

J. M. BAXI GROUP

TIDINGS

ISSUE XXIII

OCTOBER - DECEMBER 2018



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With Mr. ATUL
CHATURVEDI SHREE
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J M BAXI GROUP

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From the Quarter Deck

Dear Friends and Colleagues, Once again, we start the October–December issue with a report on the monsoon. In all parts of India, we have had a normal monsoon and it is thought that agricultural outputs will likely be excellent for the season. Thus, many economists are predicting that there is a strong chance that India will return to GDP growth of 8% this year. Regrettably, the monsoon also resulted in major havoc in Kerala, which received unprecedented rain from 1 August to 19 August of 29.87 inches or 758.6 mm, resulting not only in total disruption and destruction of property but also a substantial loss of life. We at J.M. Baxi & Co. contributed to the relief efforts as best we could. Our heartfelt sympathies and support go to the people of Kerala. We hope to see them get back to normal as soon as possible.

Continuing the macroeconomic trend, one of the major areas of concern has been the sharp drop of the rupee against the US dollar. This is leading to an increase in fuel prices, which may have an impact on logistics and transportation costs. Whilst, at the moment, India seems relatively unscathed by the tariff wars that have begun in earnest between the US and China, the general global situation has contributed to the depreciation of the Indian rupee. The world will be watching closely and scrutinising the US–China trade tariff spat.

On a positive note, it is, therefore, very likely that we shall see intra-Asia trade continue to grow. The Indian economy has shrugged off its flatness of the last couple of years and growth in industrial production seems to be kicking firmly in. Agriculture is strong and with a successful monsoon, there should be no reason to see any decline. The ports and logistics sector confirms this assessment. Across all the ports as well as the inland terminals, we have seen that cargo volumes are holding steady. There has been a sustainable steady growth of trade across almost all commodities. In some areas, we are also noticing berthing delays, which is an indicator of good trade volumes.

On the container shipping line front, everyone is closely watching the US–China trade tariff spat with close interest. Any major disruption to China–USA trade lanes will impact the demand–supply equilibrium of ships and slots. Very large container ships (VLCCs) have not only been deployed, but more ships are being delivered for the Far East to Europe trade lane. Certainly, we are very much waiting and watching.

Bulk carriers seem to be holding their own, even though Vale continues to build and roll out its own Valemax tonnage, mainly for the ore trade to China from Brazil. The tanker markets remain sluggish and are causing increasing distress to shipowners.

In India, on the ports and coastal and river shipping front, we continue to see the Sagarmala project evolving. Linked to this, we are also observing the encouragement of the maritime cluster methodology. The Inland Waterways Authority of India is taking long strides in creating river terminals and dredging to enable the navigability of the river Ganges, i.e. National Waterway No 1.

On the logistics front, Boxco Logistics is involved in some interesting projects. With large-scale public transportation projects coming up in various parts of India, such as metros, and also the growth of the petroleum and petrochemical sector, we are looking forward to a busy and satisfying 2019.

The next edition, which will be January 2019, will include a report on the rollout of Portall PCS 1x for all the ports in India. With our ship agency and logistics units, we are mainly a service business. All services business are seeing incredible change. Walmart–Amazon, hotel chains–Airbnb, automobile companies–



Uber, Ola and Tesla. The change and disruption is for all to see. We are all seeing the great importance of artificial intelligence(AI), blockchain, digitalisation etc. Our colleagues in our group are working hard to keep us relevant, to keep us ahead, to keep us competitive. We will see incredible disruptions and we also see great opportunity.

This is the last quarter of the calendar year 2018. We entered 2018 knowing that it would be a tough year and we can proudly say that the year has been “not bad”.

The last quarter will see Durga Puja, Diwali, Christmas and of course the

Terminals TEUs	April – Sept 2017	April – Sept 2018
KICT	49,528	103,710
HICT	70,060	92,453
VCT	190,144	232,560
DICT	41,550	58,943
MICT	45,807	50,582

PICT handled cargo volume of 0.49 mn metric tons of Break bulk and 2,427 TEUs for the period of June to September 2018.

start of 2019. I take this opportunity to wish each of you and your families “Happy” festivities on these occasions. I welcome you to join us in 2019 with confidence and courage, as it seems it will be a great year ahead ■

Till next time

Krishna B. Kotak
Chairman - J M BAXI GROUP



PS: As you know, we have our own beer brand, Happy by Thirsty. Please feel free to call my office if you wish to celebrate an evening with your family on any of these occasions. This offer is open till 30th December 2018.

Agency & Services

The Automotive Industry In INDIA

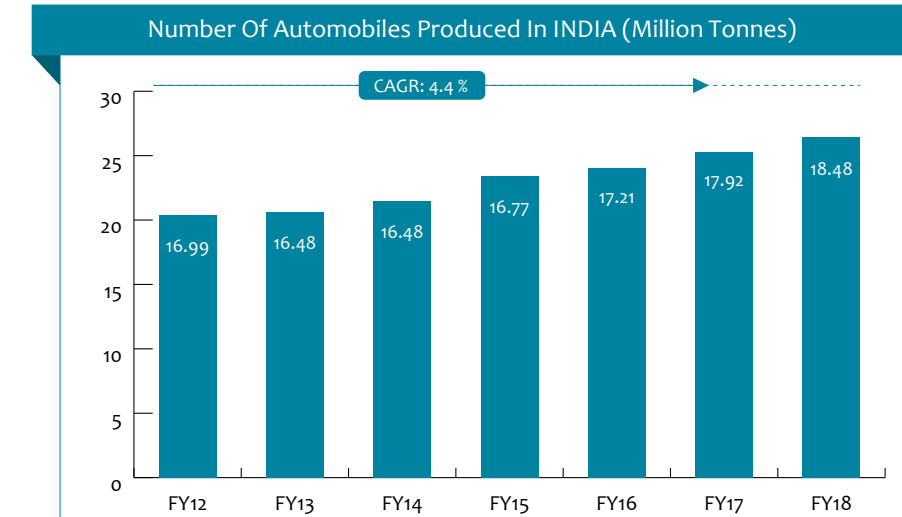
Since the commencement of liberalization in 1991, the automotive industry has grown consistently in India over the years, backed by the various initiatives of the Government. The Government of India encourages foreign investment in the automobile sector and allows 100 per cent Foreign Direct Investment (FDI) under the automatic route. Presently, the Indian Auto Industry has become the 4th largest in the world with sales increasing 9.5 per cent year-on-year to 4.02 million units (excluding two-wheelers) in 2017. India was the 7th largest manufacturer of commercial vehicles in 2017.

According to data released by the Department of Industrial Policy and Promotion (DIPP), the Indian Automotive industry has attracted FDI worth US\$ 18.413 billion during the period April 2000 to December 2017.

The Overall Market And Investments

Overall domestic automobiles sales in India has witnessed a CAGR growth at 7.01 per cent during FY 2013-18 with 24.97 million vehicles getting sold in FY18. Two-wheelers dominate the industry and made up 81 per cent share in the domestic automobile sales in FY18. The passenger vehicle sales in India crossed the 3.2 million units in FY 2018 and is further expected to increase to 10 million units by FY20. Auto sales in Q1 FY19 witnessed a year-on-year growth rate of 18.1 per cent across segments, driven by a 19.91 per cent growth in passenger vehicle sales. Overall exports in Q1 FY19 increased 26.73 per cent year-on-year basis.

In order to match the growing demand, several auto-makers have started investing heavily in various segments of the industry during the last few months. A few of the



recently planned investments and developments in the automobile sector in India are as follows:

- » Ashok Leyland has planned a capital expenditure of Rs 1,000 crore (US\$ 155.20 million) to launch 20-25 new models across various commercial vehicle categories in 2018-19, possibly to meet the challenge of the in-roads made by MNC competitors.
- » Mahindra & Mahindra is planning to make an additional investment of Rs 500 crore (US\$ 77.23 million) for expanding the capacity for electric vehicles in its plant in Chakan.

Automobile Export

India has also grown to be a prominent auto exporter, registering a reasonably strong export growth so far and expectations for the near future are high.

Overall, automobile export from India has grown at 6.86% CAGR during FY 2013-18. About 14% of India's annual automobile production is being exported presently. After decline by about 4.5% in FY17, exports witnessed a sharp growth of over 16% in FY18. Exports of two and three wheelers have registered a sharp growth of over 22% year-on-year on the back of gradual recovery in overseas demand; though commercial vehicles' export has declined by about 10%, the growth of export of passenger vehicles has remained largely stable. Many companies like Volkswagen, Ford Motors and General Motors, are focusing on exports and expansion in newer markets such as South America, North America and Asia. Demand from African and Latin American countries is expected to pick up on back of stabilization of exchange rates and commodity prices in those regions.

Category	2013-14	2014-15	2015-16	2016-17	2017-18
Passenger Vehicles	596142	621341	653053	758727	747287
Commercial Vehicles	77050	86939	103124	108271	96867
Three Wheelers	353392	407600	404441	271894	381002
Two Wheelers	2084000	2457466	2482876	2340277	2815016
Grand Total	3110584	3573346	3643494	3479169	4040172

Agency & Services

The US, which was non-existent as an export market for Indian automakers, is now the third-largest export destination, thanks to the slowdown in other regions. In FY 2018, passenger car exports to the US ballooned to \$654 million from a paltry \$3.52 million a year before, according to export data from the Ministry of Commerce. In 2017, two American companies, Ford and GM started exporting to the US in a big way for the last 2 years. While Ford started exporting its Eco Sport model from India to the US, GM completely shut down their Indian sales, using the entire production capacity for exports, and to the US primarily. Ford Eco Sport and Chevrolet Beat remained the most exported cars from India. Hence, the US market accounted for 9.2% of the overall car exports from India.

Initiatives And Future

The Government aims to develop India as a global hub for Manufacturing and Research & Development for the automotive industry. It has set up a National Automotive Board to act as a facilitator between the government and the industry; National Automotive Testing and R&D Infrastructure Project (NATRIP) centres have also been set up by GOI. Also, under the impetus from GOI for alternative fuel to meet the country's energy demand in the auto sector, the CNG distribution network in India is expected to rise to 250 cities in 2018 from 125 cities in 2014.

The Indian government has also set an ambitious target of maximizing the sale of electric vehicles in India going forward. Some of the recent initiatives taken in the public sector are -

- » The GOI is planning to set up a committee to develop an institutional framework on large-scale adoption of electric vehicles in India as a viable clean energy mode, especially for shared mass transport, to help bring down pollution level in major cities.
- » The Ministry of Heavy Industries, Government of India has shortlisted 11 cities in the country

for introduction of electric vehicles (EVs) in their public transport systems under the FAME (Faster Adoption and Manufacturing of (Hybrid) and Electric Vehicles in India) scheme. The government will also set up incubation Centre for startups working in electric vehicles' domain.

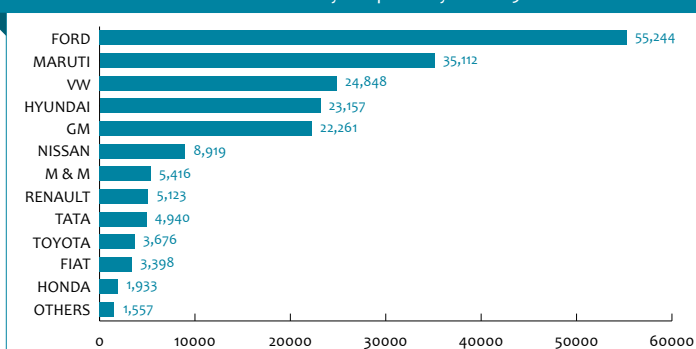
- » Energy Efficiency Services Limited (EESL), under Ministry for Power and New and Renewable Energy, Government of India, is planning to procure 10,000 e-vehicles via demand aggregation and has already awarded contracts to Tata Motors Ltd for 250 e-cars and to Mahindra and Mahindra for 150 e-cars.
- » The Government of Karnataka is going to obtain electric vehicles under FAME Scheme and set up charging infrastructure across Bengaluru, according to Mr R V Deshpande, Minister for Large and Medium Industries of Karnataka.

The luxury car market is also expected to register high growth and annual production is projected to reach 150,000 units by 2020.

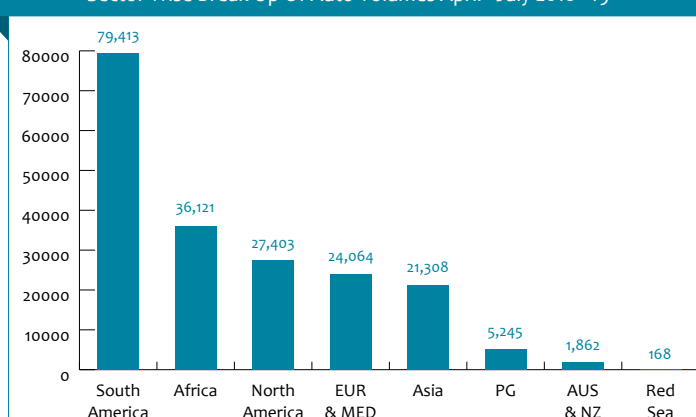
The auto industry is set to witness major changes in the form of electric vehicles (EVs), shared mobility, Bharat Stage-VI emission and safety norms. Electric cars in India are expected to get new green number plates and may also get free parking for three years along with toll waivers. Sales of electric two-wheelers are estimated to have crossed 55,000 vehicles in 2017-18. Premium motorbike sales in India crossed one million units in FY18. The automotive industry is therefore upbeat.

The J M BAXI GROUP has had a long interface with the automotive industry. While its shipping agency arm has been handling vessels of K Line and WWL, the freight forwarding team has worked on and off with import-based projects and rail-based logistics of automobiles ■

OEM Volume Analysis April - July 2018 - 19



Sector Wise Break Up Of Auto Volumes April - July 2018 - 19



[Sources: Media Reports, Press Releases, Web Site of Department of Industrial Policy and Promotion (DIPP), Automotive Component Manufacturers Association of India (ACMA), Society of Indian Automobile Manufacturers (SIAM), Union Budget 2017-18, Internal Data]

Agency & Services

Innovative Ideas Thy Name Is JUGAAD

The client always expects the best services from his vessel agent as the agent is, in fact, his extended arm in the location the service is being provided. The normal agency services which includes Ship Husbanding, Crew Management, Customs Clearance etc. is no different in India as compared to other parts of the world. What differentiates the standard agency services from the one provided to Oil & Gas clients operating in the Indian offshore regions is the additional documentation requirements for vessels, crew and shipments deployed for the purpose of exploration and production.

In this context, Arya Offshore had won a contract to provide comprehensive agency services to M/s Seadrill who were, in turn, awarded a contract by Vedanta to deploy their rig-off Kakinada. Since Seadrill was re-entering Indian market after a gap of few years, it was important for us as agents, to advise the client and sort of handhold so as to ensure that the formalities required to be accomplished prior to the rig commencing its task is completed in the shortest period.

The Rig, as all mariners would appreciate, is a costly asset. The rig in question we understand is approximately USD 150 Million. Once the contract was signed between the two parties the events to unfold until the rig reaches its offshore location was explained and rehearsed over and over again. Our team at Kakinada was excited as it took up the challenge of ensuring that the mobilisation activity is conducted with clockwork precision in a copybook style. With all pre-arrival formalities completed, the

Immigration / Customs and Naval inspection team at stand-by, the rig towed by a powerful tug entered into Kakinada port on 28th March 2018.

However, due to certain technical clarifications between the Operator (Vedanta) and the nodal Governmental Authority (Director General of Hydrocarbons), the documentation was delayed by a couple of days and the final documentation landed in our custody on 5th April 2018.

As is the case with all clients the hell breaks loose as soon as the documents reach the agent because from that time the expectation of the client is for the agent to perform wonders and complete the task in the shortest time frame.

The Operations Group was ready with parallel teams to ensure swift customs clearance of the rig (the other statutory clearances had been completed by then). Though many countries are of the belief that we still follow the old system of documentation in hard copies where the files move within the offices based-on the whims and fancies of the peons and file handlers, the truth is that our processes to quite an extent are on-line. This routine on-line submission became a challenge whilst filing the customs documentation, namely, Bill of Entry (BOE).

The Bill of Entry which was hitherto filed in Kakinada Customs Services Centre was now required to be filed by the agents through their terminals. Though our office has a seamless connectivity with a reasonable bandwidth, the documents could not be uploaded on a portal, namely E-Sanchet.

The minutes were ticking by and the tempers of the client were shooting skywards. It was past close of business hours and a loss of a day in filing the documents would have led the client poorer by approximately USD 70,000 – day rate of the charter hire.

Despite the setbacks, the team was not ready to give up till all avenues were exhausted. However, whilst considering various alternatives, one of the members contacted his counterpart in Chennai to consider exercising the option of remotely filing the documents on Arya Kakinada's behalf. A step to an innovative solution. The Chennai team which was at standby after a few failed attempts managed to upload the documents. It took them a couple of hours to upload all the documents. On completion of uploads, the system generated the necessary Invoice Reference Number (IRN) and Business Registration Number (BNR) which were shared with Kakinada team for them to complete online submission of Bill of Entry. The remote take over from a different location was not only the first for our teams but also for Customs who appreciated the co-ordinated approach of two locations to accomplish a single task.

The end result may seem simple but was worth a challenge to the teams and the satisfaction they got on completion especially when the chips were down, speaks of the ingenuity and the determination of the team to complete a given task in a given time schedule.

Finally, the saga ended with the rig having completed all the formalities in time and sailed for its offshore location without any delays ■



In Conversation

With Mr. Atul Chaturvedi SHREE RENUKA SUGARS

Q: How has the scenario in the logistics of Edible Oil changed over the years?

Ans: I have been associated with Vegetable Oil Industry since the early eighties and have witnessed the evolving landscape from close quarters. In the eighties and early part of nineties, Edible oils were canalised through STC and they used to allocate oil to Vanaspati Industry. All major suppliers to India from Malaysia, Indonesia and Latin America etc. had to take part in regular tenders and plan their sales on the basis of STC tenders. Honestly, it was not the best way to source edible oils and the trick for the suppliers was to get information before-hand about upcoming tenders for taking positions.

With India opening up in the nineties, the rules of the game changed big time. Most of the big boys either got into Joint Ventures with Indian partners or had set up their own units in India. Trade became much more transparent which resulted in the consolidation of the industry.

The role of logistics both in International sourcing and local distribution within India can never be underestimated. Saving a few dollars in the Ocean freight can make a huge difference in terms of success and failure. The same goes for local distribution. Needless to say, margins in the Edible Oil Trade are wafer-thin and optimising logistic costs goes a long way in creating a sustainable business model.

Q: In the past, you have estimated the demand for consumption of Edible Oils in India to increase at about 5% year-on-year. Do you still feel the same?

Ans: The Edible Oil consumption in India on the strength of low import duties has grown exponentially over time. In the late nineties, the dependence of India on imports



Atul Chaturvedi Executive Chairman, Shree Renuka Sugars Limited. Previously he was the CEO of Adani Wilmar Limited and the CEO of Agri Business for Adani Enterprises Limited. Has over three decades of experience in commodities business and is a veteran in Vegetable Oils/Oil seeds and Agro Business in the country.

was only about 3 per cent which has now ballooned to around 150 lakh tonnes (15 million), making India the biggest importer of edible oils in the world. The flip side of this growth story has been the stagnation of the domestic Oilseed sector and dependence on the imports to the extent of 70 per cent of our country's consumption. Being alarmed at this gradual surrender of our Edible Oil Security, the decision makers have now realised the importance of raising the edible oil import duties in order to protect Indian Oilseed grower. Hike in the import duties has resulted in moderating the demand in India. Earlier, we were estimating our growth to be in and around 5 per cent, but now we feel the consumption growth would be closer to 3 per cent.

Q: Do you see more investments coming in port-based refining for Edible Oils in India or will it be majorly refined Oil imports?

Ans: India already has excess capacity and we do not visualise more investment coming in port refining. However, we may witness more consolidation going forward. Weak players may get elbowed out and be bought over.

As the President of SEA (the apex body of Oil Trade in India), I am fighting tooth and nail against Refined Oil imports into India as it goes against the objective of 'Make In India'. I feel the Refined Oil imports are not in Indian interests and would gradually be discouraged.

Q: What is your view on long-term imports of edible oil and oil-seeds?

Ans: Edible Oil imports are here to stay. The only thing we should aim to do is to raise local Oilseed production and cap the import dependence at current levels. All incremental requirement of the country should be met from the domestic Oilseeds.

We have been suggesting the Government to allow Oilseed import during our lean months, say from April to September. This will not affect our Oilseed farmer and also help the domestic Poultry and Cattle Feed Sector in getting competitive prices. Moreover, value addition would happen in India. These suggestions, however, have still not been given its due importance.

Q: What is your view on export and import of agri-commodities in India? Which would contribute to higher volumes in the EXIM trade?

Ans: Let's face it, India is a high cost Agri producer and coupled with high MSP our Export Competitiveness in practically all commodities is pretty low, except perhaps Rice. Rice will continue to be our mainstay in Agri Exports apart from Castor Oil and a whole range of Oil meals, like Soya, Rape, Rice Bran, and Castor etc. With China and USA in midst of Trade war, India has a golden opportunity



In Conversation

to increase its exports to China as they have to diversify their import dependence. India is struggling with massive Sugar inventories, and with suitable incentives, we can offload almost 4-5 million tonnes in the World market.

If India has to increase its Agri Exports we will have to give incentives to increase competitiveness with other origins. How far it would be WTO compatible we don't know.

Q: What is your view on the Indian Cold Chain infrastructure?

Ans: India has a fairly strong Cold Chain Infrastructure, however, it is heavily skewed in favour of cold stores dedicated to low-value Potatoes and Onions. India seriously lacks Reefer Trucks and intermediate Cold Chains to ensure cargoes don't get thermal shocks.

The capacity to pay of Indian consumers is rising and they are becoming more and more demanding. All this augurs well for this Sunshine Sector which is crying for investment.

Q: Has crop forecasting matured in India? Can we rely on the estimates and data by Government departments?

Ans: I would probably say crop forecasting is still work-in-process and has not yet matured to the desired levels. Most of the Trade bodies do their own crop surveys and their numbers are invariably at variance with the Government figures. It is a tragedy that India still does not have a body like the United States Department of Agriculture (USDA) which monitors crop-development and provides timely advisories. In the absence of real time data proper decision making is always a challenge.

Let us move towards Sugar:

Q: How do you see India dealing with excess stock of Sugar, as it is estimated that India will have an opening stock of 10.8 million tonnes when it starts the next crushing season in October this year?

Ans: India is truly a swing State as far as Sugar is concerned with high FRP and SAP our farmers who have

merrily kept on producing more and more cane to make India the largest producer of Sugar, beating Brazil to the second place. The high production of Sugar (32 million tonnes) with the consumption hovering around 26 million tonnes is bound to result in excess inventory stressing Sugar Sector.

The only viable solution at this point of time seems to be in biting the bullet and exporting at whatever rate possible. This would mean giving incentives to ensure that the Mills do not lose more money. All this is easier said than done, as it may not be WTO compatible and might open our country to legal challenges internationally.

The other solution is to divert as much Cane juice as possible towards ethanol. A good beginning has been made by not only allowing Ethanol to be made from B heavy molasses and cane juice but also giving a higher price for the same. We still feel, to have any meaningful impact in new Cane Crushing season the price of Ethanol made from Cane Juice should be increased by another Rs.5 per litre to minimum Rs.52 or Rs.53 per litre.

Q: Will India become a perpetual exporter of Sugar like Brazil, especially considering the new policy on the mandatory MSP for Sugar?

Ans: High MSP has a flip side to it as well as it makes our Sugar uncompetitive in the international market. If India has to become a perpetual exporter of Sugar with high MSP, we will have to give Perpetual Incentives to make exports viable.

It would be interesting to see how things pan out if India suffers a drought. The rules of the game may again undergo a huge change.

Q: Do you feel Ethanol policy of India as a game changer for the Sugar industry?

Ans: Absolutely! India has learnt from Brazil. Ethanol Policy kills many birds in one stone. It is environment-friendly, cuts down on Crude Import Bill and ensures remunerative prices to farmers for Cane. All in all, it is a wonderful initiative and would go a long way in improving the health of

the Sugar sector.

Q: Do you see Paradip, Orissa as a strategic location for EXIM trade in Agri commodities?

Ans: I would congratulate J M BAXI GROUP for realising the importance of Paradip in Orissa. That part of India has remained relatively under-developed and it cannot be kept down for long.

With Kolkata and Haldia losing the importance on account of heavy silting and inefficiencies Paradip is bound to grow as the gateway not only to Orissa but also to Chhattisgarh and even West Bengal. If properly marketed Paradip can become the next Kandla of the East.

Q: What do you think of the Indian dry bulk logistics infrastructure in terms of Agri-Commodities?

Ans: With the development of ports which are capable of handling Panamax and Cape Size vessels, the rules of the game have undergone a sea change. Higher capacity vessels go a long way in reducing and optimising costs and is the way forward for commodities like Coal, Iron Ore etc.

Q: What is the one crucial area that needs focused effort for improvement in Agri-Commodity logistics?

Ans: Not many realise that the customers also need to be told what is good for them and in their interest. Educating clients and helping them optimise costs would go a long way in building an everlasting relationship.

Q: Lastly your advice to the port and maritime logistics fraternity as your partners in business?

Ans: Maritime logistics is evolving on a continuous basis and it's important to keep tab of the trade flows. My sincere advice to Port and Logistics Operators is to hire 'Domain Experts' of target Commodities as that would reduce their own learning curve and also help in understanding the client requirements much better.

J M BAXI is a well-known and highly respected name in Maritime Logistics and we wish them The Very Best ■



Logistics

BPCL Integrated Refinery Expansion Project, KOCHI

Integrated Refinery Expansion Project (IREP) is aimed at increasing the refining capacity of Kochi Refinery from the existing 9.5 MMTPA to 15.5 MMTPA with the modernization of refinery to produce auto-fuels complying with Euro-IV/ Euro-V specifications. The units of IREP are designed to be flexible enough to process high Sulphur crudes that will fetch a higher margin.

BOXCO has been awarded the contract to transport 16 critical Over Dimensional Cargoes (ODCs); where 6 super critical ODCs were to be transported by multimodal transportation method and rest of the ODCs by road from the Kochi Port to the BPCL site.

The special hatch-type barge had been arranged for reducing the height of the packages to safely cross 19 in-route bridges (where height clearance is less than cargo height) in backwaters. A special basin-like jetty was constructed to remove the cargo from the barge

CARGO DIMENSIONS			
Length (Meter)	Width (Meter)	Height (Meter)	Weight (MT)
10.4	5.2	5.1	256
10.3	5.1	3.7	188
10.3	5.1	3.7	188
43.1	5.5	5.5	211
13.2	5.4	5.2	131

by 'roll-off method' after cutting the forward side of the barge.

The cargo was transported to site via road where the permission was taken from the Rail authorities for the shutdown and in-route bridges were checked for the safe movement. Timely delivery was achieved by using a combination of state-of-the-art Self-propelled Modular Trailer (SPMT) axles for each package.

The project for the six ODC packages was a challenge, which was overcome by the safe, timely and efficient planning of the team. The biggest issue faced in the project was to perform

the barging operation in the National Waterway 3. The Inland Waterways Authority of India (IWAI) permission was taken for the movement of the barges through the Inland Waterway 3, efforts were put by all the team members in unison with a team technical personnel and crew was maintained, three months prior to the movement of the packages to ensure that all the legal and necessary permissions from the authorities were taken well-in-advance before the transportation and barging. The overall project was very crucial, and the safe and timely delivery of the packages was a huge achievement for the planning and execution team ■



RECEIVING ODC AT KOCHI PORT



KOCHI PORT TO IRUMPANAM JETTY



Infrastructure

PICT Launch And Its Developments

The J M BAXI GROUP, a pioneer in shipping support services and infrastructure development in the country has developed a clean cargo and container terminal, Paradip International Cargo Terminal Private Limited (PICT) on the eastern coast of India on a Build-Operate-Transfer (BOT) basis.



Location

Located at 210 nautical miles on the south of Kolkata and 260 nautical miles on the north of Visakhapatnam on the Bay of Bengal. PICT will play the part of a critical gateway port in order to cater to the eastern and north-eastern part of India. The port is serving both international as well as coastal trade routes within the country.

The Launch

The Concession Agreement was signed on the 7th day of March, 2015 between Mr. M.T. Krishna Babu, Chairman, Paradip Port Trust on behalf of Paradip Port and Shri Dhruv Krishna Kotak, Joint Managing Director, J M BAXI GROUP on behalf of PICT at Paradip on public-private partnership mode.

The PICT marketing team initially made a detailed market study of



Odisha and its hinterland without restricting to the available market survey reports and in the shortest possible time frame. Strategies were devised, micro-level detailed planning sketched and the team embarked on the mission to make 'PICT the Shining Star' of J M BAXI GROUP.

The journey of the team, so far, has been excitedly challenging from identifying the prospective clients, their decision makers and contacting them in the best possible economical medium by setting-up an office in Bhubaneswar for cost efficiency. The team with their 'can do' attitude and keeping the organizational goal as their main motto delivered expected results. The marketing team was also entrusted with the task of proving the projected potential of PICT to a set of financiers - this too was accomplished with good results.

Enormous efforts of PICT marketing throughout the state of Odisha

and hinterlands received huge encouragement and hearty welcome from the trade. Few of the trade connects by team PICT as below:

Make-In-Odisha Conclave (November 2016)



pledge ₹2L-cr investments

Make In Odisha Will Be A Biennial Event: CM

PROMISES TO KEEP

The following sectors have got investment proposals at Make in Odisha conclave

₹27,023 cr: Fertilizer, chemical and petrochemicals
₹2,181 cr: Agro and food processing
₹1,192 cr: Healthcare
₹18,448 cr: Infrastructure (including road and rail)
₹1,508 cr: IT and electronics manufacturing
₹2,665 cr: Manufacturing
₹25,342 cr: Renewable energy
₹17,811 cr: Metals and minerals
₹172 cr: Textile and apparel
₹2876 cr: Tourism and hospitality

Bhubaneswar: In the run up to the Make In Odisha conclave the state government was hoping for Rs 4 lakh crore in investment assurances. But at the end of the three-day event on Friday, it has achieved more than its desired goal - with companies pledging to invest around 2 lakh crore in various sectors.

Total investment intent: received by the state as a lead up to this event and during the event this year is to

Given the buzz generated by the event, the government would be organizing the conclave biennially to realize its dream of

a decision to set up a convention centre and trade zone in the city (at a cost of around Rs 500 crore) which will be named after Biju Patnaik.

mechanism would be set up to ensure smooth grounding of investments in Odisha. Later, addressing a news conference, chief secretary



Infrastructure

MSME Trade Meet, attended by Chinese delegates



Trade & Liner Interactive Session (May 2018)



An interactive session was held on 11th day of May, 2018 at Hotel Swosti Premium which witnessed representative from esteemed organizations of various sectors, such as Steel, Aluminum, Ferro Alloys, Seafood, CHA, MLOs etc.

congratulating the J M BAXI GROUP for developing such a world class terminal in the region.

Smart Logistics Summit & Awards (June 2016)



The Developments

PICT received its Customs Notification on 18th May, 2018 and since then it has already handled **14 vessels (2, 42, 695.798 MT of break bulk cargo along with 1,893 containers).**



PICT announced its maiden handling on the 27th day of May, 2018 with the berthing of MV DMC JUPITER.



The local trade dealing in Steel, Aluminium, Alloys, Fertilisers, Garments, Textiles, Rice, and Engineering goods, Machinery, Paper, Granite and Seafood would reap benefits of the state-of-the-

art multi-purpose clean cargo handling facility at PICT, resulting in cost savings for the exporters and importer who were earlier relying on terminals farther than PICT.



The Container Yard with its 1260 ground slots is all-set and can accommodate more than 3000 containers at a time along with 96 plug points for reefer containers.

The terminal has been developed in an area of 22.24 hectares which includes a fully covered warehouse of 25,000 square meters. The terminal is well with modern equipment for faster and seamless handling of clean break-bulk and bulk cargo.

PICT is gearing up for its second tremendous launch in terms of handling containerised cargo. Our team has already created a huge market potential in this regard and will soon with the advent of Berth II and EXIM Shipping calls commence a new era.



A long wait for 'Clean cargo & container terminal' has come to an end for the Odisha region and its trading community with the opening of PICT ■



Technology

HAWK: RFID Solution For Yard Management

Yard Management and Planning was initially done on excel platforms which involved several physical man-hours, there was an urgent need for a smart interface to intervene and deliver effective results.

We analyzed all current alternatives and best practices carried out by competitors and we finalized on RFID-based Yard Management Solution. All variants and benefits were studied in details of vendors available. We opted for the product which offered Planning Module and Three Dimensional Container location status, which was customized as per our requirements.

We target to reduce move count from 7.1 to 6 with effective utilization of RFID based solution.

HAWK : Location-Allocation

As a key step towards efficient operations, we have opted for a 3-D planning module of HAWK system.

First of its kind, it relies on Artificial Intelligence (AI) to identify the best vacant slot in the yard for any new incoming container at the IN-Gate.

Location-allocation is dynamic based on an intelligent algorithm, real-time analysis is done on Lot size, past history of the delivery pattern of a customer/cargo and allots the best slot for that new arriving container/lot.

With a highly efficient tool, we have eliminated unproductive container moves, now as lots are stacked together custom examination has

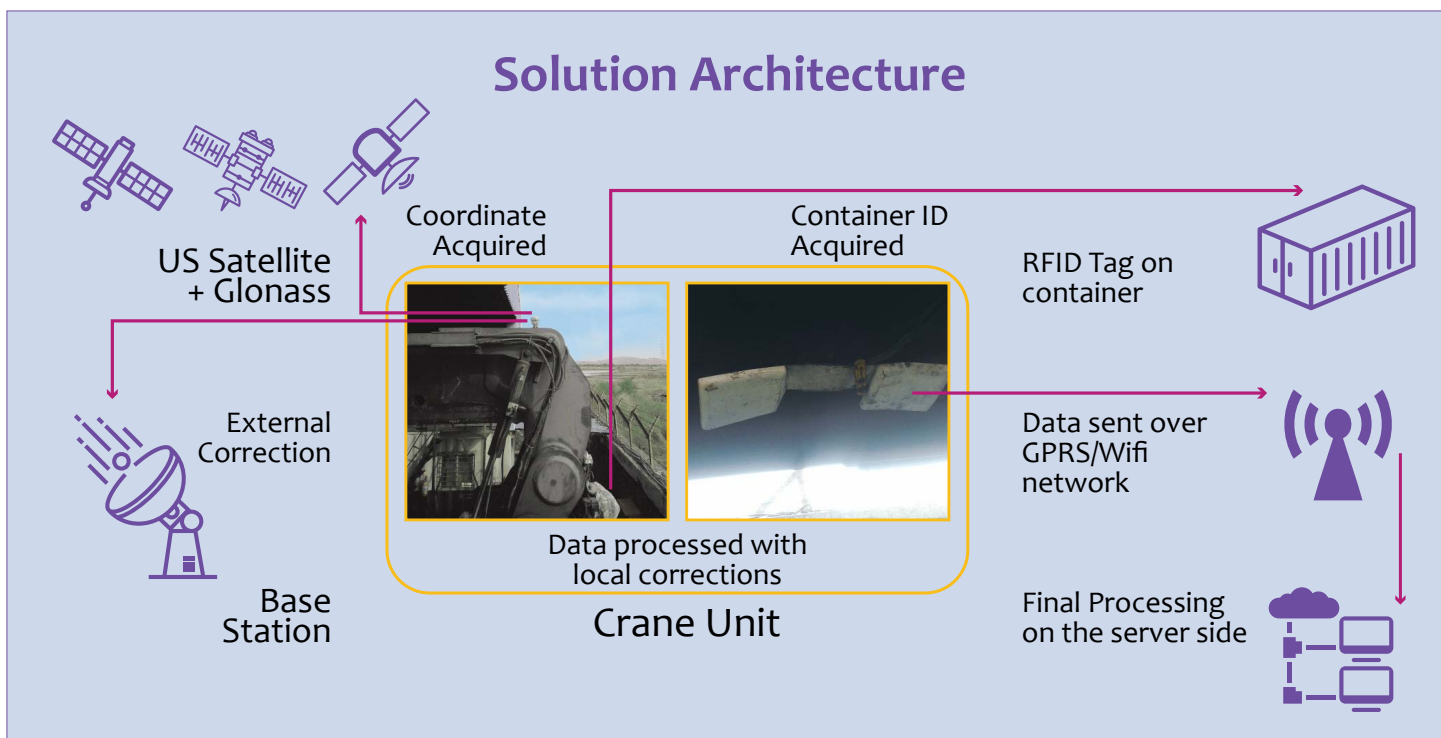
been easy for clients/customs officer.

For deliveries of lot clients, we now allocate a dedicated machine, which reduces the delivery time of the customers.

Advantages

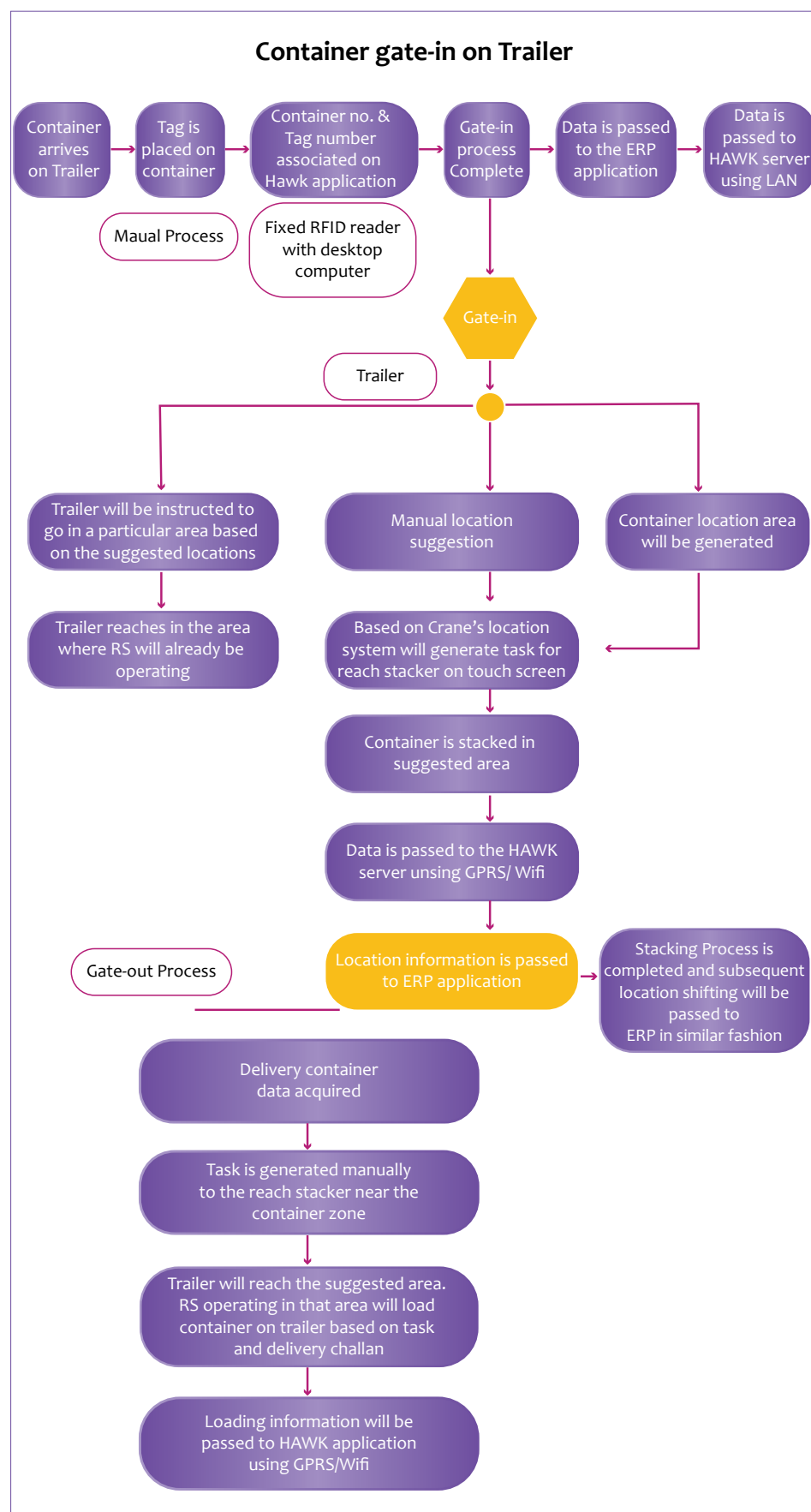
- Increases productivity and operational efficiency of the CFS by reducing container gate-out process turnaround time by way of reduction in time in searching the container
- Faster in and gate-out process leads to fast movements of the container in and out adding up to the capacities of the CFS/ICD yard resulting in increased revenues
- Provides information on empty and as well as on inefficient use of slots which leads to better planning

HAWK : Architecture



Technology

HAWK : Process Flow



- ✚ Facilitates easy and quick search of the location of the container, thus reducing operational headaches in searching the container
- ✚ Reduces truck congestion around CFS
- ✚ Helps CHA's and Customs officers in locating the container quickly thus boosting end customer's (CHA, end customer, customs officers) confidence in the CFS
- ✚ End customers can log in to the system to check the container availability, thus reducing the number of phone calls from the CHA's to CFS operators, resulting in better utilization of assets and personnel
- ✚ Truck tagging would commence shortly, which would link trailer with the container at entry itself, thus moving ahead operating machine would be allotted tasks to handle said linked trucks
- ✚ Container Tracking App for Customer ■



**MUMBAI
INTERNATIONAL
CARGO TERMINAL**

For multiple (max 10) enter comma separated
Example: xyzt2093471, pqlr3456789

Locate

Download Android App

Cont #	Size	Date	Status	Marker	Location
TCNU7925344	40	15-11-15	Location Updated		M:5:X



Technology

PICT Embraces Modern Technology

Paradip International Cargo Terminal (PICT) is a multipurpose port designed to handle clean cargo including containers. Built with a vision for high productivity, the terminal has modern infrastructure delivering stakeholder satisfaction.

PICT believes that technology-based intervention is one of the key pillars to the success of its terminal. The terminal was faced with the challenge of identifying a solution to seamlessly handle Break Bulk, Bulk and Container cargo while providing best-in-class features. Most solutions in the market offer the ability to handle only a single cargo with heavy customization required to handle other cargos. Even with considerable customization, the solutions offer limited functionality and do not provide the flexibility to adapt to the changing requirements.

After examination of various products available in the market, Infyz Terminal Operating System (iTOMS) was chosen and implemented at PICT to handle end-to-end operations for all the cargo classes while providing high visibility across all the departments.

iTOMS is a high-end IT-enabled product, which connects all the

departments of the terminal with one-time data capture. The information once fed is fully automated and integrated with all enterprise resource planning (ERP) systems. The product increases the operational efficiency of the terminal as all entities connected with the port/terminal can access instant information on the operation of equipment (like mobile cranes, wagon loaders etc.), operations (loading, discharge, stock movement etc.), stock and yard details. This enables faster handling of cargo and ensures accountability for any delays and provides insights into taking corrective actions. The data captured in the system is automatically fed to the invoicing module and from there posted to SAP for accounts receivable.

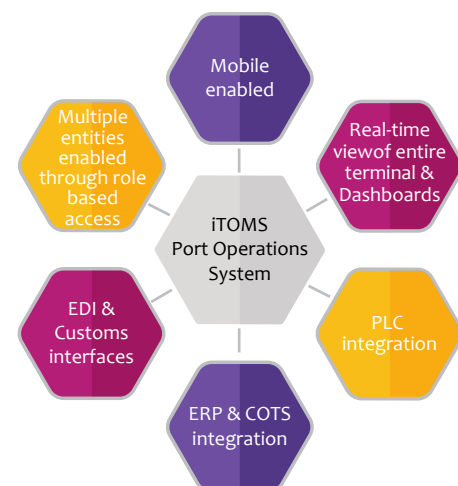
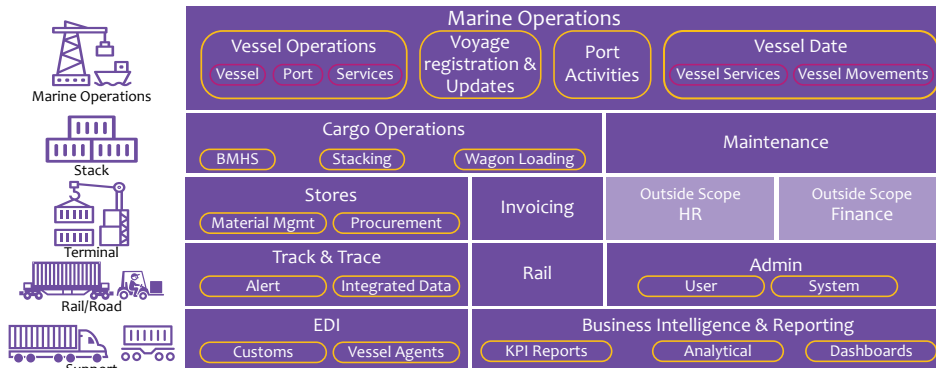
Key features and differentiators of the product:

- iTOMS is fully mobile-enabled and integrates workflow processes in the Port unlike other products which only support notifications on the Mobile
- iTOMS supports role-based access even to screen level which helps to have external entities like agents or stevedores access the product. Internal entities are also

differentiated through role-based privileges. Traditional systems only support function level access.

- iTOMS is EDI ready. The product can directly send EDI messages to customs and other entities
- iTOMS is fully integrated with ERP in bidirectional mode. It supports customer master, Purchase Orders and invoicing functionality to be synchronized with ERP. All integration is enabled through Open interfaces.
- iTOMS is integrated with PLC devices, this ensures seamless data communication to monitor and manage the Port Operations including wagon loading operations in a fully automated mode. Traditional systems do not support this capability

iTOMS provides comprehensive Business intelligence features, Operational and Analytical reporting and Management Dashboard available on mobile. iTOM implementation has supported PICT in becoming truly digital terminal ■



Weights & Measures

INDIAN PHARMA

Indian pharmaceutical sector has for long been historically dominated by the Multi-National Corporations (MNCs) like Roche, Johnson & Johnson, Pfizer, Merck & Co, Burroughs Wellcome to name a few. These MNCs controlled around 80 to 90 per cent of the domestic drug market - primarily through imports and limited manufacturing under monopoly license. Approximately 99 per cent of all pharmaceutical products under the patent of India are held by these MNCs and therefore, the domestic Indian drug prices were unaffordable and amongst the highest in the world.

The pharma industry and markets however, underwent a major structural transformation during the 1980s and 1990s when the dominant MNCs gradually withdrew and paved the way for several Indian drug entities that took over the industry leader. The dominant presence of MNCs in India was primarily owing to the following factors - firstly, their control over the drug patents, being ahead in the research value chain; secondly due to what they considered the cost advantage of cheap labour in India. These advantages eroded, as India proactively took to establishing knowledge-lead through indigenous research and secured its own global drug patents and restive labour in the 1980s forced industry relocation and restructuring.

Industry Growth



The Indian pharma industry once almost non-existent in the 1970s has now become one of the largest and most advanced pharmaceutical industries in the world. The pharma sector was valued at US\$ 33 billion in 2017 and is expected to expand at a CAGR of 22.4 per cent over 2015-20 to reach US\$ 55 billion. India's pharmaceutical exports

stood at US\$ 17.27 billion in 2017-18 and are expected to reach US\$ 20 billion by 2020. Globally the industry ranks 4th in terms of volume and 13th in terms of value. It not only provides employment to millions but ensures that essential drugs are available to the vast population of India at affordable prices. Enviously, India now has the highest number of manufacturing plants that have been approved by US FDA, next to the US itself.

Indian drug market has come a long way from its utter dependence on imports to more than 85% of the formulations are produced and sold in the domestic market. The pharma industry in India was able to effectively leverage the advantage of a significantly large indigenous demand base for a wide range of drugs, which in turn provided rapidly expanding healthcare network and infrastructure, and improved access and affordability of healthcare.

Export Growth



Over 60 per cent of India's bulk drug production is currently exported. India holds a lion's share in the World's Clinical Drug Research business, as activity in the pharmaceutical market continues to explode. Over a dozen prominent global Contract Research Organizations (CROs) operating in India are attracted by its ability to offer efficient R&D on a low-cost basis. About 35 per cent of business is

in the field of new drug discovery and the rest is in the clinical trials arena. India offers a huge cost advantage in the clinical trials domain as compared to western countries. India's prospect has also got a major boost with the signing of Trade Related Intellectual Property Rights and a number of drug patents registered by the research entities. Indian companies received 304 Abbreviated New Drug Application (ANDA) approvals from the US Food and Drug Administration (USFDA) in 2017. Today, India accounts for around 30 per cent by volume and about 10 per cent in value in the US\$ 70-80 billion US generics market.

By the year 2020, India will be projected to be among the top three pharmaceutical markets in the World by its growth rate and sixth largest market in size. Increase in the size of middle-class households, along with the improvement in medical infrastructure and increasing penetration of public health services in the country will influence the further growth of pharmaceuticals sector. The pharmaceuticals market has witnessed growth at a CAGR of 5.64 per cent, during the year 2011-16, with the market pie increasing from US\$ 20.95 billion in FY11 to US\$ 27.57 billion in FY16. The industry revenues are estimated to have grown by 7.4 per cent in FY17. The pharmaceutical market grew at 9.5 per cent year-on-year with sales of Rs.10, 029 crores (US\$ 1.56 billion).



Weights & Measures

Around 40.6 per cent of Indian US\$ 16.8 billion pharmaceutical exports in 2016-17 was to the American continent, followed by a 19.7 per cent to Europe, 19.1 per cent to Africa and 18.8 per cent to Asian countries. Indian pharma companies are capitalizing on the export opportunities in regulated and semi-regulated markets and in FY 2017, and exported pharmaceutical products worth US\$ 16.8 billion with the number expected to reach US\$ 40 billion by 2020. Consequently, India is now the world's largest provider of generic medicines; the country's generic drugs account for 20 per cent of global generic drug exports (in terms of volumes) and are exported to more than 200 countries in the world.

Indian pharmaceutical industry supplies over 50 per cent of global demand for various vaccines, 40 per cent of generic demand in the US and 25 per cent of all medications in the UK. India contributes the second largest share of the pharmaceutical and biotech workforce in the world. The pharmaceutical sector in India was valued at US\$ 33 billion in 2017. In June 2018, the market grew by 12.8 per cent year-on-year with a turnover of Rs.10, 460 crore (US\$ 1.56 billion). The composition of India's pharma exports also reflects on the maturity of the industry in terms of its diversified capabilities. With 71 per cent market share, generic drugs form the largest segment of the Indian pharmaceutical sector. Domestic Active Pharmaceutical Ingredients (API) consumption is expected to reach US\$ 18.8 billion by FY22. India is also accounted for the second largest number of Abbreviated New Drug Applications (ANDAs) and the world's leader in Drug Master Files (DMFs) applications with the US. Indian Drugs & Pharmaceuticals sector has received cumulative FDI worth US\$ 15.72 billion in April 2000 to March 2018 which is considered as an achievement.

Logistics Optimization



Indian drugs are currently exported to over 200 countries around the world, with the US among

India's Pharmaceutical Exports				
Region	USD in Million		Growth %	Contribution %
	FY17	FY18		
Africa	3213.76	3346.89	4.14	19.37
ASEAN	1083.09	1181.29	9.07	6.84
Asia	565.31	626.55	10.83	3.63
CIS	631.9	733.14	16.02	4.24
EU	2522.74	2750.21	9.02	15.92
LAC	992.82	1135.09	14.33	6.57
Middle East	807.56	868.91	7.6	5.03
North America	5770.13	5346.12	-7.35	30.95
South Asia	721.99	763.93	5.81	4.42

Source: Pharmexcil

its key export destination. The pharmaceutical exports by value stood at US\$ 17.27 billion in 2017-18. Out of which 31 per cent went to the US alone. With further ambitious growth plans for the industry and export trade, the Government of India (GoI) has set up a US\$ 640 million venture capital fund to boost drug discovery and strengthen pharmaceutical infrastructure. The 'Pharma Vision 2020' by the Department of Pharmaceuticals aims to make India a major hub for end-to-end drug discovery. The rapid pace growth of global pharma trade in a highly sophisticated range of drug products has generated many new challenges on the logistics front in packaging, storage, warehousing, domestic/global trade distribution and transportation of drugs - the entire supply chain connecting the manufacturing sources to end-user. Stringent international regulatory and shipper-driven specifications and standards, make the supply value chain a key challenge for all the stakeholders. It is very critical for providing the right medicine to the right patient at the right time, place and dosage and most importantly at the right price.

Since business is highly competitive today, success largely depends upon the efficiency of the supply chain. The supply chain is very critical as it maintains the complex network relationship between the organizations (drug manufacturers), trading partners to source raw

materials, delivery products, retailers and hospitals. The lifeblood of the pharmaceutical industry is new product innovation and delivery. The Industry mainly focuses on R&D efforts to develop the product and gain necessary approvals. SCM activities related to making the product available to providers and patients is being increasingly outsourced to customized logistics service providers. Pharma products need the services of a cold chain with temperature-controlled storage and distribution. The industry has given importance to logistics by focusing on supply chain and logistic level activities in terms of delivering the product to the end customer at the right time, right place, in a secure mode and at a competitive operational cost.

The most important supply chain factors in the pharmaceutical industry are the reduction in inventory and order cycle time. This is because operational performance could be directly linked to logistics costs, while inventory reduction and the demand to decrease order cycle time are related to just-in-time deliveries and supply chain speed. Lately, there has been a paradigm shift in the supply chain process of Indian pharmaceutical industry. Value added tax, consolidation of pharmaceutical companies and emergence of pharmaceutical retail chains are some of the factors that are driving momentous changes in the drug distribution cycle ■



Port Statistics

The Shift Of Focus From Capacity To Capability

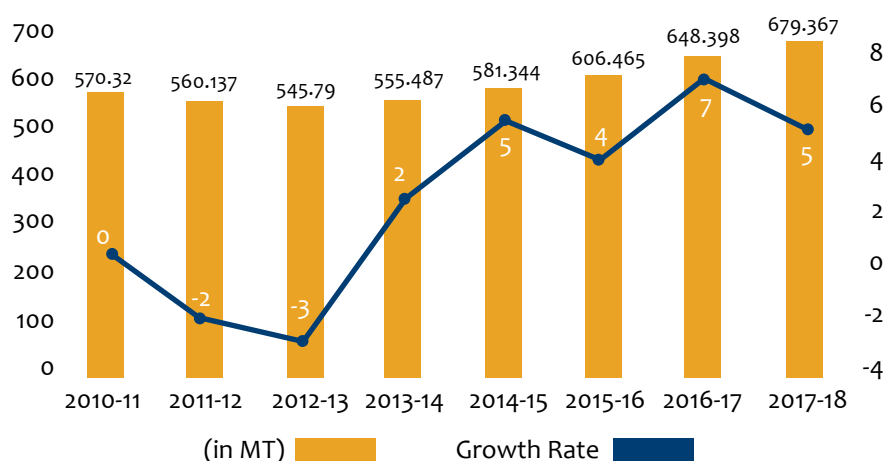
The Central Government initiated its strategic port development policy in the mid-1990s when for the first time, the private sector investments were invited in Build-Own-Transfer (BOT) and later in Public-Private Partnership (PPP) projects. This policy aimed at enhancing the throughput capacity of the port sector, with the creation of new green-field ports, private captive jetties, cargo berths, terminals and other cargo-related infrastructure. Over the last two decades, this policy has resulted in a sustained increase in the overall capacity of the port sector, with the major ports seeing a dramatic increase in their throughput capacity, from less than 300 million tonnes in 1996 to 1,451 million tonnes in 2018. Together with the throughput capacity of the non-major ports, including private ports, the aggregate throughput capacity in the port sector has almost touched 2,000 million tonnes.

The standard benchmark of having an ideal port infrastructural capacity at about twice the actual level of capacity utilization is being realized, while a certain saturation of sorts has also been reached in terms of further growth in port capacity. The actual throughput in the Indian port sector as a whole has meanwhile touched about 1,200 million tonnes. A little over half is coming from the major ports, while non-major ports are almost set to surpass the share of major ports shortly. The overall growth of port throughput capacity in the port sector as a whole has already outpaced the growth in actual cargo traffic throughput, resulting in increasing inter-terminal and inter-port competition for cargo market shares.

This growing competition has given rise to a new element of service differentiators - between the public and private ports - with respect to various cargo performance parameters. The traffic throughput at private ports (including private terminals at major ports) has, in fact, outpaced the performance of major ports, mainly as they offer much better service efficiency to the shipping lines and shippers. While performance-related data is not available for the private ports, the private port owners and terminal operators are working overtime to ensure that their vessel turnaround time, berthing time, loading and unloading rates are optimal and meet the expectations of shipping lines and shippers. However, sustaining this service advantage by private ports would also mean that they are able to provide required hinterland infrastructure networks and facilities, in terms of road and rail networks and connectivity and adequate cargo processing and storage facilities, multi-modal logistics parks, in proximate vicinity.

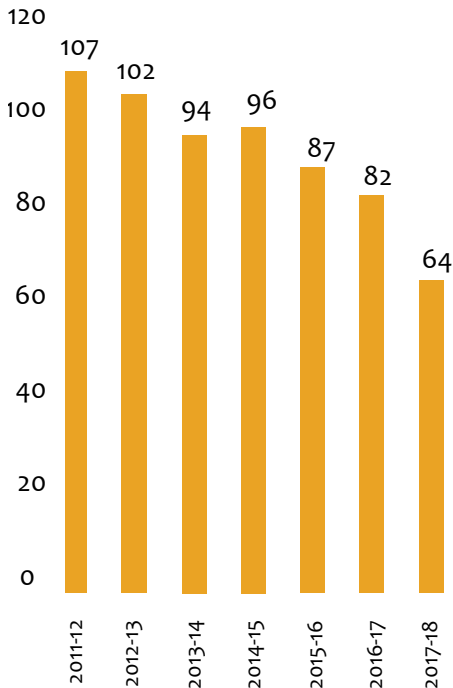
Investments in road and rail connectivity have so far been mainly undertaken by the Government and other nodal public authorities like the National Highway Authority of India (NHAI) and Indian Railways (IR) at various major ports to link them up to their cargo hinterlands (see the tables on rail and road connectivity). The connectivity by rail and road for the private ports, however still remains a challenge because of the high capital cost involved, and other regulatory and public monopoly-induced entry barriers, in privatizing such core services. In addition to its own connectivity projects, the Government has been open to private investment initiatives in undertaking the development of toll roads and bridges, private railways sidings and operation of leased and owned railway assets by private parties. A number of private sector initiatives (Pipavav Railway, Automobile Train AFTOs and SFTOs) in this direction have been initiated and would surely help improve the prospect of private ports, evolving into a more integrated logistics players ■

Growth Trends in India Major Ports



Port Statistics

Average Port Turnaround Time



Rail Connectivity Projects

Place	No of Projects	Lenth in KM	Investment (Rs Cr)
Completed	13	426	2592
Under implementation	27	1967	18795
Pre- implementation	30	1854	25341
TOTAL	70	4247	46728

Road Connectivity Projects

Place	No of Projects	Lenth in KM	Investment (Rs Cr)
Gujarat	4	690	19,311
Maharashtra	14	2351	53,703
Goa	2	110	1,363
Karnataka	7	781	6,094
Kerala	21	220	4,423
Tamil-nadu	19	1913	54,800
Andhra Pradesh	36	2184	30,140
Odisha	4	62	649
West Bengal	5	275	9,278
TOTAL	112	8586	1,79,761

Status of Multi-modal Logistics Parks (MMLPs)

S.No	PROJECT NAME	STATE	COST (Rs Cr)	IMPLEMENTING AGENCY	DEVELOPMENT STATUS
1	New ICD in South Uttarakhand (Pant Nagar)	Uttarakhand	120	CONCOR	Under implementation
2	New ICD in Naya Raipur	Chhattisgarh	207	CONCOR	Under implementation
3	New ICD in Hyderabad (Nagulapally)	Telangana	102	CONCOR	Under implementation
4	New ICD in Jharsuguda	Odisha	100	CONCOR	Under implementation
5	MMLP at Swaroopganj in Rajasthan	Rajasthan	102	CONCOR	Under implementation
6	MMLP at Phulera in Rajasthan	Rajasthan	310	CONCOR	DPR to be Prepared
7	MMLP At Paradip Port	Odisha	114	CONCOR	Under implementation
8	New ICD in North Bengal (Darjeeling)	West Bengal	85	SJDA	Under implementation
9	Phase II of Multi model Logistics hub - Vizag Port	Andhra Pradesh	260	VPT	Under implementation
10	Dry Port Cum MMLP Terminal at Jolarpet	Tamil Nadu	200	ChPT	DPR to be Prepared
11	MMLP in Jogighopa Assam	Assam	207	MoRTH	DPR to be Prepared
12	Dry Port at Niphad in Nasik District	Maharashtra	500	JNPT	DPR to be Prepared
13	Dry Port at Ranjani Village in Sangali District	Maharashtra	500	JNPT	DPR to be Prepared
14	Dry Port at Wardha	Maharashtra	353	JNPT	Under implementation
15	Dry Port at Jalna	Maharashtra	400	JNPT	Under implementation

Port Statistics

SHIPPING & CARGO PERFORMANCE

QUARTERLY UPDATES ON INDIAN MAJOR & MINOR PORTS (QTY IN MILLION TONNES)
APRIL - JUNE 2018 (1st QUARTER) 2018 - 2019 / APRIL - JUNE 2017 (1st QUARTER) 2017 - 2018 (QTY IN MT)

AGRICULTURAL PRODUCTS

	SUGAR		SOYAMEAL		WHEAT		RICE		MAIZE	
	1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17
No. of Ships called	15	31	7	12	0	15	30	32	3	0
Total Cargo Handled	0.536	0.818	0.209	0.276	0.000	0.674	0.545	0.709	0.054	0.000
Import	0.390	0.572	0.000	0.060	0.000	0.674	0.000	0.030	0.000	0.000
Export	0.146	0.246	0.209	0.216	0.000	0.000	0.545	0.679	0.054	0.000

FINISHED FERTILIZERS & FERTILIZER RAW MATERIALS

	UREA		SULPHUR		ROCK PHOSPHATE		DAP		MOP	
	1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17
No. of Ships called	51	39	15	16	48	60	44	21	36	44
Total Cargo Handled	2.126	1.643	0.348	0.389	2.111	2.311	2.026	0.963	1.062	1.355
Import	2.126	1.643	0.152	0.265	2.111	2.311	2.005	0.963	1.062	1.335
Export	0.000	0.000	0.152	0.124	0.000	0.000	0.021	0.000	0.000	0.020

COAL

	THERMAL COAL		COKING COAL		MET COKE		PET COKE		ANTHRACITE COAL	
	1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17
No. of Ships called	299	230	248	202	35	36	44	72	13	14
Total Cargo Handled	16.309	12.595	10.917	10.705	0.765	0.762	1.752	2.844	0.281	0.412
Import	6.951	6.267	10.650	10.705	0.753	0.703	1.582	2.746	0.244	0.412
Export	9.358	6.628	0.267	0.000	0.012	0.059	0.170	0.098	0.037	0.000

STEEL & RELATED ORES

	STEEL PRODUCTS		SCRAP METAL		CHROME		MAGNESIUM ORE		IRON ORE	
	1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17
No. of Ships called	326	309	5	3	0	4	24	37	236	307
Total Cargo Handled	3.390	3.530	0.204	0.072	0.000	0.078	0.653	0.826	16.508	21.875
Import	2.139	1.523	0.204	0.072	0.000	0.000	0.653	0.826	7.418	4.887
Export	1.251	2.007	0.000	0.000	0.000	0.078	0.000	0.000	9.090	16.988

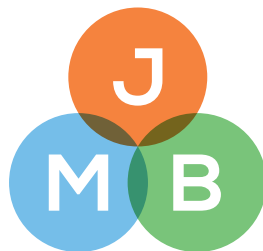
INDIAN PORT PERFORMANCE - Q1 & FY 2018 - 19 THROUGHPUT (QTY IN METRIC TONNES)

APRIL - JUNE 2018 (1st QUARTER) 2018 - 2019 / APRIL - JUNE 2017 (1st QUARTER) 2017 - 2018 (QTY IN MT)

Ports	Types of Ports	NO. OF SHIPS		LIQUID CARGO		BULK CARGO		CONTAINERS (TEUS)		TOTAL CARGO *	
		1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17	1 st Qtr'18	1 st Qtr'17
Kandla	■	415	396	3.312	3.141	4.269	5.880	56,252	32,132	7.581	9.021
Mumbai	■	476	500	7.618	6.461	3.483	3.396	-	12,851	11.101	9.857
Nhava Sheva	■	189	187	1.786	1.738	0.284	2.570	1,241,118	1,208,946	2.070	4.308
Mormugao	■	150	179	0.238	0.268	5.330	6.508	-	-	5.568	6.776
Mangalore	■	329	348	6.131	6.736	4.004	3.429	-	30,535	10.135	10.165
Cochin	■	174	177	5.784	5.194	0.327	0.344	139,142	135,783	6.111	5.538
Tuticorin	■	181	234	0.387	0.396	4.361	4.915	183,252	166,316	4.748	5.311
Chennai	■	233	241	3.847	3.946	1.612	1.311	411,919	393,598	5.459	5.257
Ennore	■	232	211	1.304	1.292	7.663	6.559	-	-	8.967	7.851
Vishakhapatnam	■	377	383	3.733	3.797	9.334	9.185	112,026	91,350	13.067	12.982
Paradip	■	518	473	0.000	0.000	18.985	16.929	-	1,200	18.985	16.929
Haldia	■	522	493	3.372	3.174	6.427	5.017	41,590	34,000	9.799	8.191
Kolkata	■	22	92	0.232	0.320	0.002	0.001	157,376	154,965	0.234	0.321
Gangavaram	■	69	67	0.000	0.000	3.794	4.023	-	-	3.794	4.023
Pipavav	■	124	125	0.158	0.231	1.919	1.613	195,298	165,291	2.077	1.844
Mundra	■	678	743	6.939	14.345	8.531	14.345	1,152,804	1,002,581	15.470	28.690
Dahej	■	205	195	6.180	5.010	2.972	5.010	-	-	9.152	10.020
Hazira	■	146	180	0.669	0.369	3.096	1.369	130,949	110,216	3.765	1.738
Navlakhi	■	69	0	0.000	0.000	3.383	2.344	-	-	3.383	2.344
Kakinada	■	204	224	0.733	0.755	2.809	2.822	-	-	3.542	3.577
Total Vessel Calls at all ports		5313	5448	52.423	57.173	92.585	97.570	3,821,726	3,539,764	145.008	154.743

■ Major Port ■ Non-Major Port

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



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