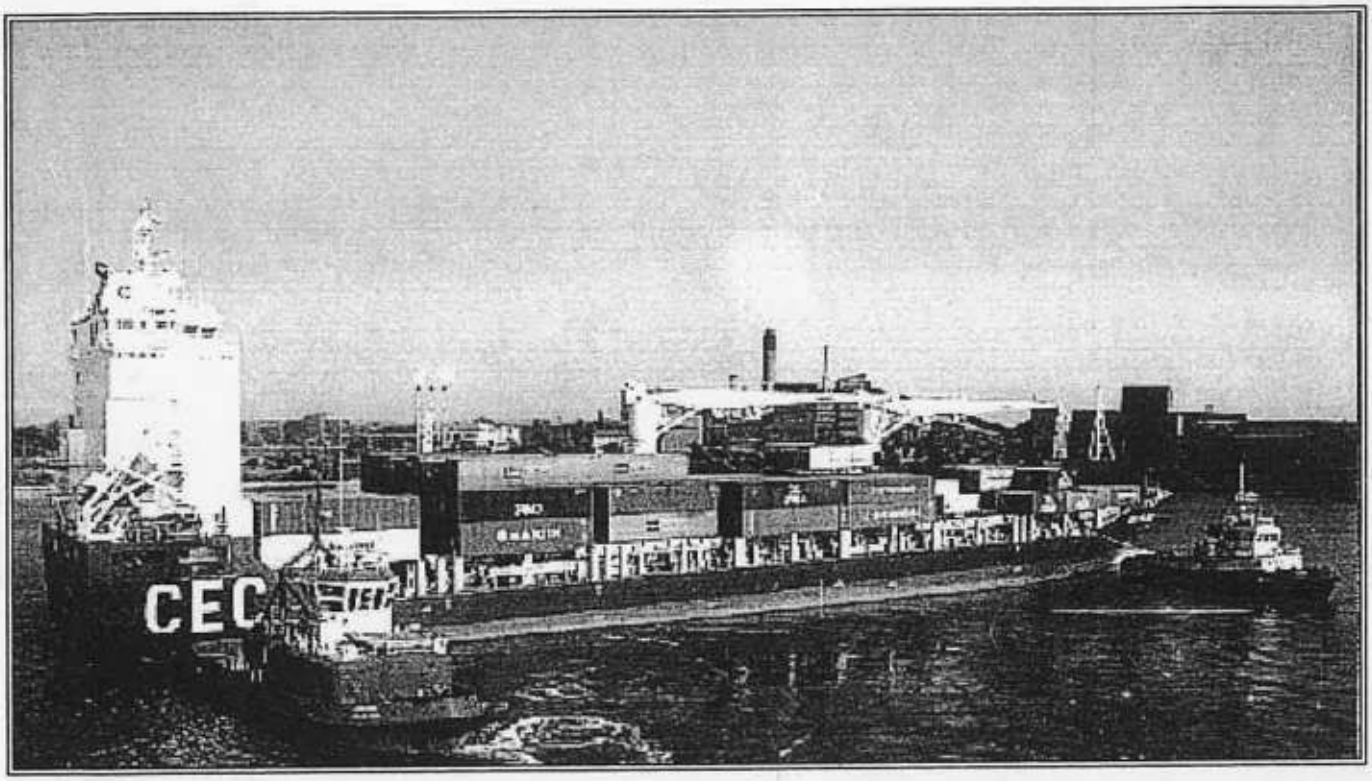
भारत के पत्तन क्षेत्र का अदयतन

UPDATE ON INDIAN PORT SECTOR

(31.03.2011)



परिवहन अनुसंधान प्रभाग

TRANSPORT RESEARCH WING

सड़क परिवहन तथा राजमार्ग मंत्रालय

MINISTRY OF ROAD TRANSPORT & HIGHWAYS

भारत सरकार

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PREFACE

As per the decision of the Maritime State Development Council, the Transport Research Wing in the Ministry of Shipping, Road Transport and Highways has been bringing out the biannual publication "Update on Indian Port Sector". Till now fifteen issues of the publication have been released. The last issue contained data up to March, 2011.

The current issue of the "Update on Indian Port Sector" includes the information on the performance of Major and Non-Major Ports for the period up to end of March, 2011. The list of private sector/captive/joint sector port projects under implementation/consideration at Major Ports and Non-Major Ports have also been included. The cooperation extended by the concerned source authorities is gratefully acknowledged.

(Arvind Kumar)

June, 2011

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UPDATE ON INDIAN PORT SECTOR

[UP TO 31.03.2011]

CONTENTS

I. RECENT TRENDS IN CARGO TRAFFIC AND POLICY INITIATIVES

1.1 International and Domestic Factors Related to Seaborne Trade

1.1.1 After a contraction of 0.5 percent in 2009, global real output expanded by 5.0% in 2010 and is forecast to expand by 4.4% in 2011. Output of developing economies which grew by 2.7 % in 2009 posted a robust growth of 7.3 % in 2010 and is projected to expand at 6.5% in 2011. In advanced countries, however, growth is projected to be modest at only 2.4% in 2011 compared with a growth of 3.0 % in 2010. World trade volume that had plunged by 11.7 % in 2009, recovered by more than 13% in 2010 is expected to further expand by 7.7 % in 2011 (World Economic Outlook, April 2011, IMF). The global crises in 2008-2009 was exceptional in many ways. it was the first time in the post war period that the global GDP contracted, almost all the regions of the world were affected, and the time lag between the financial crises and its impact on the real economic activity was short. No region was spared by the crises. The global contagion hit some countries harder than others. While developing countries are leading recovery, it remains fragile and uneven in developed countries. Strong counter cyclical macroeconomic policies in most developed and developing economies helped the global economy to turn the corner, although rates of recovery are uneven across countries and regions.

Developments affecting Seaborne trade

1.1.2 International maritime trade and services also have a direct relationship with the overall performance of the global economy and total merchandise trade. Seaborne trade (which carries 80% of all world traded goods) declined in volume by 4.5% in 2009 as per UNCTAD (Review of Maritime Transport, 2010, UNCTAD). The sharpest reduction was in containerized trade at the end of 2008 and into 2009. The bulk sector was less affected owing to large imports by China, which took advantage of low prices of commodities and freight to increase its stocks of raw materials. Prices of maritime freight plummeted by the end of 2008, when the Baltic Exchange Dry Index fell by 90% from its record high in May of that year. By mid 2009 there was a partial recovery, with freight rates at around 40% of their 2008 peak (UNCTAD, 2010). The world merchant fleet capacity grew by 8.7% in 2008 and by another 7% in 2009. Given the scheduled ship deliveries, capacity is expected to expand

1.1.3 Table 1 gives the growth in cargo and at Indian ports and related parameters of Indian and world trade.

Table 1: Growth in Cargo handled at Indian Ports and related parameters

Parameters	2006-07	2007-08	2008-09	2009-10	2010-11
Trends in India's Select : Macro Parameters (in per cent)					
I. Total Cargo	12.2	11.3	2.5	7.9	4.1
(a) Major Ports	9.6	12.3	2.2	5.7	1.8
(b) Non Major Ports	19.7	11.8	3.1	35.7	9.8
II. GDP overall	9.7	9.7	6.7	8.0	8.5
(a) Agriculture	3.7	4.7	1.8	0.4	0.0
(b) Industry	12.7	9.5	3.9	8.5	7.0
(c) Services	10.2	10.5	9.8	10.1	9.4
III. Foreign Trade					
(a) Export in $ Value	22.0	29.0	13.6	-1.7	37.5
(b) Import in $ Value	24.6	35.5	20.7	-4.9	21.8
Trends in Global Select : Macro Parameters (in per cent)					
IV. World Output	5.2	5.4	2.9	-0.5	5.0 (4.4)
(a) Advanced Economies	3.0	2.7	0.2	-3.4	3.0 (2.4)
(b) Developing Economies	8.2	8.8	5.1	2.7	7.3 (6.5)
V. World Trade Volume #	6.9	7.1	2.7	-11.7	13.0 (7.7)
VI.Export Volume (Goods)					
(a) Advanced Economies	6.7	6.1	1.0	-12.0	13.0 (7.3)
(b) Developing Economies	8.0	8.7	4.1	-7.9	16.1 (8.5)
VII. Import Volume (Goods)					
(a) Advanced Economies	6.0	5.1	0.3	-13.1	12.5 (6.1)
(b) Developing Economies	9.8	10.8	5.2	-6.2	13.9 (9.2)
VIII. World Seaborne Trade*	7.0	3.5	2.2	-4.4	
(a) Goods Loaded	6.7	3.9	2.8	-4.5	
(b) Goods Unloaded	6.4	3.2	1.7	-4.4	

I. Based on data from Major Ports and Non Major Ports
II. Based on gross domestic product (GDP) at Factor Cost (2004-05 Prices), Central Statistical Organisation's data
III. Based on Department of Commerce, DGCI&S data;
IV,V,VI & VII Based on World Economic Outlook April 2011, IMF;
VIII. Based on Review of Maritime Transport 2010, UNCTAD
Note : MT: Million Tonnes; For Item Nos IV, V, VI, VII and VIII, year 2006-07 refers to calendar year 2006 and so on; figures within parentheses indicate forecasts for the relevant parameter for the year 2011. * growth in solid goods loaded plus unloaded.

World Sea-borne Trade

1.1.4 Maritime transport activity depends on developments in world trade. An analysis of world seaborne trade based on Review of Maritime Transport (RMT, UNCTAD (2010) shows International seaborne trade (loadings/exports) declined from 8.21 billion tonnes in 2008 to 7.84 billion tonnes in 2009 by 4.6% (Table:2). According to Clarkson Research Services this was the first drop since 1985. Indeed during the past three decades, the annual average growth in world seaborne trade is estimated at 3.1 per cent by the RMT (2008), UNCTAD. The figure of 8.17 billion tonnes of international seaborne trade in 2008 comprised 2.65 billion tonnes of tanker cargo (33.7%) and 5.19 billion tonnes of dry

cargo (36.3%). Tanker trades (crude oil and products) passed a fall of 3.0 % in 2009 in an environment of weak demand. The tanker Cargo in turn consisted of 1725 million tonnes (65%) of crude oil and 925 million tonnes (35%) of petroleum products. Dry bulk trade, the main driver of the shipping industry over the past few years, is driven, inter alia, by industrial production and growth requirements. These shipments accounted for more than two-thirds of total world goods loaded. Dry bulk (5.19 billion tonnes) consisted of 2.11 billion tonnes of the five traditional dry bulk types (iron ore, coal, load grains, and bauxite/alumina and rock phosphate) which showed an increase of 1.6 % in 2009. However, other dry cargo at 3.08 billion tonnes in 2009 recorded a steep fall of more than 9%.

Table 2: International Seaborne Trade (loaded goods in million tonnes)

Year	Tanker Cargo		Dry Cargo		Tota Cargo	
	In tonnes	% change	In tonnes	% change	In tonnes	% change
1990	1755		2253		4008	
2000	2163		3821		5984	
2001	2177	0.6%	3844	0.6%	6021	0.6%
2002	2139	-1.7%	3981	3.6%	6120	1.6%
2003	2226	4.1%	4274	7.4%	6500	6.2%
2004	2318	4.1%	4528	5.9%	6846	5.3%
2005	2422	4.5%	4687	3.5%	7109	3.8%
2006	2698	11.4%	4984	6.3%	7682	8.0%
2007	2747	1.8%	5237	5.1%	7984	3.9%
2008	2732	-0.5%	5479	4.6%	8210	2.8%
2009	2649	-3.0%	5194	-5.2%	7843	-4.5%

Source: Review of Maritime Transport 2010, UNCTAD and earlier issues

1.1.5 An analysis of world seaborne trade based on RMT (2010), UNCTAD by country groups for the year 2009 provides interesting insights. Firstly, developed market-economy countries (DMECs) accounted for 2.54 billion tons of seaborne exports loadings and 3.50 billion tons of seaborne imports/unloading in 2009. This gave them a market share of 32.4% of total world seaborne exports and 44.3% of total world seaborne imports. Secondly, developing countries (across all continents) accounted for more than 61 % of the volume of world seaborne exports (with a very high market share of liquid cargo, reflecting the importance of Oil producers) and about 55% of world seaborne imports. The trade structure of developing countries contrasts sharply with that of DMECs. The developing countries' combined share in crude oil and petroleum products exports represented about 84 % and 57 % respectively. For imports, these shares were about 35% for crude and 44 % for products. In the dry cargo sector, the share of

developing countries' exports reached about 53 % of world dry cargo exports, while their share of world imports touched 63 %. Thirdly, developing countries in Asia were the largest traders accounting for about 29 % of the world seaborne goods loaded/exported and 45 % of the world seaborne goods unloaded. Further developing countries in Asia accounted for 32.1 % and 28.3 % of total crude and petroleum products loaded in 2008. The corresponding share of crude and petroleum products in total unloading (imports) were 32 % and 83% respectively in 2009.

Recent Trends in Seaborne trade by Major Groups

Crude oil shipments

1.1.6. In 2009, seaborne shipments of crude oil fell by an estimated 3.4 percent to 1.72 billion tons. After the exceptionally good times in the pre-2008 period, the tanker market faced difficult times in the first half of 2008. The year 2009 was also considered a poor year for the product tanker segment. Demand for gasoline and diesel for cars declined, while demand for distillates and other products used for industrial purposes remained subdued. This was reflected in world shipments of petroleum products, which fell by 2.4 percent to reach 924.6 million tons in 2009.

Dry Cargo shipments: major and minor dry bulks and other dry cargo

1.1.7 In 2009, dry cargo volumes, including dry bulks, container cargo and other dry cargoes, recorded their first drop since 1985 (by 5.2 percent) and stood at about 5.2 billion tons. The share of dry cargo in the total volume of goods loaded has been growing over the years, and continues to account for the lion's share of the total (68.2 percent).

1.1.8 In 2009, trade in the five major bulks (iron ore, grain, coal, bauxite/alumina and phosphate) increased by 1.6 percent to 2.1 billion tons. The main drag on growth in the major dry bulk volumes resulted from the severe contraction in the volumes of bauxite and alumina (28.2 percent) and phosphate rock (38.7 percent). This drop was more than offset by the growing volumes of two major dry bulks, namely iron ore and coal. In 2009, the world dry bulk trade continued to hold strong, due in particular to China's $586 Billion stimulus package and massive infrastructure expenditure in support of domestic demand.

1.1.9 The world's iron ore shipments were estimated at 900 million tons in 2009, an increase of 8.6 percent over 2008. Major exporters included Australia, Brazil, India and

South Africa. Together, Australia and Brazil accounted for about 70 percent of world iron ore exports; Australia remained the world's largest exporter with 362.4 million tons (an increase of more than 17.0 percent compared to 2008). Exports from Brazil amounted to 266 million tons, a drop of 5.6 percent measured against 2008. Surging iron ore imports into Asia more than offset the falling imports in other regions, and they help to explain the resilience shown by the dry bulk market in 2009. The engine of growth was China, whose iron ore imports increased dramatically (by 40.1 percent over 2008), owing in particular to the Chinese Government's fiscal stimulus package, which boosted domestic demand for steel at a time when the export market was depressed. Looking ahead, global iron ore trade volumes are expected to expand by 7.9 percent in 2010.

Coal shipments

1.1.10 In 2009, the volume of coal shipments (thermal and coking) totaled 805 million tons, a volume equivalent to the 2008 level (799 million tons). Thermal coal exports increased by around 2.1 percent and reached 590.0 million tons (73.3 percent of world coal shipments). Shipments of coking coal, which is also used in steel production, fell by 2.7 percent to 215 million tons. Together, Australia and Indonesia accounted for 62.2 percent of the world's thermal coal shipments, with Indonesia remaining the world's leading exporter. As regards coking or metallurgical coal used in steel production, Australia remained the world's largest exporter, with a total of 139 million tons – a marginal increase of about 1.0 percent over 2008. The main destinations for both types of coal exports (thermal and coking) are Europe and Japan, which together accounted for 42.7 percent of the world's coal imports in 2009. However, over recent years, coal exporters have increasingly focused on Asia.

Bauxite/alumina and phosphate rock

1.1.11 In 2009, world trade in bauxite and alumina fell sharply, by 23.2 percent, and totalled 86.0 million tonnes.

Dry cargo: minor bulks

1.1.12 In 2009, the minor bulk trades (manufactures, agribulks, metals and minerals) were badly hit by the economic downturn and fell by 12.8 percent compared to 2008, down to 851 million tons. Manufactures accounted for the biggest share of the total in our dry bulks (44.6 percent), followed by metals and minerals (27.7 percent) and agribulks (27.5 percent). The largest decline (19.0 percent) was suffered by goods directly

associated with the construction industry, namely metals and minerals, including coke, pig iron, scrap, manganese ore and cement.

Other dry cargo: containerized cargoes

1.1.13 The year 2009 proved to be the most challenging and dramatic year in the history of container shipping. After having grown at an impressive average annual rate of around 10.0 percent over the last two decades, by far surpassing the growth in other seaborne trade segments, container trade recorded its first absolute contraction ever, since containerization began. In 2009, container trade volumes fell sharply, by 9.0 percent, with the overall volumes totaling 124 million twenty-foot equivalent units (TEUs). Of the remaining 2.22 billion tons of other dry cargo (i.e. total dry cargo excluding major bulks and minor bulks), some 1.19 billion tons are estimated to be carried in containers. Reflecting the historical dip, the share of containerization trade in the world's total dry cargo, which increased from 5.1 percent in 1980 to 25.4 percent in 2008, fell to about 24.3 percent in 2009. Containerized trade is also a major driver of growth in the dry bulk segment. Strong growth in containerized traffic is fuelled by increased demand for consumer goods in developing regions, growth in intra-company trade and production inputs (parts and semi-finished goods for assembly) and rising containerization of some traditional agricultural bulks.

1.1.14 Despite these very challenging developments, container shipping is currently moving into more positive territory, with the global economic recovery on the way and with a turn in the inventory replenishment cycle. Container trade is forecast to increase by 11.5 percent in 2010. In sum, seaborne trade volumes were significantly impacted by the falling global demand that followed 2009's historical contractions in world GDP and merchandise trade. All shipping segments have been negatively affected, with the exceptions of the major dry bulks which showed more resilience due to China's robust demand for coal and iron ore. Reflecting the emerging recovery in the global economy seaborne trade volumes are expected to reverse the trend of 2009 and to resume growth in 2010. Nevertheless, there remain some uncertainty as to the strength and the duration of the recovery, due, among other things, to the fragile economic and financial position of some advanced economies. Projections by Clarkson Research Services Limited indicate that global seaborne trade (i.e. goods loaded) is expected to reverse the trend of 2009 and to grow by 5.2 percent in 2010.

1.2 Cargo Traffic at Indian Ports

1.2.1 During 2010-11 Major and Non-major ports in India accomplished a total cargo throughput of 884.6 million tonnes reflecting a modest increase of 4.0% over 2010-11 compared to a robust growth of 14.3 % in 2009-10. The growth in cargo handled at Major and Non-major ports in 2010-11 was 1.6% and 8.5% respectively compared to 5.7% and 35.7% achieved in of 2009-10. The deceleration in overall growth in India's seaborne cargo traffic in 2010-11 some reflects slowdown in growth during the course 2010-11. The growth in India's GDP, Port traffic and growth in world output, world trade volume and world seaborne trade (loadings and unloading) since 2006-07 is given in Chart I. Trend in traffic handled at Major and non-major ports is given in Table 3

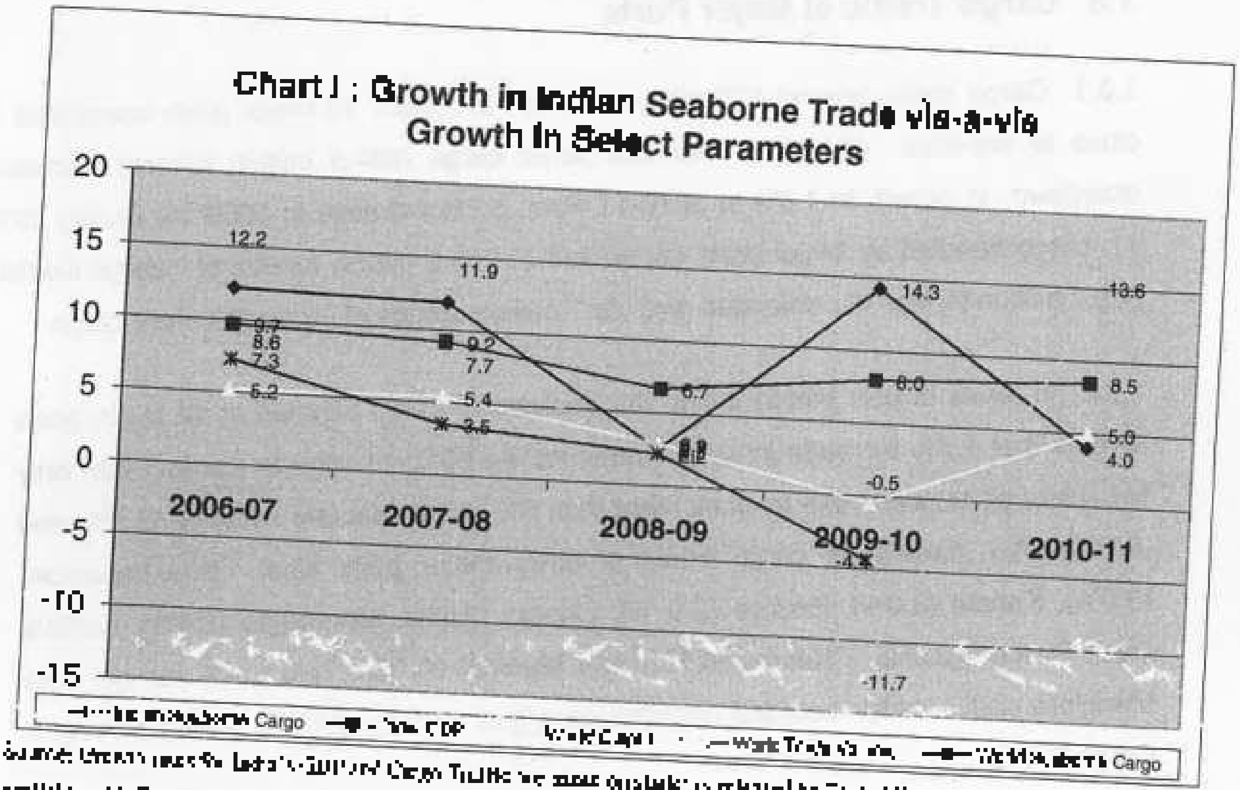

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Table 3: Traffic Handled at Indian Ports (Thousand Tonnes)						
Major / Non-Major Ports	Traffic Handled			Growth over previous year/period		
	2008-09	2009-10	2010-11 (P)	2008-09	2009-10	2010-11 (P)
Major Ports	530504 (71.3)	561068 (66.0)	569319 (64.4)	2.5	5.7	1.5
Non-Major Ports	213979 (28.7)	289319 (34.0)	314841 (35.6)	9.3	35.2	8.8
All Ports	744026 (100.00)	850109 (100.00)	884160 (100.00)	2.6	14.3	4.0
(P): Provisional; Figures within parenthesis indicate percentage share in total cargo traffic for Major and Non-Major ports respectively.						

1.8 Cargo Traffic at Major Ports

1.8.1 Cargo traffic around 570 million tonnes at India's 12 major ports accounted for close to two-third of India's total sea borne cargo (884.6 million tonnes). Witnessed slowdown in growth to 1.6% in 2010-11 from 5.7% increase in 2009-10. During 2010-11, cargo handled by Major ports comprised of 213.5 million tonnes of cargo loaded, 329.7 million tonnes of unloaded and 26.7 million tonnes of transshipment cargo.

1.8.2 In terms of port performance, the analysis of cargo handled at 12 major ports reveals that 1.6% increase in cargo traffic during 2010-11 reflects the fact that only two major ports, were able to clock more than 5% growth namely Tuticorin (8.2%) and JNPT (5.8%). Growth in cargo traffic at other major ports was: Vishakhapatnam (3.9%), Kandla (3.0%), Ennore (2.9 %), Cochin (2.6%), Mormugao (2.1%), Kolkata Dock System (2.2%), Chennai (0.7%) and Mumbai (0.1%). Two ports namely New Mangalore and Paradip recorded negative growth of 11.2 % and 1.7 % respectively in Cargo Traffic.

Table 4 : Traffic Handled at Major Ports

(Thousand Tonnes)

Ports	2006-07	2007-08	2008-09	2009-10	2010-11 P	% Change over CP
1	2	3	4	5	6	7
Kolkatta	55450	57329	54290	49429	47432	2.2
Kolkatta Dk	12590	13747	12428	13045	12540	-3.9
Haldia DC	42454	43599	41792	36384	34892	4.5
Paradip	96517	42487	46412	57111	59030	-1.7
Vizag	30865	84597	83306	65501	69041	-5.9
Ennore	10719	11563	11608	10703	11049	-2.9
Chennai	58414	57154	57491	61057	61460	-0.7
Tuticorin	18091	21480	22071	23787	25727	-9.2
Cochin	15257	15810	15496	17423	17873	-2.5
New Mangalore	32042	36019	36897	35508	31550	-11.2
Mormugao	34241	35128	41651	46047	50022	-2.4
Mumbai	52364	57038	51676	54541	54586	-0.1
JNPT	44815	55038	57083	60763	64309	-5.8
Kandla	52082	64960	72524	73500	81880	-0.0
All Ports	463782	519313	530804	581090	590019	1.6

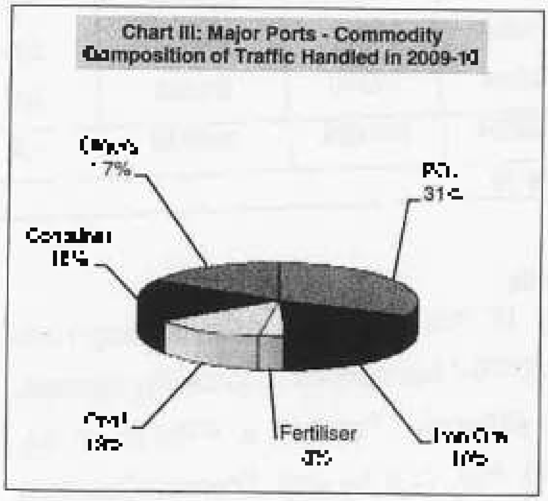
(P): Provisional; CP: Corresponding period 2009-10

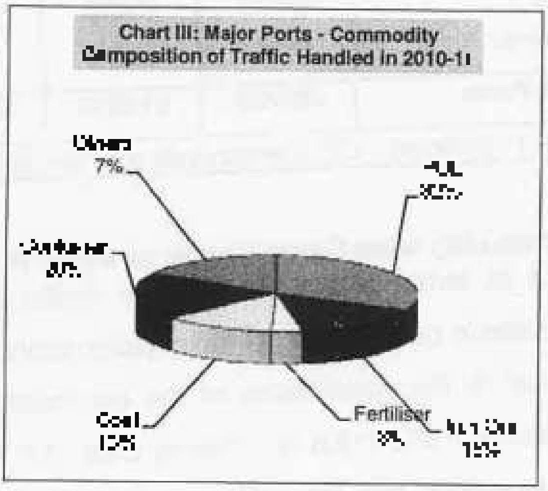
Commodity wise Cargo Traffic at Major Ports

1.2.3 In terms of Commodity-wise traffic at 12 major ports (Table: 5), the 1.6% increase in cargo traffic at major ports during 2010-11 comprised of following increase (shown in the parenthesis of the commodity groups): Fertilizer & FRM (12.3 %), Container traffic (12.6 %), Coking Coal (3.7 %), POL (2.9 %) and Thermal Coal (0.6 %). However, iron ore traffic mainly in the nature of exports declined by more than 13% in 2010-11.

Table 5 : Commodity wise Traffic Handled at Major Ports (Thousand Tonnes)						
Commodities	2006-07	2007-08	2008-09	2009-10	2010-11 (P)	% Change over CP
1	2	3	4	5	6	7
POL	145978	167495	174203	175190	180188	2.9
Iron Ore	93584	92290	92669	100744	87637	-13.1
Fertiliser	19066	18575	18277	17697	15987	17.9
1. Finished	7929	11874	12171	10939	12381	13.2
2. Raw (DHY)	11729	6405	6103	6758	7906	12.5
Thermal Coal	37309	39933	44046	43348	40628	0.6
Coking Coal	23042	69565	37680	23954	29106	3.7
Container (Tonnes)	73469	92917	95446	101244	114046	12.6
Others	84493	40606	79290	94613	95427	0.6
Total	463782	519313	530064	561090	569019	1.6
(P): Provisional; CP Corresponding period 2009-10						

1.3.4 The shares of different commodities in total cargo traffic during 2009-10 and 2010-11 are depicted in the Charts II and III respectively. Energy imports consisting of POL and Coal constituted 45 % of the total cargo traffic at India's major ports.





POL: Petroleum, Oil & Lubricants

1.3.5 The Port-wise & commodity-wise traffic handled at major ports during 2007-08 to 2010-11 are given in Annex 2.

Container Traffic

1.3.7 Growth in container traffic (in million tonnes) which reflects largely trade in manufactures and components continued to surge ahead with a growth of 12.6% in 2010-11 from 8.4% in 2009-10. In terms of Twenty Foot Equivalent Units, the containers handled by Major Ports in 2010-11 increased by 9.8%. Amongst the major ports, the ports at Mormugao, and Haldia Dock system witnessed fall in container traffic. Jawahar Lal Nehru Port continues to be the leading container handling port in the country with a share of about 50% in terms of tonnage and 57 % in terms of TEUs in the total container traffic at major ports (Table:6). Chennai port which handled 26% of container cargo has emerged as the second container handling port. *Efficiency* in container handling operations at some of the select container terminals in India is given in Table: 7. The total throughput measured in terms of TEUs at all the major ports at 7.54 million TEUs in 2010-11 was a quarter of TEU throughput at the Shanghai port alone.

Table 6: Container Traffic at Major Ports (in thousand tonnes/TEUs)

PORT	2006-07		2007-08		2008-09		2009-10		2010-11 (P)		% change over CP	
	Tn	TEU	Tn	TEU	Tn	TEU	Tn	TEU	Tn	TEU	Tn	TEU
1	2	3	4	5	6	7	8	9	10	11	12	13
Kolkata DS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.3	[illegible]
Haldia DC	1918	[illegible]	2257	[illegible]	[illegible]	127	2065	[illegible]	2754	146	[illegible]	[illegible]
Paradip	[illegible]	2	58	[illegible]	34	2	13	4	64	1	[illegible]	0.0
Vizag	[illegible]	56	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	48.0
Chennai	[illegible]	[illegible]	[illegible]	1122	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	524	[illegible]	[illegible]
Ennore	0	[illegible]	0	[illegible]	0	0	0	0	0	0	[illegible]	0
Tuticorin	[illegible]	[illegible]	[illegible]	[illegible]	5408	[illegible]	[illegible]	440	[illegible]	[illegible]	23.9	[illegible]
Cochin	[illegible]	[illegible]	[illegible]	254	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12.5	[illegible]
New Mangalore	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	31	[illegible]	[illegible]	[illegible]	25.0
Mormugao	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	182	[illegible]	[illegible]	[illegible]	5.2	[illegible]
JNPT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.1
Mumbai	[illegible]	126	[illegible]	115	1291	[illegible]	[illegible]	[illegible]	651	[illegible]	7.6	24.1
Kandla	[illegible]	178	[illegible]	165	[illegible]	137	2405	146	[illegible]	160	[illegible]	[illegible]
All Ports	[illegible]	5537	[illegible]	6704	[illegible]	6578	[illegible]	6863	114046	7539	[illegible]	[illegible]

Note: CP - Corresponding period of previous year. (P) - Provisional; Tn - tonnes; TEU - twenty foot equivalent units; Source: IPA

Table 7: Performance Indicators of Select Container Terminals

Terminal	Year	Moves / Crane Hr.	Moves / Berth Hr.	TEU /Mtr. Quay	TEU / Employee	Dwell Time(Day)	TRT Day
1	2	3	4	5	6	7	8
Tuticorin	2007-08	27.00	52.0	1223	2222	6.5	1.?8
	2008-09	25.0	45.0	1188	2280	2.7	0.71
	2009-10	25.0	47.0	1187	3058	2.0	0.73
	2010-11	22.0	42.0	1204	3042	2.4	1.?8
Chennai - CCTPL	2007-08	21.0	42.0	1237	2570	2.8	1.08
	2008-09	22.7	48.2	1258	2717	1.9	1.46
	2009-10	27.0	55.0	1250	2797	2.0	1.10
	2010-11	28.0	61.0	1323	2744	2.7	1.20
Chennai - CITPL	2009-10	25.?	81.1	89	735	3.8	1.24
	2010-11	32.0	25.0	441	3452	3.2	4.60
JNPT - JNPCT	2007-08	16.2	41.0	1706	1349	2.2$	1.90
	2008-09	15.?	40.5	1450	1133	2.1$	1.69
	2009-10	16.0	34.0	1142	820	2.0$	1.82
	2010-11						
JNPT - NSICT	2007-08	25.0	73.4	2513	2687	2.05	1.30
	2008-09	22.8	80.2	2578	2475	2.62	0.90
	2009-10	24.1	77.8	2563	3592	2.5$	1.60
	2010-11						
JNPT - GTICT	2007-08	29.7	58.9	1813	2670	2.4$	1.21
	2008-09	27.0	73.2	2054	3428	2.9$	1.14
	2009-10	29.9	83.9	2452	3285	2.85	1.02
	2010-11						
Cochin	2007-08	14.8	25.8	409	589	6.5	1.14
	2008-09	16.3	27.0	458	588	7.0	1.37
	2009-10	16.3	24.9	538	579	6.4	1.45
Kolkata D$	2008-09	19.8	15.9@	NA	NA	7.2$	3.28
	2009-10	27.2	15.2@	NA	NA	6.5$	4.?5
	2010-11	29.2	17.1@	NA	NA	8.0$	4.46
Visakhapatnam	2010-11	22.0	30.?	324	868	4.0	0.76

[illegible]
[illegible]
[illegible]
[illegible]
Moves/Berth Hr.: [illegible]
[illegible]
Dwell time: Total No. of container days/Total No. of containers
JNPCT: Jawaharlal Nehru Port Container Terminal   NSICT: Nhava Sheva International Container Terminal
GTICT: Gateway Terminals India Container Terminal   TRT: Turn Around Time
CCTPL: Chennai Container Terminal Pvt. Ltd.   CITPL: Chennai International Terminal Private Limited

1.4 Cargo traffic at Non-Major Ports

1.4.1 The annual average growth in cargo throughput at non major ports during first four years of Eleventh Five Year Plan was 14.2% compared to 14% during the Tenth Five Year Plan. Non major ports handled more than one-third of total maritime freight traffic of the country during 2010-11.

1.4.2 Table 8 presents maritime state-wise share and growth of traffic handled at Non-major ports during 2007-08 to 2010-11.

Table 8 : Traffic Handled by Non-Major Ports by Maritime States/UTs

('000 Tonnes)

Maritime State/UT	2007-08	2008-09	2009-10	2010-11	% Change over Previous Year			
					2007-08	2008-09	2009-10	2010-11
Gujarat	160321 (72.98)	159811 (77.67)	206540 (71.00)	230307 (73.30)	14.7	1.6	34.5	12.3
Maharashtra	11868 (5.21)	[illegible] (4.66)	12511 (4.12)	14875 (4.78)	-1.9	-8.5	30.1	18.9
Andhra Pradesh	19283 (8.75)	29720 (13.94)	43694 (15.10)	42112 (13.51)	3.7	54.1	47.0	[illegible]
Goa	12586 (6.25)	11901 (5.58)	[illegible] (4.00)	[illegible] (4.08)	-10.4	-7.2	[illegible]	4.9
Tamil Nadu	967 (0.43)	982 (0.46)	1174 (0.41)	1611 (0.51)	10.2	1.2	20.7	37.2
Karnataka	9300 (4.21)	4888 (2.30)	[illegible] (2.95)	3025 (0.96)	35.6	-47.7	72.0	-65.6
OtherStates/UTs	2681 (1.20)	2508 (1.18)	3981 (1.37)	6972 (2.41)	44.4	-3.3	57.8	75.5
All 9 States/UTs	220374 (100)	213222 (100)	289913 (100)	314641 (100)	11.3	[illegible]	35.7	8.3

Note: Figure in parenthesis is the percentage share of traffic handled by the maritime state to the total traffic handled by all the maritime states. P Provisional

1.4.3 The growth in cargo handled by the non-major ports in 2010-11 at 9.0% was one fourth of 35.7% increase posted in 2009-10 (Table:8). The growth in cargo handled at non-major ports has been facilitated by sustained growth by non-major ports in all the states except Karnataka and Andhra Pradesh (Table: 8). The growing importance of non-major ports in handling cargo traffic has helped alleviate the congestion at major ports. Table 8 provides traffic handled by non-major ports in terms of maritime states

(geographic location) and Table 9 gives a glimpse of commodity profile of the cargo handled. Table:8 reflects that Gujarat accounted for about three-fourth (73.4 %) of the total traffic handled by the non-major ports followed by Andhra Pradesh (13.5%), Maharashtra (4.7%) and Goa (4.6%). Four maritime States, viz. Gujarat, Andhra Pradesh, Goa and Maharashtra together accounted for 96% of the total cargo traffic handled by the non-major ports in 2010-11.

1.4.4 Three commodities, viz. POL, iron ore, and coal accounted for more than fourth-fifth of the total cargo handled at the non major ports (Table :9).

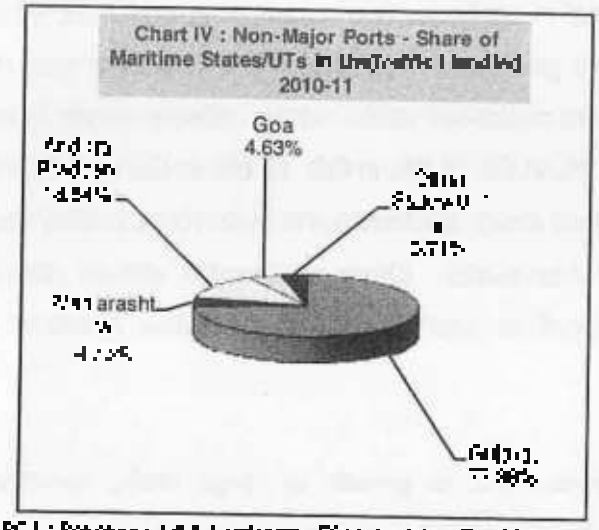
Table 9 : Commodity-wise Traffic Handled by Non-Major Ports

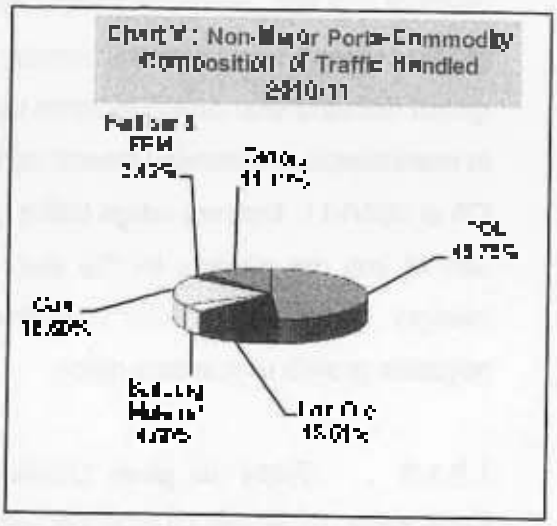
('000 Tonnes)

Commodity Group	2007-08	2008-09	2009-10	2010-11	% Change over Previous Period			
					2007-08	2008-09	2009-10	2010-11
POL	81035 (44.11)	[illegible] ([illegible])	145155 (50.17)	[illegible] (41.71)	12.[illegible]	7.4	49.4	5.7
Iron Ore	3[illegible]833 (18.58)	35808 (16.84)	49062 (16.98)	42492 (13.51)	0.7	4.8	36.8	-13.4
Building Minerals	16051 (7.85)	17[illegible] (8.22)	14802 (5.12)	14160 (4.50)	19.0	18.5	11.8	-4.4
Coal	15[illegible]41 (7.48)	[illegible] (10.08)	41307 (14.30)	52524 (18.60)	10.2	38.0	92.8	41.5
Fertiliser & FRM	7112 (3.45)	8855 (4.15)	6185 (2.10)	10494 (3.40)	4.9	24.5	28.9	72.[illegible]
Others	42502 (20.59)	[illegible] (16.47)	[illegible] (11.27)	[illegible] (11.12)	[illegible]	-15.[illegible]	0.3	7.8
All	205370 (100)	[illegible] (100)	[illegible] (100)	314641 (100)	11.6	[illegible]	[illegible]	8.8

Note: Figure in parenthesis is the percentage share of major commodity groups in the total traffic handled by the Non major ports.

1.4.5 The share of Maritime States/UTs in the total traffic and Commodity-wise composition of traffic in 2010-11 is revealed in the pie Charts IV and V.





1.4.6 Maritime State-wise & commodity-wise traffic handled at non-major ports during the last five years is given in Annex 3.

1.5 Impact of Global Macro Developments on Maritime Trade

1.5.1 Impact of growth on India's seaborne cargo

1.5.1.1 Maritime Transport activity is driven by developments in the world economy viz. growth in world output & trade as well as in Indian economy (coastal trade). Thus volume of seaborne cargo traffic is essentially in the nature of derived demand and is mainly shaped by the levels and changes in both the global and domestic activity. During 2010-11, the GDP recorded growth of 8.6% as compared to an annual increase of 9.0% in 2009-10. Cargo traffic at India's 12 major ports, which accounts for about two-third of India's total seaborne cargo at 570 million tonnes showed a meagre growth of 1.6% in 2010-11 compared to 5.0% increase in 2009-10. The trajectory of growth in cargo handled at India's major ports comes into sharp focus when these growth rates are viewed in terms of quarterly growth trajectories. This reveals that growth in total cargo throughput at Major Ports remained subdued in Q2 and Q3 of 2010-11. The manufacturing sector which is a major factor influencing seaborne cargo traffic had recorded lower GDP growth of 7.9% in 2010-11 compared to 8.0% in 2009-10. The GDP of Manufacturing sector comprising of Mining & Quarrying; manufacturing; electricity, gas and water supply and construction activities recorded quarterly growth of 10.2% in Q1, 8.4% in Q2, 7.1% in Q3 and 8.1% in Q4 during the course of 2010-11. While trends in POL, coal and fertilizers are largely driven by the dynamics of domestic demand supply;

those of iron ore, container traffic 'boomers' in particular are largely shaped by the state of global demand and economic activity and government policies. The impact of pick up in global demand was pronounced in case of container traffic, which reflects trends in trade in manufactures, recorded growth of 16.3% in Q1, 6.6% in Q2, 15.8% in Q3 and 12.1% in Q4 of 2010-11. Iron ore cargo traffic posted sharp decline 13.0% in 2010-11 mainly due to ban of iron ore exports by the state of Karnataka. Other commodity groups recorded meager to modest growth recording positive positive growth in some quarters and negative growth in quarters other.

1.5.1.2 Table 10 gives Quarter wise trend in growth of cargo traffic handled at Major ports, GDP and GDP of Manufacturing sector during 2009-10 and 2010-11

Table 10 : Quarter wise Trend in Growth of Cargo Traffic at Major Ports & GDP

Commodities/ Year	2009-10					2010-11				
	Q1	Q2	Q3	Q4	2009-10	Q1	Q2	Q3	Q4	2010-11
POL	9.9	0.1	-1.5	-1.3	-0.8	-0.7	0.6	6.1	7.5	3.1
Iron Ore	-4.5	19.1	14.1	3.4	8.7	-3.5	-26.0	-13.6	-11.1	-13.0
Coal	4.7	-11.0	8.5	0.4	1.9	-9.2	-0.7	1.1	4.9	1.5
Fertilizer	2.1	-0.6	6.5	58.7	16.5	11.7	50.8	-0.6	-9.0	13.1
Container Inward	8.8	1.4	17.1	22.6	8.7	16.3	6.6	15.8	12.1	12.6
TEUs	-7.8	-9.8	6.5	27.4	4.8	18.8	5.9	11.7	4.2	9.4
Other cargo	10.0	22.4	29.4	32.4	20.6	3.1	-4.0	-7.4	0.6	0.1
All Cargo	2.2	2.7	10.9	7.5	5.2	1.7	0.7	0.2	2.9	1.5
GDP overall	3.8	8.0	7.8	8.4	8.0	8.3	8.9	8.5	7.6	8.5
GDP - Manufacturing	5.7	9.9	9.5	12.4	9.9	10.2	8.4	7.1	6.1	7.9

GDP: Gross Domestic Product at factor cost at 2004-05 prices

1.5.2 Global Ocean Freight Rates

1.5.2.1 The Baltic Dry Index (BDI) is a daily average of prices to ship raw materials and represents the cost paid by an end user to transport raw materials across seas on the Baltic Exchange, the global marketplace for broking shipping contracts. The BDI is

one of the leading indicators of global economic activity. It measures the demand to move raw materials.

1.5.2.2 The surge in BDI from 2005 till May 2008 was primarily due to Chinese demand. There was also a shortage of supply for dry bulk cargo ships and a large backlog at shipyards. The combination of these two factors caused a surge in the index. However, during the second half of 2008, BDI lost almost 94 % from its record highs. BDI dropped from its all time high of 11,793 on May 20, 2008 to less than 1000 by the end of December (774 as on December 24,2008). BDI index remained around 90 % of its peak (May 20, 2008) during the course of second half of 2008 and touched its low at 663 points on July 31, 2008. However, BDI has gained considerably but remains well below the peak attained in May 2008.

1.5.2.3 This fall in BDI was due to a simultaneous convergence of several factors. Chief among these is the rapid plunge in the 'global growth' phenomenon. In addition to this, credit has been nearly impossible to get for the purchase of goods and the payment of time charters on the vessels. Many of vessels under shipping companies operate under Contract of Affreightment (is a contract to move cargo over a specified area between named ports and regions and may be performed by any ship as distinct from charter hire arrangements that pertains to a named ship) for a fixed period, which have been fixed much earlier or operate under long-term time charter. So, it is only that spot rate that gets affected immediately by this. It needs to be kept in view that the supply of large carriers tends to remain very tight with long lead times and high production costs. The index can experience high levels of volatility if global demand increases or drops off suddenly.

1.5.2.4 The opening half of 2010 saw growth in the dry bulk sector driven by China's demand for iron ore imports along with a rally in imports from Europe. Iron ore imports grew 9 per cent year-on-year pushing capsize rates up 20 per cent in the first six months of 2010 compared to 2009, averaging $20,828/day. This had a knock on effect for demand for coal, imports of which grew by 13 per cent in 2010. Grain imports also proved to be more robust in 2010, growing marginally by 1 per cent due to an increase in demand from Europe. Handisize, Handymax and Panamax rates all jumped by 70 per cent in the January to June period on the back of the demand growth.

1.5.2.5 From July onwards the ongoing addition of new buildings to the market along with a lowering of demand significantly depressed earnings and time charter rates in the market. The supply of tonnage outpaced demand by 16.5 per cent in 2010. Capesize one year time charter rates fell 23 per cent in the second half of the year down to $17,500/day in December. The Panamax, Handymax and Handysize markets were also marred by over supply issues; however rates fared better in the second half of the year due to consistent demand for thermal coal and grain imports. The influx of 30 per cent new building capacity between 2011 and 2012 is likely to add further pressure to freight rates which in some segments are barely covering operating expenses.

1.5.2.6 The decline in container ship charter rates accelerated in 2008 and by the year end rates has fallen by over 50% for ships in the 700-1,700 TEU range. In 2009, rates on average slipped by a further by 15 to 20%. The persistently low rates were the result of subdued world trade and its impact on container volumes.

Table 11: Container 1 year Charter Rates (US $ Daily Rate)

Month	Feeder 350 TEU	Feedmax 725 TEU	Handysize 1000 TEU	Handymax 1700 TEU
Jan-10	3,200	3,425	4,000	4,200
Feb-10	3,200	3,450	4,200	4,350
Mar-10	3,300	3,500	4,300	5,450
Apr-10	3,600	3,800	4,500	4,800
May-10	3,600	4,000	5,300	5,600
Jun-10	3,800	4,850	6,800	7,800
Jul-10	4,000	5,000	7,200	8,250
Aug-10	4,150	5,200	7,300	8,300
Sep-10	3,300	5,300	7,350	8,750
Oct-10	4,000	5,300	7,500	8,250
Nov-10	4,000	5,800	7,500	8,250
Dec-10	1,000	5,300	7,650	8,400
Jan-11	4,100	5,600	8,500	8,250
Feb-11	4,100	5,550	8,500	9,250

Sources : Clarksons

1.5.2.7 Containers ship time charter rates made a significant recovery in 2010, for ships in the 700-1,700 TEU size range charter rates, on average, increased by 35% over the course of 2010 (Table 12). Handymax vessels charter rates jumped 100% between January and December, 2010, from $4,200 to $8,400 per day. Feedermax rates increased by 55% to US $5,300 per day in 2010 and feeder size vessel rates increased

by 25% jumping to US $ 4000 per day. Despite these positive upward movements charter rates are still well below 2008 peak levels are hovering around 2002 levels. Container ship capacity demand remained high in 2010 in particular over the first three quarters. The up turn in demand resulted in the reactivation of a large amount of idle tonnage which at the start of 2010 was close to 12% of freight with 562 vessels lying idle. On top of this a further 9.2% new building capacity entered the market bringing the total fleet to 4,849 vessels operating 14.2 million TEUs. Despite concerns over the supply/demand balance, many shipping lines are placing order of large vessels. In 2010 the global container trade volumes expanded by 12.3% on the back of market recovery. In 2010 Maersk reported a profit of $2.43 billions as against $ 1 billion loss made in 2009. The improvement in earning among the top liner operators is largely result of 25% increase in box freight rates and strong volume growth across the main freight lanes. On the main trade lanes carrier achieved freight rates from January upto September rates rose on an average 50% higher than in 2009. On the Asia Europe route freight rate were around US $1990 per 20 ft.

1.5.3 Trends in Global top 20 Cargo/Container Ports

1.5.3.1 Growth in cargo and container traffic at world's top major ports/container terminals is a barometer of trends in seaborne trade. The growth in cargo traffic (million tonnes) at world's top 20 ports increased by more than 13 % in 2010 after suffering a drop of 2.8 % in 2009 in the aftermath of global recession. Similarly, the growth in container traffic (million TEUs) which reflects growth in manufactured goods increased by 11.6 % on the back of global recovery after experiencing a severe contraction of 10.8 % in 2009. Recent trends in Top 20 World Major Ports (in Million Tonnes) and Container Ports (in million TEUs) are given in Table 12 and Table 13 respectively.

Table 12 : Top 20 World Major Ports (in Million Tonnes)			
Port	2008	2009	2010
Shanghai (PRC)	582.0	590.0	650.0
Zhoushan/Ningbo* (PRC)	520.1	570.0	627.0
Singapore	515.4	472.3	502.6
Rotterdam (Netherlands)	421.1	387.0	429.9
Tianjin (PRC)	365.0	380.0	406.0
Guangzhou (PRC)	344.3	375.0	400.0
Dalian (PRC)	185.2	273.7	300.8
Hong Kong	259.4	249.0	257.9
Busan (South Korea)	241.7	228.3	262.1
Qinhuangdao (PRC)	252.2	249.8	257.0
South Louisiana (USA)	232.7	215.6	240.2
Houston (USA)	227.0	166.0	225.0
Shenzhen (PRC)	211.2	194.0	221.0
Hohseo (PRC)	151.0	181.3	201.0
Los Angles (USA)	170.0	157.5	187.8
Nagoya (Japan)	218.1	185.1	186.7
Port Hedland (Australia)	190.7	159.4	178.8
Antwerp (Belgium)	198.4	157.5	178.2
Chiba (Japan)	170.3	150.0	165.3
Total of Top 20 Ports	5978.4	5825.5	6513.8
Source: Port Statistics, Port of Rotterdam Authority; PRC: Peoples Republic of China; * Combined in 2008			

Table 13 : Top 20 World Container Ports (in Million TEUs)			
Port	2008	2009	2010
Shanghai (PRC)	27.08	25.00	29.07
Singapore	29.92	25.87	28.45
Hong Kong (PRC)	24.49	20.96	23.58
Shenzhen (PRC)	21.40	18.25	22.51
Busan (Republic Korea)	13.45	11.80	14.16
Zhoushan/Ningbo* (PRC)	11.23	10.50	13.14
Guangzhou (PRC)	11.00	11.19	12.55
Qingdao (PRC)	10.32	10.26	12.01
Dubai Ports (UAE)	11.80	11.12	11.60
Rotterdam (Netherlands)	10.78	9.74	11.15
Tianjin (PRC)	8.50	8.70	10.08
Kaohsiung (Taiwan Province of PRC)	9.68	8.58	9.78
Port Klang (Malaysia)	7.97	7.91	7.97
Antwerpen (Belgium)	8.66	7.85	8.67
Hamburg (Germany)	9.74	7.91	7.91
Los Angles (USA)	7.85	6.75	7.85
Tanjung Pelepas (Malaysia)	5.60	6.00	6.53
Long Beach (USA)	5.49	5.07	6.26
Xiamen (PRC)	5.00	4.68	5.82
Bremen (Germany)	5.53	4.58	4.88
Total of Top 20 Ports	247.48	220.76	268.12
Source: Port Statistics, Port of Rotterdam Authority. PRC: Peoples Republic of China; * Combined in 2008			

1.5 Policy Initiatives - Central Government

1.5.1 In October 1996, the then Ministry of Surface Transport issued guidelines for Private Sector participation in Major Ports. The guidelines were intended to precisely define the options for the involvement of private sector in the Major Ports.

1.5.2 Government also issued guidelines on joint venture formation in Major Ports which came into effect from 1.9.2000. In order to attract private sector investment, model bid documents were finalised for private sector projects laying down transparent bidding procedure, qualifications and selection criteria, bid evaluation procedure, termination payment, dispute resolution process etc. and detailed terms and conditions of the License Agreement, to ensure bankability, uniformity and reduction in time taken to select the private parties.

1.5.3 The Major Port Trust Act 1963 was further amended in the year 2000 for allowing Major Ports to form joint ventures with Non-Major/Foreign Ports as well as companies.

1.5.4 Measures for increasing the capacity of Major Ports which are under the control of Central Government are taken as part of an ongoing process, keeping in view the demands of maritime trade through implementation of development plans for the ports, improvement in productivity, etc. The Eleventh Five Year Plan has envisaged an increase in the capacity of major port to 1016.56 million tonnes by the end of 2011-12. At the beginning of the Eleventh Five Year Plan the capacity of the Major Ports was 504.75 million tonnes. Thus the proposed capacity addition during Eleventh Five Year Plan at the Major Ports amounts to 511.80 million tonnes. At the end of March 2010 the cargo handling capacity of Major Ports was 510 million tonnes. Commodity-wise capacity of Major Ports at the end of March 2010 is given in Annex 4.

Maritime Agenda 2010-20

1.5.5 In the Maritime Agenda a target of 3130 MT Port capacity has been set for the year 2020. More than 50% of this capacity is to be created in the Non-Major Ports. The Non-Major Ports are expected to play a major role and by the year 2020, the traffic handled by Non-Major Ports is expected to increase to 1280 Million Tonnes(MT). The objective is not only creating more capacity but to bring out ports at par with the best international Ports in terms of performance. This will reduce the transaction cost

considerably for our trade, thus making them globally competitive. The total proposed investment in Major and Non-Major Ports by 2020 is expected to be around Rs.298,000 crore. Most of this investment has to come from the private sector. Public Funds will be mainly deployed for common user infrastructure facilities like deepening of port channels, rail and road connectivity from ports to hinterland etc. Foreign Direct Investment up to 100% under automatic route is permitted for construction and maintenance of Ports.

1.6.7 The Ministry of Shipping is continuously engaged in designing and implementing various projects for development of port sector. To increase the pace of growth and to improve the efficiency of the delivery system, the Ministry of Shipping has come out with a Maritime Agenda 2010-20 for the next ten years. The Agenda is an effort to identify the areas for attention during 2010-11 to 2019-20.

1.6.8 The agenda for the Ports are:-

- Develop Two New Major Ports one each on east and west coasts.
- Full mechanization of cargo handling and movement
- Major Ports to have draft of not less than 14 metres and hub ports 17 metres.
- Identification and implementation of projects for rail, road and inland waterway connectivity to ports.
- Development of two hub ports on each of the West and the East coasts - Mumbai (JNPT), Kochi, Chennai and Visakhapatnam.
- Port Policy Measures
  - Corporatisation of Major Ports
  - New Land Policy for Major Ports
  - New Policy on captive berths
  - Establishing a Port Regulator for all ports for setting, monitoring and regulating service levels and technical & performance standards.
  - New Policy on dredging
  - Shifting of transshipment of Indian containers from foreign ports to Indian ports
  - Policy on co-operation and competition amongst Indian Ports

i) Establishing 'Indian Ports Global' for overseas investments by Indian Ports

Private Sector Participation

1.8.9 With opening up of the Indian economy, the Government of India has allowed private sector participation in Major Ports to infuse funds, induct latest technology, improved management practices and above all addition of capacity. Foreign direct investment upto 100% under automatic route is permitted for construction and maintenance of Ports and Harbours. It has been estimated in the Maritime Agenda 2010-20 that investments required in new projects of Major ports will be Rs.109448.41 crore, of which Rs.72878.16 crore have been estimated to come from Private sector participation and the balance Rs 36571.25 would be funded through Internal Resources/EBR and Government Budgetary support etc. The states have also identified projects for development of non-Major ports at an estimated cost of Rs 187930.84 crore for creation of additional capacity of 1256.56 million tonnes. Private sector is envisaged to fund most of the projects through PPP or BOT or BOOT basis. It is envisaged that private sector will meet 98.1% of the cost of development amounting to Rs 161032.91 crore. Remaining requirement of Rs 3678.34 crore is planned to be contributed by State Governments through Internal Resources / Gross budgetary Support/ Internal Extra budgetary Resources.

1.8.10 To encourage private sector participation uniformity, clarity and transparency in the bidding process is of the prime importance. The Department of Shipping has already put in place guidelines for private sector participation. To ensure uniformity in shortlisting and bidding Model RFQ and RFP documents have been finalized. A Model Concession Agreement has also been finalized which attempts to bring in uniformity in the various contracts to be signed by the Major Ports as Concessioning Authority with the various private operators as concessionaire. In the financial year 2010-11, nine Public Private Partnership (PPP) projects were awarded at an estimated cost of Rs. 3056.65 crore resulting in capacity addition of 51.76 MT in the port sector comprising construction of berths and terminals, mechanization of existing berths etc.

1.8.11 The preferred route for private sector participation is through open competitive bidding in which the bidder offering the highest percentage of revenue share out of the operation of the facility which is licensed out is selected. The tariff fixation is carried out

by TAMP which is an independent Regulatory Body. At present the tariffs are fixed up-front which act as a ceiling before a project is bidded out on revenue share basis as explained above. The private operators are free to charge below the ceiling.

Areas of private investment

1.6.12 The following areas which are indicative in nature have been identified for participation/investment by private sector:

(a) Leasing out existing assets of the Port.

(b) Construction/creation of additional assets, such as:

- construction and operation of container terminals.
- construction and operation of bulk, break bulk, multipurpose and specialized cargo berths.
- warehousing, container freight stations, storage facilities and tank farms.
- cranes/handling equipment.
- setting up of captive power plants.
- dry docking and ship repair facilities.

(c) Leasing of equipment for port handling and leasing of floating crafts from the private sector.

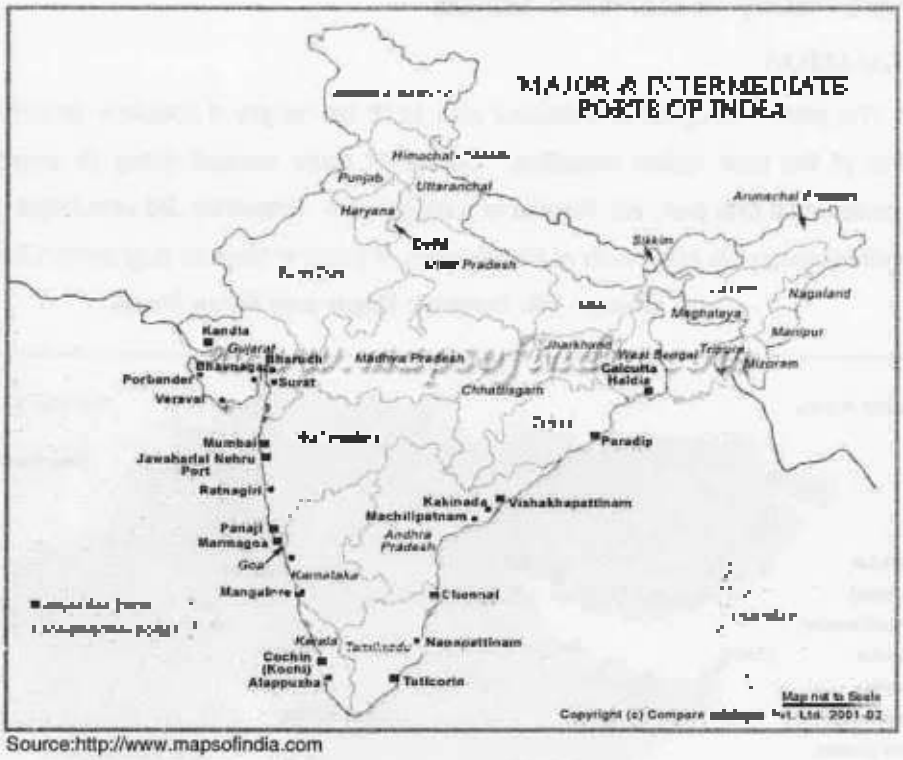
(d) Pilotage.

(e) Captive facilities for port based industries.

II. POLICY AND PERFORMANCE OF MARITIME STATES

2.1 Ports are economic and service provision units of a remarkable importance since they act as a place for the interchange of two transport modes, maritime and land, whether by rail or road. Therefore, the essential aspect of ports lies in their intermodal nature. India has a coast-line of around 7517 Kms with 12 major ports and 187 notified non-major (minor/intermediate) ports along the coast-line and sea islands. Of the Non-Major Ports, around 60 are handling traffic. Chart-VI gives the geographical location of the Major and prime Non-Major Ports. The Maritime Ports operate within the statutory framework of the Indian Ports Act 1908 which applies to all the ports. However, the Major Ports Act 1963 applies only to Major Ports. Each Major Port is administered by a 'Port Trust' (except for the port of Ennore which is a corporatised entity).

Chart - VI



Source:http://www.mapsofindia.com

2.2 The Major Ports are under the purview of the Centre while the Non Major Ports are under the purview of the States. Port development in the Central Sector has emphasized additions to capacity as well as provision of commodity specific handling facilities (at Major Ports) as per the plan schemes. With the liberalization of the economy, private sector participation in development of Major Ports has been encouraged. The Maritime

States are also actively pursuing the development of Non-Major Ports to meet the growing needs of the sea borne trade.

2.3 Maritime States Development Council (MSDC)

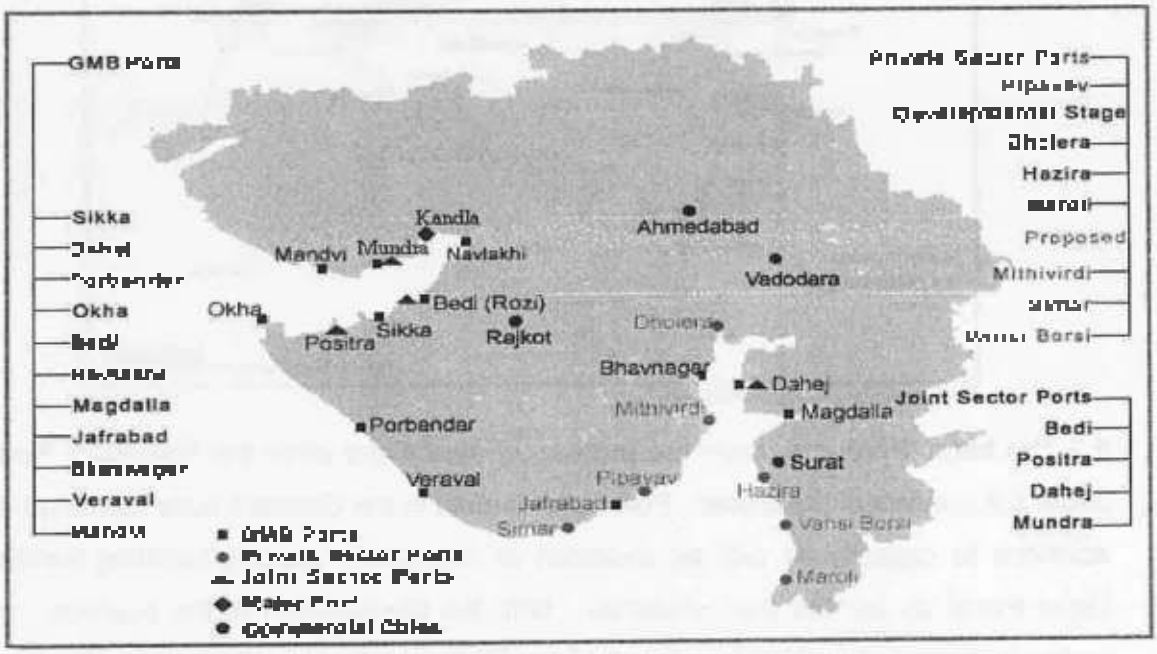
2.3.1 With a view to have an integrated approach for the development of both Major and Non-Major Ports, the **Maritime States Development Council (MSDC)** was constituted in May, 1997 under the Chairmanship of the Honourable Minister of Shipping. The Ministers In-charge of Ports in all Maritime States, Union Territories of Puducherry, Andaman's & Nicobar Administration, Daman & Diu and Lakshadweep are its members. The deliberations and decisions of the MSDC provide the institutional framework for coordinated development of Major and Non- Major ports. So far thirteen meetings of MSDC have been held.

2.4 Port Policy in Maritime States

2.4.1 GUJARAT

2.4.1.1 The state of Gujarat is endowed with 1215 km length of coastline which constitutes about one-tenth of the total Indian coastline. Out of 41 ports located along its coastline, 40 are non major ports while one port, viz. Kandla is a major port. Presently, 20 non-major ports in the State are handling cargo. A snap view of the location of ports in Gujarat is given in Chart -VII.

Chart – VII: Gujarat: Major and Minor Ports



Source : http://www.gmbports.org/port_page1.htm

2.4.1.2 The trends in the cargo handled at both major and non-major ports of Gujarat State during 2006-07 to 2010-11 are given in Table: 14

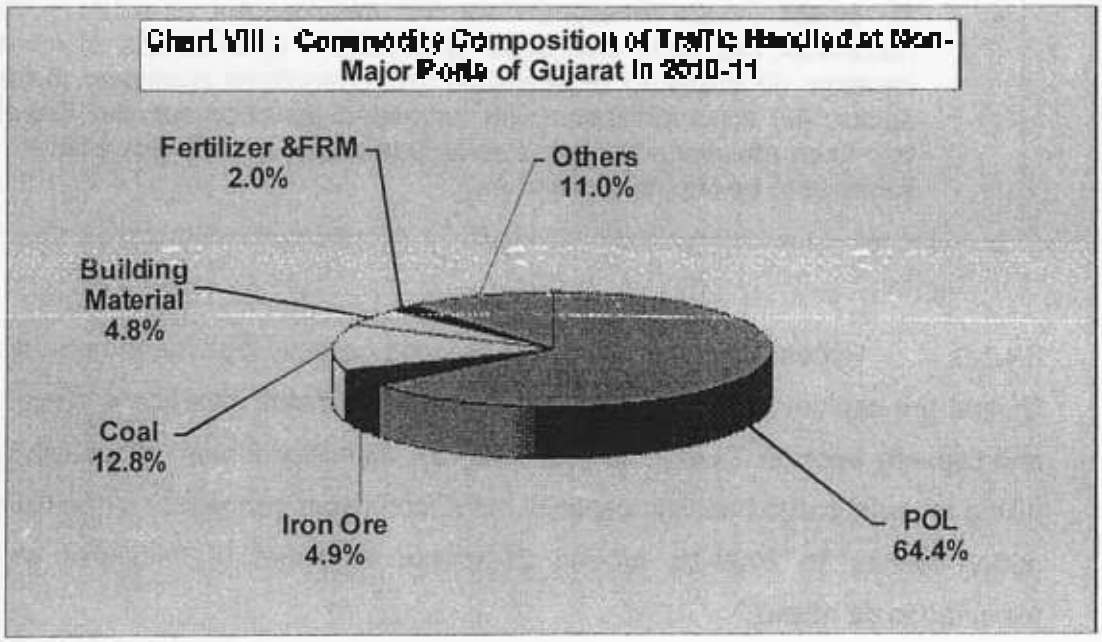
Table: 14 Gujarat: Trends in Cargo Handled at Major & Non-Major Ports (Million Tonnes)

Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11 (P)
Major Ports	52.98 (15.4)	64.82 (22.5)	72.22 (11.2)	79.53 (10.1)	81.88 (3.0)
Non-Major Ports	131.26 (21.4)	150.62 (14.7)	152.81 (1.5)	205.54 (34.5)	230.91 (12.3)
All Ports	184.24 (19.8)	215.44 (16.9)	225.03 (4.5)	285.04 (26.7)	312.79 (9.7)

Figures in bracket represents percentage change over the previous year/period (P) Provisional.

2.4.1.3 It is noteworthy that all ports (major and non-major) located along the coast of Gujarat handled more than 25% of the total cargo handled by Indian ports in 2010-11. In particular, non-major ports of Gujarat alone handled more than 73% of total cargo traffic at India's non-major ports.

2.4.1.4 The share of commodity-wise traffic handled by non major ports of Gujarat is shown in the Chart VIII.



POL: Petroleum, Oil and Lubricant FRM: Fertilizer Raw Material

2.4.1.5 Amongst the Maritime States of India, Gujarat is one of the States, which has played a proactive role in the development of non major ports on its coastline. It announced an Integrated Port Policy in December 1995. The salient features of the Policy are given in the Box:2

Box: 2-Gujarat: Objectives of Integrated Port Policy

- To increase Gujarat's share in the export and import sectors in national and international trade and commerce in pursuance of the policy of liberalisation and globalisation.
- To reduce the burden on existing major ports on the western coast of India.
- To provide port facilities to promote export oriented and port based industries which are estimated to contribute 50% of the total industrial investment in Gujarat.
- To take full advantage of the strategic location of Gujarat coast by (a) encouraging shipbuilding, ship repairing and related manufacturing activities and; (b) providing facilities for coastal shipping and ferrying passengers between Saurashtra and South Gujarat and other destinations.
- To meet Gujarat's potential power requirements by (a) establishing barge mounted power plants and (b) providing exclusive port facilities for importing different kinds of power fuel.
- To attract private investment for the development of minor ports BOOT framework has been envisaged to provide - (i) timeliness of infrastructure creation, (ii) efficiency of operation and operational autonomy to the private sector, (iii) synchronization with hinterland development, (iv) Government's role to be maintained only in appropriate areas, and (v) Government financial liabilities to be kept to a minimum.

2.4.1.6 Recent trends in cargo handled and capacity creation in non major ports of Gujarat are captured in the Table: 15. It indicates sustained increase in cargo throughput and capacity addition. During the year 2008-09, 36 million tonnes of capacity was added taking the total cargo handling capacity in the non major port sector in the Gujarat to 226 million tonnes. In 2009-10, around 25 million of tonnes of additional capacity was expected to be added.

Table : 15 - Gujarat Non Major Ports - Current Capacity & Utilization (Million Tonnes)					
Item	2006-07	2007-08	2008-09	2009-10	2010-11
Capacity*	182.0 (18.77)	197.0 (15.0)	225.0 (36.0)	243.64 18.64	267.4 (23.76)
Cargo Handled	132.44	147.80	152.80	205.54	230.91
% Utilization	72.14	74.92	61.99	84.36	86.35
* Including Lightrage Port Capacity; Figures within parenthesis indicate capacity addition in MT during the year					

2.4.1.7 As per the port policy, Gujarat Maritime Board (GMB) has selected 10 Green Field sites for development of new ports as "All weather Deep Water Draft Berthing Ports". Amongst 10 ports, 6 ports are to be developed through private investment and remaining 4 ports in the joint sector. The port wise trend in capacity creation are given in the Table-16 below.

Table 18 : Trends in capacity creation (Million TPA)						
Ports	2006-06	2006-07	2007-08	2008-09	2009-10	2010-11
Mundra (GAPL)	26.20	36.20	36.20	36.20	36.20	41.20
Mundra (GABI	0.24	0.24	0.24	0.24	0.24	0.24
Okha	3.96	3.96	3.96	3.96	3.96	3.96
Bedi	5.69	5.69	5.69	5.69	5.69	5.69
Pipavav (DPPL)	9.41	9.41	14.41	14.41	29.41	29.41
Magdalla	17.05	27.05	27.05	27.05	27.05	45.05
Navlakhil	3.82	3.82	4.82	4.82	4.82	4.82
Sikka	57.57	57.57	67.57	104.57	104.57	104.57
Porbander	5.26	5.26	5.26	5.26	5.26	5.26
Veraval	2.17	2.17	2.17	2.17	2.17	2.17
Mulwarka	7.72	7.72	7.72	7.72	7.72	7.72
Jafrabad	4.53	4.53	4.53	4.53	4.53	4.53
Dahej	13.19	13.19	13.19	13.19	13.19	13.19
Bhavnagar	1.18	1.18	1.18	1.18	1.18	1.18
Jakhau	3.25	3.25	3.25	3.25	3.25	3.25
Mandv	0.32	0.32	0.32	0.32	0.32	0.32
Gugha	0.08	0.08	0.08	0.08	0.08	0.08
Bhoo	0.00	0.00	0.00	0.00	0.00	0.00
Total	164.00	182.00	198.00	235.00	243.64	267.64
*expected						

2.4.2 MAHARASHTRA

2.4.2.1 The State has a coastline of around 653 km. with 2 major ports viz. Mumbai and Jawahar Lal Nehru and 53 non-major ports. Out of 53 non major ports only 13 handle cargo. Maharashtra Maritime Board (MMB) is the nodal agency for regulation and development of the State's maritime activities. MMB has taken many policy initiatives for development of port sector which are given in the Box.

Box: 3- Maharashtra: Policy Initiatives for Port Development:

- Development on BOOST basis
- Developer's selection on MOU basis or by tender if many investors interested.
- Concession period of 50 years
- Concessional Wharfage
- Government land on lease, if available, at market valuation
- Equity participation by Government/MMB up to a maximum of 11 %
- Road linkage to nearest State Highway to be part funded by the State
- Rail connectivity by Developer
- Freedom to fix tariff

Policy Guidelines for Captive Terminals

- Land and site for jetty will be leased out for a period of 30 years
- Development on Build, Operate & transfer (BOT) basis
- No berthing dues from vessels calling at captive jetty
- Wharfage charges as per the prescribed rates notified by the State Government.
- At the end of 30 years, the jetty, superstructure & facilities on jetty will revert back to MMB.

2.4.2.2 Revas-Aware and Dighi are both located in Raigad District are in the process of development since March, 2002. The developer of Dighi Port has issued work order for construction of first berth in November 2007. The Revas Aware Port Project has secured Environmental Clearance from M/o Environment & Forests in May 2007 and pre-construction activities as well as validation of some earlier data are in progress. Further, 3 more ports viz. Redi, Vijaydurg and Jaigad are likely to come up shortly. Letters of Intent have been issued to the concerned developers. These ports are expected to be ready for cargo handling in next 3-4 years. The proposed capacity of these ports is given in Table 17 .

Table 17 :Maharashtra: Proposed Capacity Creation (in million tonne per annum)		
Port	Initial Phase	Ultimate Phase
Rewas-Aware	47.00	127.00
Dighi	5.45	18.15
Jaigad (Dharmarkhol Bay)	5.00	18.00
Jaigad	1.12	2.90
Vijaydurg	7.50	75.00
Redi	5.10	33.0

2.4.2.3 The trends in the cargo handled at both major and non-major ports of the State during 2006-07 to 2010-11 are given in Table 18.

Table 18 : Maharashtra: Cargo Handled at Major & Non-Major Ports (MT)					
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11 (P)
Major Ports	97.18 (18.5)	112.88 (16.2)	109.18 (-3.3)	115.50 (5.6)	118.90 (3.1)
Non-Major Ports	11.58 (3.8)	11.36 (-1.9)	10.42 (-8.3)	12.51 (20.1)	14.88 (18.9)
All Ports	108.76 (16.7)	124.24 (14.2)	119.60 (-3.7)	127.91 (6.9)	133.78 (4.7)
Figures in bracket indicate percentage change over the previous year ; (P) Provisional					

2.4.3 GOA

2.4.3.1 Goa with a coastline of about 118 kms is criss-crossed by 7 rivers. Apart from the major port at Mormugao, there are five non-major ports all of which are riverine ports with an average depth of about 2 meters except Panaji (which is the lone cargo handling non-major port) with a depth of 4 meters.

2.4.3.2 The trends in the cargo handled at both major and non-major ports of the State during 2006-07 to 2010-11 are given in Table19.

Table 19 : Goa : Trends in Cargo Handled at Major & Non-Major Ports (MT)					
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11 (P)
Major Ports	34.24 (8.0)	35.13 (2.6)	41.69 (18.7)	48.86 (17.2)	50.02 (2.4)
Non-Major Ports	14.31 (21.7)	12.83 (-10.3)	11.90 (-7.2)	13.90 (16.8)	11.58 (-4.9)
All Ports	48.55 (11.7)	47.96 (-1.2)	53.56 (11.7)	62.76 (17.1)	64.62 (3.0)
Figures in bracket represents the percentage change over the previous year Period; (P) Provisional; MT Million Tonnes					

2.4.4 KARNATAKA

2.4.4.1 Karnataka has a coastline of about 280 kms. At present, there is one major sea port, the New Mangalore Port and 10 non-major ports in Karnataka. The ports of Karwar, Mangalore, Tadri, Haldipur and Belekari are main cargo handling non-major ports in the state.

2.4.4.2 The trends in the cargo handled at both major and non-major ports of the State during 2006-07 to 2010-11 are given in Table 20.

Table 20: Karnataka:Trends in Cargo Handled at Major & Non-Major Ports (MT)					
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11 (P)
Major Ports	32.04 (-7.0)	36.02 (12.4)	36.69 (1.9)	35.53 (-3.2)	31.55 (-11.2)
Non-Major Ports	6.56 (59.2)	8.9 (35.7)	4.97 (-44.2)	8.55 (72.0)	2.13 (-63.8)
All Ports	38.60 (0.1)	44.92 (16.4)	41.66 (-7.3)	44.08 (5.8)	34.65 (-21.4)
Figures in bracket represents percentage change over the previous year Period; (P) : Provisional; MT Million Tonnes					

2.4.5 KERALA

2.4.5.1 Kerala has a coastline of 570 kms. with one major port at Cochin and 13 other non-major ports. The Vallarpanam Container Terminal Project in Cochin is being promoted on a BOT basis under private participation.

2.4.5.2 The trends in the cargo handled at both major and non-major ports of the State during 2006-07 to 2010-11 are given in Table 21. In Kerala of the 4 non major ports 3

ports, viz, Azhikkal, Beypore (handles more than 90 % of the total non major cargo traffic in the State) and Vizhinjam are handling cargo for the last few years.

Table 21: Kerala : Trends in Cargo Handled at Major & Non-Major Ports (MT)					
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11 (P)
Major Ports	15.26 (9.9)	15.81 (3.6)	15.19 (-2.0)	17.48 (12.5)	17.87 (2.5)
Non-Major Ports	0.17 (21.4)	0.10 (-41.2)	0.14 (40.0)	0.12 (-14.2)	0.12 (0.0)
All Ports	15.43 (10.1)	15.91 (3.1)	15.68 (-1.7)	17.55 (12.2)	17.90 (2.5)
Figures in brackets represents percentage change over the previous year/period; (P) - Provisional; MT - Million Tonnes					

2.4.6 TAMIL NADU

2.4.6.1 Tamil Nadu has a coastline of about 991 km, with 3 major ports at Chennai, Ennore and Tuticorin and 16 non-major ports. Out of 15 non-major ports only five handled cargo. A Port Policy for promoting private investment for the development of minor ports in Tamil Nadu has been formulated. Its main objectives are to provide exclusive port facilities for import of Coal/Naphtha/Oil/Natural Gas for shore based thermal power plants, promote export oriented and port based industries along the coastal districts of Tamil Nadu, encourage ship-repairing, ship-breaking and manufacture of cranes and floating cranes. In addition, leisure tourism and water sports along the coastline are also aimed.

2.4.6.2 Since the formation of the Tamilnadu Maritime Board, the Board has granted permission for establishing captive ports to nearly 15 port based industries. Besides, there are 7 Government ports, which are under the administrative control of the Government of Tamilnadu, including Cuddalore, Nagapattinam and Colachel. These will be developed through Public Private Partnership. This will improve the cargo handling capacity.

2.4.6.3 In order to optimize the limited resources and the ports along the east coast permission for captive ports to handle commercial cargo have been given. Accordingly, the Katupalli Port developers, namely, M/s L&T Shipbuilding Private Limited and the Thruchinguram Port developers, namely M/s Nagarjuna Oil Corporation

Limited, have been permitted to handle other commercial cargo as well. It is expected that these developments will pave way for the upcoming industries in this area.

Development of Cuddalore Port

2.4.6.4 Cuddalore port is strategically located to provide best port connectivity for the industries located in the Central and Western Districts of Tamil Nadu, which have been hitherto depending on the major ports of Tamil Nadu, which are located either in the Northern or Southern extremities of the State. Therefore, Tamil Nadu Government has proposed to offer the existing Cuddalore Minor Port on the basis of Develop, Operate, Maintain, Share and Transfer through Public Private Participation (PPP) mode. Proposed investment is about Rs.150 Crore over a period of six years with the revenue to the Tamil Nadu Maritime Board based on the minimum guaranteed annual throughput.

Development of Nagapattinam Port

2.4.6.5 Nagapattinam Minor Port was primarily used for importing fertilizer required for the agrarian hinterland. The port was also used for the passenger trade between India and Singapore. However, keeping in mind the potential of this port, it is proposed to develop a green field port in this location. It is estimated that this project would invite investment of about Rs.400 Crore.

2.4.6.7 The trends in the cargo handled at both major and non-major ports of the State during 2006-07 to 2010-11 given in Table:22.

Table 22: Tamil Nadu: Trends in Cargo Handled at Major & Non-Major Ports (MT)

Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11 (P)
Major Ports	82.18 (11.6)	90.18 (9.8)	91.00 (0.9)	95.55 (5.0)	98.20 (2.8)
Non-Major Ports	0.81 (14.1)	0.89 (9.9)	0.90 (1.1)	1.17 (30.0)	1.61 (37.6)
All Ports	82.94 (11.7)	91.08 (9.8)	91.90 (0.9)	96.72 (5.2)	99.81 (3.2)

Figures in brackets are relevant percentage changes over the previous year /period

(P): Provisional; MT Million Tonnes

Sethu Samudram Ship Canal Project (SSCP)

2.4.6.8 The project envisages creation of a two-way navigational channel connecting the Gulf of Mannar to the Bay of Bengal through a dredged channel on either side of Palk Bay. Originating from Tuticorin Port crossing Adam's Bridge and passing through Palk Bay & Palk Strait, the project would end in Bay of Bengal.

2.4.6.9 The project is expected to reduce average distance by 336 Nautical Miles and reduce sailing time for the vessels operating to/from east and west coast of the country by 22.50 Hrs. The total cost of the project approved in 2005 was estimated at Rs. 2427 crore. Tuticorin Port was appointed as a nodal agency for implementing the project. The project work was inaugurated by Honorable Prime Minister on 2nd of July 2005.

2.4.6.10 Pursuant to the direction of the Supreme Court in July, 2006, a committee of Experts has been constituted by the Government of India under the Chairmanship of Dr.R.K.Pachouri, Director General, TERI to consider alternate alignment for SSCP.

2.4.7 ANDHRA PRADESH

2.4.7.1 The State is bestowed with a coastline of about 974 kms. There is one major port viz Visakhapatnam and 12 non-major ports in Andhra Pradesh.

2.4.7.2 The State had prepared a perspective Developmental plan in the VISION 2020 Document for development of its ports with a view to enhance cargo handling capacity at its Non-Major Ports to around 178 million tonnes by 2020. As large investments are required for capacity creation, the State Government policy intends to encourage the participation of private sector in port development. The status of privatized ports and private investment in Andhra Pradesh Ports is as follows:

Status of Privatized Ports

(i) Kakinada Deep Water Port was privatized in March 1999 to M/S ISPL on DMST terms for 30 years.

(ii) Krishnapatnam Port was privatized in Jan 1997 on BOOT terms to M/S Krishnapatnam Port Company Ltd.(NATCO) for 30 years. Revised agreement was signed

on 17-9-2004. Navayuga Engineering Company has taken 74% equity stake in KPCL and NATKO 26%.

(ii) Gangavaram Port was privatized in August, 2008 for development of Deep Water Port on BOOT terms initially for 30 years. The port has started handling cargo.

Proposed Private Investment

The proposed investments in approved port projects are (i) Gangavaram Port (Rs.2000 crore); (ii) Krishnapatnam Port (Rs.650 crore); and (iii) Kakinada Deep Water Port Expansion (Rs.280 crore). The projects under pipeline are (i) Machilipatnam Port (Rs.1000 crore); and (ii) Nizampatnam Port (Rs.1000 crore).

2.4.7.3 The various measures taken by the government of Andhra Pradesh have increased capacity of non-major ports in Andhra Pradesh to 39.50 million tonnes by March 2010. The capacity at the end of March 2011 is expected to be 49.5 million tones.

2.4.7.4 The trends in the cargo handled at both major and non-major ports of the State during 2006-07 to 2010-11 are given in Table: 23.

Table23: Andhra Pradesh: Trends in Cargo Handled at Major & Non-Major Ports(MT)

Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11 (P)
Major Ports	56.39 (1.1)	64.60 (11.8)	63.91 (-1.1)	65.50 (2.5)	69.04 (3.9)
Non-Major Ports	16.81 (1.9)	19.29 (9.7)	29.72 (54.1)	43.69 (47.0)	42.61 (-2.5)
All Ports	75.00 (1.0)	83.89 (11.9)	93.63 (11.6)	109.19 (16.6)	110.66 (1.3)

Figures in bracket represents percentage change over the previous year period.
(P) Provisional; MT Million Tonnes

2.4.8 ORISSA

2.4.8.1 Orissa has a Coast line of 480 KMs. from Andhra Pradesh border in Ganjam District to West Bengal border in Balasore District. It is endowed with conducive, unique natural and strategic port locations. The Government of Orissa has identified 14 potential sites for development of Minor Ports. To facilitate developers for

development of Minor Ports. Government of Orissa has framed the Port Policy during the year 2004.

2.4.8.2 The advantages for development of sea ports in Orissa includes availability of a vast hinterland generating cargo, comprising of other developing Eastern and Central Indian States, mineral rich hinterland which offers long term potential for cargo which need seaport facility in Orissa. Paradip port is the only major port in the State under the control of Government of India which is packed to accommodate increasing traffic. Fourteen Potential Port locations identified in the State are as follows:-

Table 24: Potential Port Locations in Orissa	
Name of the Port Locations	District
(2)	(3)
Gopalpur	Ganjam
Bahuda/Muhan (Sonepure)	Ganjam
Palur	Ganjam
Balharichandi	Puri
Astaranga	Puri
Jatadhar Muhan	Jagatsingpur
Damrei Muhan	Kendrapara
Dhamra	Bhadrak
Chudamani	Bhadrak
Inchuri	Balasore
Chandipur	Balasore
Haribarpur	Balasore
Subarnarekha Mouth (Kirania)	Balasore
Bichhrapur (Talasnar)	Balasore

Dhamra Port

2.4.8.3 Government of Orissa had signed a Memorandum of Understanding with International Sea Ports Limited on 31.03.1997 for development of Dhamara Port. Concession Agreement was signed between Government of Orissa and International Sea-Ports Limited on 02.04.1998. The Special Purpose Company i.e. Dhamara Port

Company Limited (Tisco and L&T 50%:50% basis) is developing the port. The Company shall share with the Government ITS gross income in accordance with formula given in below:

Period commencing from Share as in operation date	Percentage of income to company payable to Government by the Company
1st to 5th year	6%
6th to 10th year	8%
11th to 15th year	10%
16th year to end of lease period	12%

Gopalpur Port

2.4.8.4 Gopalpur Port was operating as a seasonal lightarage port from 1886-87 by Government. This port was closed during 2003-04. The Concession Agreement between Government of Orissa and Gopalpur Ports Limited was signed on 1st September, 2006 on BOOST basis. The Company will share with the Government, "Gross Revenue of Company" on the basis of sharing percentages mentioned below:-

Period commencing from take over date i.e. 30.10.2006	Percentage of "gross revenue of company" to be paid to the Government as share by the Company
1st year	NIL
2nd to 4th year	1.5%
5th to 9th year	5%
10th year to end of Concession period	7.5%

2.4.8.5 The Port was handed over to Gopalpur Ports Limited on 30th October, 2006 for construction. The environment clearance from MOEF, Government of India has been obtained for the Phase-II of the Port on 30th March, 2011.

Subarnarekha Mouth (Kirtania)

2.4.8.6 For development of Port on Subarnarekha Mouth (Kirtania) in Balasore district, Government has entered into an MOU with Creative Port Development Private

Limited, Chennai on 10th December, 2008. Government of Orissa has signed the Concession Agreement with the developer on 11th January, 2008. Environment scoping application submitted and clearance of terms of reference (TOR) obtained from MOEF, Government of India. Detailed land survey for port area (981 acre) has been made and alienation work of these land are in progress.

Astaranga Port

2.4.8.7 Government of Orissa has signed an MoU with Navayuga Engineering Company Limited, Hyderabad on the 22nd December, 2008 for development of a Port at Astarang in Puri district. The estimated cost of the Project is Rs.3500.00 Crore. The projected capacity of the Port will be 25 MTPA in Phase-I. Number of berths will be eight. The Government has signed the Concession Agreement with the company on 22nd November, 2010. Land acquisition work in progress.

Chudamani Port

2.4.8.8 Government of Orissa has signed a MoU with Aditya Birla Group represented by ESSEL Mining and Industries on 22.10.2009 for development of a Captive Port at Chudamani in Baudh district. The draft Concession Agreement is under process.

Jatadhar Port

2.4.8.9 Government of Orissa have approved for establishment of a captive minor port at Jatadhar Muhan in Jagatsingpur district by POSCO India Ltd. on 14th June, 2006. POSCO has conducted preliminary study and prepared Master Plan for Harbour facilities and site preparation for POSCO's Integrated Steel Plant. Numerical Model Analysis, Littoral Drift Study have also been conducted by POSCO through the consultancy services of International standard. Environment Clearance has been obtained from MoEF. The proposed port, POSCO India Ltd. Will handle its own cargo i.e. Iron ore, coal etc. The draft Concession Agreement is under process.

2.4.8.10 The trends in the cargo handled at both major and non-major ports of the State during 2005-06 to 2010-11 are given in Table 25.

Table 25: Orissa : Trends in Cargo Handled at Major & Non-Major Ports (MT)					
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11 (P)
Major Ports	38.52 (16.3)	42.44 (10.2)	46.11 (9.4)	57.01 (22.8)	56.03 (-1.7)
Non-Major Ports	-	0.3	0.3 (0.0)	0.42 (10.0)	0.42 (0.0)
All Ports	38.62 (16.3)	42.74 (11.0)	46.71 (9.3)	57.43 (23.0)	56.45 (-1.7)
Figures in bracket represent percentage change over the previous year ; (P) Provisional					

2.4.9 WEST BENGAL

2.4.9.1 The State of West Bengal has a coastline of about 158 kms which has two Docks at Kolkata and Haldia under a single major port and one non- major port. The non-major port namely Kulpi is being developed for which consultants have been shortlisted. Presently there is no cargo traffic at non major ports

2.4.9.2 The trends in the cargo handled at both major and non-major ports of the State during 2006-07 to 2010-11 are given in Table 26.

Table 26 : West Bengal-Trends in Cargo Handled at Major & Non-Major Ports (MT)					
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11 (P)
Major Ports	55.05 (3.6)	57.33 (4.1)	54.22 (-5.4)	46.43 (-14.4)	47.43 (2.2)
Non-Major Ports	-	-	-	-	-
All Ports	55.05 (3.6)	57.33 (4.1)	54.22 (-5.4)	46.43 (-14.4)	47.43 (2.2)
Figures in bracket represents percentage change over the previous year period (P) Provisional					

2.4.10 OTHER NON-MAJOR PORTS

2.4.10.1 The other non-major ports are spread across the Union Territories (UTs) of Daman & Diu, Puducherry, Lakshadweep, and Andaman & Nicobar Islands. These ports in the UTs are administered through their respective Departments. Andaman & Nicobar Islands administration has constituted a 'Port Management Board' for the development of ports in the Islands. The two non-major ports of Daman & Diu are not

handling any cargo traffic for the last few years. The trends in the cargo handled at these ports of the State during 2006-07 to 2010-11 are given in Table 27.

2.4.10.2 The cargo handling capacity at Puducherry was around 200,000 tonnes of cargo per annum. In January 2008, the Government of Puducherry entered into a concession agreement with private developers for the development of deep water ports on BOT basis at Puducherry and Karaikal. The development work at Karaikal port has begun and commercial operations have started in April 2009.

2.4.10.3 Port Blair was declared as a major port with effect from June 1, 2010. With the issuance of notification, Port Blair becomes India's 13th Major Port. The Port Blair will have territorial jurisdiction over all the 23 ports located on Andaman and Nicobar Islands.

Table 27: Union Territories: Trends in Cargo Handled at Non-Major Ports(MT)

	2006-07	2007-08	2008-09	2009-10	2010-11 (P)
Andaman & Nicobar Islands*	0.92	2.78	2.01	2.07	1.58
Lakshadweep	0.03	0.03	0.03	0.02	0.02
Puducherry	0.03	0.01	0.04	1.32	4.71

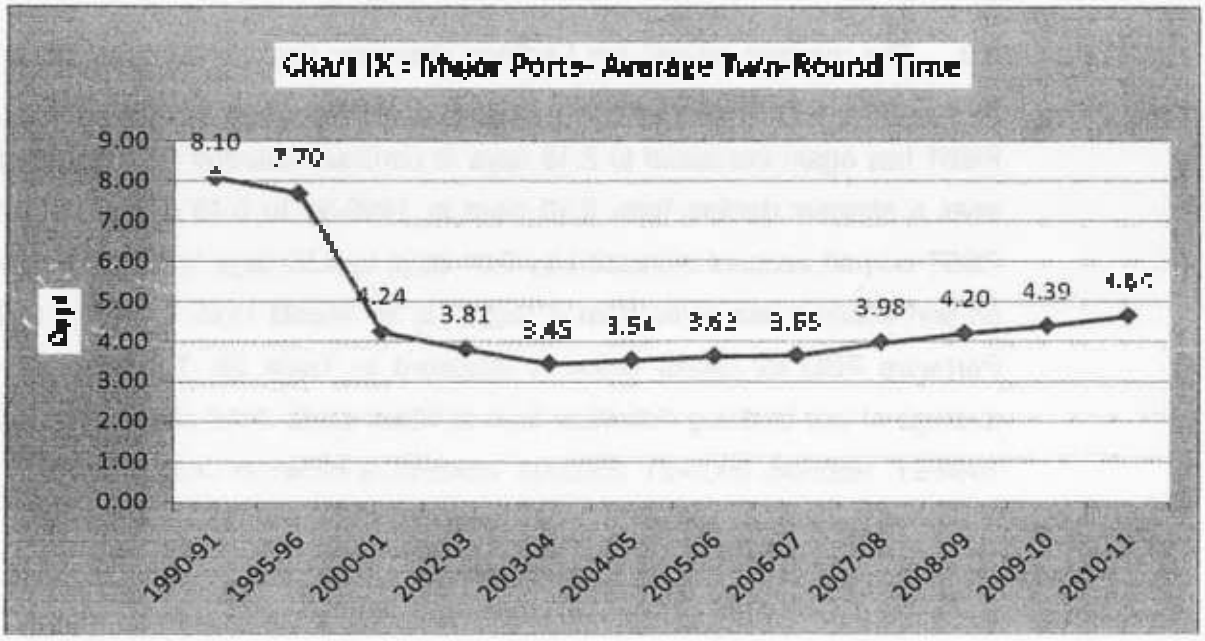
(P) Provisional; - negligible; * Declared Major Port with effect from June 1,2010.

CHAPTER III: PORT EFFICIENCY

Efficiency at ports have an impact on transaction cost of shipping lines. Major Ports have improved their efficiency of operations as reflected in select physical performance indicators over the last several years. Some key operational indicators of physical performance pertaining to major ports for the years 1990-91, 1995-96, 2000-01,2006-07 through 2010-11 are elaborated below.

Average Turn-Round Time (TRT)

3.2 This parameter has improved significantly during the past one and half decades for all the major ports. Average TRT for all major ports improved from 8.10 days in 1990-91 to 4.39 days in 2009-10. It is observed that during 2010-11, the TRT varied in a range between 2.29 days at Cochin Port to 7.73 at Paradip. Amongst the 12 major ports improvement in TRT during 2010-11 in comparison to 2009-10 is discernible in case of Kolkata Dock System and Haldia Dock Complex at Kolkata Port, Paradip and New Mangalore. Port-wise TRT for select years are given in Table 28. The path of turn round time at major ports for select years since 1990-91 to 2010-11 is presented in the Chart IX below.



Turn-Round time- Total time spent by a ship at a port from entry till its departure.

Table 28: Average Turn Round Time (days)						
Port	1990-91	2000-01	2007-08	2008-09	2009-10	2010-11 (P)
1	2	3	4	5	6	7
Kolkata D.S	11.90	5.90	6.46	5.10	5.47	5.25
Haldia D.C	8.47	3.97	4.26	4.21	6.01	4.52
Paradip	9.20	4.16	6.64	4.76	9.04	7.78
Vishakhapatnam	7.07	3.71	3.91	3.93	4.70	5.84
Ennore			2.06	2.35	2.35	2.78
Chennai	7.90	5.83	4.56	4.13	4.06	4.26
Tuticorin	4.70	4.10	3.86	3.54	5.97	4.11
Cochin	4.30	3.11	1.94	2.14	2.08	2.20
New Mangalore	4.95	2.89	3.21	3.00	3.06	2.70
Mormugao *	8.40	4.75	8.24	5.95	6.03	6.46
J.L.Nehru		2.21	1.30	1.20	2.09	2.67
Mumbai	10.50	5.20	4.07	4.95	4.10	4.62
Kandla	10.03	4.72	5.13	7.26	5.06	5.90
All Ports	8.10	4.24	3.36	4.20	4.89	4.64

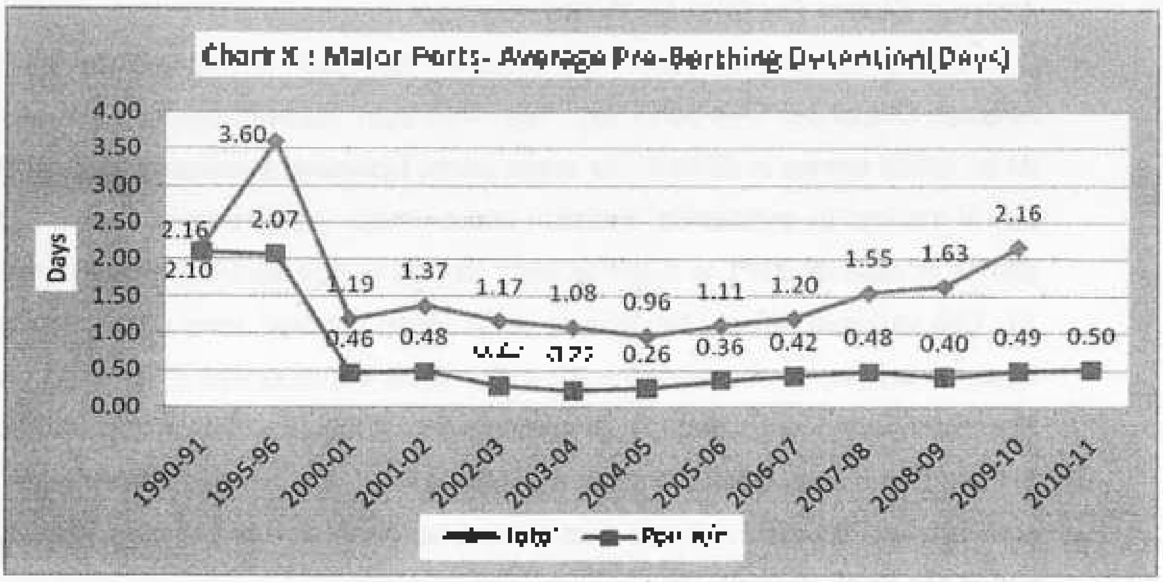
(P) Provisional

* Relate to dry bulk cargo for MOHP(Mech.) and Berth No. 10 & 11 (Only)

Source: Major Ports / Indian Ports Association (IPA)

Average Pre Berthing Detention Time (PBDT)

3.3 The average overall pre berthing detention time for all major ports has declined from 2.2 days in 1990-91 to 1.08 days in 2008-09. However, in 2009-10, the average PBDT has again increased to 2.18 days In contrast, average PBDT on port account has seen a sharper decline from 2.10 days in 1990-91 to 0.49 day in 2009-10. Average PBDT on port account increased by 0.01 days to 0.50 days in 2010-11. Average PBDT on port account was more than a day(1.15) at Haldia Dock Complex during 2010-11 . Port-wise PBD for select years is indicated in Table 29. The trajectory of weighted average of pre berthing detention time at Major ports- total and on port account -during 1990-91, 1995-96, 2000-01, 2002-03 onwards is shown in Chart X below.



Pre-Berthing Detention - The time for which a ship waits before getting entry into berth.

Table 29 : Average Pre-Berthing Detention(Days)

Port	1990-91	2000-01	2007-08	2008-09	2009-10	2010-11* (P)
1	2	3	4	5	6	7
Kolkata D.S	[illegible]	0.61	0.56	0.68	0.65	[illegible]
Haldia D.C	1.69	0.91	2.28	3.38	4.50	1.15
Paradip	1.58	1.41	2.57	2.32	6.30	0.10
Vishakhapatnam	1.83	0.75	[illegible]	1.28	1.90	0.10
Ennore			0.3	0.27	[illegible]	0.00
Chennai	2.1	2.45	1.58	[illegible]	1.35	0.04
Tuticorin	0.8	1.4	1.24	1.08	[illegible]	0.08
Cochin	0.83	0.74	0.8	0.70	0.65	[illegible]
New Mangalore	0.73	0.77	0.63	0.05	[illegible]	0.05
Mormugao**	2.51	1.32	2.21	1.77	3.72	0.59
J.L.Nehru		0.67	0.83	0.56	0.80	0.67
Mumbai	3.4	1.28	0.95	1.41	[illegible]	0.37
Kandla	4.4	1.61	2.04	2.62	2.50	1.61
All Ports	2.10	1.19	1.65	1.63	2.16	0.52

(P): Provisional. * Relates to Port Account only:
** Relate to dry bulk cargo for MOH-P(Mech.) and Berth No. 10 &11 (Conv.)
Source : Major Ports/ Indian Ports Association(IPA)

Average Output Per Ship Berth-day

3.4. During the last 20 years this indicator has seen a tremendous improvement. Average Output per Ship-berth day has more than trebled from 3,372 tonnes in 1990-91 to 12429 tonnes in 2010-11 for major ports. However, average output per ship berth day is marked by substantial variation across major ports ranging from a high 24,849 tonnes in case of JNPT to a low of 2841 tonnes at Kolkata Dock System during 2010-11. This variation reflects the type of cargo being handled, level of mechanization and labour practices. Amongst the 12 major ports improvement in average Output Per Ship Berth-day during 2010-11 as compared to 2009-10 is discernible in Kolkata Dock System and Haldia Dock Complex at Kolkata Port, Cochin, New Mangalore, Mumbai and Kandla. Port-wise average output per Ship-berth day for selected years and latest period are given in Table: 30.

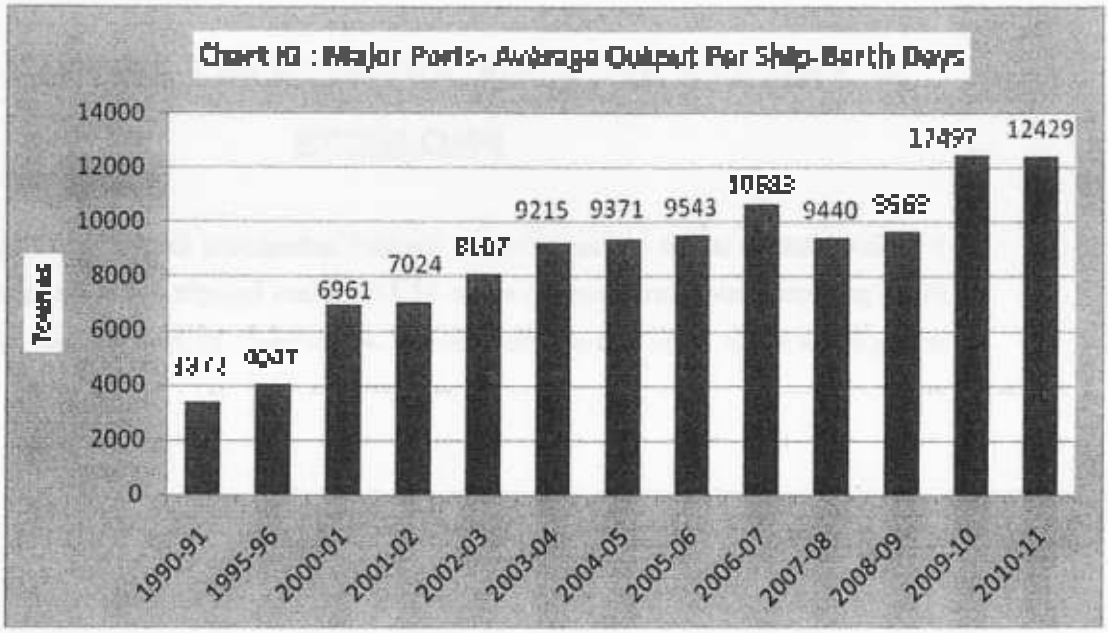
Table 30 : Average Output per Ship-Berth-Day (Tonnes)

Port	1990-91	2000-01	2007-08	2008-09	2009-10	2010-11 (P)
1	2	3	4	5	6	7
Kolkata D.S	[illegible]	[illegible]	3193	3027	2273	2841
Haldia D.C	5309	6854	8303	7732	8643	6105
Paradip	4042	8509	11181	12835	13256	14243
Visakhapatnam	6325	6720	10318	11171	10470	10595
Ennore			25280	25424	21585	17664
Chennai	3912	6977	10382	9778	11847	11371
Tuticorin	2130	3283	5474	5817	6525	8511
Cochin	3714	6168	9581	12098	10826	11752
New Mangalore	4415	12152	12994	13845	14925	15405
Mormugoa*	10422	12428	9392	8230	15612	7311
J.L.Nehru		8523	18485	23844	25627	24849
Mumbai	2310	4270	4518	5717	7128	7174
Kandla	4417	8250	11210	13107	13272	13542
All Ports	3372	6961	9430	9658	11497	12429

(P): Provisional *Relate to dry bulk cargo by MOHP(Mech.) and Berth No. 10 & 11 (Conv.)

Source: Major Ports/Indian Ports Association(IPA).

3.5 The average output per ship-berth-day for selected years since 1990-91 is presented in the Chart XI below.



Output per Ship Berth day – Total tonnage handled distributed over total number of berth days

IV. PRIVATE SECTOR/CAPTIVE/JOINT SECTOR PORT PROJECTS

4.1 Brief details of the ongoing Private Sector/Captive/Joint Sector Port Projects and a list of these projects under consideration as on 31.3.2010 are brought out in Appendix-I & Appendix-II in respect of Major Ports and in Appendix-III & Appendix-IV for Non – Major Ports.

Appendix – I

Ongoing Private Sector/Captive/Joint venture Port Projects (Major Ports)

Sl. No	Project Name	Port Name	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
1	Construction of two New Offshore Container berths & Development of Container Terminal berth on BOT basis in Mumbai Harbour.	Mumbai Port	9.00 MTEUs	14510	Agreement signed on 05.12.07 Filling in approach trestle is in progress. 245 piles out of 758 piles completed. Filling commenced for berth pockets 340 piles out of 795 completed. Precast members 760 units out of 6240 units completed. Total investment till date is Rs. 265 crores. Dredging contract for MbPT completed awarded to M/s Jaisu Shipping Co. Pvt. Ltd. at 1.4 nil. Filling of Victoria basin commenced from 04.09.09 and is in progress. Filling of Princess Dock commenced from 15.6.2010. Present Progress: Soil dredging : 5,70,000 cum. Rock dredging : 1,60,000 cum. Filling : 2,05,000 cum Anticipated date of completion is September, 2012
2	Construction of 13th to 16th Cargo berth on BOT basis.	Kandla	4.0 MMTPA	4956	For 12th Cargo berth Concession Agreement signed with M/s KAS Infraport Private Ltd. on 3.12.2008 14th CB-LOA issued on 7.12.2010 to M/s. SICAL LOGISTICS Ltd & M/s. SICAL on 23.2.2011. As approved by board in its meeting held on 14.3.2011, the action is initiated to forfeit the bid in M/s. SICAL 16th CB LOA issued on 7.12.2010 to M/s. IMC Ltd. Formed SPC namely JRE INFRA Pvt. Ltd. And executed Agreement with KPT on 18.2.2011. Amended MCA and AOA submitted by M/s JRE is under scrutiny 15th CB-LOA issued on 7.12.2010 to M/s. PSL Ltd. formed SPC namely PSL INFRASTRUCTURE AND

					PORTS Pvt. Ltd. by execution Agreement with CPT on 16.2.2011. Anticipated date of completion is 2012-13.
3	Construction of Barge Jetty at Old Kandla (LPG CC) on BOT basis.	Kandla	2.0 MMTPA	900	LOA issued on 3.11.2010. Concession Agreement signed by M/s. IOCL. Anticipated period of completion is two years from award of concession.
4	Development of Berth No. 7 as second coal handling terminal on DBFOT basis.	Visakhapatnam	6.81 MTPA	4050	The date of award of concession was fixed on 15.9.2010. Physical progress of the overall project in terms of percentage is 19.59%. Financial progress of the overall project in terms of percentage is 19.62% (Rs. 79.85 cr.).
5	Development & Operation of International Container Transhipment Terminal (ICTT) at Vallarpadam (BOT basis by M/s. India Gateway Terminal Pvt. Ltd., a subsidiary of M/s. Dubai Ports International)	Cochin	Capacity addition of 0.5 to 4.0 MMT in phases	2188	Phase I of the ICTT Project with an investment of Rs. 1200 commissioned on 11th February, 2011.
6	Setting up of IMC Port & Re-Gasification Terminal at Puthuvypeen Cochin (Cochin Port Trust).	Cochin	5.0 MMPTA	56000	The project was initially scheduled for commissioning in the first quarter of 2012. But now PLL has informed that they are setting up the additional facilities required to gravity 6 MMTPA as well as this stage and so only mechanical completion will take place by that time. The whole facility is scheduled for commissioning in the third quarter of 2013.
7	Construction of Coal Jetty by M/s. Udupi Power Corporation Ltd. (UPCL) (Formerly NPCL) On BOT (Captive user) basis	New Mangalore	3.0 MTPA	2800	Work is in progress. Piling work of jetty and Dolphin wall are completed. Structural erection work is under progress. Dredging work is also in progress. About 60% of work completed. Anticipated date of completion is June, 2012.
8	Setting up of Mechanised Iron Ore handling facilities at berth	New Mangalore	3 MTPA (Capacity of Jetty)	2960	Bids were opened on 15.09.2009 and the Letter of Award was issued on 28th September, 2009. Concession awarded to

	No. 14 by M/s SICAL Logistics Limited on BOT basis.				3.8.2010. Delay due to non-grant of work stress ban imposed on export and movement of iron ore by the Govt. of Karnataka.
9	Construction of North Cargo Berth – I (Container use)	Tuticorin	7.0 MTPA	370	Berth construction commenced on 15.1.2010
10	Development of Second Container Terminal (DCTPL) on BOT basis	Chennai	...	4800	Project facilities and services were completed and commercial operation has already been commenced on 22.9.09.
11	Development of Deep Draught Iron Ore Berth on BOT basis	Paradip	10 MTPA	6214	Concession agreement has been signed with M/s. Blue Water Iron Ore Terminal Pvt. Ltd. On dated 1.7.2009. Environmental clearance has been accorded by MoEF. Forest clearance is under process. The BOT operator has been asked to commence work. Anticipated date of completion is 30.6.2014.
12	Development of Deep Draught Coal Berth on BOT basis	Paradip	10 MTPA	4700	Concession agreement has been signed with M/s. Essar Paradip Terminal Ltd. On dated 01.1.2009. Environmental clearance has been accorded by MoEF. Forest clearance is under process. The BOT operator has been asked to commence work. Anticipated date of completion is 30.6.2014.
13	Mechanized Coal handling Facilities and up gradation of the General cum-bulk Cargo Berth in Outer Harbour (DBFOT basis).	Visakhapatnam	10.15 MTPA	2401	Approval of the Government of India received vide Ministry's letter dated 11.2.2010. LOA issued to HI bidder on 1.3.2010. Agreement is signed on 10.08.2010 with M/s Vizag General Cargo Berth Pvt. LTD. Concession was awarded on 3.10.2010. Expected date of completion is December, 2012.
14	Development of MDH berth in Inner Harbour for multipurpose cargoes on DBFOT basis	Visakhapatnam	2.08 MTPA	1145	Approval of the Government of India received vide Ministry's letter dated 25.11.2009. LOA issued to HI bidder on 19.1.2010. Concession Agreement is signed on 31.7.2010 with M/s West Quay Multi Port Pvt. LTD. Expected date of completion is December, 2012.

15	Development of EQ-10 berth in Inner Harbour for handling Liquid Cargoes & Chemicals on DBFOT Basis.	Visakhapatnam	7.5 MTPA	30d	Approval of the Government of India received vide Ministry's letter dated 7.10.2008. LOA issued on 23.2010. Concession Agreement was signed on 18.06.2010 with M/s AVR Infra Pvt. LTD. Expected date of completion is December, 2012.
16	Construction of Coal Terminal on BOT basis.	Ennore	5.0 MTPA	4000	Construction work is in progress. Anticipated date of completion is February, 2011.
17	Construction of Iron Ore Terminal on BOT basis.	Ennore	12.0 MTPA	4800	Construction work is in progress. Anticipated date of completion is February 2011
18	Construction of Container Terminal on BOT basis	Ennore	18.0 MTPA	14070	Preliminary works are going on and expected to be completed in 2013-14.
Note: Information from Kolkata D.S., Haldia D.C. Tuticorin and Chennai and Ennore ports has not been received. Latest available information in respect of these ports has been included. Source: Major Ports.					

Appendix – II

Private Sector/Captive/Joint Venture Port Projects Under Formulation (Major Ports)

Sl. No.	Project	Port Name	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
1	Development of Multi-Purpose berths to handle clean cargo including container on BOT basis.	Paradip	5.0 MTPA	3573	Letter of Award has been issued to the JV Entities on Conversion of Stanlib Leighton @ 23.4% interest stake in the port. In the meantime, Stanlib – Leighton has sought time till 30th June, 2011 to complete all formalities of the SPV and have requested Port for expediting Environmental & Forest clearance.
2	Construction of LNG Terminal (Joint Venture)	Ennore	5.0 MTPA	2700	'In Principle' approval for the proposal for development of LNG berth through Joint Venture with IOCL/GPCL granted by the Ministry on 15.7.2010. Proposal implementation schedule is awaited from KPC. IOCL is now preparing DPR.
3	Private Container Terminal (DBFOT Basis)	Jawaharlal Nehru	4.5 MTEUs	4100 Phase 1 2700 Phase - II	PPPAC recommended this project in its meeting held on 11.11.09 and the committee agreed in principle for the proposed development. Receipt of EOI was deferred pursuant to Ministry's direction and scheduled for receipt on 23.12.2009. 8 parties submitted RFQ documents. The RFQ evaluation was approved by the Board and RFP was issued to seven shortlisted Applicants in June, 2010 and the pre bid meeting was held on 29th June, 2010. On 15th Oct., 2010 five bidders submitted their bids which are kept in sealed conditions due to ongoing litigation. Security clearance has been received from MOD in Dec 2010. The Court hearing is over and decision of Supreme Court is pending. Likely commission period of Phase – I is May, 2014. In respect of Phase-II the

					development will be taken up after completion of Phase-I.
4	Development of container cum cruise handling facility with a quay length of 330 m. to the south of JNPT.	Jawaharlal Nehru	1.0 MTPA	BOT	PPP-AC discussed this project in its meeting held on 11.11.09 and the committee agreed for the proposed development. RFQ documents were opened on 7.8.2010. The Board in its meeting held on 30.11.2010 approved the proposal for shortlisting of the applicants. Out of seven shortlisted applicants five have submitted RFP. Security clearance has been received from MoD in Feb 2011. The Port has issued RFP along with DCA and 5 shortlisted bidder collected same in stipulated time. The Pre-bid meeting is scheduled on 1.4.2011. The bid due date scheduled on 20.4.2011, is extended upto 31st May, 2011.
5	Development of berth nos.10/11 Indira Dock and 12 Indira Dock as conventional cargo terminal on BOT basis for 20 years.	Mumbai	...	300	The Board has approved the proposal on 30.06.2009 private sector participation for development and operation on BOT basis of 10/11 Indira Dock & 12 Indira Dock as conventional cargo terminal. RFQ invited on 2.7.2009. The offer from 7 prospective bidders were received and opened on 8.10.2009. Six bidders have been shortlisted. RFP issued to bidders on 18.1.2010. RFP opened on 24.2.2011. No offer received so far. A proposal for fixation of upfront tariff has been submitted to TAMP on 18.11.09. TAMP held hearing on 29.12.09 for finalization of tariff upfront. TAMP has asked to furnished some more information with specific reference to capacity calculation. The same has been furnished to TAMP.
6	New Cruise Terminal near Gateway of India	Mumbai	...	1000	Consultant M/s Zepol Marine Consultant and Services submitted DPR for location at Oyster Rock. However, Navy has objected for the location of the Cruise Terminal on security ground. Matter referred to Shipping Ministry for taking up the matter with Ministry of Defence. Alternative locations are being examined. Consultant is being asked to critically examine

					feasibility of location at Navlakhi Port.
7	Construction of Berthing & Allied facilities at Tekra near Tuna (outside Kandla Creek) On BOT basis	Kandla	14.6 MMTPA	10605	Ministry convened JCT meeting with port official and TA on CCEA note on 4.1.2011 and 5.1.2011 all t prequalified bidders purchased the bidding documents Bid date extended upto 1.3.2011 Two Bids received. Bids are not opened due to non receipt of CCEA approval
8	Setting up of SPM at Vizag on BOT basis.	Kandla	8.0 MMTPA	6210	Transaction Advisor formed FR, RFP, CCEA, TAMP proposal. PPPAC Memo alongwith Bidding Documents sent to MOS on 1.2.2010. TAMP approved tariff on 18.1.2011 Based on approved tariff, Transaction Advisor has revised Bidding Documents and PPPAC Memorandum.
9	Development of Container Terminal at NMP on BOT basis.	New Mangalore	...	2697	RFQ documents issued from 20th July, 2009 to 8th September 2009. Pre-application Conference held on 18th August, 2009. 8 bidders have submitted their RFQ application on 30.09.2009. The PPPAC Memo submitted on 14.9.2009. Proposal for security clearance in revised format sent on 2.2.2009 Tariff consultative meeting held on 6.1.2010 and approved the project RFP document issued on 2.2.2010 Pre bid meeting held on 5.4.2010. Bids are due for receipt on 30.4.2010. On the request of thebidders 2nd pre bid was held on 14.5.2010 &the date of submission of bids was extended upto 30.6.2010 No bids have been received on the due date. The project is under review
10	Installation of mechanized fertilizer handling facilities at SPM in Inner Harbour on DBFOT basis	Visakhapatnam	5.21 MTPA	2106	RFQ opened on 11.05.2010 and the same are under evaluation by M/s CRISIL risk and infrastructure Ltd Mumbai. Details of applications sent to Ministry on 10.9.2010 for obtaining security clearances. RFP issued on 31.12.2010 with due date of submission on 20.4.2011.
11	Development of WQ-7 berth with Mechanised handling facility at Inner Harbour on DBFOT basis.	Visakhapatnam	4.0 MTPA	2295	Ministry's approval received on 22.08.2010 RFP issued on 4.6.2010. RFQ issued on 10.2.2011 with due date of submission on 20.4.2011.

12	Construction of WQ-9 berth with Mechanised handling facility at Inner Harbour on DBFOT basis.	Visakhapatnam	6.66 MTPA	2087	Ministry's approval received on 11.05.2010. RFP issued on 8.6.2010. RFQ will be issued shortly.
13	Development of EQ-1 berth by replacing the existing EQ1 berth and part of EQ2 berth in Inner Harbour for unloading of Steam coal on DBFOT basis	Visakhapatnam	8.41 MTPA	3232	LOA issued on 18.3.2011.
14	Development of EQ-1A on south side of EQ1 berth in Inner harbour for handling Thermal coal and Steam coal on DBFOT basis.	Visakhapatnam	7.03 MTPA	3154	LOA issued on 18.3.2011 and acceptance received.
15	Mechanisation of Iron Ore handling facility at WQ-1 berth in the Inner Harbour on DBFOT basis	Visakhapatnam	5.96 MTPA	2702	Security clearance obtained on 7.2.2011. Revised PPPAC memo, RFP (RQA and TEFR submitted to Ministry on 15.2.2011. PPPAC meeting to be fixed by Ministry shortly.
16	Development of 7.2 MMTPA Iron Ore export terminal at the waterfront west of existing breakwater on DBFOT basis.	Mormugao	7.2 MMTPA	7215	11 parties shortlisted subject to security clearance. Security clearance not received from Ministry of Shipping. Bids submission due date is 27.5.2011
17	Development of 4 MMTPA Mechanised Coal import facilities at berth No. 11 on DBFOT basis.	Mormugao	4.0 MMTPA	4250	PPPAC memo sent to Ministry of Shipping. TAMP notified inshore tariffs. 13 parties shortlisted subject to security clearance.
18	Setting up of Multi User Liquid Terminal at Pulivarpalem for Information Purposes Terminals.	Cochin	...	2725	RFQ was invited on 21.7.2009 and few been approved the proposals Five firms have been pre-qualified. RFP documents issued to the shortlisted bidder on 21.12.2010. Clarification sought by the Ministry on the SFC proposal were furnished on 4.1.2011 and 18.2.2011. Draft Pre-Bid meeting held on 10.2.2011. Final RFP documents were issued to the shortlisted bidders on 22.2.2011 with due date of in

					submission on 21.1.2011. Subsequently, the bidders requested for additional time for submitting the bid. Considering the fact that EFC clearance is still under process, the due date of submission of bids have been extended to 25th April, 2011.
19	Setting up of an International Cruise Terminal	Cochin	...	2725	Consultants furnished the final Feasibility Report and Business plan on 31/03/2009. M/s eedback Ventures Pvt Ltd, Haryana was appointed as Transaction Advisor on 30/06/2010 and they have commenced the assignment on 09/06/2010. Application seeking Prior Environmental Clearance for the project has been submitted to the MoE&F on 1.7.10. Detailed Project Report for the project has been submitted to the Ministry on 8.12.2010. Port Trust Board's approval for the revised proposal conveyed to the Ministry vide CoP Tr's letter dated 22.2.2011.
20	Development of Mega Container Terminal on BOT basis.	Chennai	4.0 MTEUs	8688	Invitation of RFQ process completed. Ministry's approval awaited for issue of RFQ to the prequalified RFQ applicants
21	Conversion of Berth No. 8 as container terminal on BOT basis.	Tuticorin	2.2 MTPA	8122	Awaiting Ministry's approval on restriction of Monopoly policy decision. Likely commission period is December 2011.
22	Construction of One number of Shallow Draught Berth on DBFOT Basis.	Tuticorin	2.0 MTPA	654	RFQ will be opened on 10.6.2010. Likely commission period is September 2012
23	Development of North Cargo Berth – I on DBFOT basis	Tuticorin	7.0 MTPA	3122	On receipt of Ministry's approval for security clearance RFP will be issued to the short listed bidders. Likely commission period is July, 2012.
24	Upgradation of Mechanical Handling equipments in Berth No. 1 to 5 and Berth No. 9 on BOT basis.	Tuticorin	1.5 MTPA	911	RFQ will be opened on 18.6.2010. Likely commission period is August, 2011.

26	Construction of a marine jetty north of 3rd Oil Jetty through DBFOT Mode.	Haldia Dock Complex under KoPT	3.75 MTPA	88*	R.O. has been issued in February 2010 for execution of the scheme.
25	Construction of a marine jetty south of 2nd Oil Jetty through DBFOT Mode	Haldia Dock Complex under KoPT	1.5 MTPA	471	Feasibility Study being undertaken following which RFQ document would be issued.
27	Construction of LNG Terminal (Join Venture)	Private	5.0 MTPA	2700	In Principle approval for the proposal for development of LNG Berth through Joint Venture with IOCL/GPCL granted by the Ministry on 18.7.2005. Proposed implementation schedule is awaited from IOC. IOCL is now preparing DPR.

BOT: Build Operate and Transfer BOO: Build Own Operate DBFOT: Design, Build, Finance, Operate and Transfer

Note: Information from Kolkata Dock, Haldia Dock, Tuticorin Chennai and Cochin ports has not been received. Latest available information in respect of these ports has been included

Source: Major Ports

Ongoing Private Sector/Captive/Joint Venture Port Projects (Non-Major Ports)

Sl No	Project Name	State/ Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million	Project Status
1	2	3	4	5	6
1.	Development of Karaikal Port through private investment on BOT basis	Karaikal Port Puducherry	Phase – I 4.0 Phase - II 4.6	4173	Phase I of commercial operations commenced in June 2008 and is currently functional. Phase I related works in progress. Upon completion of Phase 2 the total handling capacity would be 8.6 million tons per annum.
2.	Development of Puducherry port through private investment on BOT basis.	Puducherry	Phase – I 16.2 Phase - II 10.5	27850 N.A	Developer has applied for Environmental clearance. Work to commence upon obtaining the same.
3.	Development of all weather and Multi user Port on BOOST basis by M/s. Amma Lines Ltd	Maharashtra	To become the deepest in South Asia with draft 20 Mtrs 44 / MTPA (1.7 MDH by) containers	45000	Share holding pattern approved. Environmental clearance awaited. Anticipated date of completion is 2010
4.	Thiruchopuram Port Nagarjuna Oil Corporation Ltd.	Tamil Nadu	3.0	6000	Construction to be commenced
5	Project relating a captive port at Kattupalli in Thiruvallur District by M/s L & T Shipbuilding Ltd	Tamil Nadu Kattupalli	Ship building	23750	Construction works are under progress. Port is expected to commence operation during Jan 2012
6	Establishing a captive port at Thiruchopuram in Cuddalore district by M/s. Nagarjuna oil corporation Ltd	Tamil Nadu Thiruchopuram	9.0	5000	Construction work have commenced
7	Expansion development and Operation of Dhamra port,	Orissa Dhamra Port Co. Ltd	70 MTPA	120	All weather deep berthing port will function from 2012
8	Manufacturing, supplying & installation of Navigational buoys at Chatham in Port Blair.	A & N Islands		1165	Buoys brought to site. Installation being carried out

9	Construction of RCC superstructure for boat repairs at Middle Anchorage	-do-		[illegible]	Work awarded but not started due to non availability of floating crane. During Tsunami floating craft damaged and same is under fabrication after fabrication of pontoon work will be started.
10	Stone protection at Ranger Bay Phase-I	do		4.99	Main work completed Additional protection work taken up
11.	Consultancy survey and investigation and Environmental studies for construction of jetty at Kavaratti Island	-do-		1.17	Tsunami resistant Work is in progress. Hydrographic and topographic survey completed REIA studies agreement executed
12.	Construction of RCC jetty at Bangaram Island Lakshadweep in Middle Anchorage	-do-		6.56	Work awarded. Not yet started waiting for permission
13.	Special repairs to Cargo handling equipments at Campbell Bay.	-do-	-	3.02	Balance works are under progress to restore the machineries.
14.	Special repairs to jetty at Kavaratti	do	Existing jetties are maintained for safe berthing.	1.50	Work is being taken up
15.	Special repairs to berthing Tilt cranes at Kamorta and Campbell bay	do	Safe cargo handling facilities.	6.02	Tilt cranes at CBay have been recalled after maintenance/repair work are in progress
16.	Attending restoration work at Malacca jetty in Car Nicobar.	-do-		6.07	Safe berth at approach jetty completed. Revised scope of work is being executed
17.	Special repairs to Clifton ELL Wharf crane at Hut Bay	-do-		0.15	Work commenced to repair E.L. Crane to utilize balance amount.
18	Providing & laying of GI pipe line to the pump at port area at Hut Bay in Little Andaman	-do-		4.23	Water supply restored. construction of additional pumps in progress
19	Special repairs to Mobile crane at Hut Bay.	-do-		9.58	PO called for repairs of all cranes
20	Supply of polymer gabions to be placed as a unit of 27-2T weight along the sea side at Break water to protect the core at Break water at Hut Bay	-do-		1.22	Supply order placed and Gabion received at Port Blair payment made

21.	Development of multipurpose port terminal and liquid port terminal. Installation of additional 3 SBMS at Sikka by Reliance ports & terminal Ltd.	Jamnagar (Gujarat)	40	3440	Project has commenced
22	650m Deep Water Berth by Essar bulk terminal Ltd.	Magdalla/ Hazira (Gujarat)	16	800	Project has commenced
23	Revival of Khijadiya by KRIBHCO	Khijadia (Gujarat)	1	36	Dredging under progress.
24.	Development of Coal terminal at by CMPP at Mundra port	Mundra (Gujarat)	15	20000	Throw basins of 1100 mt is completed. The company has schemes to complete the terminal in the year 2011-12
25	Establishment of SBM at Bhavnagar by adani energy.	Bhavnagar (Gujarat)	7	10000	Construction work is in progress.
26	Establishment of SBM at Sikka by Bharat aluminium company Ltd.	Jamnagar (Gujarat)	5	300	Project has commenced
27	Development of Coal Terminal & Dredging by Gujarat Pipavav port Ltd.	Pipavav (Gujarat)	28.2	850	Capital dredging and construction of berth and back up land area facility in progress
28	Development of SEZ related port infrastructure at Dahej by Sterling Port Ltd	Dahej (Gujarat)	91	4000	DPR has been submitted land acquisition process has been in time.
29	Development of all weather Green – field port Dahanu by Shapoorji Pallonji & co ltd	Dahanu (Gujarat)	9	1200	Detailed project report prepared and submitted. Land acquisition process has been initiated. Environment clearance awaited.
30	Extension of LNG berth at Dahej by Petronet LNG Ltd.	Dahej (Gujarat)	2.5	450	Construction permission granted and will be commenced soon.
31	Solid Cargo Port Terminal by Adani Petronet (Dahej) port Pvt. Ltd.	Dahej (Gujarat)	10	1150	Construction has been completed. To be commissioned after customs clearance for landing place is provided
32	Development of Port facility phase 4-B by Hazira Port Pvt. Ltd. and Chemfab Global markets.	Hazira (Gujarat)	15.5	2256	Adani Hazira Private port Ltd is developing the port Consent to construct is awaited.
33	Expansion of Multi & Ro-Ro-jetty by Larsen & Turbo Ltd.	Hazira (Gujarat)	2	100	Construction is completed and made operational

34	Setting up of single Buoy Mooring by Reliance Industries Ltd	Surat (Gujarat)	5	200	DPR has been prepared and construction permission has been granted
35	Berth at product jetty.	Sikka (Gujarat)	6	100	Construction permission has been granted.
36	Development of Mundra port (South port and North port) for containers, LNG, Liquid Bulk, Car Terminal & General cargo. By Mundra port SEZ Ltd.	Mundra (Gujarat)	120	12000	Capital dredging in progress for south port.
37	Navy jetty at Porbandar	Porbandar (Gujarat)	1	500	Construction to start soon (Engineering friendly)
38	Second SPM at Mundra and Crude oil terminal	Mundra	9	5000	Proposed to set up by HMEL through sub concession. EIA clearance obtained. Request for construction under 35(1) of GMB Act, which is being processed
39	Solid Cargo Terminal at Dahej Phase 2	Dahej	9	5000	Construction is in progress.
40	Coal jetty at Salaya by Essar	Salaya	5	10000	Environment Clearance obtained. Construction permission granted. Drawings are approved.
41	Dahej port development on BOOT basis linked port	Dahej	14	12000	DPR approved. Construction permission granted and work is in progress.
42	Bulk General cargo terminal at Hazira.	Hazira.	15	10000	Environment Clearance obtained. GMB accepted AHPPL as a sub concessionaire for Phase 1B of Hazira port. DPR was approved by GMB. Addendum to concession agreement and Bulk General cargo terminal agreement was executed with the developer. GMB has issued construction permission u/s 35 (1) of GMB act on 05.05.2011.
43	Development of Modern sea port at Haldipur in Karnataka coast line	New Haldipur Port	12MMTPA (Phase -1)	14000	M/s. Mineral Enterprises have submitted proposal for Development of Haldipur Port on Swiss challenge method. The IDD has directed the firm to prepare DPR. DPR under preparation.

44	Development of Modern Sea Port at Todri in Ratnagiri coastline	Todri Port	24 MMTPA (Phase-I)	32000	IDD Nominated KSIDC as nodal agency. KSIDC appointed M/S. & Promote company for preparation of DPR. Field data collection and site survey in progress
45	Development of Ponnani Port under PPP	Kerala Ponnani		4500	Work awarded to M/s Malabar Pvt Ltd. And the project is in the primary stage.
46	Development of an all weather and Multipurpose port at Revas-Awara, Dist. Raigad	Maharashtra Revas-Awara	30	52000	Environmental clearance received. Techno studies/ Investigations completed. Pre-construction activities in progress.
47	Development of an all weather and Multipurpose port at Dighi Dist. Raigad	Maharashtra Raigad - Dighi	30	53000	First berth of 200 mtrs. Completed. Test shipments carried out. Likely commissioning post monsoon. Construction of additional 3 berths in progress
48	Development of an all weather and Multipurpose port at Dharamtar-Jaigad port Dist. Raigad	Maharashtra Jaigad	60	20000	Two berths of 550 mtrs. Length commissioned in August- 2009. Detailed Project Report (Phase-II) for additional 3 berths received and under scrutiny
49	Development of an all weather and Multipurpose port at Lavgan - Jaigad Port Dist Raigad (Cargo activity + Ship Recycling)	Maharashtra (Lavgan - Bay)	12 + Ship repair	7000	Environmental clearance received. Dredging activities commenced. Construction activities likely to commence end-2011
50	Development of an all weather and Multipurpose port at Vijaydurg Port Dist Sindhudurg	Maharashtra Vijaydurg	7.5	10000	Detailed Project Report and Environment Impact Assessment Report in progress. Techno-cal studies/ investigations at final stage.
51	Development of an all weather and Multipurpose port at Redi Port Dist Sindhudurg	Maharashtra Redi	5.16	44000	Detailed Project Report approved. Proposal for Environmental clearance under scrutiny. Land acquisition in progress.

Source: Maritime States/Maritime Boards

Private Sector/Captive/Joint Venture Port Projects Under Formulation
(Non-Major Ports)

Sl. No	Project	State/ Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
1.	Landing facilities of cargo & passenger vessel	U.T. of Daman & Diu.	-	22.85	
2.	Cargo & Passenger Landing Facility at Malvan in Dist.	U.T. of Daman & Diu.	-	600	Proposal has been submitted for approval to Ministry of Shipping.
3.	Kakinada Anchorage Port	Andhra Pradesh	7.50 MT	160	The work is in progress.
4.	Krishnapatnam Port	Andhra Pradesh	17 MT	5000	Work is in progress.
5.	Nizampatnam Port and Vodarevu port	Andhra Pradesh	15 MT	10000	Work is in progress.
6.	Machilipatnam Port	Andhra Pradesh	12 MT	15000	Work is in progress.
7.	Development of Jaigarh Port by M/s. Chowgule Steamship Ltd. (BOOST basis)	Maharashtra	4.00 MTPA	2854	Commenced in September 2006.
8.	Development of Vijaydurg Port (BOOST basis)	Maharashtra	7.5 MTPA	10000	Proposal under scrutiny
9.	Development of Redi Port	Maharashtra	7.4 MTPA	5970	Proposal under scrutiny
10.	Establishing a captive port at Marakkanam in Villupuram District.	Tamil Nadu	2 MT	13600	Port has been notified. Detailed Project Report under preparation
11.	Establishing a captive port in Cuddalore District.	Tamil Nadu	14 MT	4000	Preparation of Detailed Project Report under progress
12.	Establishing a captive port at Periyamuthiyum in Nagapattinam District	Tamil Nadu	6 MT	3500	Preparation of Detailed Project Report under progress.
13.	Establishing a captive port at Cheyyur in Kanchipuram District	Tamil Nadu	14 MT	N.A	Preparation of Techno Feasibility Report under progress.
14.	Construction of jetty at Panaji/Reconstr. Goa	Goa	-	300	Administrative work in progress.
15.	Establishing a captive port at Kattupalli in Thiruvallur district	Tamil Nadu	Ship Building	12000	Detailed Project Report under preparation.
16.	Establishing coal handling facility within Cuddalore port	Tamil Nadu	8.5	8200	Preparation of Detailed Project Report under progress
17.	Establishing a captive port at Kodiyalam in Nagapattinam district	Tamil Nadu	5	7000	Construction of the facility to be commenced

Sl. No	Project	State/ Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
18.	Establishing a captive port at Thiruvadanai in Ramanathapuram district	Tamil Nadu	3.5	6770	Techno Feasibility Report under preparation
19	Establishing a captive port at Mugaiyur in Kancheepuram district	Tamil Nadu	Ship repair yard	15000	Techno Feasibility Report under study.
20.	Captive port facility by M/s. Ennore Power Corporation Ltd.	Tamil Nadu	4MMTPA	80830	
21	Captive port facility by M/s. NSI Power Ltd.	Tamil Nadu	5.5TPA	70340	Port has been notified. Detailed Project Report submitted
22	Captive port facility by M/s. Indian Gas Ltd	Tamil Nadu	3.6MMTPA		Port has been notified. Quarrying of rock stones required for breakwater construction is in progress.
23	Captive port facility by M/s. MTPC Ltd.	Tamil Nadu	8MMTPA	100000	In principal approval accorded. Reports are awaited
24	Captive port facility by M/s.Goodearth shipbuilding Ltd.	Tamil Nadu	Ship building	140000	Port has been notified. Fencing works was under progress. Financial closure yet to be achieved.
25	Captive port facility by M/s. Sterlite power Generating Co. Private Ltd	Tamil Nadu	3MMTPA	50000	In principle approved accorded. Financial closure yet to be achieved.
26	Cauda ship repair facility by M/s Mary Seemaiyhoo-I Port Private Ltd.	Tamil Nadu	Ship repair facility	0000	Port has been notified. Coastal land has been alloted.PLL Power Ltd
27	Captive port facility by M/s PLL Power Ltd.	Tamil Nadu	4MMTPA	50000	Port has been notified. Studies are being conducted.
28	Captive port facility by M/s.Coastal Tamil Nadu Pcwr Ltd.	Tamil Nadu	10MMTPA	160000	Detailed Project Report submitted and the port limits are yet to be approved
29	Captive port facility by M/s Cuddalore Powergen Corporation Ltd.	Tamil Nadu	4MMTPA	50000	Acquiring of private lands under progress
30	Captive port facility by M/s.IL & FS Ltd	Tamil Nadu	1.5MMTPA	12000	Port has been notified. Clearance from Pollution Control Board awaited
31	Captive port facility by M/s. Empee Power and Infrastructure Private Ltd.	Tamil Nadu	4MMTPA	50000	In principle approval accorded. Financial closure yet to be achieved
32	Captive port facility by M/s Tneem port and Power and Infrastructure Private Ltd.	Tamil Nadu	4MMTPA	6000	Port has been notified. Clearance from Ministry of Environment and Forests awaited
33	Captive port facility by M/s. Chettinad Power Corporation Ltd	Tamil Nadu	2.5MMTPA	75000	In principle approved. Declaration of Port limits under consideration of Government.

Sl. No	Project	State/ Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
34	Construction of jetty at Old Goa-Panaji Goa	Goa		30	Administrative work in progress
35	Renovation of Marine Slipway, Diffoma Goa	Goa		10	Administrative work in progress
36	Purchase of vessels for Panaji Port	Goa		70	Administrative work in progress
37	Upgradation/Expansion of Maritime School	Goa		15	Administrative work in progress
38	Dredging of river Zuari & Mandovi & Improvement of their banks	Goa		50	Administrative work in progress
39	Construction of jetty of length 169 mts. at panaji	Goa	14.5 M.T. For the year 2010-11 at Panaji Port	8 cr.	Project approved by Govt of Goa administratively and financially. Funds shall be placed shortly for commencement of works.
40	Development of Vallarpam port.(BOT)	Vallarpam Port, Kerala	14.5	15830	Tender plan was completed Central Government have agreed to the project.
41	Development of Kollam port.	Kollam Port, Kerala		450	Tender clearance yet to be cleared.
42	Development of alappuzha Marine & cargo	Alappuzha		3351	Tender process yet to be started.
43	Development of Beypore Port,	Beypore Port, Kerala		1335	Tender process yet to be cleared.
44	Development of Azhikal port.	Azhikal Port, Kerala		4490	Tender process yet to be started.
45	Development of Puducherry Port	Puducherry	18	27500	Re-bust Recom of MoDA, GoI for transfer of Govt lands to developer is awaited. Developer has to obtain Envnt clearance from MoEF.
46	Construction of proposed jetty at phoenix Bay complex for berthing yatches in Port Blair.	A & N Islands	Safe berthing facilities will be provided to the ships, Yachts calling at these Islands.	81.70	Dropped proposal and issues under consideration for shifting J/Ghat
47	Desilting around the proposed jetty at Phoenix bay complex for berthing of vaches in Port Blair.	-do-	-do-	81.70	Dropped proposal and issues under consideration for shifting J/Ghat

Sl. No	Project	Under Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
48	Construction of 2 Nos. Navigational towers at landing place in shore at Kamorta in Nancowry.	-do-	Fresh water supply to ships calling at port Blair Harbour.	0.34	Location yet to be finalized and work is to be started. Sounding chart sent to PHO for finalization of location
49	Construction of RCC structures and local navaids on submerged rock including fabrication and erection of navigational tower over submerged rock at Campbell Bay.	-do-	-do-	1.57	Revised cost Estimate under preparation..
50	Reconstruction of Tsunami destroyed RCC structure and construction of additional RCC structure for local Navaids at eastern entrance of Nancowry Harbour.	-do-	Facilities will be updated for smooth handling of cargo.	21.50	TSD under preparation and location to be finalized.
51	Construction of RCC platform for local Navaids for marking Western entrance of Nancowry Harbour.	-do-	Safe berthing facilities will be provided to the ships calling in these Islands.	34.30	TSP under preparation and location to be finalized.
52	Special repairs of Teressa jetty in Nancowry group of Islands.	-do-	-do-	1.00	Jetty submerged. Work could not be taken up.
53	Special repairs to RCC jetty at Campbell bay in Great Nicobar.	-do-	Existing jetties are main vessel for providing better berthing for ships.	4.37	Revised estimate has been submitted.

54	Construction of RCC platform for local Navaids at Kamorta for making western entrance of Nancowrie Harbour	-do-	Safe navigation facilities	12.87	DPR under preparation. Location yet to be finalized.
55	Construction of 5 Nos. RCC structure for making navigational channel at Phiolobhabi & Great Nicobar.	-do-	-do-	0.85	Work was under progress. Due to Tsunami effect entire physical structures have washed away. The report on this is still awaited & requires RCE.
56	Construction of 2 Nos. Navigational towers at landing place in shore at ChaloSiahi in Great Nicobar.	-do-	-do-	11.24	Sounding chart was received for rising location of Tsunami affected & location yet to be finalized.
57	Construction of 2 Nos. Navigational towers at landing place in shore at Pilomilo in Great Islands.	-do-	-do-	0.25	Location yet to be finalized. Works to be started there after.
58	Construction of 4 Nos. RCC Structure for making Navigational Channel at Pilomilo in Great Islands	-do-	Safe berthing facilities will be provided	0.00	Tsunami affected area, hence work is to be decided.
59	Procurement of consultancy service for construction of new jetty at Inner island vessels and Sound Bay in Terasa Island on Turnkey basis.	do-	Providing additional berthing Structure at southern group of Islands	39.90	DPR received from the consultant submitted to A&N Admn. and submitted to Ministry of Shipping.
60	Procurement of consultancy service for construction of new jetty at mainland vessels at Kattabalan on Turnkey basis.	do-	-do-	42.10	DPR received from the consultant submitted to A&N Admn. and submitted to Ministry of Shipping.
61	Re-Construction of port control Tower at Hut Bay at Little Andaman	-do-	To restore the berthing structure. Providing all round collision	3.83	Scope of the work changed by PWD. Revised DSR is in progress.

			berth on facilities from ships to share and share to ships.		
67.	Construction of local navaids at Hut Bay	-do-	Safe navigation facilities will be provided to the ships calling in these Islands	1222	CPA, PMB has informed AAI HW to provide financing heads
68	Construction of local navaids at Car Nicobar	-do-	-do-	205.03	CPA, PMB has informed AAI HW to provide RCC structure yet to be commenced
64	Conducting S&I for landing facilities at Hutter Bay in Little Andaman.	-do-	Addition al berthing structure to be construc tion	9.37	Mathematical model studies entrusted to CWPRS Pune. The feasibility and seismic survey report is awaited from CWPRS.
65	Expansion of existing Captive jetty at Akrimoti, Kutch by Sanghi Industries Ltd.	Kachchh (Gujarat)	4	350	In principle approval has been granted. Studies and investigations have been carried out.
66	Extension of existing Captive jetty by Ultra Tech Cement Ltd.	Kutch (Gujarat)	2	175	In-principle approval has been granted. DPR has been prepared. Environmental clearance is awaited.
67	Modernisation of Okha port by GVK power and Infrastructure Ltd.	Okha (Gujarat)	9.25 MMTP A + 0.625 M. TEU	700	Pre-feasibility study has been completed. Detailed studies are underway.
68	Development of port terminal with Maritime city by GVK power and Infrastructure Ltd.	Okha (Gujarat)	100	15500	Pre-feasibility study has been completed. Detailed studies are underway
69	LNG Port Facility by Swan Energy Ltd.	Pipavav (Gujarat)	3	3300	Survey and investigations to prepare DPR for the port are in progress.

70	Private terminals near Bhogat and Dhavanagar by Universal Success Enterprise Ltd.	Bhogat (Gujarat)	30	3000	Pre-feasibility study has been completed.
71	Development of Green-Field port : MAHUVA by Nirma Chemical Works Ltd.	Mahuva (Gujarat)	2	700	Detailed Project Report is under preparation.
72	Development of Greenfield port Navlapada Port by Larsen & Toubro Ltd.	Navlapada (Gujarat)	20.8	2200	Detailed traffic study, Bathymetry and Topography surveys have also been completed. However, due to local agitation it has been resolved that an alternate site nearby Navlapada is to be identified and allotted to M/s. L & T to develop the green-field port.
73	New Captive Jetty by ABG Ltd.	Mora (Gujarat)	5	150	The project is awaiting MOEF approval.
74	New Captive jetty by Jaypee Ltd.	Kandla (Gujarat)	10	4500	PFR has been prepared and is under scrutiny.
75	Multipurpose jetty by Reliance Industries Ltd.	Sikka (Gujarat)	15	2000	Environment clearance obtained, Detailed engineering studies underway.
76	2nd SBM at Mundra by M/s Adani through their sub-concessionaire.	Mundra (Gujarat)	15	900	Preliminary studies have been conducted.
77	Revival of Mandvi port by M/s KKM	Mandvi (Gujarat)	7	1500	PFR has been prepared and is under scrutiny.
78	Development of new Greenfield port Vansi Borsi	Vansi Borsi (Gujarat)	4	1500	Fresh PFR has been initiated.
79	Development of new Greenfield port Maroli	Maroli (Gujarat)	1.1MMTPA + 1.6 MMTPA	2250	Fresh DOC has been issued.
80	Development of new Greenfield port Dedi.	Dedi (Gujarat)	10	859	Approval is pending at GOG level.

81	Development of new Greenfield port Madhura	Madhura (Gujarat)	3.91	867	Approval is pending at GOG level.
82	Expansion of LNG handling facilities at Dahej	Dahej	3	45000	Environment clearance is received. Work is in progress.
83	Expansion of PTCL jetty at Kovaya	Piravey	5	2500	DPR submitted. Environment clearance in finalize.
84	Private terminals at Bhogat by LSEL.	Bhogat (Gujarat)	30	20000	Environment clearance to be obtained. Land acquisition initiated.
85	Cement jetty by ACC cement at Akrimoti	Akrimoti	4	610	Construction permission is to be granted.
86	Cement jetty by JP Associates at Kharo creek	Kharo creek	3	1400	Construction permission is to be granted.
87	Private jetty at Kirol port- Ruchi Infrastructure, Arcadia shipping ser.	Bedi	2	150	Environment clearance is received and Construction to be soon soon. (Pvt -2)
88	Ro Ro jetty at Dahej	Dahej	2	1000	Applied for Environment clearance. Tenders are floated.
89	Port terminal facilities at Bagasara	Bagasara	1	500	EIA Integral Tenders for PO are under progress.
90	Expansion of Cement terminals at Jakhau by Sanghi	Jakhau	8	45000	Environment clearance in process. Land Acquisition is in progress. Company has made presentation before GMB on 24th Sept. 2011.
91	Greenfield port development at Chhara	Chhara	8	12000	Environment clearance received, GSDC is keenly interested to setup LNG terminal at Mundra. Technical studies have been initiated.
92	LPG terminal at Mundra port.	Mundra	5	300000	
93	Development of Kandla Jetty by L&T	Kachhigad	5	20000	Land identified DPR under way.
94	Multipurpose Terminal Navlakhi- DMCC.	Navlakhi	4	5000	DPR approved. Applied for extension of validity of Environment clearance.
95	SPM at Magdalla by ONGC	Magdalla	5	4000	Basic Engineering is in progress.
96	New Cement jetty at Kutch	Kharo and Suri Creek	4	35000	Common port facilities for various cement industries is planned and DPR to be prepared.
97	SPM at Magdalla by RIL	Magdalla	4	3000	Environment clearance is in process. Basic engineering completed. Detailed Engineering is in progress.

98	Cement jetty for ACC Cement at Mora village, Surat.	Magdalla	3	1000	In principle approval granted. GOG approval awaiting.
99	Expansion of Coal jetty & Phase 2 development at Pipavav	pipavav	5	6500	Development envisaged in the DPR submitted for expansion of the port, However detailed implementation plan and DPR for Phase 2 is to be submitted to GMB based on requirements of thermal power plants companies.
100	Development of South basin inital two container berths at Mundra	Mundra	15	50000	Environment clearance obtained. This work shall be taken up as a part of south port development for which GMB approved DPR in January 2007. Work is in progress.
101	Greenfield port at Mahuva	Mahuva	3	4500	DPR under progress
102	Greenfield port at Navgol	Navgol	20	17500	RFP Invited.
103	Greenfield port at Vanakbara	Vanakbara	8	12750	Fresh RFP to be carried out. Consultant is being engaged.
104	Greenfield port in lieu of Khambhat port	Khambhat	8	1700	Location shifting is in process at GOG level.
105	Greenfield port in lieu of Bhavnagar	Bhavnagar	10	10000	Location shifting is in process at GOG level.
106	North Canara sea port	Honnavar	10 MMTP A	2000	North Canara sea ports GVPRREL is developing the port DPR under process. Field data collection and site survey is going on.
107	Development of Modern Sea Ports at Karwar	Karnataka Kundapur	5 MTPA	800	RDC-over, RFP is pending with Government.
108	Development of Deep sea Port at Tadri	Karnataka Tadri	14.06 MTPA	22210	Feasibility report submitted by Ideak.
109	Haldipur Port	New Haldipur Port	78 MTPA	16411	DPR under progress by MEL Bangalore.
110	Expansion of Gangavaram port	A.P. Gangavaram port	18 MMT to 42 MMT	5936	Financial Closure process is in progress.

Annex - I

Plan Outlay and Expenditure : Port Sector (Central Sector)

(Rs. Crore)

Name of the Port	Annual Plan 2005-06		Annual Plan 2006-07		Annual Plan 2007-08		Annual Plan 2008-09		Annual Plan 2009-10		Annual Plan 2010-11	
	Qty.	Exp.	Qty.	Exp.	Qty	Exp.	Qty	Exp.	Qty.	Exp.	Qty.	Exp.
1	2	3	4	5	6	7	8	9	10	11	12	13
Kolkata (a)	[illegible]	[illegible]	50.84	[illegible]	[illegible]	25.05	44.97	52.64	58.00	42.85	[illegible]	[illegible]
Mumbai	74.53	19.93	[illegible]	[illegible]	[illegible]	37.10	[illegible]	37.84	[illegible]	45.09	179.25	116.76
JNPT	96.24	65.77	105.14	40.71	155.18	77.20	175.17	[illegible]	[illegible]	[illegible]	[illegible]	38.34
Chennai	[illegible]	25.11	25.00	[illegible]	47.81	[illegible]	72.97	42.98	24.00	[illegible]	[illegible]	[illegible]
Cochin	[illegible]	24.76	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Visakhapatnam	27.00	17.68	27.89	49.59	50.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	121.19
Kandla	95.50	[illegible]	[illegible]	80.19	59.49	38.25	140.87	55.07	[illegible]	[illegible]	[illegible]	[illegible]
Mormugao	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	71.00	37.01	[illegible]	[illegible]
Paradip	116.50	44.02	23.40	20.15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	125.19	[illegible]	[illegible]
New Mangalore	26.00	[illegible]	[illegible]	18.02	36.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Tuticorin	[illegible]	[illegible]	[illegible]	28.11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ennore Port Ltd.	[illegible]	13.40	70.00	9.57	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	95.00	70.17
Sethusamudram Ship Canal Project	[illegible]	190.00	[illegible]	[illegible]	664.22	119.47	[illegible]	[illegible]	[illegible]	[illegible]	6.00	6.02
WEB Based EDI Port Community System	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6.00	1.00	[illegible]	[illegible]	[illegible]	[illegible]
Others (b)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Survey Vessels	[illegible]	0.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	1163.45	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

(a) Includes Kolkata & [illegible] Schemes.
(b) Includes [illegible] Department of Shipping and [illegible] Works.
Source: Department of Shipping/IPA

Commodity-wise Traffic Handled at Major Ports

(000 Tonnes)

Port	Period	POL & its Products	Iron Ore	Thermal Coal	Coking Coal	Fert & FRM (Dry)	Food grain	Container Tonnes	Container TEUs	Others	Total
1	2	3	4	5	6	7	8	9	10	11	12
Kolkata	2007-08	[illegible]	488	0	0	25	4	[illegible]	[illegible]	3562	[illegible]
	2008-09	[illegible]	482	0	8	[illegible]	31	5476	302	2972	12428
	2009-10	[illegible]	[illegible]	0	16	33	584	6646	[illegible]	4232	13045
	2010-11 P	[illegible]	827	0	97	28	480	6229	[illegible]	[illegible]	12540
Haldia	2007-08	17685	9892	1797	5476	[illegible]	5	[illegible]	128	5624	43588
	2008-09	16250	8727	[illegible]	5923	546	7	2373	127	[illegible]	[illegible]
	2009-10	9305	7678	1489	[illegible]	295	10	2068	124	6474	[illegible]
	2010-11 P	[illegible]	5877	2173	[illegible]	453	0	2764	[illegible]	6833	34892
Paradip	2007-08	[illegible]	[illegible]	10660	5272	[illegible]	0	58	4	7844	42437
	2008-09	3240	[illegible]	[illegible]	5464	[illegible]	[illegible]	34	2	[illegible]	[illegible]
	2009-10	11647	[illegible]	[illegible]	[illegible]	3567	[illegible]	44	4	5774	[illegible]
	2010-11 P	[illegible]	13850	[illegible]	[illegible]	4410	0	[illegible]	4	5388	56030
Visakha-patnam	2007-08	[illegible]	18948	2895	[illegible]	[illegible]	486	[illegible]	[illegible]	9852	64597
	2008-09	[illegible]	[illegible]	3440	7580	[illegible]	[illegible]	1361	88	[illegible]	[illegible]
	2009-10	18290	[illegible]	[illegible]	7951	3684	[illegible]	[illegible]	98	[illegible]	[illegible]
	2010-11 P	19267	19347	[illegible]	[illegible]	4079	[illegible]	[illegible]	145	10976	[illegible]
Chennai	2007-08	[illegible]	10781	1908	7790	851	84	18050	[illegible]	4977	57154
	2008-09	[illegible]	6846	2446	7402	[illegible]	22	20581	[illegible]	[illegible]	57491
	2009-10	13425	[illegible]	[illegible]	1527	[illegible]	0	23477	[illegible]	[illegible]	[illegible]
	2010-11 P	13882	[illegible]	1399	578	[illegible]	[illegible]	[illegible]	1524	[illegible]	[illegible]
Ennore	2007-08	319	2190	[illegible]	0	[illegible]	0	[illegible]	0	[illegible]	11563
	2008-09	366	1111	9708	0	0	0	[illegible]	0	315	11500
	2009-10	395	936	9279	0	0	0	0	0	93	10703
	2010-11 P	509	[illegible]	9265	103	0	0	0	0	[illegible]	11009
Tuticorin	2007-08	464	0	[illegible]	0	1730	443	5630	450	[illegible]	21480
	2008-09	503	0	6047	[illegible]	1824	195	[illegible]	[illegible]	7960	22011
	2009-10	[illegible]	[illegible]	5603	[illegible]	[illegible]	150	6599	[illegible]	8799	23787
	2010-11 P	742	[illegible]	[illegible]	0	1889	80	8169	[illegible]	9434	25727
Cochin	2007-08	11300	[illegible]	[illegible]	0	354	[illegible]	[illegible]	254	694	[illegible]
	2008-09	[illegible]	0	[illegible]	[illegible]	458	0	[illegible]	261	763	[illegible]
	2009-10	[illegible]	0	[illegible]	[illegible]	346	[illegible]	3928	[illegible]	1051	[illegible]
	2010-11 P	[illegible]	[illegible]	40	0	[illegible]	0	[illegible]	[illegible]	884	17873
New Mangalore	2007-08	21782	[illegible]	0	1691	[illegible]	[illegible]	319	[illegible]	[illegible]	36019
	2008-09	21328	9774	[illegible]	1929	[illegible]	[illegible]	404	29	[illegible]	36691
	2009-10	[illegible]	7062	0	[illegible]	833	[illegible]	475	31	[illegible]	35528
	2010-11 P	[illegible]	[illegible]	0	2856	788	116	568	40	1927	[illegible]
Mormugao	2007-08	874	[illegible]	357	3887	[illegible]	0	166	14	2323	[illegible]
	2008-09	1038	33809	[illegible]	4107	[illegible]	[illegible]	178	14	[illegible]	41681
	2009-10	964	40574	[illegible]	3759	[illegible]	[illegible]	192	17	[illegible]	[illegible]
	2010-11 P	938	40625	1633	4933	242	0	[illegible]	18	[illegible]	[illegible]
J. L. Nehru	2007-08	[illegible]	0	0	0	0	0	[illegible]	4060	[illegible]	55838
	2008-09	4551	0	0	0	0	0	[illegible]	3953	2143	57296
	2009-10	4925	0	0	0	0	0	53095	[illegible]	2743	60763
	2010-11 P	5035	0	0	0	9	0	56426	4270	2839	64309
Mumbai	2007-08	[illegible]	0	2872	0	333	532	[illegible]	118	[illegible]	57038
	2008-09	34571	0	3676	[illegible]	346	479	[illegible]	92	[illegible]	[illegible]
	2009-10	34496	0	3745	[illegible]	442	17	[illegible]	[illegible]	15234	[illegible]
	2010-11 P	33229	[illegible]	3869	[illegible]	494	[illegible]	[illegible]	[illegible]	16300	54586
Kandla	2007-08	[illegible]	419	[illegible]	244	4076	[illegible]	2616	[illegible]	17032	[illegible]
	2008-09	[illegible]	129	1407	467	5493	[illegible]	2136	[illegible]	[illegible]	[illegible]
	2009-10	[illegible]	[illegible]	2295	[illegible]	5700	632	2435	146	[illegible]	[illegible]
	2010-11 P	48426	[illegible]	3082	[illegible]	[illegible]	675	[illegible]	[illegible]	19690	[illegible]
All Ports	2007-08	167435	92298	[illegible]	31832	[illegible]	2990	92247	[illegible]	77399	519313
	2008-09	[illegible]	92669	[illegible]	32880	[illegible]	[illegible]	93440	6578	[illegible]	530804
	2009-10	[illegible]	[illegible]	43348	28054	17697	[illegible]	[illegible]	6863	92987	[illegible]
	2010-11 P	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7539	93627	[illegible]

P : Provisional

Source: [illegible]

Annex-3

Commodity Composition of Traffic Handled at Non- Major Ports.

(000 Tons)

Maritime States / UTs	Period	POL	Iron Ore	Building Material	Coal	Fertiliser & FRM	Others	Total
1	2	3	4	5	6	7	8	9
Gujarat	2007-08	30404	6079	12190	13913	4391	33257	100621
	2008-09	67362	5903	9585	16401	5392	28388	132811
	2009-10	140254	6831	11040	21637	2133	23615	205540
	2010-11	146000	11327	11102	26850	4936	25362	230807
Maharashtra	2007-08	356	3756	2251	1992	442	2547	11344
	2008-09	0	4273	2352	1450	277	2154	10416
	2009-10	0	5392	2197	2871	10	2011	12511
	2010-11	0	5485	2277	4397	0	2406	14875
Andhra pradesh	2007-08	3708	3580	97	40	7877	4386	19240
	2008-09	9409	9465	166	3520	3281	3011	29720
	2009-10	3652	15294	555	15242	4048	4098	43889
	2010-11	2921	5952	450	19480	5788	4719	42810
Goa	2007-08	0	12796	0	88	0	0	12025
	2008-09	0	11901	0	0	0	0	11901
	2009-10	0	13079	0	216	0	0	13837
	2010-11	0	14581	0	0	0	0	14581
Tamil Nadu	2007-08	713	0	5	0	93	76	887
	2008-09	802	0	0	0	21	74	898
	2009-10	1035	0	0	0	44	95	1174
	2010-11	1503	0	0	0	58	50	1611
Karnataka	2007-08	55	6642	0	0	38	761	6546
	2008-09	17	4283	7	15	25	610	4963
	2009-10	36	7841	19	0	0	657	8047
	2010-11	54	2322	40	0	0	679	3095
Others states / Uts #	2007-08	179	41	1478	0	203	699	2554
	2008-09	176	41	1180	0	205	926	2528
	2009-10	193	121	908	1255	40	1307	3981
	2010-11	197	121	281	4116	503	1744	6962
All Non Major PORTS	2007-08	91028	34225	16294	75443	7112	42302	266378
	2008-09	87818	56860	13259	21467	8955	35972	213222
	2009-10	145153	49068	14903	41387	6525	32613	289319
	2010-11	153483	42492	14150	58521	10934	35002	314641

: Includes Puducherry, Orissa, Kerala Andaman & Nicobar Islands and Lakshadweep Islands

Note : (1) All figures for 2009-10 &2010-11 are provisional.

(2) No traffic was handled at ports Daman & Diu.

Annex-4

COMMODITY WISE CAPACITY OF MAJOR PORT CAPACITIES AS ON 31.3.2011

(Taking into account the Reassessment of Port capacities)

(IN MILLION TONNES)

Sl no.	Commodity	Kolkata	Haldia	Paradip	Vizag	Chennai	Ennore	Tuticorin	Cochin	New Mangalore	Mormugao	Mumbai	Kandla	J.N.P.T	Total
1.	P.O.L.	4.1 [illegible] 4.0 (7) [illegible]	17.00 (7+2BJ)	21.20(11+ SBM	17.6* (4)	11.80 (3)	3.00 (1)	2.[illegible] (1)	18.70 (1)(1 SBM	23.37 (4)	1.00 (1)	32.00 (5)	62.55 +0.8 (8+3SB M+A)	5.[illegible] (2)	[illegible]0.76+4.80 (4[illegible] SBM+2BJ+A)
2.	IRON ORE		8.00 (2)	4.90 (1)	12.56 (1)	8.50 (2)	6.00(1)			7.20 (1)	35.50 (1+ Trans				79.70 (8+Trans)
3.	Coal (Thermal)		7.00 (3)	20.00 (2)			21.00 (2)	6.25 (2)							54.25 (9)
4.	Fertilizer			7.50 (2)	1.00 (1)				0.80 (1)						9.30 (4)
5.	Other Break Bulk Cargo	6.5 [illegible] 53 (22) [illegible]	14.70 (8)	21.50 (9)	[illegible]1.26 (15)	17.92 (14)	1.00 (1)	11.49 (10)	8.96 (12)	14.70 (8)	2.40 (4)	11.53 (25+6 (4)	16.18 (12)	0.90 (1)	1[illegible] 6.50 [illegible] A
6	Container	5.75 (4)	4.00 (2)		3.50 (1)	42.00 (7)		5.06 (1)	12.50 (3)			1.00 (1)	3.30 (2)	52.40 @ (9)	127.51 (3[illegible])
	Including TEUs	4.58	3.33		2.04	25.00		4.17	10.00			0.82	4.20	15.50	111.19
Total		16.25+ 1.53 (3[illegible]) [illegible]	50.70 (37)+2 BJ	76.30(15) +SBM	64.9[illegible] (22)	79.72 (24)	31.00 (6)	27.0[illegible] (14)	40.96 (19)+SBM	45.57 (13)	41.90 (6+Trans)	44.53+ 0.0 (3[illegible]) +A	86.03+0 8(22+3SBM)+A	54.00 (12)	[illegible] Trans [illegible] BJ+A

Figure in the parenthesis indicate the number of berths. BJ Barge jetties, T-Transhippers, A- Anchorages, SBM- Single Buoy Mooring

@ Capacity of JNP container terminal (3 berths), NSICT (2 berths) GTIL (3 berths) and shallow water berth (1 no.) has been taken as 15.0 MT, 15.00 MT, [illegible] MT and 1.20 MT respectively. Capacity of one shallow water berth at JNPT is 0.90 MT for dry bulk cargo.

Capacity of Chennai Container Terminal I (4 berths) and II (3 berths) has been taken as 24MT and 18MT respectively.

Capacity of Iron Ore berth has been taken as 6.0MT at Ennore Port. After full fledged commissioning, balance capacity of 6.0MT will be added.

RGCT berths at Wellington Island of Cochin Port have been shown as general cargo berths. Capacity of 1 Container berth of Vallarpadam has been taken as [illegible] Million TEU (12.5MT).

Only MS berth of Mumbai Port is considered as dedicated container berth. Annual capacity of this (Dedicated) container berth of Mumbai Port is 1.0MT. Berth No. 5, 7 & [illegible] are used as holding berths for MbPT crafts and no capacity has been assessed.