



SESQUICENTENARY CELEBRATIONS OF KOLKATA PORT

olkata Port is currently celebrating 150 years since it's inception in 1870. The only riverine port in India, Kolkata Port lies 127 NM North of Sandheads in the Bay of Bengal. The port, known as India's Gateway to the East, along with its sister port Haldia Dock Complex, handles over 64 million metric tonnes of a variety of cargo, recording the 2nd highest growth in traffic amongst major Indian ports in 2018-19. Set up by the British East India Company in 1870, it served as their principal port for furthering their economic activities. Freedom fighters and revolutionaries, e.g., Guru Rabindra Nath Tagore, Swami Vivekananda, Sister Nivedita, Raja Ram Mohan Roy and others had used the port for their travels overseas. The port was also used by the British East India Company to transport over half a million Indians to work as indentured labourers, ancestors of the rich Indian diaspora, across the world.

From Satyagraha to Swachhagraha, Kolkata port has seen the country changing

The Sesquicentenary celebrations on 11th January 2019 were held in the presence of Shri Jagdeep Dhankhar, Hon'ble Governor of West Bengal and Shri Mansukh Mandaviya, Minister of State (Independent Charge) for Shipping and Chemicals and Fertilizers. Participating in the, the Honourable Prime Minister of India, Shri Narendra Modi launched several developmental projects on 14th January 2020 as part of the Sesquicentenary celebrations.



Glimpses of Sesquicentenary Celebrations of Kolkata Port



SAGARMALA

SPOTLIGHT

The highlight was the felicitation of a 106-year-old pensioner of the port and presentation of a cheque of Rs 501 crores to the Life Insurance Corporation of India (LIC), the final instalment to meet the deficit of the pension fund set up for the past and existing employees of KoPT. The Prime Minister also released a corporate customised stamp to mark 150 years of the Kolkata Port. An iconic moment during the celebrations was the felicitation by the Prime

Dr. Shyama Prasad Mukherjee, the son of Bengal, laid the foundation for industrialization in the country Minister of 105-year-old Shri Nagina Bhagat and centenarian Naresh Chandra Chakraborty, the oldest serving pensioners of the port. A slew of projects were inaugurated by the Hon'ble Prime Minister as part of the modernisation and development of Kolkata Port. These included a Ship Repair facility at Netaji Subash Dock, Full Rake Handling facility at KDS, Kaushal Vikas Kendra and Pritilata Chhatri Avas for 200 tribal girls, Riverfront development Scheme to boost tourism, and the foundation laying of a 2.5 MMT Liquid Cargo Handling terminal at Haldia Dock Complex. The Hon'ble Prime Minister also inaugurated and witnessed a spell bounding interactive Light and Sound Show of Rabindra Setu. Honouring the late freedom fighter and visionary Shri Shyama Prasad Mukherjee, the Hon'ble Prime Minister announced the renaming of Kolkata Port Trust as Shyama Prasad Mukherjee Port Trust.

Kolkata Port comprises of the Kolkata Dock System (KDS) located 232 Km up the Hooghly river and the Haldia Dock Complex 125 Km from the mouth of the river. Handling a variety of cargo, the two complexes also serve the North Eastern hinterland through NW 1 and NW 2 through the Sundarbans and Bangladesh. Having an overall capacity of 82.57 MTPA, the port achieved it's highest cargo handling in 2018-19 achieving 63.8 MMT of a variety of cargo including 8,29,482 TEUs of container cargo.

The long coastline of India from Gujarat's Lothal Port to Kolkata
Port was not only engaged in trade and business but also in
spread of civilization and culture across the world

Inauguration of projects and felicitations of centenarian pensioners of Kolkata Port by Hon'ble Prime Minister Shri Narendra Modi at the Sesquicentenary celebrations on 11th January 2020



SAGARMALA

SPOTLIGHT

First Oversight Committee meeting of CICMT, IIT Kharagpur held



Deliberation under the Chairmanship of Sh. KK Agarwal

The working of the Centre for Inland and Coastal Maritime Technology (CICMT) is set to receive a boost as the members of the organisation attended the first meeting of the organisation's Oversight Committee on December 06, 2019 at IIT Kharagpur. This meeting held post the MoU signed between IIT Kharagpur and DST Germany on November 01, 2019, held at New Delhi.

At the meeting taken after detailed deliberations, the following decisions were taken. These include: -

- The construction of building and office/research space and development of wave flume are required to be completed by 2020-21. Besides, the development of sea keeping and manoeuvring basin planned to be completed by 2021-22.
- The preliminary design and dimensions of the proposed sea keeping
 and manoeuvring basin have been prepared by IIT Kharagpur.
 Accordingly, the preliminary document for tendering of the towing
 carriage and instrumentation in seakeeping and manoeuvring basin
 has been prepared. The document will be finalised after receiving
 technical inputs from DST Duisburg, Germany which has got a
 similar facility.
- Qualified and competent manpower to be recruited in sync with the requirement of the individual projects and other Centre-related activities.
- The CICMT will hold a one-day long workshop with all the stakeholders to showcase its vision and capabilities.
- CICMT to explore the possibilities of collaboration with other reputed international organisations or institutions to enhance its expertise and capabilities. Specific mention was made of the Korea Institute

- of Ship Technology. Similarly, for cryogenic handling, it was advised to seek inputs from DST, Germany. Bilateral cooperation with such institutions could be done either at institute level or at the national inter-governmental level.
- CICMT to organise training programmes for working professionals in the maritime sector to enhance their capabilities and expertise.
 For this, CICMT should also work closely with the Centre of Excellence in Maritime & Shipbuilding (CEMS) at Vishakhapatnam and Indian Maritime University (IMU), Chennai for capacity building.
- IIT Madras and IIT Kharagpur to work together to share their expertise. Also, the Head, National Technology Centre for Ports, Waterways and Coasts (NTCPWC) to be included as a member of the CICMT Oversight Committee while the Head, CICMT to be made a member of the NTCPWC Oversight Committee.

Government targets to increase cargo movement through coastal shipping

Shri Mansukh Mandaviya, Minister of State for Shipping (I/C) and Chemicals & Fertilizers, in a reply to a question in the Rajya Sabha, shared that the government has raised the target of cargo movement through coastal shipping from 120 MTPA in 2018-19 to 230 MTPA by 2025. Furthermore, the licensing relaxation under Sections 406 and 407 of the Merchant Shipping Act has been extended for five years for specialized vessels like Ro-Ro, Ro-Pax, Hybrid Ro-Ro, pure car carriers, pure car and truck carriers, LNG vessels, overdimensional cargo and project cargo vessels. Similar relaxation has been extended to container vessels for carrying EXIM and empty containers at transhipment ports for outbound transportation. Further, relaxations have also been provided to foreign flag vessels carrying agricultural, fisheries, horticultural and animal produce commodities, provided that these commodities comprise at least 50 per cent of the cargo onboard the ship, while for fertilizers, 50 per cent of the cargo taken on board the ship must be at the beginning of the coastal journey.

Shri Mandaviya also informed that the Coastal Berth Scheme has been extended up to March 2020. Major ports have allowed a minimum discount of 40 per cent on vessel and cargo-related charges to vessels transporting coastal cargo. Besides, the priority berthing policy for coastal vessels has also been notified to lower turnaround time for coastal vessels, thus, improving their utilization.





Ministry of Shipping to replicate MSDC model to provide training at all major ports

The Ministry of Shipping is focused on providing necessary training to port officials and those working in the maritime sector and is setting up Multi Skill Development Centres (MSDCs) with the help of major ports concerned. An MSDC is proposed to be a state-of-the-art training centre in a thematic area (e.g., port utilities, maritime logistics, cruise tourism etc.) and may offer any course that addresses needs of the port and maritime employers and provides job opportunities to the youth. Ports identify a building with a covered area of about 30,000 sq. ft. (sizes may vary) for MSDCs and provide it on a reasonably long-term lease (e.g., 15-year-lease) to a private sector partner for operation, maintenance and management of the centre. The private sector partner to run the centre will be selected through an open Expression of Interest (EoI) process based on the criterion which, inter alia, includes revenue surplus sharing with the port trusts.

The financial support in the form of a soft loan of up to Rs. 70 lakhs for lab setup, etc. and funding requirement for training would be tied up by the Ministry of Shipping with the Ministry of Skill Development and Entrepreneurship through their schemes Pradhan Mantri Kaushal Kendra (PMKK) and Pradhan Mantri Kaushal Vikas Yojana (PMKVY). There is no financial obligation for Capex or Opex on the part of Ministry of Shipping or ports. Investment on procurement of required tools, equipment and machinery will be required to be done by the training partner. However, the port trust may help them mobilize used heavy machinery costing large sums either from the industry or from their own stock, if feasible. Additionally, the revenue share from training to the ports can be utilized for offsetting maintenance and rental costs. The port is responsible for the provisioning of the minimum space required, selecting the operating partner and guiding it from time to time. It may also arrange for 'on the job training' in their port operations.

The Operating and Maintenance (O&M) Partner will be responsible for setting up, operating, maintaining and managing the centre. It can garner financial or other support through private companies, industry associations, etc., allowed to utilise CSR funds and conduct fee-based programmes for financial sustainability. It may also enter into an agreement with the government or private terminal operators for providing practical hands-on training. The job roles for training will be decided by operating partner as per sectoral and locational needs and will be aligned to the National Skill Qualification Framework (NSQF) of the Indian Government.

The MSDC model first set up at JNPT is being replicated in other ports

in the country. MSDC has now been set up at Chennai Port and Vishakapatnam Ports. The Cochin and New Mangalore Port Trusts are in the Eol process. The building has been finalised at Kolkata Port. With these MSDCs in place, skilled manpower requirement of all major ports shall be met with.



A training session at the Multi Skill Development Centre

Government takes steps to promote shipbuilding in Indian shipyards

Shri Mansukh Mandaviya, Minister of State for Shipping (I/c) and Chemicals & Fertilizers, in a written reply to a question, asked in the Lok Sabha on December 12, 2019, informed that the Government of India had approved the New Shipbuilding Financial Assistance Policy on December 09, 2015. The implementation of the policy would help to promote shipbuilding in Indian shipyards. As per the policy, the Indian Shipyards receive financial assistance equal to 20 per cent of the "Contract Price" or the "Fair Price" or actual received, whichever is lower. There would be a reduction by three per cent of the predetermined rate of 20 per cent every three years.

Shri Mandaviya also informed that only those vessels constructed and delivered within three years from the date of the contract will be eligible for availing financial assistance under the policy. This is however subject to the condition that in the event of specialized vessels, the competent authority may grant in principle approval for construction and delivery of such vessels within a specific period even beyond the aforesaid three years, but not more than six years.



Cochin Shipyard





CACL approves multiple lighthouse projects from 2014 till date

Shri Mansukh Mandaviya, Minister of State for Shipping (I/c) and Chemicals & Fertilizers, in a written reply to a question asked in the Lok Sabha concerning the lighthouses along the Indian coasts and funds allotted for their maintenance, informed that during the past five years, the Government of India had put in place three lighthouses along the coastline in 2014. The three lighthouses are at Achara Point in Maharashtra. Rava Port in Andhra Pradesh and the Kolta Plam in Andaman & Nicobar. Another lighthouse was installed at Vembar in Tamil Nadu in 2017.

Shri Mandaviya further informed the House that the lighthouses are maintained as per the budget provisions under the Revenue Head of the Director General of Lighthouses and Lightships (DGLL) according to the maintenance schedule. There is no state-wise allocation of funds. Elucidating on the guidelines laid down by the Indian government regarding the lighthouses on the coastline, the Minister explained that the lighthouses are installed based on traffic and the need of "Aid-to-Navigation" (AtoNs) in the proposed areas on the recommendations of the Central Advisory Committee of Lighthouses (CACL) headed by the Secretary of Shipping. Also, there is no further plan to install more lighthouses.



Prong's Reef Lighthouse at Colaba Point, Mumbai

The details of the seven lighthouse projects approved by the CACL during the last five years include:

Location of lighthouse	State	Year of Approval
Kelshi	Maharashtra	2014
Arnala (improvement of Lighthouse)	Maharashtra	2014
Valsad Khadi (improvement of Lighthouse)	Maharashtra	2015
Dhanushkodi	Tamil Nadu	2017
Jaffrabad (improvement of Lighthouse)	Gujarat	2017
Kuthankuli	Tamil Nadu	2017
Chaumukh	Odisha	2017





Recycling of Ships Act, 2019

A modern ship generally has a lifespan of 25 to 30 years before corrosion, metal fatigue or lack of parts renders it uneconomical to operate. After having faced rough seas and hundreds of voyages, a ship reaches the end of its life. Once the life of a ship ends, ship recycling starts. Ship recycling is a type of ship disposal involving extraction of its raw materials. This is also known as ship dismantling or ship breaking. Ship recycling allows the materials from a ship, especially steel to be extracted & transformed into various by-products. Fixtures and other equipment on board the vessels are reused as per the condition and size of the vessel. All types of household items like antique furniture for drawing/dining rooms, doors, cupboards, fans, washing machines, sanitary fittings etc are sold at a premium price after removal from ships. So rather than breaking the ship, we clear, clean and recycle the ships when their lives end. More than 90-95 per cent parts of the ships are properly treated and reutilised and there is hardly any scrap left behind. The recycled steel from ships continues to play an important role in the economic growth & development of the country. In India, the recycled steel recovered from the scrapping units amounts to almost 10 per cent of total consumption of

secondary steel. It is a well-known fact that for extraction of every one tonne of steel from iron ore, about 6 to 10 tons of coal is required during the normal process. Hence, the production of steel from recycling of ships, without exploiting natural resources like iron ore, coal etc., in comparison to steel produced by integrated steel plants, is a green and eco-friendly method.

While ship recycling is a sustainable process, there are concerns regarding environmental hazards and impacts. It is labour intensive and one of the risky industries. The health risks in the presence of materials like asbestos, lead, polychlorinated biphenyls & heavy metals, particularly in older vessels, pose a danger to the workers. Burns from explosions, suffocation, mutilation from falling metal, cancer & diseases from toxins are regular occurrences in this industry. The dangerous vapour and fumes from the burning matter can be inhaled that could pose a major health hazard to the workers. When flammable gas is not fully removed from the fuel tanks, workers may get injured in explosions. Therefore, it is paramount that insurance and health risks of yard workers are taken care of on priority.



Ship Recycling in progress at Alang Ship Breaking Yard, Gujarat







In the year 2012, nearly 1250 ocean ships were recycled in the world.

In the year 2013, the world's total demolished ships amounted to 29,052,000 tonnes, almost 92% of which were recycled in Asia.

Around 30% of the global ship recycling (around 250 to 280 ships) is carried out in India.

India, Bangladesh, China and Pakistan have the highest market share and are global centres for ship recycling. Alang in Gujarat is the world's biggest ship recycling yard. It provides direct employment to around 25,000 workers and indirectly to lakhs of workers. The employment generation for lakhs of individuals is one of the most positive aspects of this industry and very vital for a country like ours.

The Recycling of Ships Act 2019 has been notified by the Indian Government. It seeks to set global standards for a safe and sound environmentally-friendly recycling process and also to provide adequate safe working conditions for the yard workers. It is in consonance with international standards as laid down in the Hong Kong Convention 2009. The convention, once it comes into force, requires ship recycling facilities to obtain authorisation to operate and only authorised yards will be permitted to import ships for recycling. Ship-specific Ship Recycling Plans (SRPs) will need to be prepared for incoming vessels. The ships will need to obtain a "Ready for Recycling Certificate" in accordance with the HKC, prior to recycling. Inventory of Hazardous Materials (IHM) is also required to be prepared mandatorily. Ratification of HKC by India will encourage green ship recycling in India. It will draw the interest of developed countries like Norway and Japan to recycle more and more ships in India, which will enhance the economic growth and

development of this industry. Widening the global markets will also give a large scope of employment & job opportunities to our country. It will raise the brand value of ship recycling yards of India and increase the business, thus, consolidating India's position as a market leader. So, it is certainly going to result into tremendous growth of business activities in ship recycling industry, contributing to the country's GDP.

The instrument of India's accession to the Hong Kong Convention was recently handed over to the IMO General Secretary on 28th November 2019 during the 31st session of the IMO Assembly. The accession has been greatly appreciated by the IMO Secretary General Kitack Lim.

India's accession to the HKC 2009 and passing of Ship Recycling Act 2019 is a landmark achievement in India's maritime sector. With India's ship recycling volume considerably high, it is a significant step for the Hong Kong Convention, bringing it closer to entering into force globally. With passing of this landmark legislation, the Indian Government has ensured that this industry continues to operate while keeping yard workers' health and safety as well as addressing all environmental concerns interconnected with it. It is, therefore, a hallmark moment in the Indian maritime history. Undoubtedly, it is a part of ongoing major reforms and Modi Government's commitment towards making India a 5 trillion economy by 2025.







The digital footprint in Indian businesses is growing, especially, in the banking, hospitality and airlines sector. Despite several initiatives, ports and shipping companies in India have a long way to go to develop an infrastructure embracing modern technology, which would help them in improving performance to global standards.

The importance of the shipping industry, especially in context with the logistics and the port sector, cannot be undermined. However, not much advancement was seen in the Indian shipping sector until the Ministry of Shipping introduced the Sagarmala Programme in 2015 to give a boost to trade through shipping, thus, reducing the country's logistics costs. Four pillars were identified under the programme, viz., port modernisation & new port development, port connectivity, port-led industrialisation and coastal community development. Recognising the benefit of optimising India's long coastline and its vast network of inland waterways, the government recognised coastal shipping & inland waterways as the fifth pillar of the Sagarmala Programme.



DIGITALISING INDIAN MARITIME INDUSTRY

There has been a considerable improvement in India's position in the logistics performance index. However, there is more that needs to be done in terms of digitisation and subsequent digitalisation. Complete digitalisation will take time considering the enormity of the tasks involved. However, a gradual and steady move towards the same has induced in better coordination between the logistics stakeholders and government authorities, thereby, resulting in increased operational efficiencies and better utilisation of existing assets. This means that in the coming five years, the government will enjoy the ease of doing business with the various shipping lines.

Despite numerous projects having been initiated and implemented under the Sagarmala Programme, the ocean freight sector remains relatively backward. This may be attributed to the lack of skilled manpower needed to adopt digitalisation and adapt to its nuances. Compared to developed countries that save millions of dollars each year by eliminating the use of printed documents and using blockchain solutions to ease customers' experiences, the Indian shipping sector is yet to take necessary strides in this direction. It is estimated that at present not more than 50 per cent of the Indian shipping industry is submitting documents through electronic means.





ADOPTING DIGITAL TRENDS

When it comes to taking on digital capabilities, non-major ports are taking on the government-owned major ports in terms of technological advancements and automation of the industry. Warming up to the idea of privatisation has allowed them to experiment and tie-up with numerous players including technological start-ups that promise innovation and swear by technological disruption.

The digitalisation of the various processes has enabled seamless coordination between the shipping lines and customs while ushering in the regulation of the activities at the various container freight stations (CFSs), inland container depots (ICDs) and port terminals. Technology has indeed induced transparency in the various processes while lowering their costs.

Considering the massiveness of the Indian shipping industry, the endless opportunities available, the immense potential to create job opportunities, the unparalleled contribution to the country's economy and the unending technological possibilities, it has become important to adopt digital tools that will help in the industry turnaround. Optimum use of advanced technological tools is imperative at every stage including planning, operations, commercial and providing support functions.

Over the past few years, the incumbent government has shown interest in adopting new forms of technology. Ports are designing business models keeping in mind how digitalisation will not only lower operational costs but ease real-time tracking and tracing of shipments, chassis, etc. Improved technologies are hassle-free and cheaper, thus, ensuring greater visibility and transparency to the logistics chain. More than simply noticing new technologies and merely adapting to new technological trends, the Indian shipping industry is on a spree to create new technologies that will eventually open the door to new opportunities in future.

While many technological innovations have caught the fancy of both major and non-major ports in India, a select few like the Blockchain, the Internet of Things (IoT) and artificial intelligence have advanced ahead of others. Real-time tracking of containers has been made possible with IoT while the introduction of the sensor system will increase the ports' functioning apart from reducing their waiting time.

SHAKING OFF THE OBSOLETE MINDSET

The fear of treading a new path or forging original ways is always there. A stuck-up mindset impedes progress. Restricting oneself to the traditional mindset simply out of habit has ushered in technical inefficiencies, causing loss of time and money. Pushing both the government and the shipping sector to adopt a robust mindset is key to doing away with its intrinsic complexities that come in the way of the industry's need to adopt a digital framework for all its processes.

Unavailability of port manpower expertise is another bottleneck to the self-advancement of Indian ports through technology. The government recognizes the need to impart strong training and skills development strategies for the shipping sector's progress. Besides, training crew members and coastal communities will ensure more business and improved living for people living at or near the port. The need for unbridled end-to-end logistics connectivity has already prompted the Ministry to invest in maritime training institutions that impart necessary training as per job specifications.

