

India Port Report: 10 Years of Reforms and Challenges Ahead

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India Port report by I-maritime, Mumbai presents a broader prospect of Indian port sector with a public policy prospective and has integrated focal points of different business entity like, shipping lines, port authority, port operators, logistics agencies and types of cargo transported by individual ports. This report has discussed the port history before and after the liberalized era and has broadly discussed the 10 years of the reforms and challenges ahead.

The report says that the problems with the major ports in India have been seen because of political pressures, lack of autonomy, lack of incentives, excess of bureaucracy and hierarchies' rigidities. The report also admits the fact that the last 10 years of globalization and economic reforms opened different ways to different sectors and port sector has diversified accordingly and has made significant improvement. One of the reasons for diversification of this sector was to increase the export and import relations with other countries and decreasing the public monopoly to make this sector more efficient by allowing the private companies to invest in this sector. This created the urgency of standard cargo handling equipments, modernization of the port systems and transforming this sector from labor-intensive to autonomous system in order to decrease the turnaround period and thus increasing the efficiency of ports.

Indian Port

The Indian port report by I-maritime has given a clear picture of India's major and minor ports. It has broadly discussed the individual's ports in details. The tariff has increased at CAGR of 8.3% in last 10 years. This rapid increase in tariff volume has opened different challenges to restructuring the major and minor ports in India. This has also created the competition among the ports. Therefore, a competitive policy must be developed which can provide a balance between private and public operators. Some ports have their natural benefits

Table 1: Regulatory Changes	
	Salient Features/Key Issues
Indian Ports Act 1908	<ul style="list-style-type: none"> • Government retention of the poor conservancy function • Distribution of maritime jurisdiction • Residual powers for safeguarding public domain interests
Dock Workers Act 1948	<ul style="list-style-type: none"> • Enacted to remove the poor work conditions • Regulates the term and conditions of port labor employment, welfare issues of the port and the port labors
M e r c h a n t Shipping Act of 1958	<ul style="list-style-type: none"> • DG Shipping acting as the operation arms, ensuring the safety rules to be effective. These operations are ship related (like, navigation, pilotage, deberthing etc) and cargo related (like-berth allocation, cargo handling and cargo accounting etc).
Major Ports Act 1963	<ul style="list-style-type: none"> • An autonomous board of trustees for each major ports • Transferring the ownership and assets and liabilities to the respective port trustees • Clear line of authority of port trusts • Regulation of tariffs by major ports itself
Environment Protection Act 1986	<ul style="list-style-type: none"> • Coastal regulations zones to be modified from time to time • New Ports need to obtain the necessary environmental clearance

while others face challenges to survive. Kandla port faces the challenges with Mundra and Navlakhi for primary hinterland in the dry bulk and liquid bulk segment. This has happened because of congestion between Kandla and Kharirohar. Even JNPT has been facing the problems because of excess labor and tariff share among ports. JNPT, being at the centre of the Mumbai city, has been facing logistics problems for cargo evacuation because of the congestion between roads and port linkages. It is very difficult to give here an overview of how different ports have improved their cargo handling capacity over the periods and which is the major product types the respective ports handle. This book is really interesting for those who want to get a detailed view of major and minor ports and want to get a detailed view of the comparative study of different ports as well as the individual contribution commodity wise to the overall tariffs.

New Projects

Following new projects will surely be helpful in changing the face of Indian port sector:

- Setting up of Rewash-aware Port project, near Mumbai on BOOT basis. This project has been handed over to Amma Lines.
- The proposal for the development of Offshore Stockyard and Berth by Mormugao Martina Ltd.
- Setting up of captive facilities at Thiruchopuram port to handle crude oil.
- A MOU signed between Government of India and Kakinada Indian oil LNG Constrorium for the development of LNG terminals with integrated power plant at Kakinada.

Chronology of Events: A Glance at last 10 years of Port Reform	
	Salient features
Coastal Regulation Zone Act, 1991	This act was passed leading to creation of Coastal Regulatory Zone Authority requiring compliance of all Greenfield port projects.
Multimodal Transportation of Goods Act, 1993	This act was passed with a view to rationalize customs documentation procedures as applicable to goods being moved through multiple modes of transportation, involving road, rail, coastal movement etc.
Government of Tamil Nadu, 1995	Converted the Tamil Nadu Port Department into Tamil Nadu Maritime Board (TMB), which now handles the responsibility for development of minor ports in the state.
Path Breaking Policy, 1996	The first time, which allowed the opening up of port sector for both overseas and domestic private sector investors. This resulted in the setting up of the first private sector managed by P&O at International Container Transshipment terminal at Nhava Sheva.
Port (Laws) Amendment Act 1997	Introduced to lay down the guidelines on private sector participation in port sector and a Tariff Authority for Major Ports (TAMP) established to regulate tariffs for major ports.
Gujarat Infrastructure Development Act In 1999	Passed by Gujarat government paving way for privatization of port sector in the State.
Year 2000	The Ministry of Shipping (holding charge for ports) was formed through bifurcation of the erstwhile Ministry of Surface Transport.
Union budget 2001 –02	Proposed a 10-year tax holiday for the development of new ports and corporatization of the Jawaharlal Nehru Port and tariff rationalization in the major port to be initiated.
Tenth five year plan (2002-07)	Laid down the proposals for modernization of ports, introduction of cost-effective services, enhancement of service quality, and effective privatization.

Port Back Up Infrastructure

Different port infrastructure has been built up over the periods.

- **Breakwaters** infrastructure has been constructing in different ports, which is needed to break the force of the sea waves. Vishakapatnam has been successful in demarcating inner and outer harbor fronts and thus enjoys a deeper approach channel. This inturn has increased the efficiency of the cargo.
- The proposal of the construction of new channels and berths (called as **capital dredging**) in JNPT is one of the steps ahead towards world-class port infrastructure. The dredging is required in most of the ports because of higher degrees of silation in certain ports, lower productivity in ports because of labor problems and port expansion plans. The capital dredging is needed in different new ports of Gujarat like Positra, Mundra, Hazira, Adani, and Pipavav etc.
- Indian port has added several berth-side facilities, which includes civil and mechanical construction and cargo handling installations. Dry bulk berths are used in different major

ports like Paradip, Vishakapatnam, and New Mangalore. Still there are many developments in the dry bulk berths. SAIL has signed a pact with International seas port for in exclusive use of the new berth at Haldia.

- There are many major and minor ports, which offer stevedoring, like JNPT, Mumbai, Mundra and Pipavav, which are really a positive sign of improving the port infrastructure in India.
- Other important infrastructure needed in the ports are Marine access, Port infrastructure, Cargo infrastructure, Land access infrastructure, Port superstructure services, Port operators, and Port service operators. However, the issues of settlement of payments are a major problem in stevedoring industry. Moreover, the initiative taken by the Vishakapatnam Port to organize the bunkering industries is a forward step in improving the port infrastructure. The landlocked hinterlands need to improve more because these act as a facilitators to the port as there are many ports, which have geographical benefit like, Kolkata and Mumbai serving as a national gateway ports for the landlocked hinterlands of eastern and northern regions respectively. Thus, railways, roads, pipelines etc are the alternatives to the port in some cases because of inflexibility of services in case of the port. The factors, which govern the development of ports, are proximity to global trade routes, growth of national cargo trade volumes port and the cargo hinterland, and regional inter-port competition.

Privatization of Port Sector

Privatization of the infrastructure is to some extent the necessity in today's world. The same goes to the port condition. The question of privatization in port arose because of inefficiency in the system. There are lots of issues, which need to be catered, like:

- Is private sector investment contributing the overall development of the port services?
- What will be the fate of this sector if there is the transformation of public monopoly to private monopoly in future?
- Will the labor union accept the large-scale entry of the private operators?

But there has been seen several problems in privatizing this sector, like multiplicity of activities within the port sector, and the argument to justify the port operation from public monopoly to private monopoly. However, the privatization of port sector is the need of the hour as Ports can act as a catalyst for socio-regional–economical developments of the country. In India there are four different port organizations, like service ports, tool port, landlord port and fully privatized ports.

In India, ports can be privatized through different options like:

- Service contract
- Management contract
- Concession
- Build own operate and
- Divesture

Privatization can be of Asset ownership, Operations and maintenance, Capital investment, and the Port infrastructures. Also the duration of the privatization can be defined before actual process of the privatization of the system. One of the options is that the asset is owned by private and public bodies but the operation, maintenance, commercial risk are taken over by private bodies. Thus, privatization of ports is an affair to mitigate the risks of the government and making the system more efficient. The Rakesh Mohan committee report 1996, 1996 GOI guidelines on port privatization opened a fresh look on the aspects of the privatization.

Examples of Privatization in Port Sector

- IDFC came out with a BOT model to privatize the ports whereby operators will be free to regulate the tariffs, selection of the operators to be done on highest royalty quoted, and the experience of the operators. However, liberalization and globalization started its own story of the privatization of different sectors.
- The development and operation of Nhava Sheva International Container terminal (NSICT) was first ever concession agreement to P&O Ports (Australia) based on BOT basis. NSICT has proved that privatization of ports will really work if it is properly managed. Today NSICT is rated high on the international scale. The reasons for success are the state-of-the-art infrastructure, first automated container terminal, logistics management and computerized invoicing.
- Based on the concessionaire method, Tuticorin port was privatized, headed by PSA, Singapore. In Tuticorin, Container and Captive jetties both have been privatized. Captive jetties handle 25% of the cargo and mainly associated with coast-based plants.
- Mundra Port was also developed by private sector based on BOOT concept and today it is a vast hinterland of northern, western and central India because of its geographical advantages and these advantages have been properly utilized because of the BOOT concept and Mundra has changed its status from minor to major port.
- Among the private terminal operators, P&O ports (Australia), Maersk Sealand (Denmark), PSA Corporation (Singapore), stevedore services of America (USA), Dubai Ports Authority (DAE) have made the significant changes in the Indian ports like JNPT, Tuticorin, Pipavav, and Chennai.

Problems with the Port System

There are the following problems seen in the port system:

- *Too much idle time at the berth;*
- *Frequent break down of obsolete equipment;*
- *Inadequate berth and dredging;*
- *Absence of round-the-clock working in three shifts;*

- Lack of commitment to work 365 days in a year;
- Non-matching working culture of customs department for the commercial needs of the port;
- Lack of integration of port and trunk railways;
- No assured timings for the container trains;
- Inadequate financial and administrative powers;
- *Rigid institutional framework of ports; and lack of statutory and legislative support.*

But there are two major problems, which are prevailing in the port sector. The first one is how to rationalize the tariffs and another one is the labor problem. There have been different arguments among private operators, TAMP and NSCIT for the tariff rationalization.

D) Tariff Rationalization: Tariff Authority for Major Ports (TAMP) was set up in 1997 to maintain a balance between public and private port terminals and to modernize the port sector. TAMP was established when the government allowed the private sector in this field. This was done by amending The Major Port Trust Act of 1963. TAMP has been successful in settlement of the grievances of port users. Laying down the strict tariff regulation is out of the question as such policy must be acceptable to the private operators. Different methods of tariff rationalization have been discussed.

a) Cost plus method

- Is not accepted by the private port developers and they favor market-determined tariff rates.
- This creates the conflict of tariff rationalization, which is really a tough task. The private operators argue that the market pricing of tariffs will be a better practice as it correlates the port tariffs to demand–supply dynamics of the market and focuses on maximizing the returns on investment by optimizing the port facilities. However, TMAI argues that Market price method leads to high tariffs and low service delivery and create the same case of 1990s.

b) Market Price Method

- Applies well if the inter-port and intra–port competition is there but it is out of the questions in Indian context.
- TAMP also argues that it is the stakeholders who have also taken in the considerations because they have their own wishes and they want a return on the investment.

c) ROCE (Return on Capital Employed) Method

- NSICT has its different proposal, which states that the tariff must be determined on ROCE.
- Gives the incremental opportunity costs of fresh investment of the projects instead of getting all return in the short run.

Table-2: Success Story and Future Plans of Some Ports		
	Success story	Future plans of Ports
Kandla Port	<ul style="list-style-type: none"> Berths well equipped with electric level luffing cranes Growth of tariff at CAGR of 6.03% 	<ul style="list-style-type: none"> To increase draft of the channel to 14 meters, construction of 4th oil jetties
JNPT, Nhava Sheva	<ul style="list-style-type: none"> Well connected by rail and road to its hinterland by direct linkages. Growth of tariff at CAGR Of 23.2%. Aided by foreign investment and assistance, container volumes and efficiency have grown. 	<ul style="list-style-type: none"> Conversion of existing bulk terminal into a third container terminal and dredging projects to deepen the channel.
Mumbai Port	<ul style="list-style-type: none"> Has enclosed wet docks for handling crude and petroleum products. 	<ul style="list-style-type: none"> Modernization of different jetties, construction of offshore container terminal, and replacement of harbor tugs and wharf cranes.
Mormugao port	<ul style="list-style-type: none"> It has become the largest iron exporting port of India, accounting 40% of the total volume because of its well equipped infrastructure The third port in the country to implement EDI. 	<ul style="list-style-type: none"> Modernization of mechanical handling facility, construction of an outer harbor.
Ennore Port	<ul style="list-style-type: none"> India's first corporatized port All weather port Modern navigational facilities Positioned within today's IT-driven integrated logistics chain 	<ul style="list-style-type: none"> Provide scope for private participation in different port services Proposes to add five more berths and the plans to set up a 1880 mw LNG power project in association with a private Consortium.
Paradip Port	<ul style="list-style-type: none"> Has shown substantial cargo handling of CGPA of 10.7%. 	<ul style="list-style-type: none"> To enter container trade, plans for a special economic zone around Paradip port.
Mundra Port	<ul style="list-style-type: none"> Adopted BOOT as important piece of legislation and converted itself from minor to major port 	<ul style="list-style-type: none"> Has attracted many feeder/mainline vessels. Container Corporation of India (Concor) has already entered into a memorandum of understanding for transport tariffs. The 57-km long Mundra-Adipur rail link has just gone operational.
Vishakapatnam Port	<ul style="list-style-type: none"> Handles almost 40% coking coal imported in India 	<ul style="list-style-type: none"> Plan for strengthening East Quay berths Talk of installation of single buoy mooring system Construction of multipurpose berth in outer harbor Establishment of container freight station

- NSICT also proposes the inclusion of the tax as cost element in tariff determination and allow ability of technical services fee under such tariffs but TAMP does not find it suitable to impose ROCE method for tariff regulations and still prefers Cost of Capital method.

II) Labor Problem: The most important issue regarding the stevedoring job in India relates to the problem of labor. In this case, the private stevedores are not allowed to allow using their own labor force and they have to take the labor force from Dock Labour Board (DLB) of the respective ports. This has been creating the problem among the labor union in different ports because DLB interferes in allocating the number of labors at different gangways. Not only this, this DLB also determines the rate to be paid. There are other factors, which create the problem from labor. On the one hand, the labor force is unskilled and thus creates the inefficient port system and this labor force makes a lobby against any changes made in the port sector because they are afraid of layoffs once the system is being changed because of automation. This is a major problem in almost every port of India, which is also affected by the politics.

I-maritime is of the opinion that proper utilization of existing infrastructure and the implementation of the future plans will change the facet of the port sector. The report says that the port sector is not only a type of transport in the present scenario but it has become an important part of global value chain, which has been possible because of the reforms of the past 10 years. There are many bottlenecks like:

1. Poor road and rail connectivity to hinterland
2. Labor unions obstruction and unskilled labor workers
3. Too much government control
4. Limited responsiveness to the market demand, which needs to be uprooted in order to increase the operational efficiency.

An excellent example is Gujarat, which has the largest coastline of 1,600 km with 41 ports, and has shown a high positive correlation between growth in cargo and growth of port capacity because of the multiple-port business models and encouraging the private bodies in this sector. This book will surely be helpful for those policy makers who just want to pass on the information to the respective authority. On the other hand, it is the guidelines to the port authorities holding higher posts. It is a must to read for all those who are interested in the field of infrastructure. 📖

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Reference # 27J-04-03-10