

# CENTRE FOR JOINT WARFARE STUDIES



## SAGARMALA- A GAME CHANGER

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### Background

Project Sagarmala is a terribly ambitious and bold plan for integrated development of all maritime-related activities. India has nearly 7500 km of coastline, 14500 km of navigable waterways and geographically the peninsula is situated in the thick of major maritime routes. Sagar mala was originally visualized by Prime Minister Atal bihari Vajpayee during the NDA government along with the project for linking of rivers. The latter is now a separate programme with the water resources ministry.

The project is a strategic initiative to modernize India's ports and to develop the vast coastline to accelerate the nation's growth. It aims at "transforming the existing ports into modern world class ports and integrate the development of the ports, the Industrial clusters and

hinterland and efficient evacuation systems through road, rail, inland and coastal waterways resulting in Ports becoming the drivers of economic activity in coastal areas."<sup>1</sup>

Indian ports handle more than 90 percent of India's total foreign trade by volume; the proportion of merchandize trade in Gross Domestic Product (GDP) of India is 42 percent (Germany and European Union, have a proportion of 75 percent and 70 percent respectively). There is therefore, enormous scope to increase the abovementioned ratio and with the "Make in India" initiative, the share of merchandise trade is expected to increase. This increase in merchandise trade necessitates a corresponding expansion of the port and

<sup>1</sup><http://www.bestcurrentaffairs.com/sagarmala-project-india/>

logistics ie transportation, handling and warehousing facilities.

However India lags behind the growing economies and the developed countries in ports and logistics infrastructure. One of the key issues in moving commodities smoothly is an interlinking of all modes of transport. In addition high logistics costs make Indian exports uncompetitive. The Sagarmala project would provide ports and shipping their rightful place in the Indian economy and enable port-led all round development.<sup>2</sup>

Projects such as the Western Dedicated Freight Corridor would enable ease of transportation from the hinterland to the ports. Work is also progressing for providing of spur lines to the major ports on the west coast.

### **Bottlenecks**

The growth of India's maritime sector is constrained by developmental, procedural and policy bottlenecks namely, involvement of multiple agencies in development of infrastructure, trade, tourism and transportation; presence of a dual institutional structure that has led to development of major and non-major ports as separate, unconnected entities; lack of requisite infrastructure for movement from major and non-major ports; limited hinterland linkages that increases the cost of transportation and cargo movement; limited development

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<sup>2</sup>Press Information Bureau <http://pib.nic.in/newsite/PrintRelease.aspx?relid=117691>

of centres for manufacturing and urban and economic activities in the hinterland; low penetration of coastal and inland shipping in India, limited mechanization, procedural bottlenecks and lack of scale, deep draft and other facilities at various ports in India.

Growth of cargo in major ports in the country increased by 7.6 percent last year. Data from the Indian Ports Association reveals that the 12 major ports handled 481 million tonnes of cargo compared with 447 million tonnes the previous year. Growth was driven primarily by increased iron ore handling as the government lifted production bans and relaxed export duties. Of the 12 major ports three, JNPT, Kamarajar at Ennore, and Kolkata, reported declining volumes in the first three quarters of the 2016 and 2017.

The cost of shipping goods in India is very high as compared to that of China, South Korea, Japan and other developed countries. This blunts the competitive edge for Indian goods in the international market. Logistics costs as a percentage of GDP are estimated to be around one-third higher than those of China and are a serious cost enhancer. Projects under Sagar Mala address the problem by modernizing the port networks, improving hinterland connectivity including inland waterway transportation, and developing well-connected coastal industrial and manufacturing zones.

## Objectives

The Sagarmala programme aims to promote port-led development in the country by harnessing India's 7,500-km long coastline, 14,500-km of potentially navigable waterways and its strategic location on key international maritime trade routes. Sagar Mala aims to bring down logistics costs in order to attract more international shipping; to set up manufacturing and supply chain operations for exports in India and to improve the competitiveness of domestically-produced goods.

Various development projects that would be undertaken under the Sagarmala initiative are:-<sup>3</sup>

- (i) Port-led industrialization
- (ii) Port based urbanization
- (iii) Port based and coastal tourism and recreational activities
- (iv) Short-sea shipping, coastal shipping and Inland Waterways Transportation
- (v) Ship building, ship repair and ship recycling
- (vi) Logistics parks, warehousing, maritime zones/services
- (vii) Integration with hinterland hubs
- (viii) Offshore storage, drilling platforms
- (ix) Specialization of ports in certain economic activities such as energy,

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<sup>3</sup>Press Information Bureau <http://pib.nic.in/newsite/PrintRelease.aspx?relid=117691>

containers, chemicals, coal, agro products, etc.

- (x) Offshore Renewable Energy Projects with base ports for installations
- (xi) Modernizing the existing ports and development of new ports. This strategy incorporates both aspects of port-led development viz. port-led direct development and port-led indirect development.

## Coordination

The institutional framework for implementing Sagarmala would provide a coordinating role to the Central Government.<sup>4</sup> The framework would be a platform for central, state governments and local authorities to work in tandem to achieve the objectives of the Sagarmala Project and ensure port-led development.

**A National Sagarmala Apex Committee (NSAC)** would provide overall policy guidance and high level coordination, and to review various aspects of planning and implementation of the plan and projects. The National Sagarmala Apex Committee is headed by the Minister of Shipping to provide policy direction and guidance for implementation, in accordance with the overall National Perspective Plan (NPP) and to review the progress of the project. The Sagarmala

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<sup>4</sup><http://sagarmala.gov.in/about-sagarmala/sagarmala-institutional-framework>

National Perspective Plan was released on 14 Apr 2016.

A **Sagarmala Coordination and Steering Committee (SCSC)**<sup>5</sup> would be constituted under the chairmanship of the Cabinet Secretary with secretaries of the various Ministries, and Chairman (Railway Board) and CEO, NITIAayog as members. This Committee would ensure coordination between various ministries, state governments and agencies connected with implementation of the National Perspective Plan, Detailed Master Plans and projects. It would also consider issues relating to funding of projects. The Committee would also examine financing options available for the funding of projects, the possibility of public-private partnership in project financing/construction/ operation. Global port investors such as DP World have shown interest in invest in the country's port infrastructure. The Dubai-based company plans to invest \$1 billion in the country over the coming years to complement existing operations at JNPT, Mundra (Gujarat), and Vallarpadam (Cochin). DP World's local intermodal arm, Container Rail Services, has been adding new rail services connecting major ports.

The **Sagarmala Development Company (SDC)**<sup>6</sup> would assist the

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<sup>5</sup><http://sagarmala.gov.in/about-sagarmala/sagarmala-institutional-framework>

<sup>6</sup><http://sagarmala.gov.in/about-sagarmala/sagarmala-institutional-framework>

State level/zone level Special Purpose Vehicles (SPVs), as well as SPVs to be set up by the ports, with equity support for implementation of projects. The SDC would get the 'Detailed Master Plan's for individual zones prepared within a two year period. The SDC would provide a funding window and/or implement only those residual projects that cannot be funded by any other means/mode. The SDC's mandate is to develop and form projects and assist with project implementation.

The Sagarmala Development Company was set up on 20th July 2016 with an initial authorized share capital of Rs 1000 Crore and subscribed share capital of Rs 90 Crore, to give a push to port-led development.

The main points for the Sagarmala Development Company (SDC) are given below:-<sup>7</sup>

- (i) SDC would be under the administrative control of the Union Ministry of Shipping.
- (ii) It would provide equity support to the project Special Purpose Vehicles (SPVs) and funding support to the residual projects under the Sagarmala Programme.
- (iii) Implementation of the identified projects would be taken up mainly through private or PPP mode. It

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<sup>7</sup><http://sagarmala.gov.in/about-sagarmala/sagarmala-institutional-framework>

would also provide equity support for the project Special Purpose Vehicles (SPVs).

- (iv) SDC would mainly identify port-led development projects and assist the project SPVs in project development and structuring activities, bidding out projects for private sector participation.
- (v) It would also put in place suitable risk management measures for strategic projects cutting across multiple States and Regions and obtaining requisite approvals and clearances.
- (vi) SDC would also undertake the preparation of the detailed master plans for the Coastal Economic Zones (CEZs) identified as part of the NPP (National Perspective Plan).
- (vii) SDC would provide a holistic framework for ensuring the integrated development of Indian maritime sector.
- (viii) It would also manage the coastal community development scheme and fund coastal community development projects identified under the Sagarmala Programme.
- (ix) SDC would raise long term capital as per project requirements by leveraging resources provided by Union Government and also from multi-lateral and bilateral funding agencies.

## **Cost**

Under Sagarmala Programme, 415 projects, at an estimated investment of approximately Rs 8 lakh crore (US\$120 billion), have been identified across port modernization and new port development, port connectivity enhancement, port-linked industrialization and coastal community development for phase wise implementation over a twenty year period (2015 - 2035)<sup>8</sup>. As per the approved implementation plan of Sagarmala

S No.	Project Theme	No. of Projects	Project Cost (Rs. Cr)
1.	Port Modernisation	189	142,828
2.	Connectivity Enhancement	170	230,576
3.	Port-Linked Industrialisation	33	420,881
4.	Coastal Community Development	23	4,216
	<b>Total</b>	415	798,500

Programme, these projects are to be taken up preferably through private/PPP mode. The details are as given below.

## **Components Of The Project**

China, South Korea and Japan have effectively used their coastline for 'port-led development'. India has to replicate their model to stay competitive.

Besides port development, a number of road and rail connectivity projects are being undertaken as well as seven major national multimodal logistics parks and a series of coastal industrial zones are

<sup>8</sup>[https://en.wikipedia.org/wiki/Sagar\\_Mala\\_project](https://en.wikipedia.org/wiki/Sagar_Mala_project)

being set up. The programme has total of four components.

- The first constituent is increasing port capacity.
- The second module is port led industrialisation and development to reduce the logistics cost which is dragging down economic growth in the country.
- The third component is connectivity with the hinterland. As connectivity with the hinterland is improved and the transportation costs are brought down the competitiveness of our exports, imports and domestic trade would improve.
- The fourth component is development of the coastal communities. This is particularly important from human resource perspective as we cannot expect development without taking along these communities.

### **Improvement Of Port Efficiency**

Sagar Mala plans to triple the cargo capacity of the 12 major and more than 200 non-major ports and supporting infrastructure to 3 billion tonnes by 2025. The commencement of the 12 new projects would take the total number of port building and modernization projects underway to 85 at a cost of more than \$5.7 billion.

Improvement of operational efficiency of existing ports, which is an important

objective of the Sagarmala initiative, would be achieved by business process re-engineering to simplify procedures in addition to modernizing and upgrading the existing infrastructure through improved mechanisation. Increased use of information technology and automation to ensure paperless and seamless transactions would be another important focus area. Under the Sagarmala Project, the use of coastal shipping and inland waterways are proposed to be enhanced through infrastructure enhancement and policy initiatives.

### **Port Led Development Sustainable Development**

The Sagarmala initiative would also promote sustainable development of the population living in the Coastal Economic Zone (CEZ). This would be done by synergising and coordinating with State Governments through their existing schemes and programmes such as those related to *community and rural development, tribal development and employment generation, fisheries, skill development, tourism promotion etc.* In order to provide funding for such projects a separate fund by the name 'Community Development Fund' would be created.

Gujarat has been a pioneer in adopting the strategy of port-led development, with significant results. While in the 1980's the state grew at only 5.08 percent per year (National average was

5.47 percent), this accelerated to 8.15 percent per annum in the 1990's (All India average 6.98 percent) and subsequently to more than 10 percent per annum, substantially benefitting from the port-led development model.

### Initial Projects

In order to kick start the implementation of projects a few projects have been identified for implementation in the initial phase. These identified projects are those with available feasibility study reports and the preparedness, willingness and interest shown by the State Governments to take up projects.

The projects would be implemented through the private sector and through Public Private Participation (PPP) wherever feasible. Funds requirement for starting the implementation of projects in the initial phase of Sagarmala Project was projected at Rs. 692 crores for the FY 2015-16. Further funds would be provided after completion of Detailed Master Plan for Coastal Economic Zones for future years.

Under the plan, more than 400 projects with the cost of almost Rs 8 lakh crore are to be implemented over the next 10 to 20 years. One hundred and ninety nine core projects have been identified which would be taken up in the next three years and the total cost of these 199 projects is Rs 3.31 lakh crore. In 2016 work had commenced on projects worth more than Rs one lakh crore which were either being implemented and it is

expected that there would be substantial progress by 2018-19.

### Proposed Ports

Six new mega ports have been cleared to be built under the ambitious Sagarmala Project<sup>9</sup>, taken up by the Ministry of Shipping. The National Perspective Plan (NPP) envisions these new infrastructural facilities as part of its multi-pronged strategy to enhance India's cargo handling capacity.

The six mega-ports planned in Sagarmala project are:-

1. **Sagar Island** (West Bengal)  
However its viability is being re-examined in view of announcement of a new port **Tajpur Port** at Tajpur by the State Govt (West Bengal).
2. **Paradip Outer Harbour** (Odisha)
3. **Sirkhazi** (Tamil Nadu)
4. **Enayam** (Tamil Nadu)
5. **Belikeri** (Karnataka)
6. **Vadhavan** (Maharashtra)

The new **Vadhavan** port estimated to cost around Rs 10,000 crore, would ease congestion in the present shipping capacity. Vadhavan currently handles about 40 percent of the total container traffic in India. The new port would be able to handle 40 to 60 million tonne of cargo every year. The present capacity

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<sup>9</sup><http://www.firstpost.com/india/india-to-get-six-new-mega-ports-under-ministry-of-shippings-sagarmala-project-3082626.html>

of the port is 4.16 million tonne per year.

The proposed **Paradip Outer Harbour** project, estimated to cost around Rs 8,200 crore, would be developed to facilitate the coastal shipping of thermal coal for power plants in Southern and Western India. The new port would have a capacity of 175.5 million tonne per year.

Similarly, the **Sagar** port, proposed to handle the overflow of traffic from Kolkata and Haldia facility, has received an initial grant of Rs 515 crores as viability fund from the Centre. A special purpose vehicle, named Bhor Sagar Port Limited, has also been created in partnership with Kolkata Port Trust and the West Bengal Government. The project is expected to cost Rs 12,000 crore.

A new port, either in **Machilipatinam** or **Vodarevu**, in Andhra Pradesh has also been proposed to handle the thermal coal, cement and container cargo in the region. A similar facility, either in Cuddalore or Shikazhi, in Tamil Nadu is also being contemplated to handle the movement of thermal coal.

**Enayam** in Tamil Nadu has been selected as India's future mega transshipment destination, aimed to capture the international business opportunity presently enjoyed by Singapore and Sri Lanka.

The new ports are likely to enhance India's cargo handling capacity by 466 million tonne per year. As part of the

Sagarmala vision, India's cargo traffic handling capacity would be enhanced from 1,550 million tonne per year to 3,000 million tonne per year by 2025. The rest 980 million metric tonne capacity needed to meet the target would be fulfilled by enhancing the capacity of major and non-major ports.

The new infrastructural facilities would also help enhance earnings from the transshipment business. Currently, India loses considerable revenue to Sri Lanka and Singapore due to lack of transshipment facilities. About 25 percent of the Indian cargo is transhipped in Colombo and Singapore. One of the major reasons is that India's biggest container port JNPT has a draught of 14 m, whereas capsized vessels require it to be above 16 m.

India's cargo volume is estimated to rise by up to 2,500 metric tonne per year from the current evaluation at 972 metric tonne per year. Infrastructural enhancements are likely to ease the pressure on the existing facilities.

The new ports would promote coastal shipping and decrease the dependence on transportation by rail and road. This is likely to cut down the inland transportation costs by up to 80 percent.<sup>10</sup> Presently the country has 12 major ports.

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<sup>10</sup><http://www.firstpost.com/india/india-to-get-six-new-mega-ports-under-ministry-of-shippings-sagarmala-project-3082626.html>

The project is estimated to save up to Rs 40,000 crore per year spent on logistics.

### **Coastal Economic Zones**

The Sagarmala Project proposes fourteen Coastal Economic Zones (CEZ) across major and non-major ports of India in a comprehensive plan that would also support the Make in India initiative.

It would facilitate port-led industrialisation similar to the model followed so successfully by China – now a key economic competitor. The CEZs are expected to increase India's merchandise exports by Rs110 billion by enhancing industrial competitiveness.

The CEZs would be built as per a comprehensive plan for port-led industrialisation and embrace 12 industrial clusters those would require up to Rs 8 lakh crores of industrial investment and Rs 15,000 crores of investment in basic infrastructure.<sup>11</sup>

The twelve big clusters that run across 3 wide sectors - energy, materials and different manufacturing - were proposed in the CEZs on the basis of suitability of sea mode of transport for imports of raw materials or exports of goods. The proposed port directed development wouldn't just reduce logistics costs by optimizing movement of freight, but additionally impact competitiveness in accessibility of raw materials, skills, supporting infrastructure and existing industrial agglomeration. The

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<sup>11</sup><http://www.maritimegateway.com/news/sagarmala-proposes-14-cezs-across-india/>

proposed port-led development would not only reduce logistics costs by optimising movement of cargo, but also impact competitiveness in availability of raw materials,.

As per the plan, coastal states would have one or more CEZs. The industrial clusters within these zones would enjoy the benefit of lower cost of movement by waterways. It has been observed that EXIM containers in India travel 700 to 1,000 kilometres between production centres and ports. The plan attempts to decrease it substantially by facilitating port-led industrialisation.<sup>12</sup>

- Three energy clusters to meet the future power requirements of the country have been planned in the proposed Poompuhar CEZ in Tamil Nadu and North Konkan CEZ in Maharashtra.
- Two refining clusters in the proposed Mannar CEZ in Tamil Nadu, South Konkan CEZ in Maharashtra or in Poompuhar CEZ in Tamil Nadu.

The plan also proposes four petrochemical clusters in proposed CEZs to be built in Gujarat, Karnataka, Odisha and Tamil Nadu.

Furthermore, it aims to enhance steel and cement production by 40 MTPA each by 2025 by creating coastal capacity and thus reduce logistic cost by Rs 1,000 per ton and make domestic manufacturing more competitive.

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<sup>12</sup><http://www.maritimegateway.com/news/sagarmala-proposes-14-cezs-across-india/>

As per an analysis, six discrete manufacturing sectors – food processing, automotive, electronics, apparel, leather products, footwear and furniture – would be set up. Separate industrial clusters are also proposed in the CEZs to be built in the coastal states of the country.

The proposed Coastal Economic Zones are named Kachch, Suryapur and Saurashtra in Gujarat, North Konkan and South Konkan in Maharashtra, Dakshin Kanara in Karnataka, Malabar in Kerela, Mannar, Vizag-Chennai Industrial Corridor (VCIC) South and Poompuhar in Tamil Nadu, VCIC North and VCIC central in Andhra Pradesh, Kalinga in Odisha and Gaud in West Bengal.

The plan anticipates a gap in demand and supply of skilled manpower to implement the project successfully in the coastal districts and plans are afoot to plug it using special Skill Development program. The Sagarmala Project proposes a massive training drive among the people in the coastal regions to meet the requirement.<sup>13</sup>

Sagarmala project aims to invest Rs 70,000 crore in facilitating economic growth by enhancing coastal shipping of goods.

### **Inter Modal Transportation**

A Shipping ministry study has claimed that the project could lead to an annual saving of Rs 40,000 crore by optimizing logistics. Increasing the share of coastal shipping

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<sup>13</sup><http://www.maritimegateway.com/news/sagarmala-proposes-14-cezs-across-india/>

and inland navigation in the transport modal mix is one of the key objectives of the Sagarmala Programme. Developing rivers as inland waterways can also help save domestic logistics costs too. Transport costs are high in India – 18 per cent of GDP as compared to less than 10 per cent in China.<sup>14</sup> In order to equip ports for movement of coastal cargo, the scope of ‘Coastal Berth Scheme’ has been expanded and merged with Sagarmala Programme. Financial assistance of 50% of project cost is provided for construction of Coastal Berths, Breakwater, mechanization of coastal berths and capital dredging. Rs. 152 Cr has been released for 16 projects under this scheme. In addition, Cabotage has been relaxed for a period of 5 years for specialized vessels like RO-RO, RO-PAX etc.<sup>15</sup>

To augment transshipment capacity in the country, Vizhinjam (Kerala) and Enayam (Tamil Nadu) are being developed as transshipment ports. Vizhinjam is being developed as transshipment hub under PPP mode by Kerala govt with Viability Gap Funding from the centre.<sup>16</sup>

The underlying aim is that all major ports along the west coast should be linked to the western dedicated freight corridor.

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<sup>14</sup><http://www.thehindubusinessline.com/opinion/columns/all-you-wanted-to-know-about-sagarmala/article8640858.ece>

<sup>15</sup><http://pib.nic.in/newsite/PrintRelease.aspx?relid=159037>

<sup>16</sup>Minister of State for Shipping, Shri Pon Radhakrishnan in a written reply to a question in the Lok Sabha.

The western dedicated freight corridor line would terminate on JNPT and the intention is that all other major ports along that corridor should be linked to the western dedicated freight corridor.

As regards the concept of multimodal hubs, in Varanasi an inland terminal for waterway national highway number one is being set up that would have connectivity with two national highways. It would also be connected to the railway line and interestingly because Mughal Sarai is presently the last point of the eastern dedicated freight corridor. It is expected that by end of 2018 the terminal would be operational. Inland Waterways Authority which is implementing the project has an MOU with the Dedicated Freight Corridor corporation so that that can act as a transfer point for all cargo which is going further towards Haldia and Kolkata and this would be an interchange point.

Similarly at other places also for example at Paradip and Vizag and all other ports we are looking for developing these multimodal hubs with connectivity into the hinterland and this concept is only going to grow.

The Gulf of Cambay (also known as Gulf of Khambhat) is an inlet of the Arabian Sea in the state of Gujarat along the west coast of India. It divides the Kathiawar peninsula to the west from the eastern part of Gujarat state. Narmada, Tapti, Mahi and Sabarmati rivers drain into it.<sup>17</sup>

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<sup>17</sup><https://currentaffairs.gktoday.in/tags/sagarmala-project>

A Capital Dredging Project has been sanctioned of Ro Pax Ferry Services between Gogha & Dahej, in Gulf of Cambay in Gujarat under Sagarmala programme. The total project cost is estimated to be Rs 234 Crore of which 50% would be funded by the Union Government under the Sagarmala programme.<sup>18</sup>

This is a first of its kind project in India and it would be in the area of the world's second highest tidal range. It would reduce the motorable distance of 231 kms between Gogha and Dahej in Gujarat to only 31 kms and would reduce the travel time to 1 hour from 7 hours. It would be India's first roll on-roll off (Ro-Ro) passenger ferry service on this route.

It is expected that the project would open up new avenues in coastal shipping & tourism and help in socio-economic development of proximate areas. It would facilitate utilisation of inland waterways through River Narmada for shipping goods from industries located upstream.

### **Strategic depth and flexibility**

Several strategic commentators believe that the two most important regions of the 21st century are likely to be the Pacific and Indian Ocean Region, where maritime power will be the most important measure of military and diplomatic influence. The concept of bases for refuelling, rearming and provisioning ships, enables the navy to demonstrate capabilities of maritime

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<sup>18</sup><http://pib.nic.in/newsite/PrintRelease.aspx?relid=151735> 17-October-2016 18:07 IST

presence, expeditionary ventures, to deter or defeat maritime adversaries, and ensure the free flow of maritime commerce in areas of interest. This timeless concept is as relevant today as in the times of Alfred Mahan. The development of numerous ports under the ambitious Sagarmala project would provide greater flexibility to maritime forces and reduce turnaround times and thereby increase the tempo of operations. Turnaround time is the time needed for a ship to enter harbour, replenish stores, refuel and leave the port. As an example, for naval operations in the northern Bay of Bengal, Paradip would be better suited for operational turnaround than Vishakhapatnam. Similarly for the ships in the southern Bay, Tuticorin is a more convenient option for replenishment and refuelling than say Chennai.

The plethora of ports that would dot the Indian coastline would provide immense strategic depth for the conduct of naval operations. Security analysts would look forward to the timely completion of Project Sagarmala.

### Conclusion

The Sagarmala Programme as a series of projects would leverage the country's coastline and inland waterways to drive industrial development. It has been launched with a view to promote port-led economic development in the country. The Project seeks to harness the vast potential of India's 7,500 km long coastline, 14,500 km of potentially navigable waterways, and strategic location on key international maritime trade routes. The plan would take up various projects including Port Connectivity Enhancement, Port Modernization, New Port Development, Port-led Industrialization and Coastal Community Development.

The Sagarmala project would encourage the growth of coastal and inland shipping as a major mode of transport along the coastal and riverine economic centres. When integrated with the development of inland waterways, it would help to reduce cost and time for transporting goods. The Sagarmala Programme would bring about immense economic development by creating many new major and minor ports along India's coast.



**Capt (IN) Ranjit Seth**

Senior Fellow, CENJOWS

### **Centre for Joint Warfare Studies**

Kashmir House, Rajaji Marg, New Delhi-110 001

Tel. Nos : 011-23792446, 23006535, 23006538/9, Fax : 011-23792444

Website : <http://cenjows.gov.in>, e-mail : [cenjows@yahoo.com](mailto:cenjows@yahoo.com)