

## EXECUTIVE SUMMARY

There are 11 major ports in India governed by the Major Port Trusts Act, 1963, which serve as the primary conduit for India's international trade, by handling three-fourths of the nation's maritime cargo. These ports function as autonomous bodies under the Ministry of Shipping. They follow a traditional business model where ports take upon themselves, the task of creation of common infrastructure and the responsibility of commercial operations like marine and cargo handling services. However, with the rapid increase in cargo traffic over the last decade, massive investments in capacity augmentation had become necessary. To address the need, the Ministry formulated the National Maritime Development Programme in 2005-06, which envisaged an investment of Rs 55800 crore for the major ports by 2012. The programme also indicated a paradigm shift in policy towards the 'landlord' model, whereby the ports would act as trade facilitators by investing in common user facilities like deepening of channels, improvements in connectivity, etc, leaving commercial services to private entities under revenue sharing arrangements.

The performance audit revealed that the depths available at the major ports were unable to cater to all types of vessels that plied international waters. Moreover, dredging undertaken by these ports had not been effective as significant variations were noticed between the drafts at the access channels and the berths. The depths reported by the ports did not provide adequate assurance to the visiting vessels. The dredging policy of the Ministry compelled some ports to engage the Dredging Corporation of India for the work, but it often failed to maintain the required drafts. Further, deepening projects, critical for the competitiveness of the ports, were neglected. These factors limited the berthing options available to ships, resulting in their queuing up for a few berths, leading to high pre-berthing detentions. It was estimated that maritime trade in India lost more than Rs 1400 crore per annum on account of such detentions. It was also found that important marine services like providing of tugs and pilots for safe navigability, in which ports enjoyed a monopoly, were not being carried out efficiently. Lack of provision of night navigation facilities also restricted round -the -clock access of vessels to the ports.

It was found that the cargo handling services of the ports were inefficient, as a predominant number of berths still did not have the dedicated facilities that were necessary for quick handling of the main forms of cargo like liquid bulk, dry bulk and containers. Liquid bulk which primarily consisted of petroleum, oil and lubricants, constituting 33 *per cent* of the total cargo, faced handling inefficiencies due to slow rates of discharge at specialized berths, leading to high turn-round time of vessels. The users at the major liquid bulk handling ports were, therefore, compelled to shift handling points to offshore Single Buoy Moorings, thereby affecting the revenues of the ports. It was found that dry bulk cargo, viz. coal, iron ore, fertilizers, etc, comprising around 40 *per cent* of the total cargo, was mostly handled at non-mechanised berths as only eight *per cent* of all the dry bulk berths at the ports had specialized equipment for the same. Moreover, 55 *per cent* of equipment available at all ports except at the Jawaharlal Nehru Port had crossed their economic

lives, resulting in low utilization, with users preferring to hire modern and privately owned equipment. For faster handling, the users of the ports were hiring private labour at additional costs, over and above the mandatory engagement of port labour. It was also found that the ports were assessing labour productivity on the basis of outdated norms. Further, the entire handling output was being attributed to port labour, disregarding the engagement of private labour, leading to misreporting of labour productivity to the Ministry. Thus, the inefficient rendering of marine and cargo handling services made the ports less attractive to trans-shipment cargo and bigger vessels, as compared to neighbouring ports of Colombo and Singapore.

In the case of containers, which saw the fastest growth in traffic during the period covered, around 65 *per cent* were being handled at privately operated terminals in Chennai, Jawaharlal Nehru Port and Tuticorin. The handling efficiency in these terminals touched international benchmarks.

The performance audit revealed that storage space and connectivity at the ports, necessary for smooth accumulation and dispersal of cargo, was inadequate. Dispersal of cargo by rail was affected due to lack of double-line connectivity, low mechanisation at sidings, restrictions in lengths of sidings causing part-rake handling and the absence of exclusive freight corridors. Efficient dispersal of cargo by road was hindered by narrow last-mile linkages, city traffic restrictions on movement of trucks during daytime and lack of exclusive port roads connecting to highways. To address these problems, a number of schemes had been planned and the Committee on Infrastructure had recommended four-laning of roads and doubling of railway lines at ports by 2008. However, due to delays in implementation, only four out of 33 schemes could be completed by March 2009. The possibility of alternative modes like inland water transport and coastal shipping that were being used extensively at international ports worldwide, remained underexplored.

Procedures for assessment, monitoring and reporting of performance by ports were fraught with several deficiencies. The assessment of berth occupancy, a prime indicator for congestion at ports, was distorted. As occupancy was shown in terms of days, a berth occupied for even an hour was being shown to have been occupied for a whole day. Thus, high occupancy was being reported for relatively idle berths. The calculation of handling capacities at berths did not represent the optimum handling possible, based on equipment support, size of vessels, nature of cargo etc., but was based on the actual handling done in previous years. Existing inefficiencies were, therefore, factored into the calculation, resulting in understatement of the capacities of the ports. It was also noticed that critical performance parameters such as pre-berthing detention and turn-round time were not being recorded and reported correctly by most of the ports, leading to the risk of real problems remaining unidentified and unaddressed. Moreover, the targets set by the Ministry through Memoranda of Understanding with the ports, remained mere upgrades of their previous years' performances and were neither based on any norms nor were always mutually consistent. Abnormally low targets like idle time of 42 *per cent* in Haldia and less than 20 *per cent* equipment utilisation at Mumbai did not incentivise efficiency.

Audit observed that only 31 out of 170 schemes planned for the first phase of National Maritime Development Programme (March 2009) could be completed at the 11 major ports, resulting in an investment lag of 80 *per cent*. Implementation of critical deepening and connectivity projects, which was the primary responsibility of the ports under the 'landlord' model, was poor. Private participation in commercial operations at ports, as envisaged under the model, was slow due to delays in handing over of sites and grant of security clearances. An analysis by Audit showed that 18 out of 26 ongoing schemes were delayed by over a year due to delays in approvals at various stages. Build Operate Transfer agreements for the terminals included clauses containing ambiguities regarding the nature of the services to be provided to the ports.

Thus, in order to enhance maritime trade and competitiveness of the ports with the international ports and the emerging private ports in India, the Ministry needs to ensure formulation of adequate draft plans, assessment of dredging requirements based on long-term planning, adequate night navigation facilities, rapid mechanization of handling facilities, phasing out of outdated equipment, proper and effective implementation of deepening and connectivity projects, correct reporting of berth occupancy as well as pre-berthing detention and turn-round time and strict adherence to the defined common minimum standards of performance.