

PORTS, SEA ROUTES, INLAND WATERWAYS

India, with her 7,517 km coastline has a hinterland of about 380,000 sq km, covering nine maritime states- five states on the western coast and four on the eastern coast apart from union territory of Puducherry, islands of Lakshadweep and Andaman & Nicobar which also form part of the coastal hinterland. The coastline of the country is studded with thirteen major ports and two hundred non-major ports. Major ports except for Ennore corporate port, come under the purview of central government while the non-major ports come under the jurisdiction of the respective state governments; some are operated by private sector. The ports are mainly distributed in Maharashtra (53), Gujarat (40), Tamilnadu (15), Karnataka (10), and others (82). Government of India plans to modernize these ports and has approved a project called *Sagarmela*.

The thirteen major ports are evenly spread out on the eastern and western coasts. The ports of Kolkata, Haldia, Paradip, Visakhapatnam, Chennai, Ennore and Tuticorin are on the eastern coast of India while the ports of Kochi, Mangalore, Marmagao, Mumbai, Jawaharlal Nehru Port (Nhava Sheva) and Kandla are on the western coast. A new subsidiary port with an industrial complex named Haldia has been set up about 90 km downstream of the Hugli river from the port of Kolkata, to lessen the heavy pressure on Kolkata port. The latest addition to major ports is Port Blair on June 2010, the 13th port of the country. Major ports handled over 75 per cent of all cargo traffic. However, Mundra port in Gujarat registered cargo traffic of around 28.8 million tonnes during 2008-09; the amount is higher than that of many major ports. In recent years private sector participation in port administration has increased. Karaikal Port Pvt. Ltd., Port Papavav in Saurashtra, are some of the most efficient ports. Port of Dhamara in Odisha was inaugurated in August 2010.

Altogether there are 187 notified minor and intermediate ports. The capacity of major ports has increased from 20 million tonnes per annum (MTPA) in 1951 to 670.13 million tonnes per annum as on 31st March 2011. The non-major ports had a capacity of 250 MTPA.

Ports of the western coast

Mumbai and Jawaharlal Nehru ports: About 25 per cent of India's container traffic is handled by the Mumbai port and Jawaharlal Nehru Port Trust in Navi Mumbai; bulk of which consists of petroleum products and dry cargo. Mumbai port has natural deepwater harbour and handles bulk cargo traffic which includes liquid chemicals and crude.

Kandla: This port located on the Gulf of Kachchh enjoys a free trade zone. The harbour is natural, deep and protected. Main import items are machinery, iron and steel, mineral oil and chemical products. Export items are oilseeds, food grains, cotton textiles, cement and salt.

Marmagao: It is a good natural harbour located at the mouth of Zuari river in Goa. It is an export oriented port; the main item is iron ore, others are pharmaceutical products, pig iron, iron casting, liquor and frozen fish. Imports are steel turning, potassium carbonate, shredded scrap and heavy melting scrap.

New Mangalore: It is an all weather, deep-water port located in Karnataka. The main export items are iron ore, coffee, cashew and coconut products, granite stones, manganese etc. Main goods imported are foodstuff, fertilizer and mineral oil, timber logs, wood pulp, liquid chemicals and LPG.

Kochi: This port has a natural harbour. It is located on the Arabian Sea-Laccadive Sea-Indian Ocean searoute. The goods imported are food grains, fertilizer and mineral oil. Principal exports are tea, coffee, rubber, cashew, coconut oil, coir products.

Ports of the eastern coast

Tuticorin: it is situated on the Gulf of Mannar in Tamilnadu. It is also known as V.O.Chidambaramanar port. One of the largest container terminals, it is an all-weather port which receives a large volume of international traffic. It used to be a port for maritime trade and pearl fishery. Main imports are edible oils, petroleum coke, coal, cement, mineral oil and fertilizers. Export items are salt, spices, limonite ore, granite, sugar, building materials and pearl.

Chennai: It is one of the oldest ports and the 2nd largest in the country. The harbour is artificial. Export items are groundnut, oilseeds, coffee, tea, tobacco, manganese, cotton textiles, leather, iron ore etc. Machinery, food grains, mineral oil, paper, iron and steel and raw cotton are imported.

Ennore: Also known as Kamarajar port, located 24 km north of Chennai, it is the first corporative major port in the country. It is an all

weather port having a mooring line measuring over 1000m in length and a depth of 15m which will allow vessels of up to 8000 TEU to operate. It handles rock mineral products, chemicals, POL, LPG, project cargo, automobiles and thermal coal.

Visakhapatnam: It is the deepest land-locked port of the country. The harbour is natural. The main exports are manganese, nuts, oilseeds, wood and iron ore. The main imports are machinery, chemical goods and mineral oil.

Paradip: It is an artificial deep-water port located on Odisha coast developed mainly for export of iron ore and manganese.

Kolkata-Haldia: Kolkata is a riverine port on the Hugli river, 202 km off the Bay of Bengal. Its harbour is artificial. At one time this port was one of the leading ports of the country. But due to siltation of the Hugli estuary the position has come down to sixth in the hierarchical order. It deals with petroleum products, fertilizers, coal, granite and iron ore. To supplement Kolkata port, Haldia port has been set up closer to the Bay of Bengal in the mouth of the Haldi river. It receives bulk cargoes of chemicals, petrochemicals and oils.

Minor ports on the eastern coast are Chandbali, Gopalpur, Machhilipatnam, Dhanuskodi, Puducherry, Karaikal etc.

Major ports under construction include Vizhinjam 16 km south of Thiruvananthapuram with deepest draft to berth mega vessels of 18,000 TEU; Krishnapatnam Port Co Ltd (Nellore district), 180 km north of Chennai, with a deep draft of 17.5m. In order to improve efficiency, productivity and quality of services as well as to bring in competitiveness in port services, the port sector has been thrown open to private sector participation. The Major Port Trust Act 1963 permits private sector participation in major ports for construction and maintenance of ports and harbours. Private sector participation has been allowed in a variety of ports services which includes construction and operation of terminals, warehousing and storage facility, dry docking and ship repair facilities.

Sea routes and trade

Shipping plays an important role in the transport sector of India's economy. Approximately 95% of country's trade volume (68 per cent in terms of value) is transported by sea. India has one of the largest merchant shipping fleet amongst the developing countries and ranks 16th amongst the countries with the largest cargo carrying fleet with 10.76 million Gross Tonnage as on 30.6.2011 and average age of the fleet being 18.03 years. Indian maritime sector facilitates not only transportation of national and international cargoes but also provides a variety of other services such as cargo handling services, shipbuilding and ship repairing, freight forwarding, light house facilities and training to marine personnel.

Inland water transport

India has over 14,500 km of navigable waterways. Considering the inherent advantages of inland water transport mode namely, fuel efficiency, environment friendliness, cost effectiveness and decongestion of road and rail networks, particularly for movement of bulk goods, hazardous goods and over-dimensional approach. Inland Waterways Authority of India (IWAI) was set up in 1986 for regulation and development of inland waterways for the purpose of shipping and navigation. Following five waterways have so far been declared as national waterways:- Allahabad-Haldia stretch (1,620km) of the Ganga-Bhagirathi-Hugli river system (NW-1) in 1986. Sadiya-Dhubri stretch (891 km) of Brahmaputra river (NW-2) in 1988.

Kottapuram-Kollam stretch of West Coast Canal along with Champakara Canal and Udyogmandal Canal (205 km) (NW-3) in 1993.

Kakinada-Puducherry stretch of Canal and Kallurelly Tank, stretches of rivers Godavari and Krishna (1028km) in 2008.

Talcher-Dhamra stretch of river Brahmani, Geonkhali Charbatia stretch of East Coast Canal, Charbatia-Dhamra stretch of Matai river along with Mahanadi delta river system (585 km) in 2008.

In addition, declaration of Barak river from Lakhpur to Bhanga (121 km) as sixth National Waterway is under consideration of the government.

Central Water Transport Corporation Ltd. (CIWTC) was incorporated on 22nd February 1967 by taking over all the assets of the erstwhile River Steam Navigation Co. Ltd. The principal activity of the corporation is the transportation of cargo through inland waterways in the country and through the routes identified in the Protocol on inland

water transport between India and Bangladesh. The Head Office is located at Kolkata with branches at Guwahati, Karimganj, Badarpur, Dhubri, Patna and elsewhere.



सत्यमेव जयते

राष्ट्रीय एटलस एवं थिमैटिक मानचित्रण संगठन

