

HIGHLIGHTS AND SUMMARY OF RECOMMENDATIONS

Marine Operations

- Lack of navigable depth was the biggest challenge faced by major ports in India as reported drafts did not provide adequate assurance to visiting vessels. As the issue was not addressed adequately, large ships of higher than 60000 dead weight tonnage were not visiting to these ports except for Chennai, New Mangalore and Visakhapatnam. Twenty one *per cent* of the vessels visiting Haldia needed to be lightened to gain access to its berths.
(Paragraph 2.1.1 and 2.1.2)
- Due to significant mismatches in drafts at channels and berths at some of the ports, the shipping lines were left with limited berthing options besides underutilization of draft at approach channels.
(Paragraph 2.1.3)
- Depth survey procedures at the ports were not standardised and in some cases, survey results were not included in the dredging contracts. As per dredging policy of the Ministry, some ports were compelled to engage the Dredging Corporation of India, which often failed to maintain the required drafts. Dredging by port dredgers was costly due to poor utilisation and hiring of private dredgers was justified on faulty basis.
(Paragraph 2.2.1 and 2.2.2)
- Capital dredging projects at Haldia and Kolkata were neglected and poor management of maintenance dredging threatened navigability at these ports.
(Paragraph 2.2.3)
- Barring Visakhapatnam, significant delays were noticed in providing pilotage to incoming vessels in most of the ports.
(Paragraph 2.3.1)
- Accessibility at night was restricted at Cochin, Jawaharlal Nehru Port (JNPT), Kandla, Kolkata, Mumbai and Tuticorin due to lack of adequate facilities for night navigation.
(Paragraph 2.4)

- Maritime trade lost an estimated amount of Rs 1400 crore per year on account of pre-berthing detentions. These, *inter alia*, were caused due to lack of specialised berths, resulting in congestion of vessels.

(Paragraph 2.6)

Recommendations

- *Concerted efforts should be made by the Ministry to ensure the minimum draft availability of 14 metres as recommended by the Inter-Ministerial Group.*
- *The draft plans of each port, particularly Chennai and Visakhapatnam should focus on addressing the significant mismatches of drafts between the approach channels and the berths.*
- *As the present dredging policy of the Ministry compelled some ports to engage Dredging Corporation of India in spite of the latter failing to meet the targets, a clear cut policy ensuring competitive bidding should be formulated.*
- *Assessment of dredging requirements should be made based on long-term planning and proper surveys with the help of specialized organizations like National Institute of Ocean Technology and Central Water and Power Research and Consultancy Services for better quality assurance.*
- *Proper efforts should be made to improve night navigation facilities in Cochin, Kandla, Kolkata and Tuticorin.*
- *Factors leading to pre-berthing detentions on port account should be identified and addressed by the ports.*

Handling Operations

- Liquid bulk – primarily consisting of petroleum, oil and lubricants (POL) constituting 33 per cent of the total cargo in 2008-09, faced handling inefficiencies due to slow rates of discharge through Marine Loading Arms at specialized berths, leading to high turn-round time of vessels.

(Paragraph 1.1, 3.1.1 and 3.1.2)

- At two ports – Haldia and Cochin – insufficient storage capacities and low drafts at liquid berths respectively resulted in diversion of cargo to other ports. Revenues of Cochin port declined as users shifted handling points to the offshore Single Buoy Mooring.

(Paragraph 3.1.2 -3.1.3)

- The method of measurement of the volume of liquid cargo handled and the system of billing varied from port to port. Absence of any standard norm for measurement of liquid bulk resulted in discrepancies between the actual cargo handled and the quantities billed.

(Paragraph 3.1.4)

- Only eight per cent of all berths at the ports had specialized equipment for handling dry bulk, viz coal, iron ore, minerals, fertilizers, foodgrains, etc. A significant proportion was being handled at non-mechanised berths at Chennai, New Mangalore, Paradip, Tuticorin and Visakhapatnam, resulting in higher turn-round times.

(Paragraph 3.2.1)

- Container handling efficiency at JNPT and Tuticorin, particularly at privately operated terminals, fulfilled international benchmarks. Other major container handling ports like Chennai, Cochin and Kolkata registered lower TEUs per berth as these ports were having less equipment support.

(Paragraph 3.3.1)

- At Cochin, 94 *per cent* of the port equipment were beyond their economic lives.

(Paragraph 3.4.1)

- Except for Kandla, the average utilisation of all equipment belonging to nine other ports remained significantly below the minimum utilisation norm of 60 *per cent* as prescribed by the Ministry. This indicated low demand for port-owned equipment.

(Paragraph 3.4.2)

- In all ports except JNPT, 55 *per cent* of all available equipment for handling cargo had crossed their economic lives by 2007-08. At Haldia, where dry bulk made up the biggest cargo share, instead of procuring dry bulk related handling equipment, the port spent Rs 71.19 crore on purchase of container handling equipment that remained underutilized.

(Paragraph 3.4.1 and 3.4.4)

- Assessment of labour productivity at ports was based on outdated norms and was not standardised.

(Paragraph 3.5.2)

- As Handling by port labour was generally inefficient, the Port users at some Ports had to hire private labour at additional cost to overcome handling inefficiencies. The ports, however, attributed the entire handling output to port labour, thereby distorting the reporting of labour productivity to the Ministry.

(Paragraph 3.5.2)

- Availability of open storage sheds was inadequate and of poor quality at Cochin, Kandla, Kolkata and Mumbai. The practice followed at Chennai port of regular review and re-allotment of unutilized licensed storage space was good.

(Paragraph 3.6.1, 3.6.2 and 3.6.3)

- The pollution control cell at Mumbai was inadequately manned; control equipment was not being maintained and air quality was not being adequately monitored there. Visakhapatnam port introduced a number of good practices for containing pollution arising from handling of dry bulk cargo.

(Paragraphs 3.7.2)

Recommendations

- *Ports should address the problem of underutilisation of existing discharge capacities of Marine Loading Arms. To reduce the turn-round time of liquid bulk vessels, low capacity MLAs should be replaced with high capacity arms.*
- *The Ministry should fix a standard system of measurement of liquid cargo and frame a standard document for verification of the quantities handled and claiming of wharfage.*
- *Dry bulk should be handled exclusively at specialised berths with mechanised handling facilities to arrest the increasing turn-round time of dry bulk vessels.*
- *With the increasing trend of containerization of cargo, ports should create facilities of specialised container berths. Possibilities for conversion of existing general cargo berths into such berths should be explored. .*
- *Concerted efforts should be made by the ports to phase out outlived equipment. Selection of equipment should reflect the port's business plan, trend and type of major cargo handled and users' preferences.*

- *For making correct assessments of labour productivity, the ports should revise the manning scales and datum as recommended by the National Tribunal in 2006.*
- *The 11-month ceiling on storage area licences may be modified in the interest of long-term users.*
- *The Chennai model of storage area review may be adopted at other ports.*
- *Ports should consistently deploy oil booms and other protective measures while handling POL cargo to restrict the impact of oil spillage. Oil sensors to detect spillage of oil in the water front and oil-water separators, skimmers, dispersant spray systems etc. should be used to remove pollutants from water bodies as per international best practices.*
- *Ports should make provisions for levying fines on tankers/vessels polluting harbour waters and berths and recover the cost of consumables used for cleaning operations of oil spillages from the users.*

Port connectivity

- In comparison to international ports like Rotterdam, where more than 50 *per cent* of cargo moved by inland barges, the use of inland waterways and coastal shipping was minimal, except at Mormugao.
(Paragraph 4.1)
- Railway infrastructure was found to be deficient at most ports due to lack of double line connectivity, low mechanisation at sidings, restrictions in length of sidings, causing part-rake handling and absence of exclusive freight corridors.
(Paragraph 4.2- 4.4)
- Efficient dispersal of cargo by road was hindered due to narrow last-mile linkages, city traffic restrictions on movement of trucks during daytime and absence of exclusive corridors connecting highways to ports.
(Paragraph 4.6-4.7)

- Due to delays in implementation, only one of the 11 rail connectivity projects and two out of 22 road connectivity projects at ports could be completed by March 2009, as planned.

(Paragraph 4.5 and 4.8)

Recommendations

- *Four-lane roads and double line rail connectivity as recommended by the Committee on Infrastructure should be taken up for speedy implementation. Increased length of loops at sidings and larger space envelopes should be factored in while implementing new rail projects.*
- *Mechanization of handling at sidings should be considered at ports with larger volumes of bulk cargo.*
- *Emphasis should be laid on widening of the port roads where they are narrow.*
- *Implementation of road projects in close coordination with National Highway Authority of India should be taken up expeditiously for efficient evacuation of cargo from the ports.*

Performance indicators

- Performance targets set by the Ministry through Memoranda of Understanding with the ports remained mere upgrades of the previous years' performances and were not based on any norms. The standards of performance also varied from port to port.

(Paragraph 5.1 and 5.2)

- At Haldia, the targets allowed 42 *per cent* idle time at the berths while at Mumbai, the targets for equipment utilisation were less than 20 *per cent* of the total working time. In contravention of Ministry's stipulations against lowering performance targets, several ports viz. Haldia, JNPT, NMPT and Visakhapatnam reduced the targets of PBD and TRT in their MoUs.

(Paragraph 5.2 and 5.2.4)

- Important performance parameters such as pre-berthing detention and turn-round time were not being recorded and reported correctly by most of the ports. The segregation of these parameters into 'port account' and 'non-port account' to identify the delays under separate heads, was not done.

(Paragraph 5.3)

- For computing berth occupancy, a berth occupied for even an hour was shown to have been occupied for the whole day. Thus, relatively idle berths reported high occupancy. In Cochin, a berth showing 100 *per cent* occupancy was found to be actually occupied for only 16 *per cent* of the time, when computed in hours. Similarly, at New Mangalore, a berth showing 60 *per cent* occupancy actually handled only nine vessels in two months. Moreover, several investment decisions like widening and reconstruction of berths were based on inaccurately reported high occupancy rates of berths.

(Paragraph 5.5)

- The mode of calculation of the handling capacity of the berths did not represent the optimum handling possible at those berths but was based on actual handling done in previous years. The existing inefficiencies were, therefore, factored into the calculation, due to which most of the ports were reporting high capacity utilisation.

(Paragraph 5.6)

Recommendations

- *The Ministry should consider computation of berth occupancy in hours. Capital expenditure decisions on new berths should be based on the occupancy and utilisation figures of the existing berths in hours.*
- *Capacity should be objectively assessed based on the capacities of equipment and other infra-structural facilities and should not merely reflect the handling done during the earlier years.*
- *The Ministry should ensure correct reporting of pre-berthing detention and turn-round time by the ports.*

- *All major ports should adhere to the defined common minimum standards of performance based on the output of standard equipment under normal working conditions without making allowances for deficiencies.*
- *In the case of equipment, the ports should adopt measures like prioritization and synchronization of maintenance schedule, proper inventory management, timely cargo aggregation and disposal of obsolete/surplus equipment, without undue delays in achieving better availability and utilisation, rather than lowering the targets to indicate achievements.*

Schemes undertaken

- The National Maritime Development Programme drawn up by the Ministry of Shipping in 2005-06 envisaged spending about Rs 27075 crore in the implementation of 170 infrastructure augmentation projects which were planned under the first phase to be completed by March 2009. However, progress on implementation was marred by delays at various stages and only 31, i.e. 18 *per cent* of the projects could be completed.

(Paragraph 6.1 and 6.2)
- Out of 26 ongoing schemes, 18 schemes were delayed by over a year due to delays in approvals of the schemes at various levels. Implementation of schemes was poor at JNPT, Kandla, Mormugao, Mumbai, New Mangalore, and Visakhapatnam.

(Paragraph 6.2.1)
- Adequate priority was not accorded to the most critical projects like deepening and connectivity projects, which were the main responsibility of the ports under the 'landlord' model. Only two out of the 15 deepening schemes planned for Phase- I of National Maritime Development Programme could be completed.

(Paragraph 6.2.2)
- The progress of schemes planned for privatisation of commercial services, mainly in the nature of building and operation of terminals under lease, was also slow due to delays in handing over of sites, grants of security clearances, etc. Only one out of the seven terminals planned could be completed by March 2009.

(Paragraph 6.3)

- The minimum performance prescribed for the private operators under the Build Operate Transfer (BOT) agreements varied widely and was not properly benchmarked.

(Paragraph 6.3.2- 6.3.4)

Recommendations

- *The Ministry should formulate a clear time schedule for all stages of schemes and concerted efforts should be made to implement these schemes in a time-bound manner.*
- *Planning by individual ports should be aligned to the National Maritime Development Programme, which is a national Plan document. Integration with other national Plans like that of the Railways and National Highways Authority of India should also be considered.*
- *While framing BOT agreements, performance benchmarks need to be fixed as per identified best practices. The Ministry should play an active role in identification of such best practices.*