIQUID CARGOS AND LIQUIFIED GASES

	CRUDE OIL & OIL PRD		CHEMICALS		EDIBLE OIL & MOLASSES		ACIDS		LIQUIFIED GASES	
	IV <sup>th</sup> Qtr'20	IV <sup>th</sup> Qtr'19								
No. of Ships called	1550	1472	657	674	301	399	165	176	449	423
Total Cargo Handled	95.780	91.550	6.390	6.510	3.740	4.830	1.910	1.890	12.930	10.230
Import	73.020	69.990	3.650	3.880	3.490	4.400	1.910	1.870	12.770	10.070
Export	22.760	21.560	2.750	2.620	0.250	0.430	0.000	0.020	0.150	0.160

## INDIAN PORT PERFORMANCE - Q4 & FY 2019 - 20 THROUGHPUT (QTY IN MILLION TONNES)

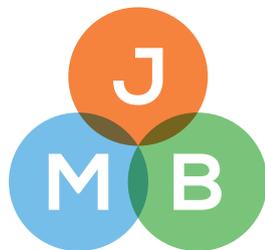
JANUARY - MARCH 2020 (IV<sup>th</sup> QUARTER) 2019 - 2020 / JANUARY - MARCH 2019 (IV<sup>th</sup> QUARTER) 2018 - 2019 (QTY IN MT)

Ports	Types of Ports	NO. OF SHIPS		LIQUID CARGO		BULK CARGO		CONTAINERS (TEUS)		TOTAL CARGO *	
		IV <sup>th</sup> Qtr'20	IV <sup>th</sup> Qtr'19								
Kandla	■	672	613	3.865	3.943	7.922	8.583	1,555,622	84,106	11,787	12,525
Mumbai	■	499	432	8.274	6.795	1.846	1.887	-	-	10,120	8,682
Nhava Sheva	■	200	194	1.539	2.069	0.000	0.326	1,682,839	1,322,489	1,539	2,396
Mormugao	■	145	213	0.154	0.290	4.077	3.742	-	-	4,232	4,032
Mangalore	■	372	368	7.128	7.606	3.077	2.932	-	-	10,204	10,539
Cochin	■	189	198	6.099	6.286	0.438	0.438	203,804	167,665	6,537	6,724
Tuticorin	■	327	179	0.426	0.452	4.646	4.042	264,265	187,138	5,072	4,495
Chennai	■	195	253	3.473	3.793	0.969	1.419	422,299	385,303	4,442	5,212
Ennore	■	186	187	1.207	1.305	5.745	5.772	47,419	33,131	6,952	7,077
Vishakhapatnam	■	553	379	5.037	3.721	12.772	8.707	158,426	109,585	17,809	12,428
Paradip	■	552	519	9.242	9.833	21.287	18.368	-	-	30,529	28,201
Haldia	■	557	555	3.910	3.631	7.039	6.498	52,080	42,859	10,949	10,129
Kolkata	■	21	37	0.225	0.016	0.018	0.085	203,876	152,291	0,244	0,101
Gangavaram	■	139	75	0.000	0.000	9.759	4.764	-	-	9,759	4,764
Pipavav	■	111	125	0.203	0.237	1.588	2.181	280,401	219,460	1,791	2,418
Mundra	■	790	586	6.980	6.756	10.255	12.682	1,646,560	1,173,079	10,255	19,438
Dahej	■	170	185	5.911	5.596	2.052	2.774	-	-	7,963	8,370
Hazira	■	161	223	1.796	0.967	2.125	6.076	205,376	142,850	3,921	7,043
Navlakhi	■	52	54	0.000	0.000	2.868	3.590	-	-	2,868	3,590
Kakinada	■	211	216	0.842	0.825	2.841	3.562	4,037	5,018	3,682	4,387
Sikka	■	414	407	36.487	33.462	0.020	0.123	-	-	36,507	33,585
Vadinar	■	141	143	14.555	14.210	0.000	0.000	-	-	14,555	14,210
Krishnapatnam	■	220	210	0.345	0.457	10.479	9.054	181,273	144,594	10,824	9,511
Kattupalli	■	19	2	0.000	0.000	0.151	0.002	233,736	149,514	0,151	0,002
Bhogat	■	8	10	0.603	0.677	0.000	0.000	-	-	0,600	0,680
<b>Total Vessel Calls at all ports</b>		<b>6904</b>	<b>6363</b>	<b>118.301</b>	<b>112.925</b>	<b>111.976</b>	<b>107.606</b>	<b>5,742,013</b>	<b>4,319,082</b>	<b>223.297</b>	<b>220.531</b>

■ Major Port ■ Non-Major Port

\* Total Cargo Includes Liquid Cargo, Bulk Cargo and Other Cargoes and Excludes Containers





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