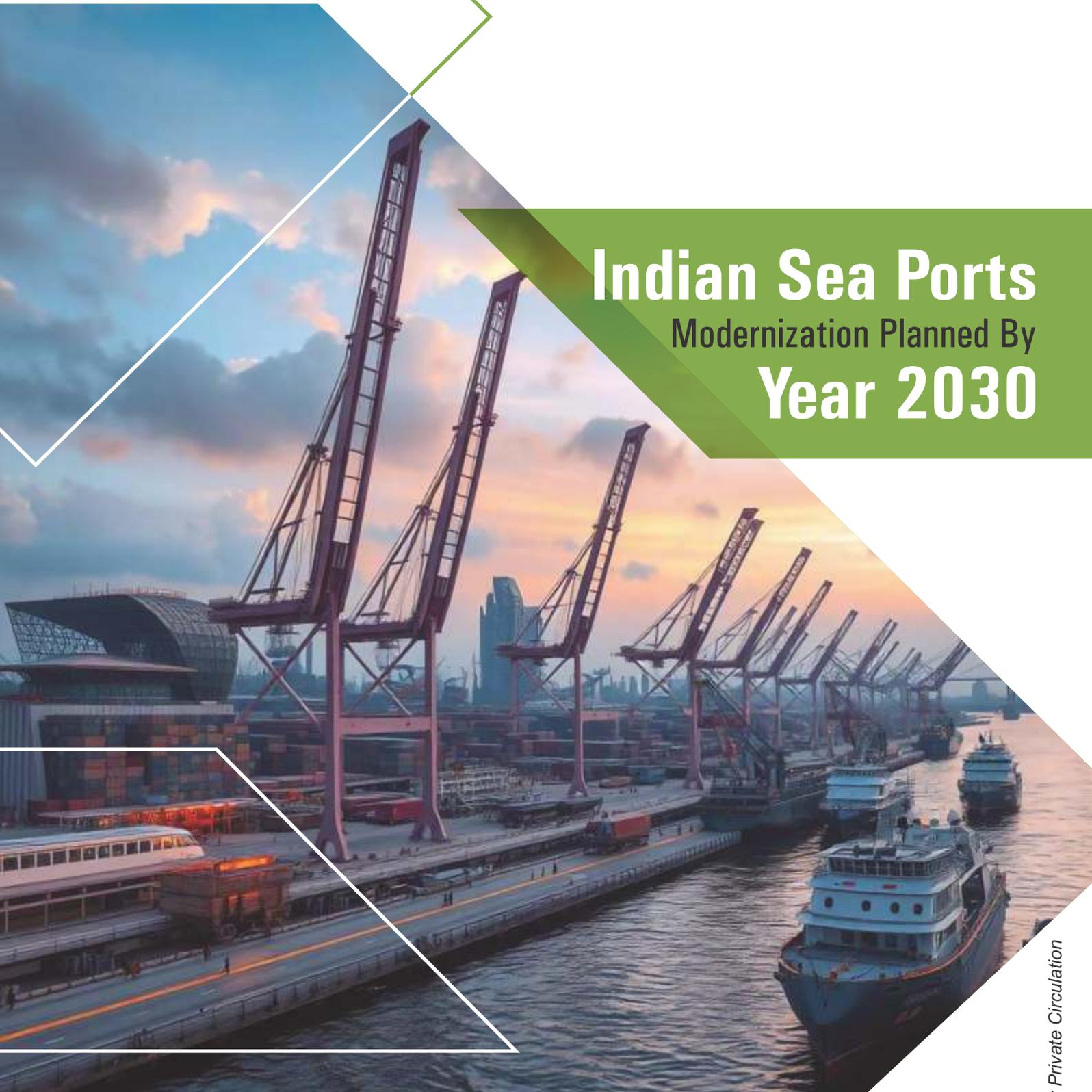




**KRS** Infra Ventures Pvt. Ltd.

# Indian Sea Ports

Modernization Planned By  
**Year 2030**



## From Director Desk



India's port modernization and future investment outlook is marked by ambitious State initiatives, substantial capital deployment, private sector participation, and a strong emphasis on transforming the maritime sector into a global powerhouse.

India plans investments exceeding \$82 billion (around ₹6 lakh crore) until 2035 for port infrastructure, focused on expanding capacity to reach a target of 10,000 MTPA by 2047. Projects include the development of deep-draft ports like Vadhavan and Paradip to handle larger cargo vessels.

The Indian Government is actively pursuing modernization of existing ports and building new ports, with projects valued above Rs. 1.7 lakh crore in the pipeline.

The future of Indian port modernization is characterized by robust investments (both public and private), capacity expansion, sustainability initiatives, and technology-driven enhancements. These efforts are supported by flagship programs like Sagar mala and international cooperation, positioning India's ports as critical enablers for trade growth, economic development, and global maritime leadership through 2030 and beyond.

International Partnership will change the shape and platform to manage larger business opportunities in India.

Come & become part of Indian Development.



**Keshav Gandhi**  
Executive Director  
KRS Infra Ventures Private Limited

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## INTRODUCTION

India's major Sea Ports modernization planned for 2025 to 2030 is primarily guided by the Maritime India Vision 2030 (MIV 2030) and the ongoing Sagar mala Program, with further advancements under Maritime Amrit Kaal Vision 2047. These plans target comprehensive port infrastructure modernization, capacity enhancement, technology adoption, green initiatives, and development of mega ports.

Key highlights for the period 2025-2030 include:

- ▶ Implementation of around 839 identified Sagar mala projects with a total estimated investment of ₹5.79 lakh crore, of which many are underway or completed by 2025.
- ▶ Development and modernization of major ports with over 166 initiatives targeting port expansions, efficiency improvements, mechanization, and cargo handling upgrades.
- ▶ Development of new greenfield ports including Vadhavan Port (Maharashtra) with an investment of ₹76,200 crore, designed as a deep-water port with > 20m draft to handle.
- ▶ Upgrading non-major ports with 45 projects valued at ₹47,166 crore, many through public-private partnerships aimed at increasing cargo throughput and multimodal connectivity.
- ▶ Increasing India's global shipping competitiveness through increased shipbuilding, repair capacity, and eco-friendly operations.
- ▶ Increasing container handling capacity and reducing vessel turnaround time at major ports to become globally competitive.
- ▶ Targeting a port handling capacity rise beyond 2,500 million metric tons by 2030.





- ▶ Emphasis on sustainability including green port operations and potential targeting a renewable energy share above 60% at major ports.
  - ▶ The Sagar mala 2.0 initiative aims to leverage investments of ₹12 lakh crore over the next decade for shipbuilding, repair, recycling, and port modernization to enhance maritime competitiveness.
  - ▶ Creation of coastal economic zones, logistics parks, and integrated hubs to boost port-led industrial and export growth.
  - ▶ Technological integration includes smart port systems, AI-based berth scheduling, automated cranes, IoT sensors, blockchain for transparency, and digitized cargo handling to reduce turnaround and dwell times. Adoption of advanced technologies like AI, IoT for port operations, and fostering multimodal connectivity through road, rail, and inland waterways integration.
  - ▶ Infrastructure to support green port initiatives such as electrification of equipment, LNG bunkering, renewable energy adoption.
  - ▶ Enhancements in hinterland connectivity via improved rail, road, and inland waterways connections to facilitate faster cargo movement and reduce logistics costs.
  - ▶ Ship repair, recycling, and shipbuilding infrastructure development to support the maritime ecosystem.
  - ▶ Significant eco sensitive dredging and berth deepening works to accommodate larger vessels and increase cargo handling capacity.
- Government initiative up to 2030, India plans to have three major ports each handling over 300 million metric tons annually, significantly increasing cargo handling at PPP operators to over 85%, and achieving efficiency targets like reducing average vessel turnaround time from 25 to under 20 hours and average container dwell time to below 40 hours.
- These efforts are expected to elevate India's position in global maritime trade, create over 2 million jobs, and unlock significant revenue potential for ports through improved infrastructure and operational efficiency.

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The main port infrastructure expansion projects planned for 2025-2030 in India focus on several key areas under the Sagar mala Program and Maritime India Vision 2030:

- ▶ Together, these projects aim to raise India's port handling capacity significantly, improve operational efficiencies, and integrate the maritime sector with national freight corridors and industrial corridors to support export-led growth and positioning India as a major global maritime hub by 2030.
- ▶ Thus, the main modernization focus areas are new mega port creation, expansion and mechanization of existing ports, digital and green infrastructure, port connectivity projects, and Maritime cluster development supporting India's long-term maritime ambitions.
- ▶ The Government's official sources and programs such as Maritime India Vision 2030, Sagar mala Program, and Maritime Amrit Kaal Vision 2047 detail these modernization plans, aiming for India to become a top five maritime nation by mid-century.

Key port modernization projects planned for 2025 to 2030 under India's Sagar mala Program and Maritime India Vision 2030 include:

- ▶ Development of 14 new ports with an investment of around ₹1,70,842 crore, including new port projects like Vadhavan (Maharashtra), a transshipment port at South Bay of Andaman Islands, Ramayyapatnam (Andhra Pradesh), and a CNG terminal at Bhavnagar.
- ▶ Special focus on mechanization and digitization including port community systems (PCS), gate automation with OCR, terminal operating systems (TOS), remote monitoring of refrigerated containers, and vehicle tracking to speed up cargo handling and reduce dwell time at ports.
- ▶ Ship repair and ship recycling projects with investments of nearly ₹3,968 crore, including facilities at Alang, A&N Islands, Cochin, Chennai, and Karaikal ports to boost shipbuilding and maintenance capabilities.





- ▶ Key major port modernization examples include Chennai, Ennore (Kamarajar), and Tuticorin (V.O. Chidambaranar) ports upgrading cargo handling, berth facilities, mechanized cargo movement, and navigation aids.
- ▶ Enhancements in multi-modal connectivity ensuring better linkages of ports with rail, road, and inland waterways for faster cargo evacuation and seamless logistics.
- ▶ Projects targeting reduction in vessel turnaround time, cargo dwell time, and increase in container handling capacity aligned with green and sustainable port operations.

These projects together aim to expand India's port capacity well beyond the current levels toward handling over 2,500 million metric tons by 2030, making Indian ports globally competitive and supporting the national agenda of port-led industrial growth.

Thus, the key modernization pillars include new port creation, major and non-major port capacity

upgradation, technology and mechanization infusion, ship repair cluster development, and enhanced hinterland connectivity.

Digitalization and green technology play a crucial and complementary role in India's port modernization and infrastructure expansion projects planned for 2025-2030 by:

- ▶ Facilitating real-time monitoring and management of energy consumption, emissions, and resource use, enabling ports to minimize environmental footprint and adhere to sustainability goals efficiently.
- ▶ Driving green technology innovation (GTI) by integrating advanced digital systems that support environmentally friendly practices such as energy-efficient equipment use, electrification of port machinery, LNG bunkering, and renewable energy adoption.
- ▶ Enabling predictive analytics to forecast maintenance needs, optimize resource allocation, and reduce waste through digital twin and smart grid technologies, thereby maintaining sustainable port operations.

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- ▶ Supporting corporate and industrial green transformation by combining digital transformation with green innovation to advance eco-friendly products, processes, and business models aligned with national climate targets.
- ▶ Promoting investment in sustainable projects through green digital finance initiatives that leverage open digital platforms to mobilize funding for environmental infrastructure and clean technologies at ports.

Overall, digitalization acts as a key enabler of green technology adoption and sustainability enhancement, making India's port modernization both more efficient and environmentally responsible. This integration helps align port infrastructure projects with global climate commitments and India's vision of developing green, smart ports by 2030.

India's port modernization plans for 2025 to 2030 focus on expansive infrastructure development combined with cutting-edge digitalization and green technology integration. These projects aim to build new mega ports, upgrade existing facilities, and enhance cargo handling capacity while significantly improving operational efficiency and sustainability. Digital tools optimize logistics and resource management, enabling faster turnaround and reduced environmental impact. Simultaneously, green technologies drive energy-efficient and eco-friendly port operations. Together, these efforts are set to transform India into a globally competitive maritime hub, supporting economic growth, job creation, and environmental stewardship aligned with national and international goals. ■



*Declaration : The data produce here is compilation of information Government of India planned to cover by year 2030 & subject to verify and KRS Group is not responsible for any statement or financial provisions mentioned here.*

## KRS MARKETING Partnership Proposal

### Marketing Requirements

Handling business opportunities in India require various steps and Marketing Partnership will help you to understand the practice and management to work in India. Considering the promotion before official participation in business, few steps like promotion, introducing own product range to manage the requirement development accept our standard products or services, advance preparation of participation in Indian Opportunities, management of local vendor team, if required for joint participation, handling tenders, offers, negotiations, contract management support etc., the list is ongoing and KRS Infra Ventures Pvt. Limited ensure that our experience being in this trade from last three decades offer you wider experience base in INDIA.

### Marketing Proposal

The KRS Group herewith introduce KRS Infra Ventures Pvt. Limited herewith offers the marketing partnership to your organization to promote you and yours associates interest in Indian Infrastructure Sector with following ways:

- Informing Business Opportunities in India for business scope of your organization.
- Promoting your organization with introducing and presenting details to various clients in Government

and Private Sector and follow-up for acquisition formalities (tendering process, finalization of business, all assistance during implementation & after sales etc.)

- Informing the current scenario of market in view of Government Policies, Procurements plans etc.
- Advising the strategies required during promotion for successful business opportunities.

The partnership terms will require discussions to finalize, which will be second step after receiving your principal approval and suggest you to work on following options for understanding:

- Marketing Partnership Joint Venture-which means "KRS Infra Ventures" will be offering all Marketing support in India and your organization handle the technical & commercial need of the projects targeted and rest terms & conditions of arrangement will decided after in principal approval of partnership.
- Exclusive Agent in INDIA-KRS will be offered exclusive Agency Agreement for 3 years minimum to develop and managing business opportunities for your organization and terms & conditions of this agreement will be discuss after principal approval of working.



## KRS Infra Ventures Private Limited

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