J. M. BAXI GROUP

TIDINGS

ISSUE XXII

JULY - SEPTEMBER 2018

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Newsletter Issue XXII

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J. M. BAXI GROUP

TIDINGS

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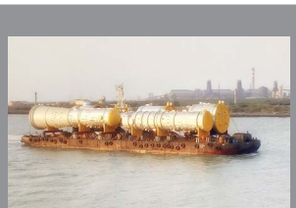
Vessel DMC Jupiter berthing at Paradip International Cargo Terminal

* All maps are for representation purpose only



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From the Quarter Deck

Dear Friends and Colleagues,
It is once again the time of year when India looks forward to the onset of the monsoons. We not only "warmly" welcome the cooling down of the weather but also the importance of the rain for our annual agriculture production. The meteorological reports are predicting that we will have a normal monsoon. This should guarantee our production of wheat, rice and pulses, which last year was almost 220 million tonnes. India's GDP has shown continuous growth and with a good monsoon, we should be able to expect further growth of upwards of 7%.

Last month saw another hike in the price of crude oil and coupled with that we saw a decline in the Indian rupee to Rs. 68.5 per US dollar. Thus, the price of petrol jumped to Rs. 85.81 per litre and diesel to Rs. 73.47 per litre. Diesel is an important fuel for the agriculture sector, for pumping water and for tractors, both of which are very important in farming. The impact of the price rises will also be felt for surface transport. Ship owners and ship operators too are beginning to feel the effect of increased bunker prices. One can only hope that this settles down soon and the price for crude stabilises at least, if not falls back down.

In the "Quarter Deck", we have consistently talked about non-performing assets in the Indian banking sector. The first few cases have successfully been resolved, with Tata Steel winning the bid to take over Bhushan Steel and the Vedanta Group poised to take over Electro Steel. It is expected that two other larger cases –Essar Steel and Binani Cement – should see a resolution in the next couple of months. A few more of such successes and we could look forward to the banking and financial sector in India being in a position to strongly participate and enable the growth story of India.

On the regulatory front, the Govt. of India have issued a major relaxation of the cabotage regulation which is the section 407 subsection (3) (for those legally inclined) for coastal transportation of Exim containers and empty containers. This issue has been a long-standing matter with the major foreign shipping companies requesting the Govt. of India to permit the same. This relaxation is likely to result in some of the transhipment activity taking place in neighbouring foreign ports shifting to Indian ports.

One matter of general interest was the headline-grabbing announcement of the takeover of homegrown company Flipkart by Walmart for an enterprise valuation of US $20 billion. Whilst a lot has been written about this transaction and which is not my place to comment or elaborate on, one fact I would like to share that in terms of market capitalization Flipkart would be no 17th on the list of most valuable companies of India. This goes to show the value of tech in business today.

As an organisation, it is, therefore, a matter of great satisfaction for us that IBM has partnered with us to develop the blockchain and AI in the maritime and logistics field. We are only the 3rd co mpany after Maersk and Mahindra Logistics to have such a partnership with IBM. But let us know that it is just the beginning, we have a long road ahead.

Whilst there have been controversies galore about the proposed new refinery project of a consortium of Saudi Aramco, IOC, BPCL and HPCL, it does present an exciting development in the immediate future. As and when this refinery comes up we are looking at a refinery capacity of 60 million tonnes per annum and taking India's refining capacity to 307 million tonnes per annum.

It is with a deep sense of satisfaction on behalf of our team J M BAXI Group and team ICTIPL that I share with you some interesting throughput numbers of our various terminals for period April 2017 to March 2018.

THROUGHPUT
April 17 - March 18

VCT	388,289 TEUs
MICT	94,036 TEUs
DICT	85,299 TEUs
KICT	117,224 TEUs
HICT	156,690 TEUs
Boxtrans	89, 594 TEUs

Dear friends, colleagues, partners and principals we are on our way in the next few short months to be a million TEUs group. It's not the size of the dog but the fight in the dog that matters.

The best for the last, PICT Paradip is open for business. We handled our first ship DMC Jupiter on 30th May 2018.

We built our facility 12 months ahead of schedule. My thanks and congratulations to the team project, team PICT, team J M BAXI GROUP and above all the management and personnel of the Paradip Port Trust, whose leadership and guidance was invaluable. We wish our PICT great success to be a valuable part and assistance to its clients and trade as it is for them and them alone that PICT and we exist. Not only do I extend a warm welcome to each and everyone of you, may I also request that you invite your principals and clients to visit Paradip.

Till next time ■

Krishna B. Kotak
Chairman - J M BAXI GROUP

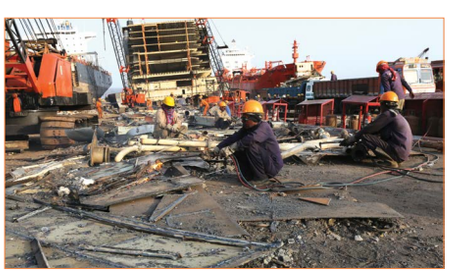
Agency & Services

Demolition Of Vessels At ALANG: A Brief Look

In the late seventies, a ship drifted towards Gopnath point and ran aground. The incident attracted serious attention of the Government of India (GOI) as well as other activists and NGOs engaged in protecting environment. Anyway, the ship was abandoned by her owners in absence of a viable solution for salvage.

At around the same time, Capt. N. Sundaresan, the Port Officer at Bhavnagar, came up with two locations as possible sites for ship demolition, one north of Alfred Victor Port and the second at Alang. His conclusions were based on a study of the Alang Light House, and the gradient, speed of current, tidal conditions, seasonal wind velocity and directions, monsoonal patterns and (potential) road access to the coastal area.

On 12th Feb 1983, the Master of the vessel MV KOTA TENJONG (the first ship scheduled for scrapping) who had been ordered to anchor Off Gopnath Point, ended up accidentally anchoring his vessel off Alang Light House due to his inexperience of the area. The vessel was beached the next day, and Alang, proving all speculations and uncertainties wrong, came to succeed. Since then Alang has grown phenomenally and it is the most eco-friendly and biggest ship scrapping yard in the world today.



Since then Alang has grown phenomenally and it is the most eco-friendly and biggest ship scrapping yard in the world today. The basic features of the Alang Ship Recycling Yard is given below.

Location	Arabian Sea, Gulf of Khambhat. Northernly to Mumbai, West Coast, India. (B.A. Chart: Alang 1486, Ports on WCI 3460)
Co – ordinates	Lat 21 Deg. – 39.5 North / Long. 72 Deg. – 24.5 East
Anchoring Position	4.5 miles North North-East off Piram Island Light House
Total Area	10 KM
No. of Plots Developed	153
Plots in Operation at present	131 including 7 plots for VLCCs

The Ship Recycling Industry At ALANG

Ship Recycling is viewed as an eco – friendly industry because it generates steel in large quantity without consumption of raw materials and resources like iron ore and coal in comparison to integrated steel plants. The industry in India produces about 4 MMT of steel every year. It employs 50,000 direct workers and provides employment to many more indirectly engaged in rolling mills, scrap trading, oxygen gas plants, logistics, real estate and the money market. The tax revenue generated by this industry alone is close to INR 25 Billion annually for the Central and State Government.

Regulatory Evolution

1. The evolution of the Alang Ship Recycling Yard started in 1983 with the formation of Ship Recycling Industries Association. The main objective of the body was to structure and administer operations at par with "world class" standards.

2. Till 2006, there was no uniform standard/norms set by the GOI/Govt. of Gujarat and the Recycling activity was completely dependent on the respective Yard operator about convincing the authorities. The ship owners (sellers) overseas used to finalize commercial terms of the S & P business on their own terms and conditions. All this changed following international protests and dialogues over demolition of a French Military vessel – MV CLEMENCEAU that was eventually called off, and a cruise vessel - MV BLUE LADY that could be demolished after huge delays only with an order of the Hon'ble Supreme Court of India causing a loss of USD billion to the owners/buyers.

3. A proper regulatory structure emerged on the basis of the Order dated 6th Sept 2007 of the Hon'ble Supreme Court. The Order stipulated very stringent Guidelines and Regulations addressing the different operational points - Advance Declaration with full documents for initial desk review at authorities' office / Permission Prior to Entry & Anchoring and Desk Review on board by

Agency & Services

all concerned Govt. agencies and authorities simultaneously and concurrently to ascertain 'asbestos/toxic/hazardous wastes, sludge etc.' on board.

4. The Order also emphasized up on the following:
   a. Qualification and role of the Yard Operators – meeting ISO/ IMO Regulations.
   b. Ships to comply with demolition requirements – inspection by appointed authorities.
   c. Treatment of Hazr./Asbestos / bilge water - removal / handling/disposal

A nodal agency called Gujarat Environment Protection & Infrastructure Ltd. (GEPIL) has been specially appointed and authorized by Gujarat Maritime Board now undertakes the task of managing the TSDF (Treatment, Storage and Disposal Facility) aspects of scrapping. GEPIL has its office and treatment plant near Alang Scrap Yard itself. Almost all the Plots/Recyclers are well equipped presently, and they are meeting the International Standards and best practices with trained workers and technically qualified Engineers and Safety Officers.

Challenges

A. Alang may be the largest ship recycling facility in the world, but it faces competition to some extent from recyclers of Bangladesh (Chittagong), Pakistan (Gadani), China, Turkey and Japan to some extent.

B. Not withstanding its status of being up to international standard, the Scrap Yard has no berth or mobile plat-form for landing the crew and materials from a beached vessel. There is also no slipway or catwalk for connecting the vessel to shore. crew / items landing.

C. Alang does not have safe and well - equipped small boats or a walk way to connect the vessel to shore. Consequently, ship's crew land directly in the mud from the beached ship and wade out; if beached far from shore, then they have to wait till the tide subsides, for safety.

D. Alang also lacks good illumination at night because the lighting is inadequate.

E. The regulatory stipulations and the process at Alang are elaborate, strict and complex compared to scrap yards in other countries. This makes scrapping at Alang relatively unattractive from the ship owners' perspective.

F. Like any other industry, involvement of third party middlemen, market decline and unethical business practices affect this industry as well adversely.

Business Scenario – Way Forward

Overall, Alang appears to be doing well, handling the largest number of ships. In 2017 for instance, 566 ships were handled at Alang while 170 ships were handled by the shipyards of China.

The main attraction of Alang lies of course, in the relatively high prices offered to owners as briefly indicated below.

- Tanker Vessels (Oil or Chemical) = **USD 400 - 430 per LDT** (Light Displacement Tonnage)
- Container Vessels = **USD 430 – 450 per LDT**
- General Cargo Vessels = **USD 390 - 410 per LDT**.

The rates vary, depending on size/ type and condition of the vessels and could be USD 5 Per LDT higher than the rates above. Also, the maximum demand is for the mid – sized vessels with LDT of about 20000.

In comparison, prices in other countries (except Bangladesh and Pakistan) are quite low and in the range of USD 255 – USD 285 PLDT. Therefore, Alang is attractive commercially.

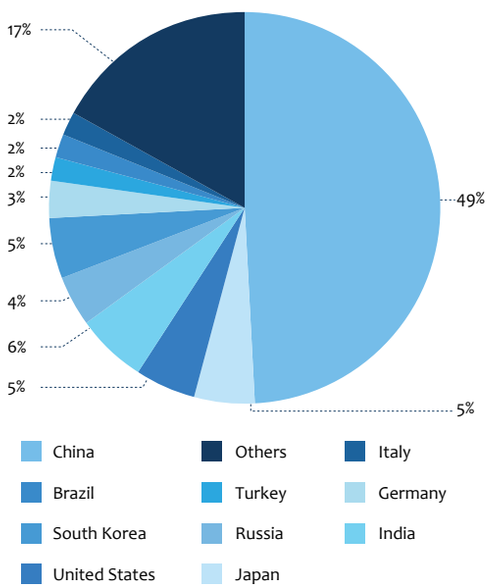
For development of Alang, the Government of Gujarat has signed an agreement with Japan International Co - operation Agency (JICA) for upgrading the existing Alang – Sosiya Ship Breaking yard. The project is due to be executed by GMB and, expected to be completed by 2022. Overall therefore, Alang is definitely on a good growth path.

J. M. Baxi & Co. has been working at the port of Bhavnagar for many years and started catering to the owners at Alang as the recycling business started. We handled the first vessel – MT STOLT AVENIR at Alang after the Yard was structured properly for compliance with environment and human safety, and re – launched by GOI under the guidelines of the Hon'ble Supreme Court

Logistics

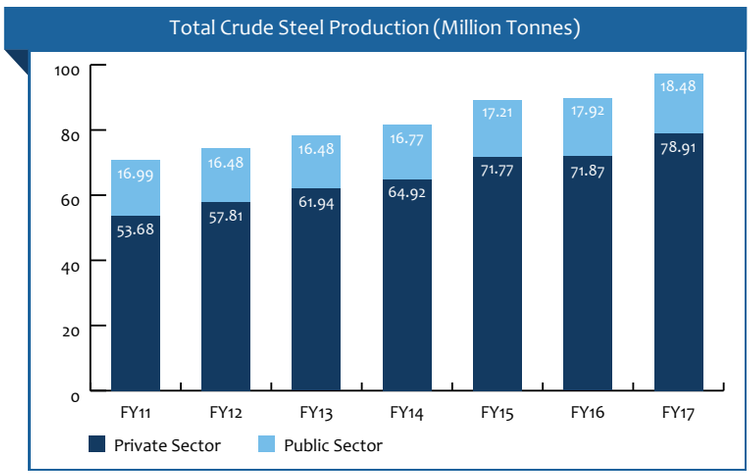
Steel Sector In INDIA

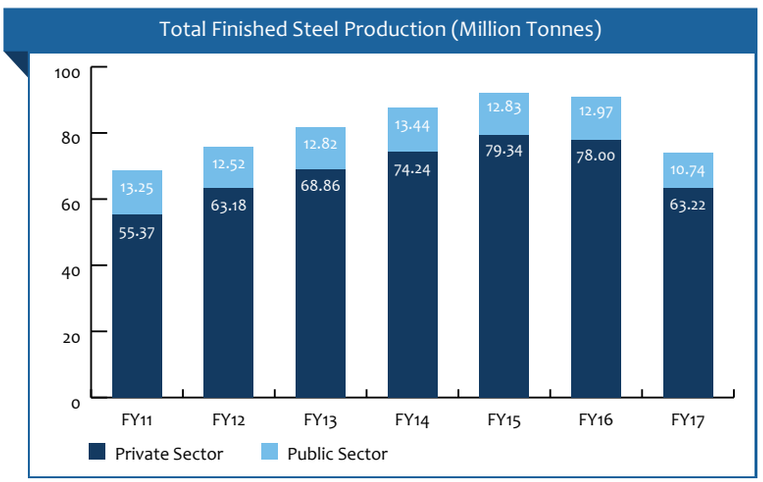
India is currently the world's 3rd largest steel producer of crude steel. The country is also the 3rd largest consumer of finished steel in the world preceded by China and the USA. The growth in the Indian steel sector has been driven by domestic availability of raw materials such as iron ore and cost-effective labour. Consequently, the steel sector has been a major contributor to India's manufacturing output. The Indian steel industry is very modern with state-of-the-art steel mills. It has always strived for continuous modernisation and up-gradation of older plants and higher energy efficiency levels. Indian steel industries are classified into three categories such as major producers, main producers and secondary producers. The steel sector contributes to over 2% of the country's GDP and employs around 25 lakhs employed in steel/allied sectors.



Steel Production in India

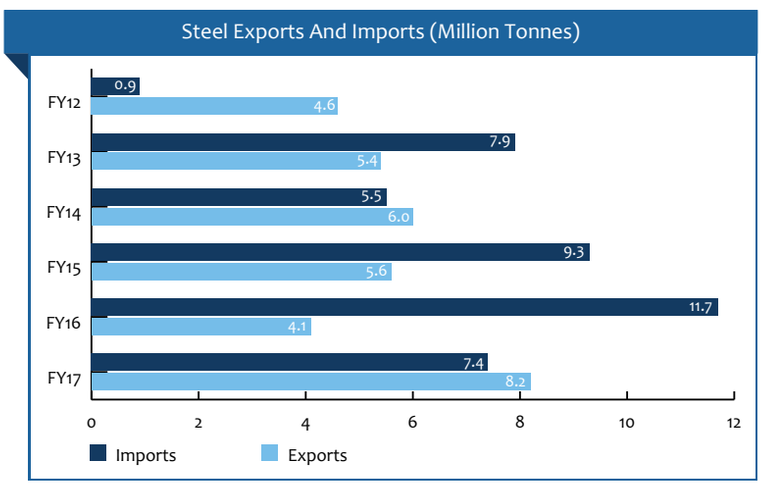
Below are the production statistics of Crude and Finished Steel:





Import-Export Trend in India

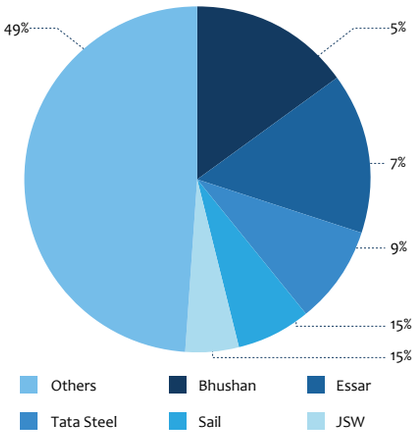
Below are the statistics of Imports-Exports of Steel:



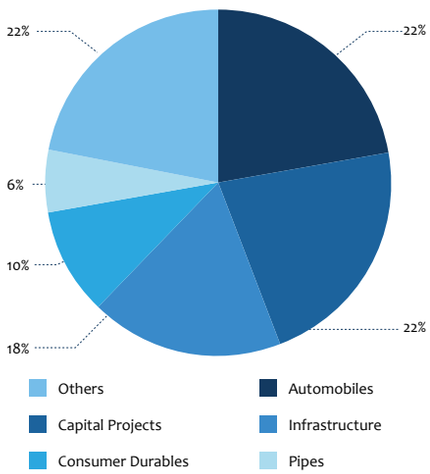
Logistics

Market Players in India

The leading top 5 steel producers are given below:



Steel End users in India



- Construction industry (Capital Projects and Infrastructure) is the largest consumer, accounting for approx. 40 % of total steel consumption
- Automobiles sector is second with 22% share followed by Consumer Durables and Pipes

Road Ahead

In order to cater the expediential growth of the Steel Industry in India and its requirements for the North Eastern region, the J M BAXI GROUP has built a top-notch facility at Paradip, a major sea-port town, in Jagatsinghpur district of Odisha, India.

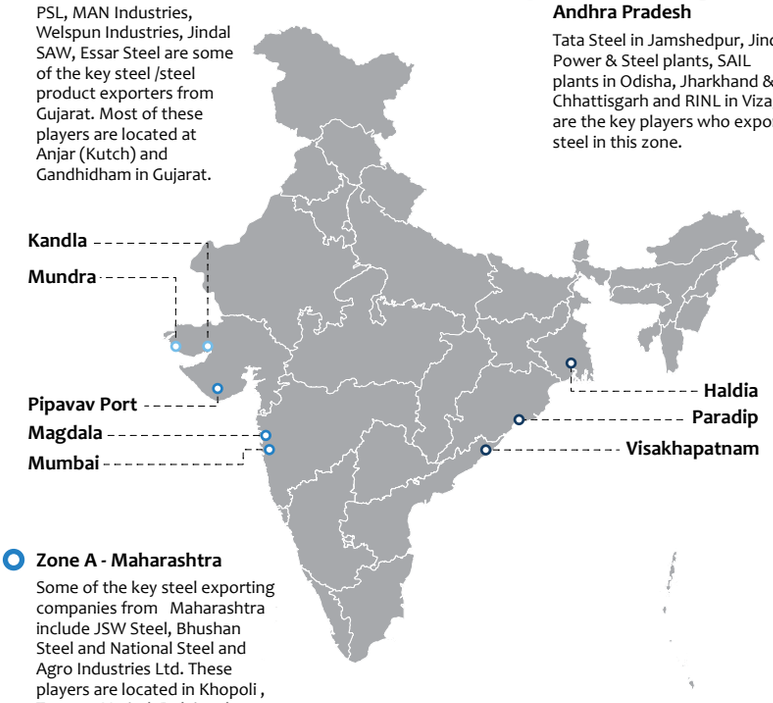
Export Zones From India

Zone B - Gujarat

PSL, MAN Industries, Welspun Industries, Jindal SAW, Essar Steel are some of the key steel /steel product exporters from Gujarat. Most of these players are located at Anjar (Kutch) and Gandhidham in Gujarat.

Zone C - Chhattisgarh/Odisha/ Andhra Pradesh

Tata Steel in Jamshedpur, Jindal Power & Steel plants, SAIL plants in Odisha, Jharkhand & Chhattisgarh and RINL in Vizag are the key players who export steel in this zone.



Zone A - Maharashtra

Some of the key steel exporting companies from Maharashtra include JSW Steel, Bhushan Steel and National Steel and Agro Industries Ltd. These players are located in Khopoli , Tarapur, Vasind, Dolvi and Kalmeshwar in Maharashtra.

The SPV, Paradip International Cargo Terminal (PICT) has been awarded a concession agreement by the Paradip Port Trust to construct and operate a multi-purpose terminal on Built-Operate-Transfer basis for a period of 30 years at the Paradip Port, Odisha. It is situated 210 nautical miles on the south of Kolkata, West Bengal and 260 nautical miles on the north of Visakhapatnam, Andhra Pradesh.

The multi-purpose cargo berth handles clean cargo which includes iron and steel products, aluminium ingots, pig iron, finished fertilizers, food grains and containerized cargo.

Salient Features of PICT

- All weather multi-purpose terminal with 3 Mobile Harbour Cranes, 2 Rubber Tyre Gantry Cranes, 3 Pay loaders, 3 Reach Stacker, 6 Fork Lifts and Tractor trailers
- Total Quay length of 450 meters Depth of 17.1 meters capable of accommodating cape size vessels up to 1,25,000 DWT
- Total back area of 22 hectares for covered warehousing, container yard and open stack yards
- Utilities including fire-fighting system, IT and communication system, water supply, Sewage Treatment Plant
- Railway sliding within the terminal

BIRDS EYE VIEW OF PICT, PARADIP

Logistics

BOXCO Moved 11 ODC's Over The BRAHMAPUTRA River

The challenge with moving such large Over Dimensional Cargoes (ODC)s from Hazira to Bongaigaon was the strict timeline to match the client's deadline as well as the barging on the Brahmaputra River during April and May.The scope of work for Boxco was door-to-door transportation, which included all the project management; barge transportation; barges and tugs; engineering for sea-fastening and stability; lifting on and off vessels; construction of a jetty at Jogighopa, Assam, on the Brahmaputra River; customs clearance for Ro-Ro and final delivery to the site.

The 11 ODCs of around 12,700 FRT were transported in two batches by multimodal transportation from L&T's plant in Hazira to the IOCL site in Bongaigaon, Assam. The experienced crew for the entire project planned for challenges like tidal restrictions at L&T's jetty at Hazira and continuous changes in the water level on the Brahmaputra River. Also, due to the excessive length of the cargos, transportation via roads proved challenging. By making minor route modifications and with the assistance of the Assam local authority, we completed the impossible task of delivering all the ODCs on time to the site ■

BARGING L&T JETTY TO ADANI HAZIRA PORT

VESSEL LOADING AT ADANI HAZIRA PORT

ROAD TRANSPORTATION TO IOCL SITE

Ro-Ro OPERATION AT JOGIGHOPA JETTY, ASSAM

Infrastructure

Exports Of Refrigerated Cargo Through HDC

Haldia International Container Terminal (HICT) proudly announces successful handling of exports of Reefer cargo from Haldia Dock Complex(HDC).

Haldia docks with advantage of higher draft, faster turnaround of Vessels, dedicated berthing window facility backed by integrated container operations by HICT has helped customers located in east coast of India to achieve:

- Less lead time from Factory/ warehouse/CFS to Port with 24 hours state and national highway connectivity.
- Flexibility in cut offs (with no addl. charges) providing sufficient time to plan shipments/logistics. Dedicated berthing window creating confidence in exporters to inform definite cargo arrivals to their international clients.
- Shipping lines and Feeder operators gains from Safe and prompt operations with higher space on vessels.
- Vessel and Yard operations carried out with sophisticated Terminal operating system providing Track and Trace capabilities of containers inside HICT managed terminal.

We have handled first reefer shipment of reputed Shrimps exporters namely KNC Agro/ Nezami Rekha and AFS Exports who have trusted Haldia as better alternative for their increased business.

It's worthwhile to mention on seamless time saving operations wherein lead time of just 1-2 days from date of gate-in of laden reefer units to loading on target vessels was achieved.

The closer co-operations between Shipping line Customer service, Operations along with Clearing agents, transporters, HDC officials and HICT Team made positive difference in smooth supply chain which is a must in reefer handling.

Considering huge potential of Reefer trade, exports as well imports, HDC and HICT have decided to augment existing reefer plug points whereby new reefer container handling facility shall be created within the Container Parking Yard at HICT which will be a big relief to reefer customers.

We thank Maersk line and CMA-CGM who have chosen HICT as an alternate gateway port adding value to their customers.

We will always remain grateful to HALDIA Docks officials who

supported in improving the ecosystem with proactive trade friendly policies.

We sincerely look forward to continuous patronage of Reefer Exporters / Importers / Shipping lines/ Clearing agents and Transporters ■

Infrastructure

Growth In Capacity At NHAVA SHEVA And HAZIRA

PSA International has recently opened a new container-handling facility at Jawaharlal Nehru Port Terminal (JNPT) called Bharat Mumbai Container Terminal (BMCT) at Nhava Sheva.

JNPT currently has five container terminals — one run by the port trust itself, two by DP World, one by APM Terminals and this new one by PSA.

All four of the private terminals operate under different rate regimes. Their rates were set by the Tariff Authority for Major Ports (TAMP) after the cargo facility was constructed, usually by adding a percentage to the actual costs. These tariffs are revised every three years.

Thus, there are differences in tariffs based on the start date for operations at these terminals.

Moreover, each terminal has to pay a royalty share to the landlord port, which rises every year.

For NSICT, the royalty paid to JNPT is allowed as a pass-through in rates only to the extent quoted by the second-highest bidder in the public tender.

GTIPL, which started operations in 2006, follows the revenue-share model. It is contractually mandated to share 35.503 per cent of its annual revenue with JNPT and the revenue share is not allowed as a cost in setting rates.

In 2008, the government adopted a new rate regime for projects that were bid on from that date. NSIGT operates under the 2008 rate regime. It shares 28.09 per cent of its annual revenue with JNPT.

PSA's BMCT will operate under this rate regime. It is contractually mandated to share 35.79 per cent of its annual revenue with JNPT.

Vessel-related charges are also different and are higher for NSIGT and BMCT.

Impact of BMCT on the other four terminals and CFSs

The opening of BMCT means there is more competition for the three existing terminal operators. Capacity had hit the ceiling before BMCT started operations, but now capacity has reached new levels. JNPT's capacity will rise from 4.8 m TEU to 7.2 million TEU. On completion of the second phase by 2022, which will have a capacity of 2.4 million TEU, total capacity will be almost 10 million TEU. As of now, supply exceeds demand, but this positive side has its own challenges: demand must be built up to sustain and nourish the ecosystem.

Since there will not be a sudden surge in cargo, the impact as of now is that there are more options for trade and terminals cannot play a monopolistic role. The business and market dynamics will have to change and thus, terminals will have to reinvent the wheel to cater to the trade. Efficiencies will automatically kick in, since it will be a case of survival of the fittest. Strategic marketing activities will have to be undertaken by all the terminals at JNPT. Value adds will have to be devised to cater to the hungry trade. With Direct Port Delivery taking shape, terminals and CFSs at JNPT will have to be even more proactive to the market dynamics to gain long-term strategic customers.

BMCT is a comparatively a bigger terminal with a separate infrastructure and this will play a major role in decongesting the already congested Jawaharlal Nehru Port, which was a major hurdle for trade.

In fact, this is the right time for all four terminal operators at JNPT to turn the tables in their favour. Three of the current terminal operators have local experience and know-how of local conditions, and BMCT will be learning and creating its own ecosystem.

It is over to the four giants to take it ahead.

There will not be a drastic increase in the volumes for the CFSs immediately, because the services that were calling at the other four terminals will start looking at BMCT to get better turnaround times for their vessels and thus, their cargo. Each main line operator will try to leverage this situation in its favour to cater to the trade.

Hazira

As per latest news, Essar Ports has said it will invest US$ 63 million (about Rs 4.5 billion) during 2018/19 in expanding the cargo-handling capacity of Hazira Port in Gujarat to 50 million tonnes, raising the company's capacity to 110 million tonnes, a senior company executive said.

The current capacity of Hazira, an all-weather deepwater port, is 30 million tonnes. It serves the landlocked northern and north-western regions of the country. The current operational capacity of the

Infrastructure

company's port terminals in India is 90 million tonnes per annum.

Hazira, 16 km from Surat, was just like any other village until a few years ago, but today Hazira is one of the most sought-after destinations for setting up industries.

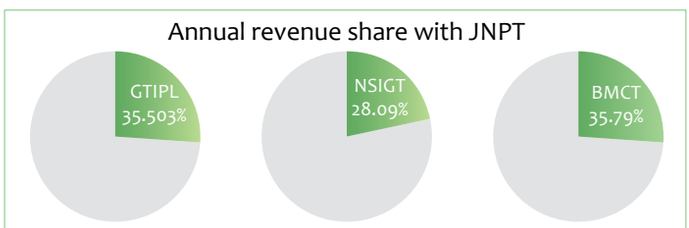
Surat itself is a fast-developing city, but the development in Hazira has been phenomenal. At present, Hazira is home to several major corporate houses, including Reliance, Essar Steel, Essar Power, L&T, NTPC, Kribhco, ONGC, GAIL, IOC, HPCL, BPCL, IBP amongst others.

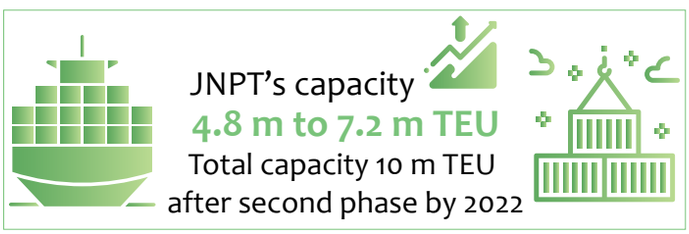
The oil and gas giant Shell recently established an LNG terminal at Hazira. Cairn Energy has also started operations here. Several other multinational companies have shown interest and are likely to set up facilities in Hazira in the next two to three years.

Investments worth of billions of rupees have been made in the area in various industries and the amount is likely to go up, as many more corporates are eyeing the region. Hazira is becoming the hub of industrial activity in the state.

Hazira's strategic location, with its proximity to both Surat and Mumbai, the two major trade centres of the country, has played an important role in its development. Hazira container throughput continues to grow steadily and new feeder and main lines have already started operations or are in an advanced stage of deploying. Hazira Port has been witnessing a positive trend with a steady growth of approximately 22 per cent.

Since Hazira has its own catchment area and an ever-growing industrial base, it will be difficult to shift its cargoes to Nhava Sheva. Thus, Nhava Sheva will have to come up with its own advantages and value adds to cater to the ever-growing west coast and more specifically the Mumbai market ■





Technology

Arya Water Technologies Deliver Effluent Treatment

For Kathmandu Apparel

Kathmandu Apparel is a premier exporter of textiles. It is headquartered in Mumbai and has manufacturing units in Bangladesh, China and Vietnam. It was setting up a new dyeing unit in Kolhapur, Maharashtra, and needed an Effluent Treatment Plant (ETP) to remove contaminants produced during the dyeing process.

Wastewater purification is a challenge in the textile industry. A study in Nature found that the industry is highly polluting, more so than airlines and maritime shipping worldwide. It estimated that consumers are buying 60% more clothing than they did in 2000. The textile industry has had to keep pace with increased production. The wastewater generated by dyeing includes fats, oils, chemicals and colours. Treatment facilities are large and complicated due to the volume of water that is used in the production process and the number of steps needed to clean the water.

Kathmandu Apparel visited installations in Pali, Rajasthan, and Tiruppur, Tamil Nadu, to study the latest technologies used in textile effluent treatment and shortlisted two companies with whom to move forward. Arya Water Technologies (AWT) was not the preferred bidder because we lacked sufficient experience in the textile industry. However, we were invited to submit a bid, as we had previously delivered a smaller ETP that was running successfully at Kathmandu Apparel's Mumbai unit.

The solution AWT designed incorporated a continuous flow of effluent through the plant. This allowed for pretreatment with chemicals to remove suspended solids (TSS) and colours, which reduces the amount of sludge produced and lowers the cost of sludge disposal. In the next step, a moving bed bioreactor (MBBR) further reduces organic contaminants and any remaining colour. With the MBBR technology, AWT was able to increase the capacity of the plant significantly, while keeping its footprint small. Finally, the effluent is filtered through sand and carbon, which ensures that the output effluent meets the requirements set by the Pollution Control Board (PCB). These systems are configured so that operating the entire plant is simple and semi-automatic. The plant was designed to handle 500 kilolitres per day (kld) with a peak capacity of 600 kld.

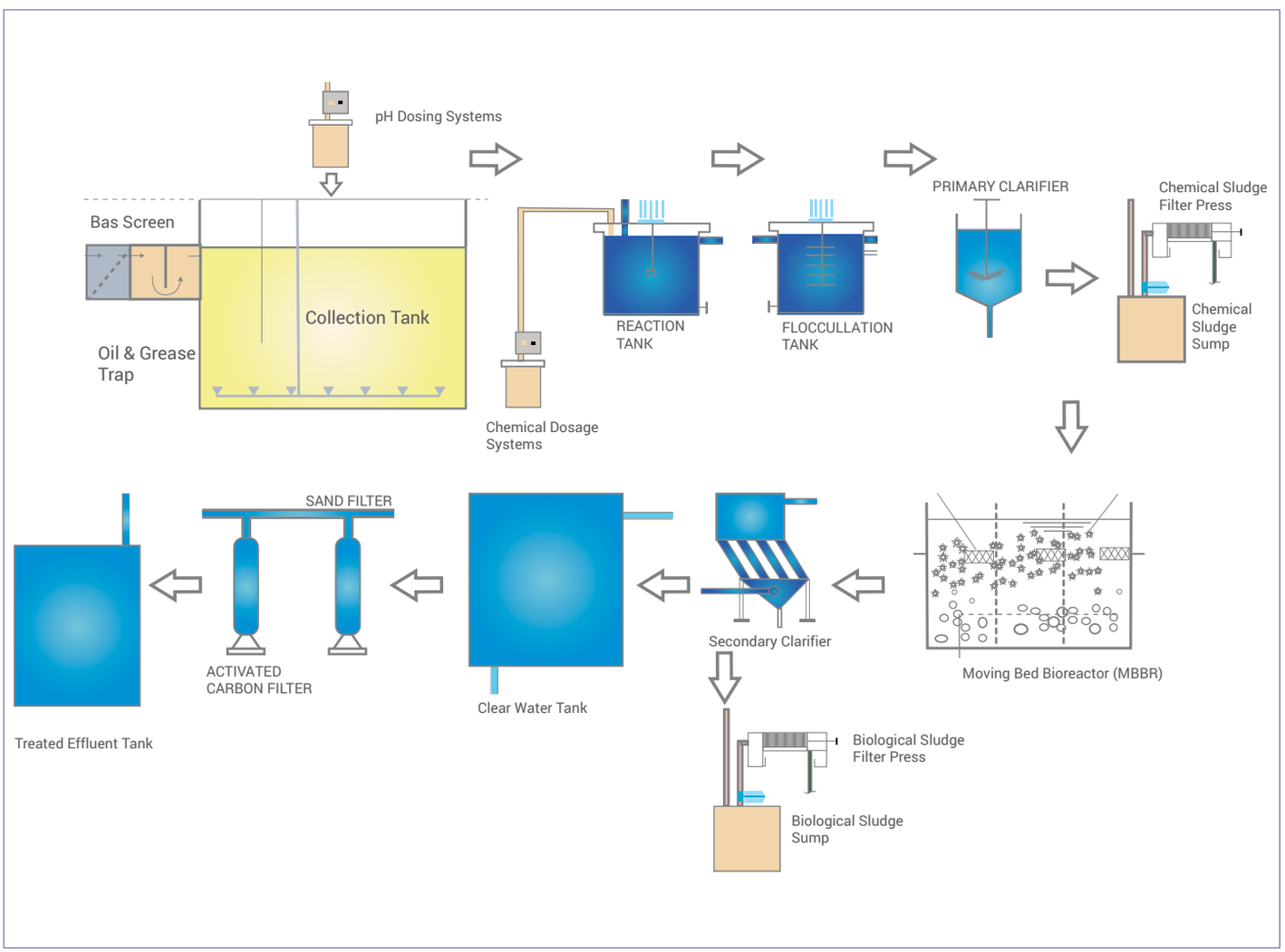
Technology

In contrast, the competing firm used chlorine oxidation in the pretreatment stage. This increases the total dissolved solids (TDS) in the effluent, and increases sludge production, as well as sludge disposal costs. In the secondary treatment phase, the solution was a conventional system that included extended aeration of the effluent. It requires a large footprint, which significantly increases the civil engineering costs borne by the client.

After several rounds of discussion with both parties, the client decided to go with AWT because our solution offered a smaller footprint, lower civil engineering costs and a guarantee that the outflow of the plant would meet PCB norms. Kathmandu Apparel awarded the contract to AWT in April 2018 ■

Key parameters of Kathmandu Textiles ETP

	Influent	PCB norms for Effluent	Effluent
pH	10	6.5–8.5	6.5–8.5
Biochemical oxygen demand (BOD)	650 mg/l	<30 mg/l	<26 mg/l
Total suspended solids	600 mg/l	<10 mg/l	<8 mg/l
Chemical oxygen demand (COD)	900 mg/l	<250 mg/l	<168 mg/l



Technology

PORTALL Clear: A Digital Superhero

The customs house agency industry is as old as the trade itself. There are about 21 government departments involved in the export/import chain, so it takes about 8–10 days to complete the relevant documentation – 7 for exports and 10 for imports – in India. Thus, importers and exporters have long appointed licensed third-party agents to clear their cargo through customs and coordinate with the customs department. That's how CHAs came into being.

India's GDP (2018E) is US$ 2.84 trillion, growing at an annual growth rate of 7.7 per cent. Total tax revenue as a percentage of GDP is 17.7 per cent. Customs contributes 15.1 per cent to this tax revenue. Thus, 2.55 per cent of India's GDP comes from customs alone, which amounts to US$ 71 billion or Rs 4.82 lac crore with an exchange rate of Rs 68 to the dollar.

This is one of the most critical activities and one of the most crucial links in the supply chain. There are about 15,000 CHAs in our country. Mumbai alone has around 3,000 and the market size is of about Rs 20,000 crores across India. Unfortunately, the CHA industry has not evolved with technology and the need for a digital superhero had become imperative.

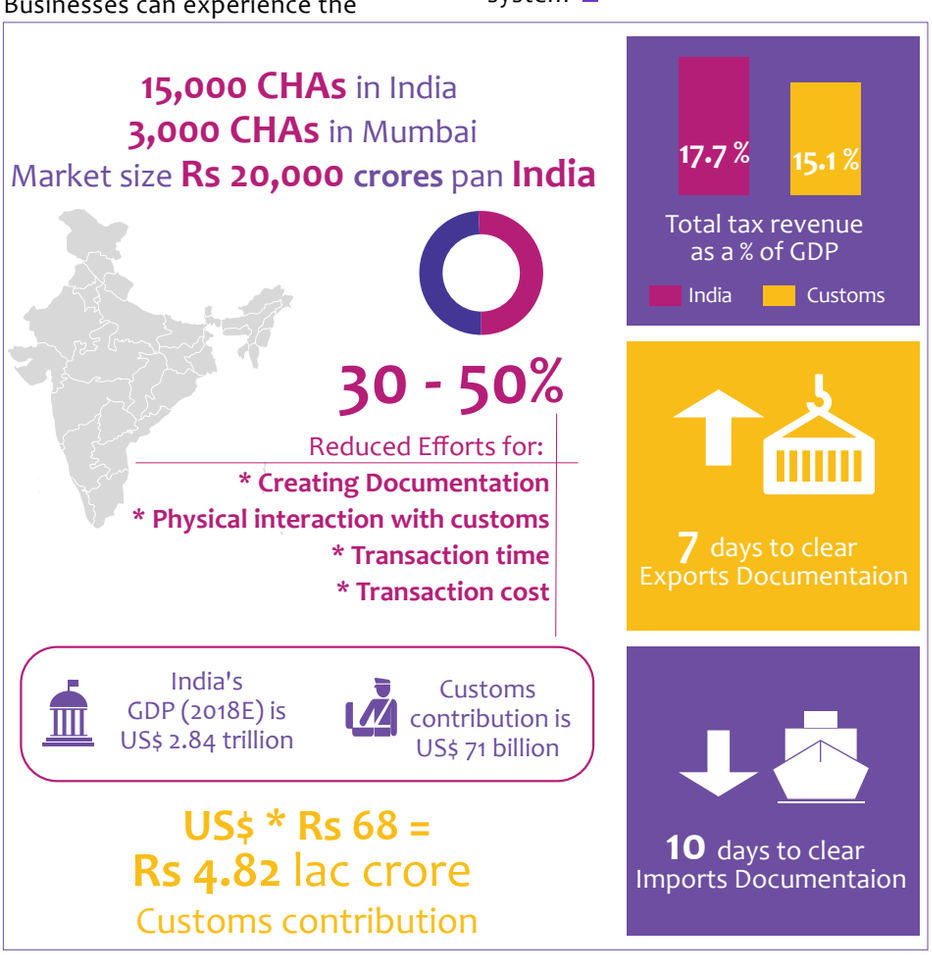
Everybody needs a transformation at some point and we all must adapt and evolve with technology. Portall, with its deep domain expertise in technology and in the shipping industry, is transforming the customs clearance model.

All transactions in Portall are encrypted. It uses a patented algorithm and access is through a secure and encrypted tunnel. This technology is used to display on-demand data and content without storing it.

Through Portall, users can cut costs by 30 to 50 per cent by reducing their efforts in creating documentation and checklists, reducing the physical interaction with various customs departments, and reducing overall transaction times and costs. Thus, they can increase efficiency, handle a bigger trade volume and acquire more customers. Portall is the place to go for customs clearance. Businesses can experience the satisfaction of using Portall and clear their cargo with minimal effort by simply registering on www.portall.in.

Through this digital initiative, we are not only empowering our stakeholders to trade efficiently and transparently, but also contributing towards improving India's ease of doing business quotient on a global scale.

The need of the hour for logistics, maritime and shipping companies and all their stakeholders is to participate in this digitalisation initiative powered by Portall. Become a part of this single online platform and help in creating a robust cargo community system ■



In Focus

Marinas In INDIA: Present And Future

What is a marina?

A marina or dock is where yachts and other small vessels can moor up to get supplies and fuel and for maintenance checks. Unlike a port, which accommodates large passenger and cargo ships, a marina is a small basin. Often, they can be home to several small luxury yachts. Depending on the size of the marina, it will offer various facilities for boat operators, such as maintenance and repair assistance, refuelling, other resources and a chandlery. Vessel owners prefer to dock in a marina with protected berths and the equipment and resources they need.

Usually, a vessel owner pays a fee to take advantage of a marina's facilities. This is the main source of income for the operators. Fees vary from one marina to another and depend mainly on its location and the types of services available to vessel owners.

Top 10 Marinas in the World

No	Name	Location	Country	Number of Berths Available	Max Length
1	Marina Grande	Capri	Italy	300	60 m
2	Marina di Porto Cervo	Sardinia	Italy	720	100 m
3	Marina di Portofino	Genoa	Italy	16	45 m
4	Puerto José Banús	Marbella	Spain	915	50 m
5	Ibiza Magna	Ibiza	Spain	85	60 m
6	Port de Saint-Tropez	Saint Tropez	France	734	50 m
7	Port Camille Rayon	Golfe-Juan	France	840	75 m
8	Marina Port Vell	Barcelona	Spain	167	190 m
9	ACI Marina Split	Split	Croatia	364	80 m
10	Yacht Haven Grande	Virgin Islands	USA	47	200 m

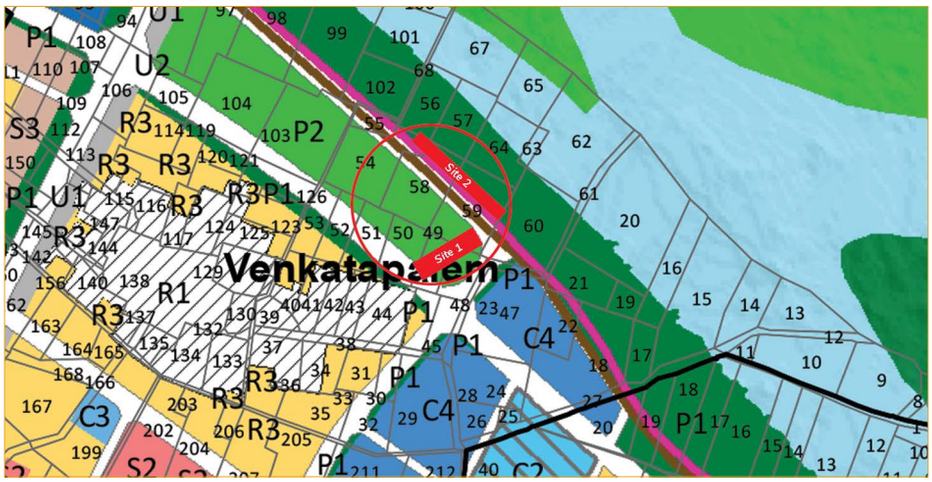
Proposed marina at Amaravati

Amaravati is the capital city of the Indian state of Andhra Pradesh. Vijayawada, Guntur, Tenali and Amaravati form the metropolitan region of Amaravati, namely Andhra Pradesh Capital Region, which is governed by the Andhra Pradesh Capital Region Development Authority (APCRDA). This new city is located on the banks of the River Krishna.

Tourism infrastructure in Vijayawada and Guntur is limited to temples and the passive water tourism at Bhavani Island, hence there is a need for the infrastructure to meet the demands and tastes of tourists and the people of the capital region. Amaravati Marina is being developed as the solution for this. Unlike marinas on the coast,

SAILBOATS ANCHORED AT NIGHT AT A MARINA

In Focus



Amaravati Marina is on the banks of the Krishna River, making it a unique facility.

The relevant authorities have already initiated the process and invited a request for proposal (RFP) from developers for Amaravati Marina. APCRDA wants the facility to be ready and operational in the capital by mid-2019. The project will be developed on 8 acres of land at Venkatapalem adjoining the waterfront area of the River Krishna. It is estimated it will cost around Rs 400 million and will operate as a public–private partnership. It will have facilities for power boating and yachting and the infrastructure to host water sports competitions. There will be a sail training centre with classrooms, a boat safety training centre, berths made from aluminium alloy pontoons and boat accessory shops. It will be developed in two phases. While the first phase will be completed in 12 months from the time the contractor is selected, the second will be ready in the subsequent year.

Amaravati is still under construction. It is thought that it will take at least 5–10 years to transform it completely into the state's capital city. The tender process for the city should be completed by June and work will be launched shortly after that. The state government expects tourist footfall in Amaravati to increase rapidly over the next 5–10 years with the number of domestic and foreign tourists growing annually by 8% and 5%, respectively. Over 10,000 foreign tourists are expected to visit Amaravati every year by 2025.

The rest of India

Kochi Marina is the first and only fully fledged marina in India meeting international standards. It is located on the eastern coast of Bolgatty Island and is owned by the Kerala Tourism Development Corporation. Kochi International Marina has been fully operational since 24 April 2010.

Kochi Marina offers services like fuel, water, electricity and sewage pump-outs for boats. Repair and maintenance facilities for yachts are also available. The marina is close to the international maritime route on the south-west coast of the Indian peninsula. It has favourable conditions and minimum tidal variations throughout the year. It is managed by Mumbai-based Ocean Blue.

Kochi Marina has berths for around 36 yachts. This will be further upgraded to 50 berths once the second phase of expansion is completed.

During the last decade, Kochi has become a major destination for sea-based adventure tourism. Moreover, yachts sailing from the west via the Suez Canal and travelling towards the north-eastern parts of Asia consider Kochi as an ideal berthing spot. The unavailability of intermediate berthing facilities for yachts sailing between Dubai and Far Eastern locations increases the prospects of Kochi Marina as an intermediary berthing spot.

Every year, Kochi is visited by large yachts from European countries such as the United Kingdom, Finland and Norway, as well as from New Zealand and Australia. Since Kochi is the nearest port on the international maritime route between the west and the east, many adventurous seafarers prefer this port. However, the biggest hurdle that yachters face is obtaining an Indian visa. For seafarers, obtaining a Sri Lankan or Maldivian visa is easier, since Indian consulates can take up to a week to issue a visa.

Kochi is situated just 11 nautical miles from an international maritime route and it is considered to be one of the best natural ports in Asia. Since Kochi is a major spot on the global maritime map, it has huge potential, provided the visa process can be simplified and upgraded for seafarers.

Despite having a coastline of over 7,500 km and over 0.25 million millionaires, India still does not have a world-class marina for small luxury vessels. Most of the yachts and boats in India moor at berths operated by existing ports at a high cost. Hence, setting up marinas would not only help port trusts to generate additional revenue but also create jobs and reduce costs for owners of luxury boats. Currently, various discussions are underway to explore the possibility of developing marinas in Goa and Mumbai.

A marina not only provides a secure environment for yachts and boats, but also offers related services like maintenance, spare parts, accessories, housekeeping and fuelling. There are options for recreational facilities and restaurants. Thus, they have the potential to create lakhs of direct and indirect employment opportunities. To realise the full potential of marinas, it is very important to have the right policies and close co-ordination between state and central government bodies ■

Trade Wars Affect The Steel Industry Of INDIA

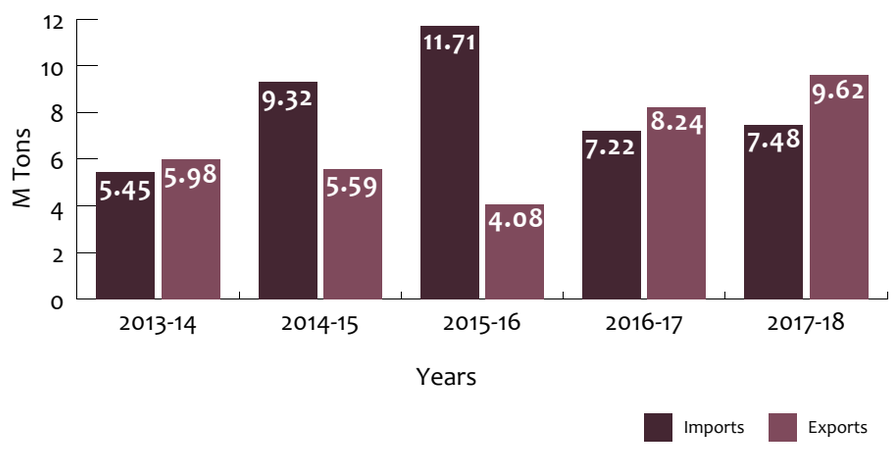
The end of “cold war” era seems to have been replaced with new “trade wars” now looming large on the global horizon. Officials sources in India have confirmed that the Indian government would open a WTO dispute, if country’s firms exporting to US were not granted an exemption. The US President Donald Trump has in March imposed the fresh tariffs, levying 25 percent on steel imports and 10 percent on aluminium, besides other commodities. The US government sources have justified the latest move on account of US national security concerns and therefore say the dispute stands outside the WTO's remit. India, China, Russia, Japan, Turkey and the European Union have however, all dismissed these US claim, regarding the tariffs as "safeguards" under the WTO rules, entitling them to a combined $3.5 billion in annual compensation. Pending a US response to India’s plea for exempting India from increased tariff, India too has raised import tariffs on a number of items being imported from the United States.

India's retaliation claim seeks to recoup a cost of $31 million levied on its aluminium exports and $134 million on steel, and it has said it could also target other U.S. exports of soya oil, palmolein and cashew nuts to India. The Indian move follows a similar move in April by China. Under WTO rules, the United States has 60 days to settle the complaint, after which India could ask the WTO to set up an expert panel to adjudicate. India has listed a string of ways, in which the U.S. tariffs violated the WTO rules and unfairly damaged India's interests. It said they broke the WTO's safeguards agreement and the United States was trying to use its tariffs to get other countries to agree to "voluntary export restraints". The United States had also exceeded the maximum import tariff allowed by the WTO and the tariffs were not applied uniformly to steel and aluminium imports from all suppliers, breaking a core principle of the WTO rule book.

The trade tiff with the United States comes at a inooportune time for India, having lately emerged as a net exporter of steel this year and with the trend expected to continue as Indian steel has become globally competitive. India’s emergence on the horizon is being keenly watched. As country is now at the cusp of becoming a global steel player and escaling trade tensions could precariously trip the balance against India's strategic trade interests. India’s decision to increase retaliatory tariff on steel imports from the US currently also covers tin plate, stainless steel hot-rolled products and CRGO (cold-rolled grain oriented) items. The tariff on these items have been increased to 26.5%, 22.5% and 20% respectively with effect from August 4, 2018. Currently these items attract a standard rate of 15%. Though the US accounts for only a small portion of total exports, Indian steelmakers have begun to carve out a small but significant market for themselves in certain high-value and critical segments such as pipes and tubes used in oil and gas applications. Overall, India’s steel production is set to climb 10% to 12% in 2017-18, from a record of 101.3 mn metric tonnes in the past 12 months, and is forecast to advance to 240 mn tonnes by the year 2031 ■

India's Steel Trade

India may turn into a net importer of steel for first time in three years



Port Statistics

INDIA's Major Ports' Traffic Share Surges To 58%

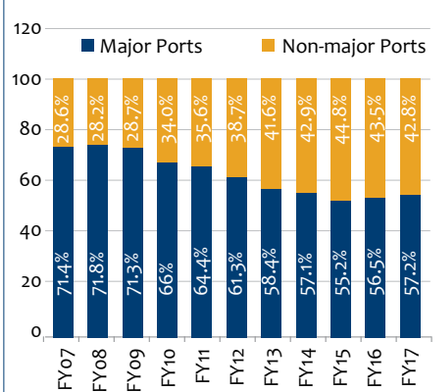
The share of India's cargo traffic handled by top 12 major ports is on the rise and has reached 58 per cent in FY 2017-18, taking a lead over the traffic share of the non-major ports, which have been on the decline during past few years, according to latest figures released by the Ministry of Shipping. Buoyed by pick up in demand, the cargo traffic at these key ports have risen by 4.77 per cent to 679.35 million tonnes (MT) during 2017-18, compared to 648.47 MT during 2016-17. The 12 major ports currently have cargo handling capacity of about 1,400 MT at present, which is being now subsantially raised through fresh investment.

On the contrary, the traffic handled by about 200 minor ports, either under the control of the State governments or the private players operating individual terminals, has been on the decline since 2014-15. The performance of non-major ports, particularly of ports in Gujarat have been rather spectacular for nearly over past one decade, before they have hit the peak levels. Private investors rushed into setting up severals of these private ports and cargo terminals, and earlier, a parliamentary panel had even expressed the concern over non-major ports eating into the share of major ports. The share of major ports in traffic handled, which declined continuously up to 2014-15, is however increasing since then. (See the following bar chart)

The share of major ports in traffic handled was 55 per cent in 2014-15 and increased to 58 per cent in 2017-18," the Ministry of Shipping noted in its report. The report said the market share of major ports, which was 61 per cent in 2010-11, had declined to 55 per cent in 2014-15 but on the back of initiatives by the Central government has been on rising. The market share of major ports was recorded at 57 per cent in 2015-16 and 2016-17 and reached 58 per cent at the end of the last fiscal, it said. On the contrary, the share of the minor ports which was at 45 per cent in 2014-15 has decreased to 42 per cent in 2017-18, despite minor relative increase in cargo throughput in 2017. India has 12 major ports, namely Kandla, Mumbai, JNPT, Mormugao, New Mangalore, Cochin, Chennai, Ennore, V O Chidambaranar, Visakhapatnam, Paradip and Kolkata (including Haldia). The report also said that the cargo traffic handled by major ports reached to 679.47 million tonnes (MT) in 2017-18 from 606.37 MT. Two major ports (out of 12) also handled more than 100 MT of cargo in FY 2017-18. For the first time a major port in India, Deendayal Port (Kandla) crossed 100 MT of traffic in 2016-17. Paradip Port has become the second major port to cross the figure of 100 MT of traffic during 2017-18," the report said.

As many as 39 projects entailing investment of Rs 205.35 billion are under implementation to augment the capacity of 12 major ports. These projects are part of 112 port capacity expansion projects, involving total investment of Rs 696.36 billion, that have been planned to increase port capacity to 3,500 million tonne per annum (MTPA) to cater to the projected traffic of 2,500 MTPA by 2025. Buoyed by pick up in demand, cargo traffic at these ports rose by 4.77 per cent to 679.35 million tonnes (MT) during 2017-18 compared to 648.47 MT during 2016-17. The 12 major ports have capacity of about 1,400 MT at present. In addition to the port master plans, the government has also announced setting up six new ports at Vadhavan (Maharashtra), Enayam (Tamil Nadu), Tajpur (West Bengal), Paradip Outer Harbour (Odisha), Sirkazhi (Tamil Nadu) and Belekeri (Karnataka) ■

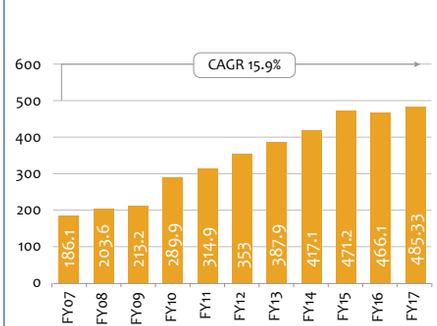
Percentage Share of ports



Non-major ports are evolving faster than major ports:

- Non-major ports are gaining shares and a major chunk of traffic has shifted from major ports to non-major ports
- The contribution of non-major port's traffic to total traffic rose to 42.8 per cent in FY 17 from 28.6 per cent in FY07

Cargo traffic at non-major ports (MMT)



Cargo traffic at non-major ports:

- Stood 485.33 MMT FY17
- Cargo traffic has expanded at a CAGR of 10.7 per cent during FY07-16
- Cargo traffic in 2017 at non-major ports is estimated to reach 815.2 MMT

Port Statistics

SHIPPING & CARGO PERFORMANCE

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

JANUARY - MARCH 2018 (IVth QUARTER) 2017 - 2018 / JANUARY - MARCH 2017 (IVth QUARTER) 2016 - 2017 (QTY IN MT)

AGRICULTURAL PRODUCTS

	SUGAR		SOYAMEAL		WHEAT		RICE		MAIZE	
	IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17
No. of Ships called	20	27	5	10	2	94	36	37	1	1
Total Cargo Handled	0.533	0.550	0.139	0.230	0.052	3.623	0.624	0.484	0.002	0.062
Import	0.321	0.390	0.000	0.030	0.052	3.623	0.017	0.032	0.000	0.062
Export	0.212	0.160	0.139	0.200	0.000	0.000	0.606	0.452	0.002	0.000

FINISHED FERTILIZERS & FERTILIZER RAW MATERIALS

	UREA		SULPHUR		ROCK PHOSPHATE		DAP		MOP	
	IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17
No. of Ships called	27	10	22	14	37	39	14	4	33	12
Total Cargo Handled	0.984	0.436	0.575	0.361	1.761	1.685	0.450	0.247	0.992	0.802
Import	0.984	0.436	0.196	0.185	1.761	1.532	0.442	0.247	0.992	0.802
Export	0.000	0.000	0.379	0.176	0.000	0.010	0.008	0.000	0.000	0.000

COAL

	THERMAL COAL		COKING COAL		MET COKE		PET COKE		ANTHRACITE COAL	
	IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17
No. of Ships called	299	230	229	120	27	14	40	57	8	6
Total Cargo Handled	16.775	12.919	10.324	9.479	0.740	0.300	1.973	2.064	0.168	0.169
Import	7.553	6.220	10.163	9.479	0.718	0.300	1.163	1.646	0.168	0.169
Export	9.222	6.690	0.161	0.000	0.022	0.000	0.810	0.417	0.000	0.000

STEEL & RELATED ORES

	STEEL PRODUCTS		SCRAP METAL		CHROME		MAGNESIUM ORE		IRON ORE	
	IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17
No. of Ships called	323	298	2	3	2	3	27	10	296	359
Total Cargo Handled	3.977	2.134	0.042	0.082	0.019	0.316	0.503	0.388	20.875	19.020
Import	1.931	2.815	0.042	0.082	0.000	0.000	0.479	0.388	8.425	4.990
Export	2.046	0.556	0.000	0.000	0.019	0.316	0.024	0.000	12.450	14.029

INDIAN PORT PERFORMANCE - Q4 & FY 2017 - 18 THROUGHPUT (QTY IN METRIC TONNES)

JANUARY - MARCH 2018 (IVth QUARTER) 2017 - 2018 / JANUARY - MARCH 2017 (IVth QUARTER) 2016 - 2017 (QTY IN MT)

Ports	Types of Ports	NO. OF SHIPS		LIQUID CARGO		BULK CARGO		CONTAINERS (TEUS)		TOTAL CARGO *	
		IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17	IVth Qtr'18	IVth Qtr'17
Kandla	■	371	360	2.720	1.695	4.963	3.825	47,353	5,252	7.683	5.520
Mumbai	■	452	310	6.817	5.911	1.423	9.700	-	9,000	8.240	15.610
Nhava Sheva	■	170	192	1.974	1.689	0.303	0.262	1,240,981	1,118,113	2.277	1.555
Mormugao	■	189	182	0.276	0.329	7.032	7.845	-	-	7.308	8.317
Mangalore	■	347	278	7.001	7.528	3.610	3.604	-	-	10.611	11.357
Cochin	■	179	147	5.095	4.660	0.260	0.315	147,655	124,228	5.355	4.917
Tuticorin	■	237	89	0.420	0.318	5.702	5.789	195,930	170,739	6.122	6.107
Chennai	■	229	310	3.770	3.045	1.263	1.922	374,472	371,321	5.033	4.970
Ennore	■	214	196	1.210	6.476	6.589	6.476	-	-	7.799	12.954
Vishakhapatnam	■	269	130	2.161	3.713	6.958	5.927	97,101	89,219	9.119	9.640
Paradip	■	471	123	8.415	8.812	20.015	15.974	-	-	28.430	22.393
Haldia	■	510	450	3.231	2.678	6.650	4.618	38,356	46,886	9.881	7.300
Kolkata	■	26	66	0.301	0.287	0.001	0.002	154,122	108,674	0.302	0.289
Gangavaram	■	4	92	0.000	0.000	0.147	2.670	-	-	0.147	2.670
Pipavav	■	128	146	0.209	0.279	1.550	1.382	204,718	158,405	1.759	1.660
Mundra	■	747	87	7.315	5.826	8.411	9.462	1,075,901	959,388	15.726	15.288
Dahej	■	182	169	6.013	4.364	2.160	2.344	-	-	8.173	6.710
Hazira	■	165	43	1.032	1.877	1.795	1.877	129,879	113,918	2.827	3.750
Navlakhi	■	54	36	0.000	0.000	2.935	1.952	-	-	2.935	1.952
Kakinada	■	172	80	0.634	0.610	2.137	2.344	-	-	2.771	2.950
Total Vessel Calls at all ports		**5116**	**3486**	**58.594**	**60.097**	**83.904**	**88.290**	**3,706,468**	**3,275,143**	**142.498**	**145.909**

■ Major Port ■ Non-Major Port

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

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