

will help improve organisational efficiency, enhance stakeholder satisfaction and lower organisational costs. To this end, the state government is planning to set up an IPMS to improve port efficiency and promote the ease of doing business.

Coastal economic zones

Of the 14 CEZs proposed for development along the country's coast under the Sagarmala programme, three are planned to be developed in Gujarat. These will be located at Kutch with a focus on petrochemicals, cement and furniture; in the Saurashtra region with a focus on the apparel and automotive sectors; and in south Gujarat with a focus on marine industries.

Smart port cities

The central government plans to build a smart city within the port community at each of the country's 12 major ports. These proposed green cities will entail an estimated total investment of Rs 500 billion.

Further, there are plans of using Kandla port's land bank to develop a smart industrial port city (SIPC) at the Kandla-Gandhidham-Adipur complex and township, incorporating green and smart city components.

The objectives of the initiative are to develop two greenfield sites on 1,500 acres around the existing Kandla-Gandhidham-Adipur complex, develop urban and industrial infrastructure to promote economic growth and improve quality of services; and achieve scales of operations to integrate the greenfield development with the existing township and drive the improvement of overall urban infrastructure in the complex. The board of the Kandla Port Trust has already approved the final master plan for the ambitious SIPC.

Greenfield ports

In addition to the greenfield ports at Mundra, Pipavav, Dahej and Hazira, GMB has identified developers for setting up ports at Chhara, Kacchigarh, Modhwa and Nargol. In addition, GMB will be conducting a study to

Integrated Maritime Complex at Nana Layja

IL&FS Maritime Infrastructure Company Limited, a wholly owned subsidiary of IL&FS, focuses on the development, implementation and operations of maritime and maritime-based logistics, taking on the role of a developer and sponsor. As one of its initiatives for integrated development of infrastructure, IL&FS Maritime is promoting the development of the Nana Layja Integrated Maritime Complex near Mandvi in Kutch district of northwest Gujarat.

An integrated maritime complex is a maritime industrial cluster or hub that houses industries and businesses that are highly dependent on marine infrastructure or are manufacturers of critical and high-value components for marine facilities. The composite development of marine facilities with the dependent industries significantly reduces costs and increases the competitiveness of products and services. The central government, through its policies and initiatives such as the Sagarmala project, is also giving an impetus to the development of integrated zones for the reduction of domestic logistics costs and facilitating EXIM-oriented manufacturing by increasing the proximity to maritime gateways and reducing variability.

The Nana Layja project emulates a similar vision. It will leverage a cluster-based approach, comprising a marine and energy special economic zone (SEZ)/free trade warehousing zone (FTWZ), fossil fuel-based power plants, renewable energy projects, a ship repair and shipbuilding facility, and captive waterfront and jetties. The waterfront marine facilities will be connected to the SEZ by a dedicated utility corridor providing direct access to and from the captive port. The project will create backward and forward linkages of internal and related components of the maritime sector and will offer economies of scale to inter-dependent marine and ancillary industries. The integrated maritime complex is located on the trade sea route between India and the Middle East, and has the potential to capture the ship repair/ship-building market, which would otherwise be catered to by Dubai and Singapore.

The integrated project will attract significant industrial investment and create direct and indirect employment. Moreover, various CSR activities have commenced in the project catchment area. With the majority of development work completed and all requisite approvals, clearances and land in place, this project presents an attractive investment opportunity for international and local customers, and end-users.

identify new sites for greenfield port development and evaluate the preliminary feasibility of these sites.

Marine shipbuilding parks

Gujarat's Shipbuilding Policy, 2010 has identified the development of marine shipbuilding parks (MSPs), with integrated shipbuilding and engineering units, to create an ecosystem and reduce production costs for shipbuilding activities. GMB has identified sites for allocating land parcels in the Dahej coastal area along the Narmada river for shipbuilding purposes. Similarly, the site for an MSP at Bhavnagar has also been identified.

The Gujarat government is in the process of revising its port policy of 1995 to leverage existing port locations for increasing port

capacity and GMB's revenue. The new policy intends to create new PPP structures to get more investment for greenfield ports, as well as set up more jetties at existing port locations. Similarly, to make Gujarat an integrated maritime state, the policy will aim to promote port-led industries, shipbuilding, etc. The policy will also define the framework for the maritime cluster and university.

To conclude, the development of greenfield ports, supportive infrastructure and port-led industries in Gujarat are some of the key priorities for GMB going forward. Implementing IT-driven initiatives and increasing operational efficiencies at ports are the other focus areas of GMB. The numerous projects on the anvil will offer a host of opportunities to all stakeholders in the sector. ▀