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W.P. No. 2014-01-06
January 2014

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AHMEDABAD-380 015
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Abstract

PPP mode of investment in Indian ports has made a significant headway and is preferred for investments today. The 12 major ports and about 200 minor ports along the 7,500 km coastline of the country have together traded about 935 mt of cargo in 2012-13. The traffic is growing each year. The share of non major ports is rising and has reached 42% in year 2012-13. The PPP mode was more popular at non major ports controlled by the State Government, than major ports controlled by Central Government. During the XI Plan, the overall investment in the port sector was significantly lower than planned. It has had an impact on the efficacy of PPP investment in this sector. This paper analyses the issues behind this, to evolve the way forward.

The issues which the port authorities or private parties have faced so far should be of interest to stakeholders wanting to leverage the PPP mode of investment. While there are arguments for and against this mode, the overall outlook for PPPs has been positive in terms of bringing about competition, fairness in operations, efficiency and quality of service.

Keywords: India, ports, PPP

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Introduction

Port infrastructure creation is a subject of both the Central and State Governments. While major ports are under the Centre's Ministry of Shipping (MoS), non major ports are under the respective State Governments. As of December 2013, there were 12 major ports in India and about 200 non major ports, across the nine maritime states and two union territories, along the approximate 7,500 km coastline of India. In 2012-13, Indian Ports handled 95% by volume and 77% by value of international trade.

Figure 1: Major and Key Non Major Ports of India

Traffic Profile

In the year 2012-13, 935 million tons (mt) of cargo were handled at Indian port. The major ports handled 546 mt (58% of total), while non major ports handled 389 mt (42% of total).In 2011-12, major ports handled 560 mt (61% of total), while non major ports handled 353 mt (39% of total). Between 2011-12 and 2012-13, absolute volume in major ports came down, while it went up in non major ports.

Since 2009-10, Sikka, a non major port in Gujarat, has been the largest port by cargo volume, surpassing Kandla, a major port in Gujarat, that year. It has essentially been a captive port to the Reliance refinery. During 2012-13, Sikka handled 124 mt, while Kandla handled 94 mt in the second place. During the six month period, April to September 2013, Mundra, another non major port in Gujarat, emerged as the second largest port, surpassing Kandla. Mundra handled 48.21 mt, while Kandla handled 45.95 mt.

In 2012-13, among the non major ports in maritime states, Gujarat accounted for the highest share at 74%, handling 288 mt, followed by Andhra Pradesh at 46 mt. Among maritime states during 2012-13, Gujarat (including Kandla), handled 382 mt, generating a share of 41% of total Indian port traffic. Andhra Pradesh (including Visakhapatnam) followed, with 105mt, at a share of 11%.

Data in 'Traffic Profile' section is sourced from:

1. Major Ports of India A Profile: 2011-12, Indian Ports Association
2. e-magazine (April 2013), Indian Ports Association
3. 'Presentation to the Board of Directors,' APSEZ Limited, January 2014
4. 'Minor Ports in State Clock 11% Growth in Cargo Volumes,' Indian Express, May 24, 2013
5. www.gmbports.org
6. www.aapa-ports.org

In 2011, among the top 100 ports of the world, 35 handled more than 100 mt each. In comparison to this, India had only one port which handled more than 100 mt. The distribution of number of ports in India by traffic is shown in Table 1.

Table 1: Traffic wise Number of Ports in India, 2012-13

Traffic (mt)	above 100	70-100	40-70	20-40	10-20	7-10	4-7	2-4	1-2	Total
No of Ports	1	2	5	6	7	4	5	5	2	37

Source: 'www.ipa.nic.in, www.gmbports.org, www.aapa-ports.org,' accessed on January 14, 2014

Port Investments in the XI Plan

The impetus on investment in ports was increasing in each of the five year plans and Public Private Partnerships (PPP) was becoming the preferred mode. The X, XI and XII Five Year Plan's allocation of funds to the Port sector (including Inland Waterways (ILW)) is shown in Table 2. Private investment in PPPs accounted for 84.1% of the X Plan expenditure, 81.5% of the XI Plan expenditure and 86.7% of the XII Plan projections.

While the projected total investment in the XI Plan was Rs 87,995 crores (cr), the actual expenditure was Rs 44,526 cr. In real terms, the relative investment was even lower, since the projections were at 2006-07 prices while the expenditure was at 2011-12 prices. The investment through all the avenues, Centre, State and Private was lower than the original figure. While the projected investment through the Centre was Rs 29,886 cr, the actual investment was Rs 5,480 cr. In the case of states, the projected figure was Rs 3,627 cr while the actual was Rs 2,759 cr. For private investment in PPPs, the projected investment was Rs 54,479 cr while the actual was Rs 36,298 cr. Interestingly, as a consequence of the reduced investments, the share of private investment in PPPs went up from a projected share of 61.9% to 81.5% of the total.

Table 2: Five Year Plan Estimates for Ports

Sector	X Plan (Actual Expenditure)		XI Plan (Original Projections)		XI Plan (Actual Expenditure)		XII Plan (Projections)	
	Rs cr (at 2006-07 prices)	%	Rs cr (at 2006-07 prices)	%	Rs cr (at 2011-12 prices)	%	Rs cr (at 2011-12 prices)	%
Ports (incl ILW)	22,351		87,995		44,536		197,781	
Centre	2,630	11.8%	29,886	34.0%	5,480	12.3%	20,670	10.5%
State	916	4.1%	3,627	4.1%	2,759	6.2%	5,563	2.8%
Private	18,805	84.1%	54,479	61.9%	36,298	81.5%	171,548	86.7%

Source: Twelfth Five Year Plan

The focus of this paper is to highlight the issues which have resulted in the reduced investment by the private partners in the PPPs. This reduced investment has also been affected by the reduced investment of the Centre in various facilitating projects. (The Annexure analyses the reasons for the reduced investment by the Centre.)

Private Investment in PPP Projects

In the XI Plan, the private investment for PPPs had come down by Rs 18,181 cr from a projection of Rs 54,479 cr to an actual expenditure of Rs 36,298 cr. We attempted to account for the reduction in investment, by identifying the significant postponed investment in projects into the XII Plan.

Table 3 gives the significant postponed investments in the major ports. The total postponed investments presented here account for Rs 16,414cr, to be spent in the XII Plan. The same project heads had been allocated Rs 13,904 cr in the XI Plan, most of which were unspent, forming a significant share of Rs 18,181 cr of unspent PPP investments.

Table 3: PPP Projects in Major Ports

	PPP Projects	**Private Investments (Rscr)**
1	Fourth Container Terminal, JNPT	6,700
2	Chennai Mega Container Terminal, Chennai	1,562
3	Shipbuilding Yard, Tuticorin	1,500
4	Ennore Container Terminal, Ennore	1,407
5	Two Offshore Container Terminals, Mumbai	1,140
6	Berths at Tuna, Kandla	818
7	330 m berth, JNPT	600
8	Berths 13-16, Kandla	588
9	Deep Draft Iron Ore Berth, Visakhapatnam	538
10	Deep Draft Coal Berth, Visakhapatnam	426
11	Mechanized Coal Berth No 7, Mormugao	406
12	LNG Regasification Terminal, Phase II, Cochin	360
13	Container Terminal, New Mangalore	269
14	Ship Repair Complex, Cochin	100
	Total	**16,414**

Source: 'Report of Working Group for Port Sector for the XII Five Year Plan,' Ministry of Shipping

"Within non major ports, the XI Plan experiences of states revealed that barring Gujarat and Odisha, the other seven states viz: Andhra Pradesh, Goa, Karnataka, Kerala, Maharashtra, Pondicherry and Tamil Nadu could create much lesser capacities than was envisaged in the plan"[1]. In Maharashtra, Rewas port was one of the major investments under PPP mode with an estimated project cost of Rs 5,200 cr that did not happen.

We give a brief description of some of the major PPP projects, which did not pick up in the XI Plan.

Fourth Container Terminal, JNPT

[1]"AP enjoys 46% share in ports sector under PPP model: Assocham," Business Standard, May 24, 2013

With the growing traffic and capacity constraint for container handling, JNPT floated tenders for the fourth container terminal in 2009. It had a planned capacity of 4.4 million twenty foot equivalent units (mTEUs) at an investment of Rs 6,700 cr. The project went through policy changes, mainly from the perspective of leveraging competition and whether or not to allow existing private parties operating within JNPT to bid. Subsequently, a bidder (PSA-ABG) was selected in June 2011. However, the Concession Agreement was not signed, and the winning bidder pulled out of the project paying liquidated damages, presumably due to non viable aggressive bidding, with a revenue share of 51%. On the premise that it was a large project, in November 2012, the project was split into two for simultaneous implementation. However, that decision was reverted and JNPT invited tenders again in June 2013. As of October 2013, the new tenders were under evaluation.

Chennai Mega Container Terminal, Chennai

Chennai was to develop a mega container terminal with a capacity of 4 mTEUs containers at an investment of about Rs 4,000 cr. In the first round in 2011, Adani Port Special Economic Zone (APSEZ) emerged as the sole bidder proposing a revenue share of 5%. Chennai rejected this due to the revenue share being low. In the second round in December 2012, Vadinar Oil Terminal and Essar Port and Terminal Ltd (VOTL) became the successful bidder, behind APSEZ who bid again, but did not get security clearance. VOTL had proposed 5.25% revenue share. Chennai rejected the bid on the ground that the revenue share was low. The tender was floated for the third time in May 2013 to seven shortlisted bidders. None of them responded, citing the delay in the launch of a vital connectivity project, namely the Chennai Port-Maduravoyal elevated four-lane link road. Another reason was the delay in completing the Ennore-Manali Road Improvement Project. Chennai had decided to restructure the package for making it more attractive to bidders.

Ennore Mega Container Terminal, Ennore

The project of building a dedicated container terminal within Ennore was awarded to a consortium led by Spain's Grup Maritim TCB in August 2010. Phase I of the project was of 730 m berth length with a capacity of 1.4 mTEU containers at an investment of Rs 1,270 cr. The consortium backed out of the project in October 2012 citing delay in finalizing funds and raised questions on project viability. This has led to Ennore inviting fresh bids in July 2013, after making some changes in quay length, capacity and cost for making the project more attractive. It received responses from eight firms. Ennore had yet to finalize the awardee.

Mechanized Coal Berth No 7, Mormugao

APSEZ was awarded the development of Berth No 7 in Mormugao in 2009. It was a project of developing a mechanized coal berth with a capacity of 4.61 mt and 300 m berth length, at an investment of Rs 400 cr. The project faced delay in obtaining environmental clearances, partly due to the Centre and State Government interface. As per the Adani Group website[2], the consent from Goa State Pollution Control Board came in March 2012. The project Phase I was planned to be commissioned in 2011-12. However, the operations were yet to start.

[2] www.adani.com, accessed on December 15, 2013

Rewas Port, Maharashtra

Rewas was to be developed as a deep water all weather multipurpose port. The Concession Agreement with the Maharashtra Maritime Board was signed on March 2002. Rewas Ports Limited, a Special Purpose Vehicle for the development, operation and management of the port, was promoted by the Reliance Group. The estimated project cost was Rs 5,200 cr. In the initial phase of development, nine berths were to be developed to cater to various cargo including Containers, Dry Bulk (Coal & Cement), Liquid Bulk (POL & Chemicals), General Cargo and Automobiles.

The project had not been implemented as yet. Environmental clearances and land acquisition had yet to be completed. In a February 4, 2009 article of The Economic Times, this issue was covered and a senior company executive stated, “We can't go ahead with the project unless the (Maharashtra) government gives us the land. For the time being, we have demobilised most of the consultants and advisors who were working for the project.” In April 2011, an official statement from Reliance Group said that the project was on hold due to land acquisition issues.

Issues

While in general, in all infrastructure sectors, India has been pushing the PPP framework, the happenings of the XI Plan in the port sector bring out various issues that need to be addressed.

Model Concession Agreement

While the XI Plan targets were in place by 2006-07, the Model Concession Agreement documents took two years more to be finalised. There were differences in perspective between the Planning Commission, the MoS and key industry stake holders. The award of PPP projects could commence only during 2009-10.

Aggressive Bidding

Bidders had resorted to aggressive bidding to win a project, perceived to be ‘highly’ viable, or more plausibly, to get access to the Indian traffic when there is an opening amidst an environment of changing policies. JNPT, at 51% revenue share offered by Singapore led PSA-ABG and Ennore, at 39.99% revenue share offered by Spain led Grup Maritim TCB had such bids. The winning bidders subsequently pulled out, causing the projects to be retendered.

Low or No Bidding

Instances of obtaining no bids or one or two complete bids with a single digit revenue share were observed in the recent past. Bidders had a perception of either the project being non viable or facing issues of insufficient or delayed development of allied infrastructure like hinterland connectivity. In the Chennai Mega Container Terminal project first round bidding, there was only one bidder, APSEZ, with a proposed revenue share of 5%. The second round bidding also had only one complete bid from VOTL with a proposed revenue share of 5.25%. Both these bids were not considered due to the low revenue share. The third round had no bidders. The extension of Visakha Container Terminal project had only one bidder with a revenue share of 10% and was not considered by Visakhapatnam Port Trust.

Legal Wrangling

Issues of delays in clearances, supporting investments by the government, interpretation of competition policy that permit/prohibit who can bid, interpretation of the concession agreements, and tariff distortions that penalise productivity have led to legal cases. These have delayed the PPP bidding and award process. JNPT, Tuticorin, Chennai are examples.

Government Clearances

The typical clearances listed in the Concession Agreement (CA) of port projects along with the responsibility for its permission are:

- Ministry of Environment and Forest Clearance – Concession Authority
- Coastal Regulatory Zone Clearance – Concession Authority
- Clearance from Pollution Control Board – Concession Authority
- Customs Notification – Concession Authority
- Any other affecting Land Acquisition - Concession Authority
- Security Clearance – Concessionaire

Delays in the above clearances affect the private player who would have obtained the letter of award and proceeded with preconstruction activities significantly. Mormugao, Chennai, Rewas, Dhamra are examples.

In the case of Mechanized Coal Berth No 7, Mormugao, developed by APSEZ, the environment clearances as a condition precedent was waived by the port trust and APSEZ was given the award of concession. A part of land was also given as per the CA. This initiated the construction works at the berth. However, the clearances came late and a critical portion of land was also not handed over to APSEZ, because of which the project's commissioning got delayed.

Investments by the Centre

As elaborated in the annexure during the XI Plan, the Centre had underinvested by Rs 24,409 cr, largely in the major ports and through the Dredging Corporation of India (DCI). Most of the project investments that were postponed into the XII Plan included deepening of channels and berths, and hinterland connectivity. These would have had a direct consequence on the attractiveness of private investments in PPP projects. The centre's own inability to invest was largely driven by inability to obtain timely environmental clearances, detailed project report estimates that had bidders quoting at a more expensive level, and tendering processes that attracted just a single bidder or no bidders. Tendering had, in many cases, to be repeated due to procedural knots.

Hinterland Connectivity

A port being an important interface between ocean transport and land movement, the hinterland connectivity becomes significant. It would mainly constitute of road, rail, pipeline and ILW. However, the hinterland connectivity has not always kept pace with the ocean side capacity. The number of decision making stake holders are many, and with their own sense of priorities. Chennai, Cochin, Mormugao, Mumbai are examples of ports where due to lack of such coordinated connectivity, private investment in PPPs have either suffered or not been forthcoming.

Some of the non major ports like Dhamra and Krishnapatnam have attempted to correct this by their own initiative. Gujarat non major ports have generally been at the forefront of ensuring good hinterland connectivity. Vallarpadam at Cochin is an example of the government's own initiative in correcting this by investing in the connectivity project as its contribution to the PPP.

Competition Policy

This issue was first recognized when the second container terminal in JNPT, on PPP basis, was to be bid out in October 2002. The MoS prevented the incumbent PPP player (P&O Ports) from bidding, in order to bring in competition. P&O Ports challenged this in court, which ruled in favour of the MoS. Consequent to this, the MoS issued policy guidelines as follows:

- There should be atleast two operators across the terminals
- One operator cannot have more than two terminals at the same port
- Awardee cannot bid for the next terminal

The third and fourth container terminals were announced. This policy created its own confusion in the sequentiality of projects in a port, distracting from the primary objective of competition. In 2010, a new bidding policy was announced:

- If there is only one private terminal/berth operator in a port for a specific cargo, the operator of that berth or his associates shall not be allowed to bid for the next terminal/berth for handling the same cargo in the same port.

- Specific cargo meant (1) containers (2) liquid cargo (3) dry bulk or (4) multipurpose / other general cargo. The policy would be applicable with immediate effect and shall apply to Request for Qualification issued on or after August 2, 2010.

Subsequent to this policy, the incumbent to the second terminal went to court to be allowed to bid for fourth container terminal, stating that their original agreement was in line with the earlier policy, which had since been changed. The court upheld their position.

Tariff Policy

A tariff regulator called Tariff Authority for Major Ports (TAMP) was set up for the major ports in 1997, once the policy of PPPs came in. While there have been benefits in focussed dealing with tariff issues, the cost based pricing and jurisdiction over only the major ports have caused distortions. Specific examples were JNPT and Tuticorin. The role of TAMP had reduced the attractiveness of private investments in major ports. The MoS has been seized with the idea of modifying the role of TAMP and having a bidding process with formula based tariffs. Overall, tariff had been a matter of great concern for Government and private players since the time the first private terminal, NSICT at JNPT, was implemented. Tariff had been a cost plus approach since the beginning. However, there were undue gains to NSICT due to this approach and also due to lack of monitoring on behalf of JNPT and TAMP.

Common User Vs Captive Policy

This is an important policy where a private investor would seek clarity on the nature of use of the port infrastructure. Allowing unfettered captive use would make private investments more attractive, unlocking higher value and bringing in more returns to the government. However, the captive use needs to be permitted as long as there is enough capacity for common use. Mormugao is an example of where an ambivalent approach has caused dissonance.

Cabotage Policy

Indian containerized cargo going/coming via foreign ports for transhipment to the extent of nearly 50% of the traffic has been a traditional issue of concern with Indian shipping industry. In 2011-12, the ports of Colombo and Singapore have been the key transhipment ports for Indian cargo, taking 35% and 25% of the transhipment load[3]. Two of the often quoted reasons are non availability of a deep draft transhipment port and Cabotage policy which restricts foreign flagged ships from feedering along the Indian coast to and from the transhipment port. This was attempted to be addressed by relaxing the Cabotage policy at the new Vallarpadam terminal at Cochin since September 2012. The results have not yet established the efficacy of this relaxation.

Consistency of Policy and Approach

Behind all the above is the lack of consistency of approach by the governments, both at the Centre and the State. This is primarily a result of lack of coordination between different government bodies, including the interface between the Centre and the State. There are structural issues like separation of the landlord and tenant, like at JNPT and even in a private port like Mundra. The Competition Commission of India has also been approached on this matter. The lack of consistency also filters down to the governing bodies at ports, especially those driven by government. There are often no robust frameworks to handle design and scope changes and new regulation after award of bid.

All this does not lend to making ports as attractive as they could be for private investments, even though the country expects a buoyant export import growth.

Way Forward

The XII Plan is more ambitious with a higher share of private participation. This is also supported by the ‘Maritime Agenda 2010-20,’ of the MoS. In view of the issues and its implications raised in this paper, and the XII Plan and Maritime Agenda 2020 targets, the following need to be addressed:

[3]Major Ports of India A Profile: 2011-12, Indian Ports Association

- Clear responsibility distinction between Public Authority and Private Party.
- Public Authority should retain control and responsibility for land acquisition, clearances, ownership and coordination, connectivity, provision of basic port infrastructure, regional planning including appropriate 'urban' support, policy formulation, tendering and bidding, and force majeure consequences.
- With many projects implemented and in the pipeline, especially in the container domain, a holistic planning would be required, even between Centre and State, to prevent proposal of unviable projects.
- Hinterland evacuation plan should be coordinated and considered the following in priority:
    - Coastal shipping and ILW
    - Railways
    - Road and extended ports
- Conditions precedent for a project should include clearances, land acquisition and risk analysis and mitigation measures.
- A Regulator with appropriate regulation towards environment, safety and security, tariffs and service level, and dispute resolution should be considered
- Many policies are still under consideration. These need to be debated and brought to a closure, reflecting consistency:
    - Draft Indian Ports Bill 2011
    - Draft Ports Regulatory Authority Bill 2011
    - Draft Captive Port Policy 2011
    - Land Policy of Major Ports 2010
    - Draft Coastal Shipping Policy
- More research and high quality education should be encouraged in maritime studies.

The move towards PPP as a solution for improved infrastructure, competitive environment and higher service level to customer was early in India. It has evolved significantly. However, there are issues which have developed during implementation of these projects and need a greater deliberation between the stakeholders. It is also an opportunity for the Indian PPP experience to be taken to countries wanting to leverage PPPs in the port sector.

Annexure

In the XI Plan, the Centre had a significantly lower actual expenditure of Rs 5,480 cr versus its original projection of Rs 29,886 cr. The major components of investments by the Centre were Major Ports, Dredging Corporation of India (DCI), Sethusamudram Ship Channel Project (SSCP) and Andaman & Lakshdweep Harbour Works (ALHW), as seen in Table 4.

Table 4: Investments by Centre, XI Plan

		XI Plan (Original Projections) Rs cr (at 2006-07 prices)	XI Plan (Actual Expenditure) Rs cr (at 2011-12 prices)	Difference Rs cr
Centre		**29,886**	**5,480**	**24,409**
(i)	Major Ports	17,551	3,935	13,616
(ii)	DCI	8,142	389	7,753
(iii)	SSCP	1,919	777	1,142
(iv)	ALHW + Post Tsunami Works	988	325	663
Total		**27,612**	**5,426**	**22,186**

Source: 'Report of Working Group for Port Sector for the XII Five Year Plan,' Ministry of Shipping

Major heads within Centre viz: Major ports, DCI, SSCP and ALHW, where under utilization of funds was observed, are described in following sub-sections.

Major Ports

The major ports actual expenditure during XI Plan was Rs 3,935 cr versus the original projection of Rs 17,551 cr. An estimate of the major port wise shortfall of investment is shown in Table 5, based on the XI Plan outlay and actual expenditure in the first four years of the plan.

Table 5: Investments by Centre in Major Ports, XI Plan

Major Ports	**XI Plan (Original Projections) Rs cr (A)**	**XI Plan (Actual Expenditure) First Four Years Rs cr (B)**	**Difference Rs cr (A)– (B)**
JNPT	4,465	336	4,129
Mumbai	1,724	337	1,387
Visakhapatnam	1,396	265	1,131
Tuticorin	1,448	329	1,119
Ennore	1,228	258	970
Kandla	1,176	217	959
New Mangalore	1,009	116	893
Chennai	1,255	363	891
Paradip	1,208	398	810
Kolkata	268	66	202
Haldia	279	156	124
River Regulatory Scheme	375	0	375
Kolkata Total	922	221	701
Cochin	1,300	750	550
Mormugao	421	134	287
Fifth Year Expenditure (all major ports)	-	211	-
Total	**17,551**	**3,935**	**13,616**

Source: 'Report of Working Group for Port Sector for the XII Five Year Plan,' Ministry of Shipping

As studied from the working group reports, the major schemes for the top six major ports of the XI Plan, which have spilled over to the XII Plan, are given in Table 6. Each of the schemes accounted for a spill over amount of between Rs 100 cr to Rs 1000 cr and explained a reasonable share of the XI Plan under utilization.

Table 6: Major Port Schemes of XI Plan Spilling Over

Major Ports	**XI Plan (Original Projections) Rs cr**
JNPT	
Deepening of channel / berth	800
Road and rail linkages	569
Procurement of equipments	135
Other works (support infrastructure)	1038
Total	**2,542**
Mumbai	
Construction of two off shore container berths	366
Redevelopment of 18 to 21 Indira Dock harbour wall berths	353
5th oil berth at Jawahar Deep	150
Total	**869**
Visakhapatnam	
Improvement to road infrastructure with road bridges/fly over bridges – Phase II and III	200
Second and third stage deepening of inner harbour entrance channel and turning circle draft from 11.0 m to 12.5 m	195
Outer harbour expansion project (berth upgradation and other infrastructure facilities)	142
Development of stacking in place of existing fishing harbour	100
Total	**637**
Tuticorin	
Development of outer harbour (break water, dredging and reclamation)	940
Total	**940**
Ennore	
Deepening of channel/berths etc.	660
Total	**660**
Kandla	
Deepening of navigation channel	186
Strengthening of existing berth 1 to 6	99
Other works	99
Total	**384**

Source: 'Report of Working Group for Port Sector for the XI Five Year Plan,' Ministry of Shipping, 'Report of Working Group for Port Sector for the XII Five Year Plan,' Ministry of Shipping

DCI

DCI actual expenditure during XI Plan was Rs 389 cr versus the original projection was Rs 8,142 cr. As per the annual report of DCI 2013-14, some of the reasons attributed to shortfall of investments in DCI were delay or failure for number of port development projects to takeoff, financial and environment constraints, the need to carry out engineering studies to assess the quantum of dredging and the type of dredging to be performed and poor response from bidders to undertake the work. Some of the other reasons observed were also of "inadequate efforts to add dredging capacity and increasing exodus of senior officials affecting the DCI performance"[4].

SSCP

SSCP project, with sanctioned cost of Rs 2427 cr, was first included in the X Plan. The XI Plan actual expenditure was Rs 777 cr versus an outlay of Rs1,919 cr. The dredging in the channel was stopped in view of the Supreme Court orders dated August 31, 2007 and September 14, 2007. Pursuant to the orders, a committee of experts had been constituted under the Chairmanship of Dr RK Pachauri, Director General, TERI, to consider the alternate alignment in respect of the SSCP project.

"Due to prolonged court cases and some other internal problems, DCI had stopped dredging works at Palk Bay/Palk Strait from July 26, 2009. Many court cases were filed against the project on environment and religious grounds. No capital dredging provision is made in the XII Plan. However, a token outlay of Rs 100 cr is recommended for the project"[5].

ALHW

ALHW, including post tsunami works, had an actual expenditure during XI Plan, at Rs 325 cr versus the original projection was Rs 988 cr. There were 56 schemes of berthing facilities and ship repair facilities such as dry docks and slipways planned by the middle of X Plan in Andaman Nicobar (A&N) Islands. Due to the earthquake followed by tsunami in December 2004, the Tsunami Restoration Program (TRP) was floated to reconstruct, develop and create additional facilities in A&N. TRP works were under progress, while the plan schemes for A&N Island for XI Plan were complete. Works at Lakshadweep islands were also under progress, for creating facilities of berthing of ships plying between mainland and the islands.

[4]"Ageing fleet, manpower shortage hit DCI operations," The Hindu Business Line, May 29, 2012

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