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AMIT SHARMA

MD & CEO, Tata Consulting Engineers

How do you view the port infrastructure developments happening in the country?

India's maritime sector plays a crucial role in the nation's development with its vast coastline of 7,500 km, a network of potentially navigable waterways spanning 14,500 km, and a strategic positioning on key international maritime trade routes. The major ports in the country such as SMPA (Kolkata and Haldia), PPA (Paradip), VPA (Visakhapatnam), CPA (Chennai), KPA (Ennore), VOCPA (Tuticorin), CoPA (Cochin), NMPA (New Mangalore), MPA (Mormugao), JNPA, MbPA (Mumbai), and DPA (Kandla) are overseen by the Ministry of Ports, Shipping and Waterways (MoPSW). Additionally, there are 200 non-major ports (state ports), with notable private ports like Mundra (Adani) and Sikka (Reliance).

To ensure that these resources are effectively harnessed, the Government of India launched the Sagarmala Programme, approved by the Union Cabinet on March 25, 2015, to promote port-led development. The programme signified private sector participation and Public Private Partnership (PPP) wherever feasible for developments of ports. Currently, 121 projects worth Rs 2.4 lakh cr under the Sagarmala Programme are being implemented in PPP mode, with 32 projects worth Rs 45,000 cr completed.

Recognising the critical role played by the sector, the MoPSW has prepared an Amrit Kaal Vision 2047 to drive growth in the maritime sector, aligning with the Government of India's vision for a robust maritime industry contributing to economic and social progress.

What is your overview of Indian ports improving their performance on a global level?

The Amrit Kaal Vision 2047 sets ambitious goals to elevate Indian ports to global standards. The roadmap includes key initiatives that have the potential to disrupt ports industry in India; it includes:

Overall port handling capacity: The projected increase from 2,500 MTPA to 10,000 MTPA necessitates the development of world-class next-generation ports.

Transshipment hubs: Expanding from 1 to 2 hubs, with an aim to reduce transshipment losses to locations like Dubai and Colombo.

PPP berths at major ports: Raising participation from 51% to 100%, which necessitates greater private sector involvement and flexibility in concessions and FDI.

New mega ports: Developing two new major ports, Wadhawan and Galthya Bay through government funding and PPP.

Ports with -18 m to -23 m MCD draft: The increase from 5 to 13 ports requires significant dredging and reclamation projects.

Smart ports: Establishing 5 fully automated smart ports with command control centres, integrating AI, blockchain, and ecosystem automation.

Just In Time arrival ports: Achieving 100% seamless integration to eliminate pre-berthing detention time.

Global ranking in ship recycling: Aiming for the top rank from the current 2nd position.

Global rank in ship building/repair: Moving up to the 5th spot from the current 22nd, supported by a comprehensive ecosystem and policy framework.

Operational inland waterways: Plans to expand from the current network of 22 waterways to over 50 waterways.

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Cargo volume in inland waterways:

Projected to increase significantly from 109 MTPA to over 500 MTPA.

Cruise terminals: Set to grow from 6 to 25 terminals with the aim of establishing the country as the leading destination for passenger volume in the Asia-Pacific region.

Additionally, India aims to strengthen its global maritime presence, enhance efficiency through technology and innovation, and increase its share of the world fleet significantly. To support this growth, maritime clusters will be developed around key ports like DPA (Kandla), VoCPA (Tuticorin), SMPA (Haldia), and the Andaman and Nicobar Islands.

How is the company contributing to the developments of Indian ports?

Tata Consulting Engineers (TCE) is providing comprehensive and integrated engineering services in the maritime sector through its infrastructure business unit. Since 2009, TCE has been actively involved in designing, engineering, and managing various maritime projects, including:

Master planning and feasibility studies: It encompasses the preparation of Master Plans, Feasibility Studies, and Detailed Project Reports (DPRs) for various ports.

Detailed engineering and construction: This involves designing and constructing jetties, berths, container yards, bulk terminals, and port-based SEZs.

Dredging and reclamation: It's a crucial process to enhance port capacity and accommodate larger vessels.

Specialized port facilities: This entails developing cruise terminals, seawater intake/outfall studies, shipbuilding/repair facilities, and inland waterways.

Energy transition and smart ports: It necessitates implementing shore-to-ship green power solutions and smart port technologies to promote efficiency and sustainability.

The brand's recent projects include notable

collaborations with firms from the Netherlands on offshore solar installations, companies from France and Korea on greenfield expansions, as well as German companies in shipbuilding and repair.

How do you foresee new opportunities in the Indian ports sector?

The upcoming developments and opportunities in the ports industry position India's maritime sector for significant growth, aligning with the nation's vision for significant economic and social progress.

To achieve the Amrit Kaal Vision 2047, the Indian maritime sector requires an investment of Rs 80 lakh crore over the next 23 years, with the potential to create an additional four-crore jobs. Several key investment projects are driving this transformation, including Tata Steel's investment in Subarnarekha Port; Adani's expansion in Mundra, Vietnam, and the Philippines; DP World's investment at Tuna Tekra and JSPL's at Paradip, JSW's at Keni, Jatadhari, Murbe among others.

The development of two mega major ports is also underway – they are Vadhvan (JV of JNPA/ MMB) with an investment of Rs 79,000 crore and Galathea Bay (Great Nicobar) with an investment of over Rs 40,000 crore.

The maritime sector is open to 100% Foreign Direct Investment (FDI), with the government usually developing trunk infrastructure to bolster this growth; it includes breakwaters, dredging, reclamation. Berths/equipment are on PPP basis, however in upcoming Vadhavan Port project by Ministry of Shipping/ JNPA is trying to introduce Hybrid Annuity Model (HAM) in port and maritime sector for first time in India for dredging/reclamation and shore protection package with an estimated capex of Rs 20,647 crores for which EOI is under process.

Green Hydrogen hubs is also being planned at VOC (Tuticorin) Port, Paradip Port and Deendayal (Kandla) Port and other Major ports will follow. ■

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FOR EDITORIAL

Sudheer Vathiyath - Executive Editor
editorial@arkeventsmedia.com

FOR ADVERTISING

Anoop Sidharth - General Manager
anoop@constructiontimes.co.in

Vijay bhoir - Regional Head - Sales & Mktg.
vijay@constructiontimes.co.in