J. M. BAXI GROUP

TIDINGS

ISSUE XVII APRIL - JUNE 2017



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Annual Golf Challenge











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^{*} All maps are for representation purpose only

From the

Quarter Deck

ear Friends and Colleagues, 2017 certainly started with a bang and the first three months has seen the unexpected happen. The US stock market is scaling new heights, the US Federal Reserve is gently easing the "Quantitative Easing" with a small increase in interest rates by raising the rates slightly. Simultaneously the Fed is assuring all that its role will be supportive.

On the shipping front, with the collapse of Hanjin and the consolidation that has happened, container freights have gone up and the space slot availability have become tight. On the other hand, despite the economic challenges for container shipping, the race for bragging rights for the largest container ship continues. In March MOL announced the launching of its largest container ship with a capacity of 20,170 TEUs which was followed by an announcement by Maersk of the delivery of their largest ship in April with a capacity of 20,568 TEUs. Not to be outdone, OOCL has announced the launching of their ship in November 2017 with a capacity of 21,000 TEUs. In India we have seen a month on month growth in export boxes. Continuing with our India picture the roll out of GST is about to happen. It is most likely expected to happen by July 17 but certainly not later than October 2017.

One major area of stress remains the issue of "Non-Performing Assets" across most of the emerging economies as well as developed economies especially in Asia. We have been seeing this problem in India closely and it can be seen that the Government of India is beginning to start taking steps to grapple with this problem. Various major banks have realistically started "provisioning" for such NPAs and also have begun to convert such debts into equity and taking over such assets and companies. Eventually when such a clean-up does happen we will likely see a far more healthy environment and frankly a level playing field for companies such as ourselves which are well managed, focused, honest and committed.

On the Indian political front at the half way mark of the Modi Government

massive electoral victories for BJP in 4 out of the 5 states of UP, Uttarakhand, Goa, Manipur and Punjab is very likely to give an additional momentum to various regulatory reforms. The stock market have clearly spoken strongly in favor of the electoral results by climbing new heights. Similarly the Indian Rupee has strengthened in value against the US dollar and other hard currencies. The exports from India have also witnessed a strong growth.

During the recent visit of the Hon. Prime Minister of Bangladesh to India, there were many bilateral Indo-Bangladesh agreements which were signed by the two countries. It was decided to enhance the movement of trade and services by increasing the rail and road connectivity between the two nations. This trade pact will also benefit the north eastern Indian states by increased network of road and inland waterways through Bangladesh connecting the rest of India. We expect an increase in the cargo volumes between the two countries in the near future. With the growing relations and improved trade, the Indian government is also increasing the movement of goods to the North East India through the inland waterways system connecting the Inland Waterway I (the Ganga River) with Inland Waterway II (the Brahmaputra River) by inter-connecting through the river system of Bangladesh.

After the good monsoon last season, agriculture production has been very good and the granaries are full. Prices of commodities of daily consumption have come down and the consumers are left with a bit of disposable income for purchase of white goods which were shelved in the recent past.

The automotive industry is seeing signs of revival and with the Indian government encouraging coastal shipping, we are witnessing a shift, though gradual, to the transportation of vehicles by coastal car carriers from the traditional Road and Rail medium. The resurgence in sales came in January 2017 when the sales of cars totaled 265,320 signaling a year on year growth of 14.4 percent. From the market reports it is gathered that the February sales are heading in the same direction.



The various Container Terminals operated by ICTIPL of the J M BAXI GROUP of companies have been active in the first quarter of 2017. The rise in container activity was largely due to the increase in Exports from India. VCTPL in Vizag handled **88,597** Teus during the first quarter of 2017. Simlarly DICT at Sonepat handled **17,150** Teus, HICT at Haldia handled **46,723** Teus and KICT at Kandla which has just commenced container operations with **4,256** teus during this period.

Tourism in and out of India has seen a steady rise over the years with cruise tourism charting a promising growth. With the increased cruise tonnage worldwide and new buildings being introduced into the market at regular intervals, the cruise lines are looking at new destinations to base their ships. The Indian government has realized the latent potential of cruising in India and is taking positive steps to develop this sector. They have appointed an International Cruise consulting firm and the report from them is expected in May 2017. JMB is in the forefront of this initiative and has been represented on the committees set up by the Indian Government and has also held prolonged discussions with the International Cruise Consultants.

With the new financial year starting from April we are keenly watching whether the GDP growth rate will be maintained at over 7 percent. This of course will be largely dependent upon a good monsoon. The weather pundits however are predicting an El Nino during the second half of 2017, so, let us hope the Indian Monsoon from June onwards manages to avoid its effect











FUTURE OF INDIAN PORTS AND SAGARMALA – WAY FORWARD

The Indian Port Sector Under Sagarmala

he modernization of Indian ports is projected to save about INR 400 billion of logistics costs per year.

1. New Mega Ports

The MOS project aims to build six new mega ports on both coasts at a total cost outlay of INR 350 billion as listed below in Table – 3.

It is reported that detailed Master Plan for all the ports below are currently under preparation.

- c. Cuddalore/Shikazhi POL, Coastal Coal, Processed Leather
- d. Machlipatnam/Vodarevu Oil, Cement and Containers
- e. Outer Paradip Harbour Oil, Coal, LPG and IWT
- f. Sagar LPG Import + Spillover from Kolkata/Haldia ports

3. Other Port Development

According to the Plan the balance capacity requirement of 980 MMTPA would be met by enhancing the capacity of existing major and non-major ports 2025.

Table – 3 (New mega ports under Sagarmala) **MEGA PORT PROJECT EST. INVESTMENT** SL NO. (GREENFIELD) (INR) VADHAVAN, MAHARASHTRA 100 BILLION 2 ENAYAM, TAMIL NADU **NOT AVAILABLE** CUDDALORE/SHIKAZHI, TN 3 MACHLIPATNAM/VODAREVU, AP 4 5 OUTER PARADIP HARBOUR, ODISHA 82 BILLION 6 SAGAR, WEST BENGAL 120 BILLION

2. New Port Projects and their Target Cargo/business

The six new ports are expected to add capacity of 466 MMTPA by 2025.

- a. Vadhavan Port Containers
- b. Enayam Port International Transshipment business competing with Singapore and Colombo

4. Regulatory Development

The GOI has already tabled the Draft Central Port Authorities Act 2016 in replacement of Major Port Trusts' Act 1963 in order to give more autonomy and flexibility to the Major Ports ostensibly to give an impetus to professional governance in future. The bill has been circulated and is currently awaiting feedback from all stake holders before modifications and finalization suitably.

Some Observations

continued from Issue XVI

1. Inclusiveness Of States

It is not very clear if Sagarmala takes into account the importance of the role and necessity of including state governments for planning and creating new port facilities. Acquisition of land for not only the ports, but also their corridors of connectivity with the hinterland is primarily under control of state governments. This multi – lateral project selling to different stake holders from various socio economic groups has proved to be extremely contentious of late. Local state support is also essential after construction starts for obvious reasons.

Development of existing infrastructure for coastal shipping appears to be another area of priority justifiably where states will play a major role because inland waterways have traditionally been used by local population and regional small scale industry segments.

Finally, the states are free to develop minor ports under their jurisdiction on the basis of their individual geo – political aspirations which can work at cross purposes with the Sagarmala Plan a GOI project reducing potential value.

2. Skills and HR

Ports have traditionally evolved as individual organizations and repeated efforts to create a centralized pool of resources with standard benchmarks and processes have failed in past.













Consequently, there is very little knowledge and skills in states (except in private ports) about ports and allied parameters for planning. The Sagarmala plan is silent on this aspect.

3. Port Capacity Building

The map (Diagram 1) of the Indian coast below shows the current situation of functional and prominent major and non – major ports in India.

Quite a few of the ports above are not doing well already due to various limitations (major ports) and shortage of cargo (private ports) primarily. Competitiveness has brought forward some absurd tariff war which cannot be sustained over a longer period although there may be a temporary sense of happiness among the importers and exporters consequently. New port capacity addition without recognizing the reality above before completion of upgrading existing facilities to the optimum may jeopardize sustainability in the port sector critically.

4. Cargo Throughput, Projections and Assurances

The Sagarmala plan is based on a very ambitious set of cargo projections particularly in the manufacturing sector for boosting exports presumably. We could not locate nevertheless any conclusive projection of commodity wise traffic growth on which the plan is based. However, if we look at the actual throughput of India and compare them even with the projections of the National Transportation Board in 2011 then the gap between performance and projection is substantial.

The growth rate above was mostly forecast on the back of imports of POL and Coal clearly although an abrupt jump in manufacturing sector can be assumed from the projections of the container traffic. However, such assumptions can be dangerous considering the evident gap between



Table – 4 (Port Throughput and Projections)											
	Throughput - Actual and Projections (MMTPA)										
Commodity	2015 – 16 (Actual)	2016 – 17 (Proj.)	2021 – 22 (Proj.)	2026 - 27	2031 – 32 (Proj.)						
POL	196	468	569	693	843						
Iron Ore	13	107	118	131	144						
Coal	130	258	379	556	817						
Fertilizer and FRM	16	42	49	56	65						
Containers	123	206	302	444	652						
Others	128	198	278	390	546						
Total	606	1278*	1695	2269	3068						
* Throughput during Apr – Nov 16 = 424 MMT (33% of annual target)											

reality and actualization.

It is pertinent that manufacturing sector will hardly get any assistance from the thriving IT Sector in boosting physical exports. In perspective of the huge fund outlay envisaged and planned for developing port infrastructure in order to boost

manufacturing and exports, it may be reasonable to link port development projects with cargo guarantees or at least formal assurances from interested stake holders in the manufacturing sector.

(Sources – Sites of MOS/IPA/IBEF/Indian Infrastructure)













Sewerage Treatment Plants For The Hill City Of MIRIK

he city of Mirik, situated at an elevation of 4900 ft above sea level, is a picturesque tourist spot nestling in the serene hills of Darjeeling, West Bengal. It is famous for its scenic lake, also known as Sumendu Lake, a beautiful natural attraction stretching across mountain ranges and one of the rare gifts of nature at this altitude.

Over the years, the lack of a proper sewerage system resulted in this lake becoming a dumping site for garbage. It became contaminated with detergents and soaps from the surrounding buildings, hotels and resorts. The ever increasing pollution levels created bad odours, and there was filth, foliage etc., which not only threatened the survival of the local fauna but also adversely affected tourism. In wake of the rising 'Save Mirik Lake' cries from NGOs and voluntary organisations, Gorkhaland Territorial Administration (GTA) was forced to act and take steps to clean and preserve this true jewel in the crown. In this endeavour, **GTA** appointed Radiant Consultant (Kolkata) to design a Sewage Treatment Plant (STP). Greenpro Engineering (Siliguri) was awarded the EPC contract for developing a drainage system through which all the sludge and sewage would be brought to the STP.

Arya Water Technologies (AWT) participated in the STP tender floated by Greenpro and won against stiff competition from some of the renowned industry players based on its design expertise and costeffectiveness. In consultation with GTA, Radiant and Greenpro, AWT suggested bringing all of the sludge from three different locations near the lake and treating it through two 300 KLD STPs and a 600 KLD STP.

Braving the challenges posed in the form of loose wet soil, uneven land and unpredictable weather and preserving the surrounding trees, AWT has successfully installed and commissioned the two 300 KLD STPs. Work on the 600 KLD STP is in progress and likely to be completed soon.

Extended aeration technology and subsequent tertiary treatment has been used to reduce the organic

600 KLD DOMESTIC

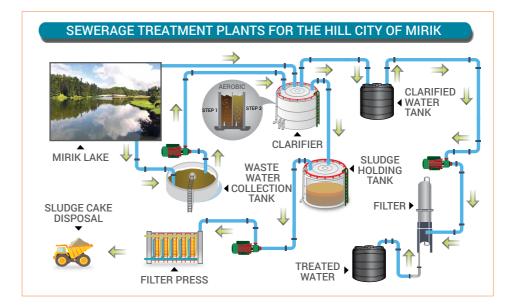
WASTE AT STP SITE 1

pollutant load by up to 95 per cent. The sludge produced as a by-product during sewage treatment is dewatered by the sludge-handling system, which makes it reusable as manure for cultivation and gardening. The treated water, now free of contaminants, is discharged into the lake, thereby protecting it from contamination. The work done by AWT has been appreciated by GTA and the local population alike

MIRIK LAKE

300 KLD DOMESTIC
WASTE AT STP SITE 3

300 KLD DOMESTIC
WASTE AT STP SITE 2















Outstanding Performance Award for Cruise Vessel's for 2016-2017

uccess is a journey, not a destination. The doing is often more important than the outcome. Success does not lie in results but in efforts. Being the best is not so important, doing the best is all that matters. And when dedication reaps results, it is a feeling comparable to none.

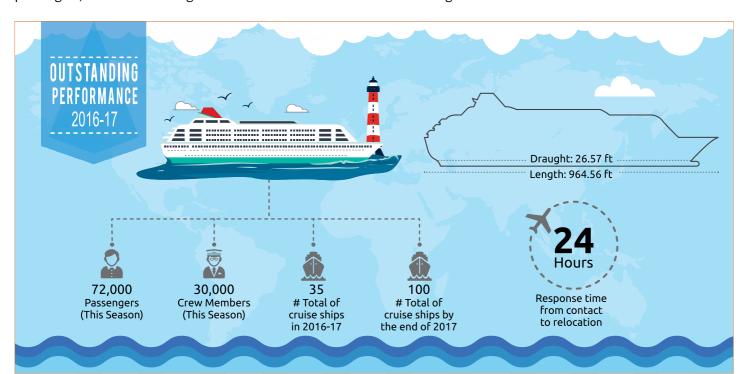
The J.M. Baxi Goa team were honoured to have their hard work and dedication recognised in the form of an "Outstanding Performance Award for Cruise Vessels" for the year 2016-17.

J. M. Baxi handled 35 cruise ships in 2016-17, and are expecting it to cross 100 vessels this year. It has been a all consuming journey involving medical evacuations to passport emergencies, to missing crew and passengers, the list is unending.



Mr Govind Pednekar, Mr Adit Fernandes.

Each cruise visit is vastly different due to number of passengers, authorities involved and ensuring subtle requirements are met to the satisfaction of principles" ■













Logistics

Road Haulage Of Heavy Reactors

oxco was entrusted with the heavy haulage of yet more super critical ODCs from Hazira to Adani Hazira jetty. The equipment was for the Rapid project refinery, which will produce gasoline and diesel meeting the Euro 4 and Euro 5 fuel specifications. It will also supply feedstock for the petrochemical complex, which will produce highly specialised chemicals. This Rapid project required huge pieces of equipment, such as reactors, a disengager, strippers etc. These were made in India by L&T Hazira, which entrusted the endto-end logistics of this prestigious project to Boxco Logistics.

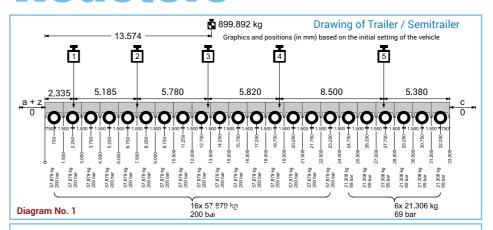


reactor to Hazira port

Boxco deployed its own equipment and staff at L&T Hazira's works from September 2016. The shipments consisted of various ODCs ranging from a minimum weight of 596 MT to single pieces weighing 896 MT. The shipments had various dimensions with a maximum height of 15.35 m. The last shipments were the most challenging. There were eight items, of which six weighed 896 MT each.

Boxco deployed 28 Goldhofer hydraulic axles and 56 Scheuerle K25 SPMTs, which are currently the most advanced pieces of hydraulic haulage equipment in the country.

Our engineering team had to counter challenges such as trailer bed



Driveability

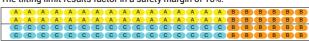
Evaluation of load and driveability based on the loading situation described in the initial setting

Highest bending load:

Tilting and overload limit: c.o.g. height above ground: 5.000 mm

> Tilting limit 15,4° | 27,8% Overload limit 4,9° | 8,5%

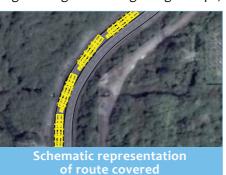
The tilting limit results factor in a safety margin of 10%



The trailer/semitrailer is driveable under these conditions.

deflection due to the heavy weight of a reactor. After careful planning and study, it was concluded that the transport solution needed a hydraulic four-point system.

Another challenge was the turning restrictions, like dividers, road ends and street light poles. There were four critical turns to be negotiated. According to the swept path drawings, the turns and obstacles could be cleared by the laden convoy. This was cross-verified by the engineering team using Google Maps,



who checked the axle turns with a steering angle limitation.

Once the vessel was ready for the reactors, Boxco moved them one by one in the right sequence. They were delivered to the vessel hook avoiding any damage to the port's properties. This repeat order from L&T for Boxco's PLD department shows the trust they put in our team to execute such challenging and critical projects. This was yet another super critical movement successfully concluded by Boxco Logistics



You









Logistics

Experienced Transformer Transporter – BOXCO

BEA once again awarded a backto-back project of moving the heaviest transformer made by TBEA of 293 MT from the Bina testing lab of PGCIL to Karjan. This transformer is scheduled for repair work and Boxco's scope was the end-to-end movement from Bina to Karjan. After being repaired at TBEA's Karjan plant, the same transformer will be returned to Bina.

Since Boxco had already completed movements for seven transformers, TBEA awarded this project for one more transformer (8.5 × 4.01 × 4.5 m weighing 293 MT) for road transportation from PGCIL Bina to Karjan with limits on the transit time.

Boxco accepted the challenge and completed the task by transporting the transformer within 25 days, well below TBEA's estimate. To accomplish this haulage, Boxco engaged its own qualified engineering team and pre-planned the execution

of the movement.

The transportation engineering team used Goldhofer's trailer stability and lashing calculations for the transportation.

Resources were mobilised at the loading site as soon as the transformer was ready for dispatch. A combination of Goldhofer hydraulic axles was used to transport the transformer from Power Grid Corp India Ltd, Bina, MP, to TBEA, Karjan, Gujarat.

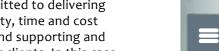
During the haulage, the Boxco team faced numerous challenges en route, ranging from state highway tolls and various sharp turns. As per the swept path drawings, the turns and obstacles were cleared by the laden convoy.

The major challenge was to construct bypasses over the Parvati and Kali Sindh Rivers near Kota Rajasthan. We

constructed two major bypasses 800 m in length over the Parvati River and another 1.5 km in length over the Kali Sindh River in a very short time after receiving permission from all relevant authorities. We used three 520 Hp prime movers to cross the Parvati River safely.

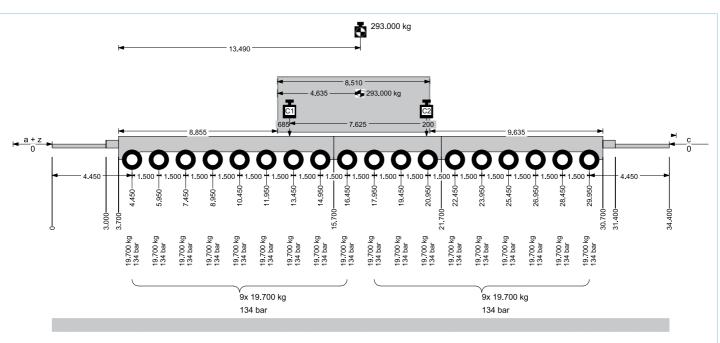
After facing all critical challenges, we delivered the cargo safely to the destination at Karjan and unloaded it there. The distance of 1213 km was covered in a record time of 25 days, 20 days before the deadline. This was a remarkable achievement for us, due to advance planning and excellent inhouse engineering work.

We are committed to delivering the best quality, time and cost parameters and supporting and delighting our clients. In this case, the timely delivery at TBEA surely is a testimony of our commitment



You

Tube



Logistics

BOXCOWORLD Executes Movement Of Nuclear-Grade Casks For L&T

oxcoWorld Logistics has achieved yet another milestone in partnering with Larsen & Toubro Ltd in the supply of nuclear-grade equipment to the USA.

L&T's Nuclear Supply Division had received an order to supply empty storage casks from Areva to Peach Bottom Atomic Power Station in Delta, PA. Each cask weighs 90 MT and the contract was for the movement of eight casks. L&T floated an RFQ amongst the elite freight forwarders in India and laid down very strict terms and conditions for execution of the job.

This was one of the most prestigious orders for any Indian engineering company, considering the stringent quality standards and the processes to be adhered to due to the nature of the cargo. The supply of nuclear equipment is a focus area for Larsen & Toubro and Areva is a major customer for them.

The scope was from receiving the cargo at Mumbai Port, ocean freight to Baltimore and delivery to site. The casks had to be unloaded onto Mafi trailers and lashed as per L&T specifications. Also, the vessel schedule and transit time were very crucial. The site is a high-security zone and, hence, adherence to the schedules provided by Areva for delivery to the final site was important.

Having successfully handled a number of critical consignments for M/s Larsen & Toubro Ltd, we were shortlisted by their Logistics Management Centre after a technical evaluation and competency study carried out by L&T to participate in export tenders for its Heavy Engineering Division.

The contract was bagged by BoxcoWorld after winning a competitive reverse bidding process. Post award of the project, L&T received an objection from its client M/s Areva, which was keen that the multinational forwarding company currently handling this movement would continue to handle the casks. The company had serious doubts about the capability of BoxcoWorld to handle the project, especially at the US end since we do not have our own office in the US. Our team were also asked to meet with the Areva team and convince them of our capabilities and the process we would follow for this project. The BoxcoWorld team successfully passed this test as well.

Boxco World partnered with Zust & Bachmeier in the USA for coordination with the shipping line, the port and the consignee at the destination for receiving and delivering the casks to site. We informed Zust & Bachmeier that the information flow with Areva was key to the success of the project.

The casks were to be shipped as four lots of two. The condition that no transhipment of cargo was allowed and the fixed transit time meant we had very limited opportunities to source a vessel for each voyage. This required close coordination with both L&T and the carriers for timely updates on the readiness of the cargo and the availability of vessels in that period.



We have successfully managed to deliver four casks to the final site to the satisfaction of both L&T and Areva. The final delivery of casks to Peach Bottom Atomic Power Station was very challenging considering the first lot of two casks was handled during the peak winter season and the route is very demanding with permits to be approved by the states of Maryland and Pennsylvania. Movements are allowed only at specific times and require an escort due to the cargo dimensions. Also, strict security checks had to be cleared at the site before delivery to the final location. BoxcoWorld coordinated all the above seamlessly and managed to deliver the four casks safely to site at the right time without any delays. The balance of four casks are in voyage and will be delivered as per schedule.

The successful execution of this project will open a number of avenues with L&T's Nuclear Supply Division for BoxcoWorld. Our effort has also been appreciated by Areva, which will create opportunities with them as well













Infrastructure

Inaugral Train From DICT To KICT



n 29th March, we are proud to say that International Cargo Terminal and Rail Infrastructure Pvt. Ltd. (ICTRIPL) dispatched the first ever container train from Delhi International Cargo Terminal (DICT) to Kandla International Container Terminal (KICT).

KICT had received requisite permission from Indian Railways Authority, on 24th March, to accept container trains.

Once KICT were informed, DICT started aggregating cargo which can be routed via Kandla.

Bay Line and Sat Line came forward to support our plan to run a container train to Kandla.

Containers were quickly sent to Kohinoor Rice and Shiv Shakti Rice Mills, from DICT.

Within a span of 3-days, containers were returned from factory after they were stuffed with Basmati Rice.

Post-custom clearance containers were railed out, on 29th March, from DICT.

These containers, upon reaching KICT, were shipped on Milaha Service to the Middle East.

J M BAXI GROUP has always strived to provide end-to-end logistics solutions, optimising time and cost for the end customer. Here, J M BAXI GROUP continues to achieve this ideal.

This is another piece of the jigsaw falling into place, proudly making ICTIPL an integrated logistics service provider with a strong infrastructure backbone















Infrastructure

Commodity Study Of Rice Bran

ice bran is a by-product of the rice milling process in the conversion of brown rice to white rice.

The bran layer is composed of a bundle of nutrients and bioactive materials that is reported to have high nutritional and healthpromoting effects in addition to actual disease prevention. milling operations, represents only about 8 per cent of the paddy weight but contains about three-fourths of the total oil.

Extraction of the rice bran oil is commercially feasible from the rice bran.

DORB is widely used in the manufacture of:

- Cattle feed
- Poultry feed
- Fish feed
- Sodium silicate, silica gel, insulation bricks etc. (using the fully burnt white ash of the husk)

In addition, it is used as a fuel for boilers and power plants. Most rice millers are in Burdwan (Bardhaman) District, which is also known as the rice bowl of West Bengal.

Major Export Markets

The export market is dominated by South-East Asian countries like Vietnam, Thailand, Cambodia and Bangladesh. Vietnam is the single biggest consuming market with an approximately 90 per cent share of the total market. Exports to



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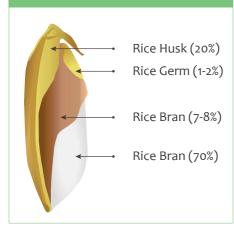


Bangladesh presently move by road through the Petrapole/Benapole border crossing.

Major Exporters:

M/s Hemraj Industries Pvt. Ltd.
M/s Sunny Trexim(I) Pvt. Ltd.
M/s Pragati Agri Products (P) Ltd.
M/s Navyug Agro Industries Pvt. Ltd.
M/s Sukumar Solvent Pvt. Ltd.
M/s Sethia Oil Ltd.

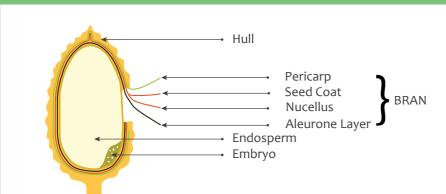
RICE SHOWING DIFFERENT LAYERS



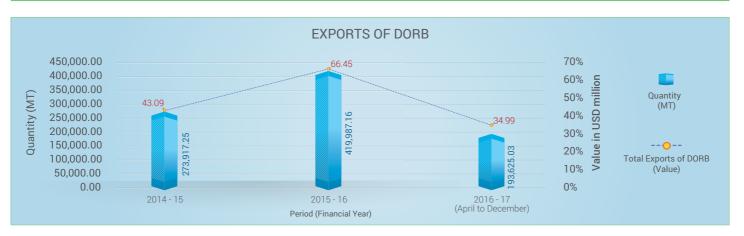
After the crude oil has been extracted from the rice bran, deoiled rice bran (DORB) is obtained.

The bran fraction, which includes the germ or embryo in most commercial





Infrastructure



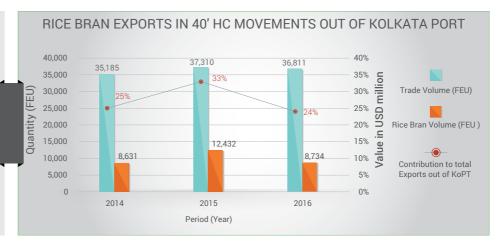


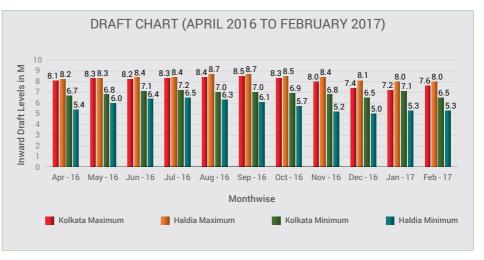
Key export facts:

- Direct factory stuffing at rice millers
- 50 kg bags
- 14-day free period at destination port
- Availability of 40' HC heavy duty containers
- For Vietnam market: Lot sizes of 11, 17 and 19 FEU, cargo weight of 28 MT
- For Cambodia market: Lot size of 26 FEU, cargo weight of 21 MT



near the port and better draft levels are attracting larger vessels ■

















We Connect



(Alphabetical order): Mr Abrao George, Mrs Abrao Nisha, Mr Arora Manoj, Mr Asano Shigeo, Mr Bae Kideunk, Capt. Bawa Parmeet Singh, Mr Borthakur P. K., Capt. Buckshee Sanjeev, Capt. Chakraborty Biswajit, Capt. Chakraborty Sovit, Mr Chang Che-Kai, Master Chang Yu- Cheng, Mr Chavan Tanmay, Mr Chen Zhijin, Mr Chen Yuan- Ching, Capt. Choo Joon Ghee, Mr Chorattil Sheldon, Cdr. Dhulekar Sunil Sudhakar, Mr D'sa Mark, Mr Dsouza Avinash, Mr Dsouza Dunston, Mr Gaekwad Samarjithsinh, Ms Gera Riya, Mr Gulati Janesh Kumar, Mr Gupta Arun Kumar, Capt. Gupta Pawan, Capt. Gupta Sanjay, Mr Hsu Huan-Chang, Mr Huang Hui-Min, Mr Imaizumi Kazutaka, Mr Jha Pranab, Capt. Jolly DSJ, Mr Kapadia Tapas, Mr Khandelwal Rajnish Kumar, Mr Khushani Chirag, Mr Kim Jisik, Mrs Kim Mi Jeon, Mr Kotak Dhruv, Mr Kotak Krishna, Mr Kotak Vir, Mr Kotresh R. M., Mr Kramer Michael, Mrs LeeChin-Yi, Mr LeeKwanghee, Mr Lin Hsin-Tsung, Mr Madhav Ramchandra, Mr Mulchandani Sushil, Mr Mulia Masli, Mr Murthy K. N., Mr Myrko Anthonio, Mr Nakamura Yutaka, Mr Nielsen Michael, Mr Park Hoon, Mr Park Youngdong, Mr Pathak Shyam, Mr Puschman Christopher, Mr Rajani Sandeep, Mr Raju R.V.S, Mr Rolner Andreas, Mr Rolner Lars, Mr Roy Gautam Kumar, Capt. Sah Nand Kishor, Mr Sahoo Ajay Kumar, Mr Sen Arunabha, Mr Shah Samir, Capt. Sharma Ashok, Mr Singh Anandbir, Mr Singh Satish Kumar, Ms Soni Payal, Mr Subramaniam Harihara, Mr Subramanian Vekiteshwaran, Mr Ueda Kentaro, Mr Unnikrishnan K. P., Mr Vaid Ashok, Mr Varghese Thomas, Mr Varvatkar Raghuvir, Mr Venkiteshwaran Subramanian (Raj), Mr Vieira Samir, Mr Vijay Rakesh, Mr Vinson Gregory Alan, Mr Vora Pranav, Mr Yamaguchi Yosuke, Mr Yamamoto Hiroo, Mr Yong Lian Hong, Mr Zhang Lei











Winner
Individual Stableford with
Double Peoria Handicap
Mr Yutaka Nakamura
MOL Bulk Shipping (India)
Pvt. Ltd.



Runner Up Individual Stableford with Double Peoria Handicap Mrs Mi Jeon Kim



2nd Runner Up Individual Stableford with Double Peoria Handicap Mr Anandbir Singh



Winner
Longest Drive
Mr Yong Lian Hong
Far Shipping



Winner
Closest to the Pin
Mr Richard Hsu
Evergreen Shipping Agency
(India) Pvt. Ltd.

You Tube









In Focus

About Arya Water Technologies

technology driven company, it specializes in providing customized, cost effective solutions based on cutting edge technologies ranging from conventional to next generation that makes it the ideal solutions basket catering sector wise applications.

Arya Water Technologies (AWT) is capable of providing end-to-end water treatment solutions; from pretreatment- process- recycle and recovery of treated water for reuse in process. Our capability also extends to trouble shooting of existing legacy systems and O&M.

It offers a complete range of products coupled with next-generation technologies, such as the ensep BioSentinel System which is a low energy membrane bio-reactor for wastewater treatment system. The ensep BioSentinel System is an integrated treatment system, combining biological treatment with filtration and disinfection processes producing World health Organisation (WHO) potable standard water from wastewater.

In a short time, AWT has established itself in the field of water treatment. A few of AWT's success stories include Fazlani Exports (P) Ltd, Shree Cement Ltd, Kwality Bottlers, Viraj Steel, Tata Power, Ranbaxy, Lodha Group, Gaursons Group, Kathmandu Apparel, Eastern Railways, Shelby group of hospitals, Hindustan Zinc Ltd and the Gorkhaland Territorial Administration.

FAZLANI EXPORTS PVT. LTD.

Treating very high levels of total suspended solids in process wastewater with cutting-edge dissolved air floatation technology

A part of the Sopariwala Group of

companies, which has existed since 1927, Fazlani is one of the leading manufacturers and exporters of sesame seeds (both hulled and natural) and spices. It was beset with the problem of very high levels of total suspended solids in process wastewater caused by the alkaline chemicals used to remove the sesame shells. The situation turned alarming when the Pollution Control Board (PCB) served notice, mandating a time-bound corrective action. Failure to comply would have meant that permission to drain the 300 KLD effluent in its common effluent treatment plant (CETP) would be revoked.

Keeping in mind the mandated quality standards and time factor, AWT proposed a pilot to ascertain the exact floating and settling characteristics. The novelty of the approach found favour with the customer, which was fast losing patience with the established players that offered solutions based on a trial and error method. Post successful piloting based on a jar test with chemical dosing, the

SMALIENT FEATURES OF DAF

Smaller footprint

Low costs for equipment

Efficient removal of settling and floating materials and pH correction in a single unit

Short process in comparison to traditional effluent treatment systems

cutting-edge Dissolved Air Floatation (DAF) technology was proposed. Case studies, working videos and site visits were used to give the customer a comprehensive understanding and eventually the order was secured. DAF reduced the organic load, comprising OFG and scum, by 90–95 per cent, resulting in the treated effluent comfortably meeting PCB norms. The treated effluent was allowed to be discharged into CETP for further treatment.

With DAF, online chemical dosing, like pH adjustment, coagulation and flocculation, is done in the raw effluent. Air mixed into the incoming effluent forms a stream of very fine bubbles, which help in the growth of flocs. The air bubbles attach themselves to these flocs, thereby reducing their apparent density and taking them to the top surface. The sludge collected at the top is continuously removed by a revolving scoop system. The settled solids flow by gravity to a sludge collection tank with the help of a scraper. The sludge is then dewatered in the filter press. Clarified water is collected from the lower portion of the DAF, flowing by gravity to the storage tank.

KWALITY BOTTLERS

Entry into Water Treatment

Kwality Bottlers is a leading beverage player in Odisha. It was using underground water for production but had been facing the following problems:

- Testing quality, since the groundwater was contaminated by total dissolved solids
- Existing Reverse Osmosis (RO) plant was not working efficiently











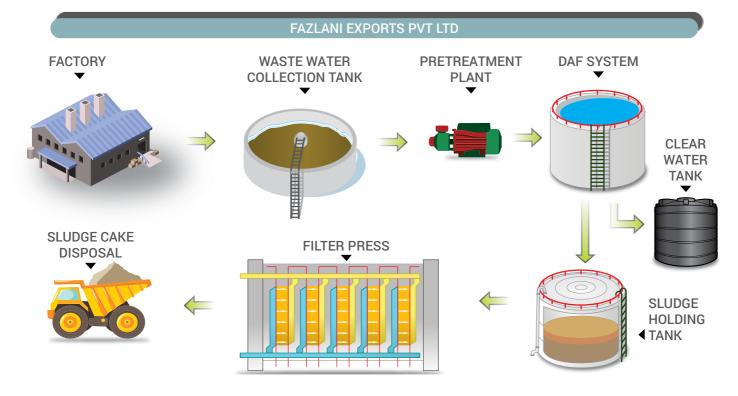


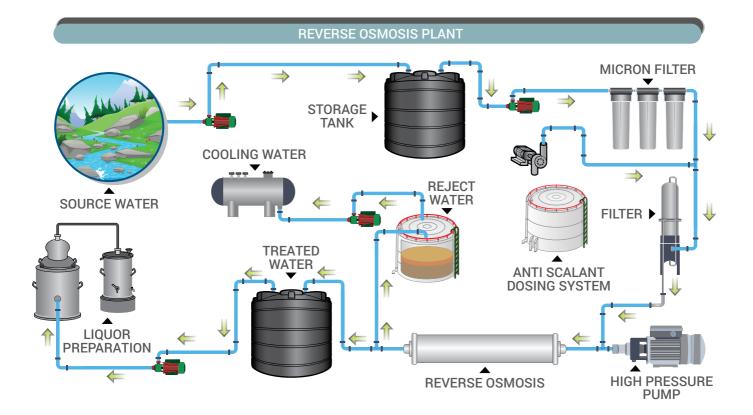
In Focus

Dissatisfaction with vendor service

AWT diagnosed the problem and gave a technical solution that surpassed the expectations of the technical

committee resulting in an order for its Khurda branch. Post successful I &C of the plant, the company registered an increase in sales. On the strength of its service and system performance, AWT bagged additional orders for four units from its branches in Sambalpur, Bangiriposi and Jharsugudha. All systems have been successfully commissioned and are running smoothly















Port Statistics

SHIPPING & CARGO PERFORMANCE

QUARTERLY UPDATES ON INDIAN MAJOR & MINOR PORTS (QTY IN MILLION TONNES)
OCTOBER - DECEMBER 2016 (IIIrd QUARTER) 2016 - 2017 / OCTOBER - DECEMBER 2015 (IIIrd QUARTER) 2015 - 2016 (QTY IN MT)

AGRICULTURAL PRODUCTS

	SUGAR		SOYAMEAL		WH	WHEAT		RICE		MAIZE	
	IIIrd Qtr'16	III rd Qtr'15	III rd Qtr ¹ 16	III rd Qtr ¹ 15	III rd Qtr ¹ 16	III rd Qtr'15	III rd Qtr ¹ 16	III rd Qtr'15	III rd Qtr'16	III rd Qtr'15	
No. of Ships called	50	26	10	1	38	3	28	0	1	0	
Total Cargo Handled	1.367	1.017	0.189	0.003	1.371	0.063	0.546	0.000	0.006	0.000	
Import	1.088	0.799	0.027	0.000	1.366	0.053	0.000	0.000	0.006	0.000	
Export	0.279	26	0.162	1	0.005	3	0.546	0.000	0.000	0.000	

FINISHED FERTILIZERS & FERTILIZER RAW MATERIALS

	UR	EA	SULF	SULPHUR		ROCK PHOSPHATE		DAP		MOP	
	III rd Qtr'16	III rd Qtr ¹ 15	III rd Qtr ¹ 16	III rd Qtr'15	III rd Qtr'16	III rd Qtr'15	III rd Qtr'16	III rd Qtr'15	III rd Qtr¹16	III rd Qtr ¹ 15	
No. of Ships called	34	49	19	17	54	35	16	21	44	14	
Total Cargo Handled	1.412	2.502	0.464	0.469	2.197	1.604	0.690	0.820	1.185	0.415	
Import	1.412	2.502	0.322	0.284	2.197	1.604	0.690	0.820	1.185	0.415	
Export	0.000	0.000	0.142	0.184	0.000	0.000	0.000	0.000	0.000	0.000	

COAL

	THERMAL COAL		COKING	COKING COAL		MET COKE		PET COKE		ANTHRACITE COAL	
	IIIrd Qtr116	III rd Qtr ¹ 15	III rd Qtr ¹ 16	III rd Qtr ¹ 15	III rd Qtr ¹ 16	III rd Qtr ¹ 15	III rd Qtr ¹ 16	III rd Qtr'15	III rd Qtr ¹ 16	III rd Qtr ¹ 15	
No. of Ships called	209	223	177	133	27	9	57	33	8	7	
Total Cargo Handled	11.311	11.969	9.522	8.572	0.986	0.258	2.532	2.112	0.175	0.120	
Import	5.833	5.473	9.426	8.567	0.962	0.258	2.459	1.936	0.175	0.120	
Export	5.479	6.496	0.096	0.005	0.024	0.000	0.073	0.176	0.000	0.000	

STEEL & RELATED ORES

	STEEL PRODUCTS		SCRAP METAL		CHROME		MAGNESIUM ORE		IRON ORE		
	IIIrd Qtr116	III rd Qtr ¹ 15	III rd Qtr ¹ 16	III rd Qtr ¹ 15	III rd Qtr'16	III rd Qtr'15	III rd Qtr'16	III rd Qtr ¹ 15	III rd Qtr'16	III rd Qtr'15	
No. of Ships called	267	143	5	9	2	1	21	1	299	48	
Total Cargo Handled	3.295	2.967	0.139	0.217	0.016	0.002	0.403	0.002	17.990	2.911	
Import	1.721	2.546	0.139	0.217	0.000	0.096	0.403	0.267	4.350	1.379	
Export	1.574	0.422	0.000	0.000	0.016	0.002	0.000	0.002	13.640	1.532	

INDIAN PORT PERFORMANCE - Q3 & FY 2016 - 17 THROUGHPUT (QTY IN METRIC TONNES)

OCTOBER - DECEMBER 2016 (IIIrd QUARTER) 2016 - 2017 / OCTOBER - DECEMBER 2015 (IIIrd QUARTER) 2015 - 2016 (QTY IN MT)

Ports	rts Types of Ports NO. OF SHIPS		SHIPS	LIQUID CARGO		BULK (BULK CARGO		CONTAINERS (TEUS)		TOTAL CARGO *	
		III rd Qtr'16	III rd Qtr ¹ 15	III rd Qtr ¹ 16	III rd Qtr ¹ 15	III rd Qtr ¹ 16	III rd Qtr'15	III rd Qtr ¹ 16	III rd Qtr ¹ 15	III rd Qtr ¹ 16	III rd Qtr ¹ 15	
Kandla		441	390	3.063	3.072	6.138	4.175	-	-	9.909	7.875	
Mumbai		490	475	7.365	6.964	2.001	2.585	-	8,885	9.531	9.724	
Nhava Sheva		176	124	1.856	1.164	0.228	0.224	1,120,153	1,112,020	2.084	1.391	
Mormugao		212	156	0.323	0.264	8.283	4.793	-	-	8.791	5.281	
Mangalore		360	304	7.633	6.363	3.633	2.165	22,672	14,738	11.269	8.549	
Cochin		197	183	4.160	3.446	0.504	0.396	124,538	105,056	4.668	3.843	
Tuticorin		301	231	0.416	0.423	6.080	5.451	148,848	132,405	6.922	6.240	
Chennai		231	252	4.053	2.856	1.185	1.538	372,187	364,457	5.418	4.699	
Ennore		212	202	1.103	1.056	5.873	6.119	-	-	7.074	7.223	
Vishakhapatnam		285	117	4.068	0.693	5.561	2.886	88,948	75,778	9.827	3.645	
Paradip		405	403	8.029	5.824	15.383	13.938	-	-	23.443	19.780	
Haldia		489	134	2.864	1.042	5.068	0.883	38,324	21,326	7.967	1.925	
Kolkata		97	70	0.323	0.307	0.000	0.067	146,145	141,094	0.361	0.391	
Gangavaram		28	37	0.000	0.000	1.380	2.723	-	-	1.380	2.723	
Pipavav		118	94	0.242	0.179	1.420	1.203	167,412	177,678	1.691	1.450	
Mundra		700	698	5.923	6.240	10.229	9.996	836,635	718,700	16.193	16.240	
Dahej		174	43	4.632	2.381	1.571	0.209	-	-	6.209	2.596	
Hazira		209	43	1.517	0.356	1.991	0.573	100,580	74,634	4.346	0.930	
Navlakhi		30	29	0.000	0.000	1.794	1.564	-	-	1.794	1.564	
Kakinada		196	191	0.625	0.574	2.569	3.330	-	-	3.795	4.281	
Total Ve	ports	5351	4176	58.195	43.204	80.891	64.818	3,166,442	2,946,771	142.672	110.350	

Major Port Non-Major Port

Tube









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



























