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UPDATE ON INDIAN PORT SECTOR (UPTO 31.3.2008)



**GOVERNMENT OF INDIA
MINISTRY OF SHIPPING, ROAD TRANSPORT & HIGHWAYS
TRANSPORT RESEARCH WING
NEW DELHI**



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PREFACE

As per the decision of the Maritime Sector 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 eleven issues of the publication have been released. The last issue contained data up to September, 2007.

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 covering 2006-07 and 2007-08. 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 authorities is gratefully acknowledged.

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GOVERNMENT OF INDIA

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I. RECENT TRENDS IN CARGO TRAFFIC AND POLICY INITIATIVES

1.1 International and Domestic Factors Related to Seaborne Trade

1.1.1 The global expansion is losing steam. As per the World Economic Outlook (IMF, April, 2008) global growth is projected to slow to 3.7 percent in 2008 from 4.9 per cent in 2007. The slow down is quite pronounced in the advanced economies from 2.7 per cent in 2007 to 1.3 percent in 2008. In contrast, developing economies are expected to grow at a slower but still robust 6.7 percent in 2008. The major drags on the global growth performance are the slowdown in the United States driven by the end of the housing bubble and the unfolding of credit crunch. Nonetheless, India and China are expected to grow at a brisk pace in 2008. India's resilience lies mainly in its healthy macroeconomic fundamentals and her increasing integration into the world economy. The exceptional growth performance of developing countries has led to amongst other things, continued strong demand for and higher prices for energy and primary commodities. On the trade side, the impact of spillovers from slowing activity in the advanced economies has been limited. The export (trade in goods) volume growth of advanced economies is expected to moderate from 5.3 % in 2007 to 4.8 % in 2008 and that of emerging and developing economies from 9.7 % to 7.0 % over the same period. Overall trading activity has been sustained, aided by strong growth in domestic demand in emerging economies. Growth in world sea-borne trade has not matched global trade volumes.

1.1.2 During the Tenth Plan (2002-07) India's Gross Domestic Product (GDP) grew at an annual average rate of 7.8% with GDP originating in industry growing at a higher rate of 9.2%. The robust growth performance of the Indian economy has helped to sustain a high growth in total seaborne cargo traffic which grew at an annual average rate of 11%. A noteworthy feature of India's growth in cargo traffic has been the fact that its growth has been much higher compared to their corresponding world averages and has outstripped both growth in world trade and output. To a large extent the strong growth of India's seaborne cargo traffic reflects strong growth in overall GDP and export volumes in recent years. The momentum of growth in cargo traffic at Indian ports has been sustained with a growth of 11 per cent in the total volume of cargo handled in 2007-08 as well.

Table 1: Growth in Cargo handled at Indian Ports and related parameters (in per cent)

Parameters	2002-03	2003-04	2004-05	2005-06	2006-07	Average 10 th plan	2007-08
Trends in India's Select Macro Parameters							
I. Total Cargo (MT) All Ports	13.1	24	12.5	10.9	-14	11.0	11.0
(a) Major Ports	9.0	10.0	11.3	10.4	9.5	10.0	11.9
(b) Non Major Ports	13.1	9.5	18.2	12.6	15.5	12.8	8.4
II. GDP overall	8.2	8.5	7.9	5.4	0.8	7.0	9.0
(a) Agriculture	-7.2	7.0	6.0	5.2	3.8	2.6	4.5
(b) Industry	7.1	7.4	10.3	10.2	11.0	9.2	8.8
(c) Services	7.5	8.0	9.7	10.3	11.1	8.8	10.0
III. Foreign Trade							
(a) Export in \$ value	20.8	21.1	21.8	22.4	22.0	23.6	23.0
(b) Import in \$ value	19.4	21.2	22.7	23.8	24.4	23.5	27.0
Trends in Select Global Indicators							
IV. World Gdp	2.9	2.8	4.8	4.4	5.0	4.1	4.9
(a) Advanced economies	1.6	1.5	2.2	2.6	3.0	3.5	2.7
(b) Developing economies	4.7	5.2	7.2	5.1	7.8	6.7	7.0
V. Export Volume (Giga-tonnes)							
(a) Advanced economies	2.7	3.3	5.7	5.5	8.0	5.6	5.3
(b) Developing economies	8.9	11.4	14.0	10.2	12.5	10.8	11.7
VI. Import Volume (Giga-tonnes)							
(a) Advanced economies	3.0	5.0	8.5	8.2	7.0	6.3	3.3
(b) Developing economies	8.2	11.4	16.6	12.4	12.5	11.9	12.3
VII. World Seaborne Trade ^a	1.2	5.2	4.0	3.8	4.0	4.0	
(a) Goods Loaded	1.2	8.2	6.3	5.7	4.2	4.2	
(b) Goods Unloaded	1.2	4.7	4.9	3.6	4.0	4.0	

^a Based on gross domestic product (GDP) at Factor Cost (1990-2000 Prices), Central Statistical Organisation
 II. Based on Department of Commerce, DGCI&S data
 IV. VIU based on World Economic Outlook, April 2005, UNCTAD
 VII Based on Review of Maritime Transport 2007, UNCTAD
 Note: WT: Million Tonnes for Jan-Mar, Y/Y & Y1 year 2007-08 refers to calendar year 2008 and so on.
 * growth in total goods loaded & un-loaded

World Seaborne Trade

1.1.2 In 2006 seaborne trade accounted for 89.6 per cent of global trade in terms of volume (tons) and 70.1 per cent in terms of value (in United States Dollars). During the same year, airborne cargo had a share of just 0.27 per cent of trade volume and 14.1 per cent of trade value, whilst overland and other modes (including pipelines) accounted for the remaining 10.2 per cent of trade volume and 15.8 per cent of trade value. Total world seaborne trade including Intra-European Union trade, amounted to about 2.4 billion tons in 2006 (UNCTAD: Review of Maritime Transport, 2007).

Model split of international trade in goods, \$ Billion (excluding intra-European Union trade)							
Mode	2000	2001	2002	2003	2004	2005	2006
Airborne	809 (17.23)	726 (19.35)	699 (15.42)	770 (14.91)	913 (14.09)	1040 (13.04)	1198 (14.09)
Seaborne	3029 (64.48)	2877 (64.62)	2955 (65.26)	3478 (67.34)	4440 (68.85)	5207 (69.77)	5958 (70.07)
Overland & other	930 (18.29)	847 (19.03)	875 (19.32)	917 (17.75)	1102 (17.06)	1216 (16.29)	1347 (15.84)

Model split of international trade in goods, million metric tons (excluding intra-European Union Trade)							
Mode	2000	2001	2002	2003	2004	2005	2006
Airborne	14 (0.26)	14 (0.26)	14 (0.26)	14 (0.26)	16 (0.25)	17 (0.25)	19 (0.27)
Seaborne	4948 (89.08)	4784 (89.82)	4787 (89.18)	4881 (89.04)	5769 (89.00)	6045 (88.08)	6319 (89.57)
Overland & other	590 (10.55)	528 (9.91)	597 (10.58)	599 (10.71)	631 (9.83)	685 (9.88)	717 (10.19)

Note: Figures in parenthesis indicate percent share of respective modes in total international cargo

1.1.4 Comparing data since 2000, the shares of the different modes have remained quite stable in terms of volume, whilst fluctuating much more when analyzing the trade value. During the last seven years, the share of seaborne trade volume has fluctuated only between 88.04 and 89.82 per cent (a range of 0.78 per cent) whilst its share in trade value fluctuated seven times more – between 64.48 and 70.07 per cent (a range of 5.59 per cent). During the same period, the airborne share fluctuated by only 0.02 per cent in terms of volume and by 3.29 per cent in terms of value.

1.1.5 The main reason for those differences lies in the fact that the share in trade value is strongly influenced by the prices of the traded commodities. In particular, the rising price of oil, but also that of other commodities, has contributed to the rise in the share of seaborne trade – albeit only its value and not its volume. Another trend that leads to an increase in the share of maritime trade value is the changing composition of global maritime trade, which includes increasingly manufactured and intermediate goods.

1.1.6 Between 2000 and 2006 the volume of airborne trade has grown by 22.7 per cent, seaborne trade by 20.4 per cent, and the trade moved by other modes by 23.7 per cent.

Average value per ton of cargo across Modes in International Trade							
Average value per ton of cargo (\$)	2000	2001	2002	2003	2004	2005	2006
Airborne	\$6,624	\$1,741	\$0,446	\$4,916	\$0,002	\$9,710	\$3,184
Seaborne	\$20	\$0.1	\$17	\$0.8	\$7.2	\$8.1	\$4.3
Overland and other	14.87	16.06	15.42	10.31	17.48	18.27	18.78
All modes	\$6.7	\$0.6	\$4.3	\$0.9	\$0.08	\$1.09	\$0.6

1.1.7 In 2006, the average value per ton of cargo of airborne trade was \$443, versus \$3,184 per ton of airbone trade and \$1.878 per ton of trade transported overland or by other modes such as pipeline. In other words, in 2006 airborne cargo was on average 67 times more valuable (per ton) than seaborne cargo. This proportion has been declining over recent years; in 2000, airborne traffic was 91 times more valuable per ton of cargo than seaborne trade.

(Section on World seaborne Trade (paragraph Nos 1.1.3 to 1.1.6) is based on UNCTAD Transport Newsletter No. 38, 4th Quarter, 2007/1st Quarter, 2008)

1.2 Cargo Traffic at Indian Ports

1.2.1 During 2007-08 major and non-major ports in India accomplished a total cargo throughput of about 716 million tonnes reflecting an increase of 11 % over the previous year. This sustained increase during 2007-08 comes on top of 11.4 % growth in cargo traffic at Indian ports in 2006-07 (Table: 2). However, the year 2007-08 saw a moderation in the growth of cargo handled at non-major ports to 8.4 % from 16.5 % in 2006-07. Over the same period growth in cargo handled at major ports accelerated to 11.8 % from 9.5 %.

Table 2: Traffic Handled at Indian Ports (Thousand Tonnes)

Major/Non-Major Ports	Traffic Handled				Growth over previous year/period			
	2004-05	2005-06	2006-07	2007-08(P)	2004-05	2005-06	2006-07	2007-08(P)
Major Ports	259756 (71.53)	271561 (73.18)	283829 (71.42)	51,9240 (72.58)	11.3	10.4	9.5	11.8
Non Major Ports	138233 (28.45)	155426 (25.54)	181112 (26.06)	185973 (27.43)	16.2	12.6	16.6	8.4
All Ports	397989 (100.00)	527002 (100.00)	564941 (100.00)	70,5213 (100.00)	12.8	10.8	11.4	11.0

(P): Provisional ; Figures within parenthesis indicate percent share in total cargo traffic for Major and Non-Major ports respectively.

1.3 Cargo Traffic at Major Ports

1.3.1 In terms of port performance, the analysis of cargo handled at 12 major ports reveals that 11.9% growth in cargo traffic in 2007-08 was sustained by double digit growth at JNPT port which posted an increase of 24.6%, followed by Kanola (22.5%), Tuticorin (19.3%), Visakhapatnam (14.6%), New Mangalore (12.4%), Paradip (10.2%) and Mumbai (8.8%) (Table 3). About more than half (50%) of the total increase in cargo traffic at major ports during 2007-08 is attributed to a cluster of 3 ports on the West Coast namely Mumbai, JNPT and Kanola. In contrast, the 3 major ports on the East Coast (Kolkata, Vizag, Paradip, Tuticorin, Chennai and Ennore) accounted for little above 40% increase in total cargo at major ports in 2007-08. The cargo traffic attained by the 12 major ports at 519.24 million tonnes in 2007-08 surpassed the target of 515.31 million tonnes by 0.8%. However, only 8 major ports could exceed their respective targets of cargo traffic during 2007-08. These include JNPT (13.1%), Kanola (8.2%), Tuticorin (5.4%), New Mangalore (4.8%), Chennai (2.3%) and Visakhapatnam (0.8%). Port-wise traffic handled during 2007-08 as compared with their respective targets in 2007-06 is given in Table 3.

Table 3 : Traffic Handled at Major Ports (Thousands Tonnes)

Ports	Annual Average growth in 10 th Plan (In per cent)	2006-07	2007-08		% Change 2007-08		
			Actual (Pmt)	Target	In 2006-07 over 2005-06	Over 2006-07	Over Target
Kolkata	12.7	53630	57202	55002	3.8	4.1	-2.7
Kolkata CS	15.9	12586	13741	13741	18.6	9.1	4.6
Ennore DC	11.3	42154	43841	43741	5.3	2.6	-4.3
Paradip	12.8	38617	42435	45886	18.3	10.2	-7.5
Visakhapatnam	5.0	55305	64607	64242	17.1	14.6	0.8
Ennore	24.8	10714	11663	11700	16.9	7.9	-1.2
Chennai	8.5	53414	57154	56800	13.1	7.0	2.0
Tuticorin	6.8	18001	21480	20885	6.9	15.3	5.4
Cochin	5.0	15214	15910	14936	10.3	3.2	-5.6
New Mangalore	13.7	32642	38013	34342	7.0	12.4	4.5
Mumbai	2.5	34241	35123	35036	2.1	2.6	-0.2
JNPT	14.0	52054	67032	65752	10.5	2.8	-2.6
Kanola	7.2	57910	61083	63036	13.1	22.6	8.2
All Ports	10.0	462128	519240	515340	9.5	11.2	0.8

1.4 Commodity wise Cargo Traffic at Major Ports

1.4.1 In terms of Commodity-wise traffic at 12 major ports, the overall growth of 11.9% in 2007-08 was contributed by an increase of 29.4% in container traffic followed by fertilizer (18.0%), Iron Ore (+4.2) and POL (9.5%) [Table 4]. However, POL and container traffic were the 2 main broad categories which accounted for close to 60% of the increase in total cargo traffic at major ports. As regards, growth with respect to target all commodity groups except c coal and fertilizer (dry) & others fell short of the targets set for 2007-08.

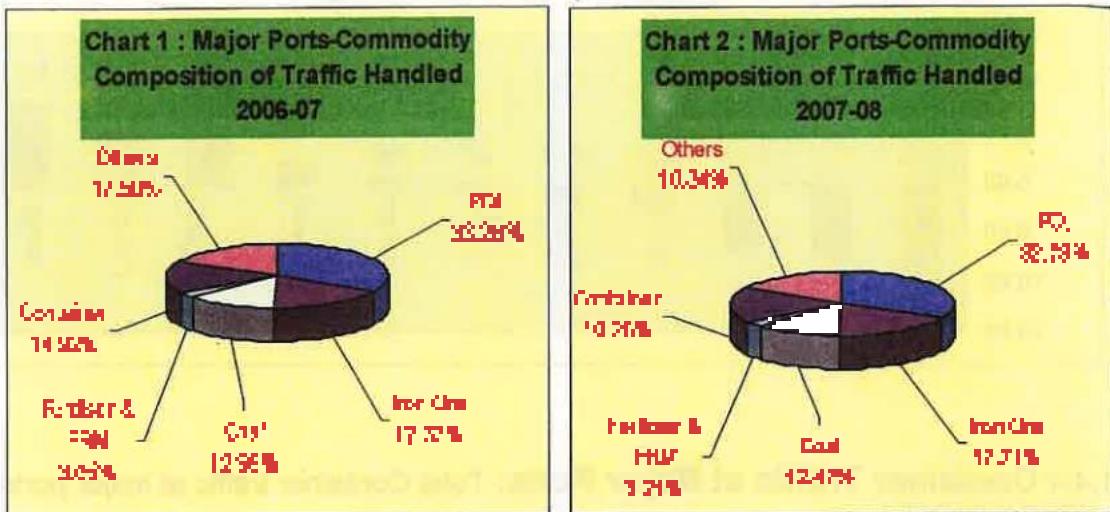
Table 4 : Commodity-wise Traffic Handled at Major Ports (000 Tons)

Commodity	Average annual Growth (%) in Target Plan	2006-07	2007-08		In 2008-09 over 2007-08	% Change 2007-08	
			Actual (P)	Target		Over 2008-07	Over Target
POL	0.1	164283	163837	173806	9.8	9.5	2.8
Iron Ore	+2.4	80582	81874	85800	+7.1	+1.2	7.4
Fertilizer	0.5	11124	10984	12740	16.2	+8.0	3.0
Pinked	+1.6	7828	10512	8800	+9.7	+3.8	+26.5
Rail (Dry)	1.0	8150	8002	6940	-1.3	-2.4	-12.0
Coal	3.7	80217	84725	71540	-12.6	-7.5	-18.2
Thermal	0.4	373.0	38060	48722	-0.8	+3.1	-18.8
Other Coal*	4.9	22907	25445	25611	+8.8	+0.8	-2.5
Container	+4.6	72485	8234	70870	-16.5	+23.4	18.3
Others	+6.8	81140	84840	89589	+7.0	+4.6	+2.0
Total	10.0	463839	515240	515906	9.5	11.0	0.4

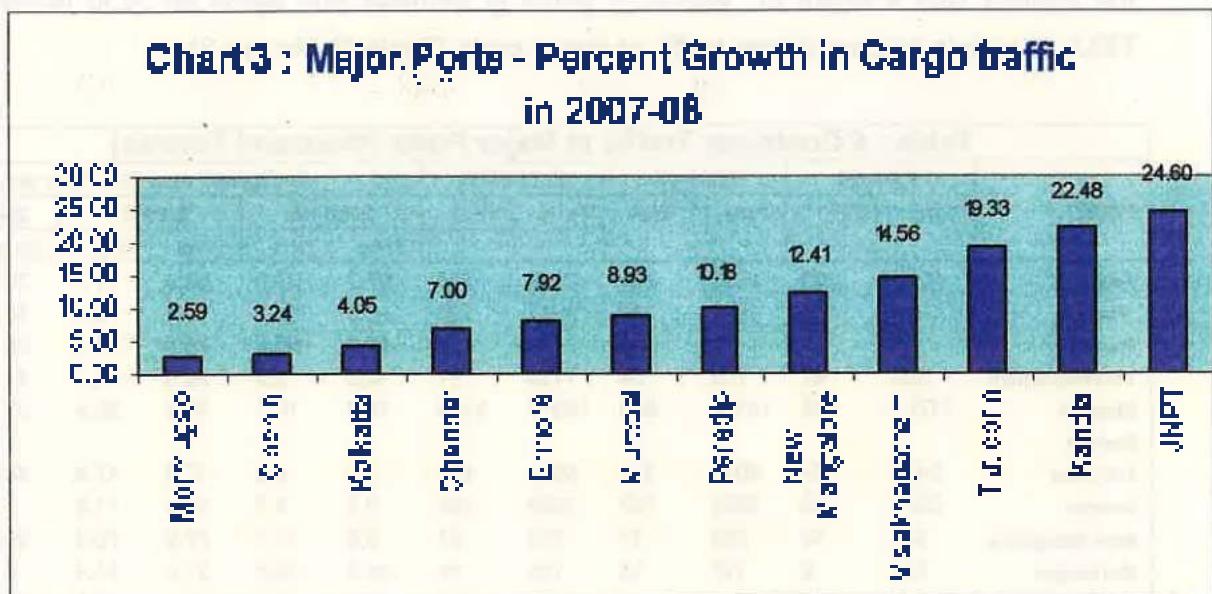
* Only Coking Coal, Steam/Industrial Coal, Coke etc. included in 'Others'. (P) : Provisional;

1.4.2 The shares of different commodities in total cargo traffic are depicted in the Charts 1 and 2 for the years 2006-07 and 2007-08 respectively. Energy imports constituting POL and coal constitute about 49 per cent of the total cargo traffic at India's major ports.

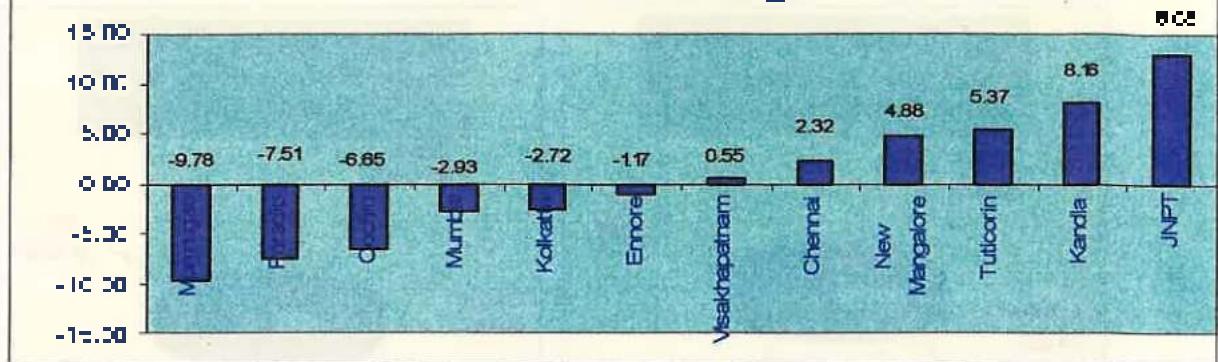
Major Ports - Commodity Composition



1.4.3 The Port-wise & commodity-wise traffic handled at major ports during the last few years are given in Annex 3. The percent growth in cargo traffic in 2007-08 with respect to 2006-07 and targets in 2007-08 is shown in Charts 3 and 4 respectively.



**Chart 4 : Major Ports - Percent Growth in Cargo traffic
In 2007-08 w.r.t to Target**



1.4.4 Container Traffic at Major Ports: Total Container traffic at major ports has increased both in terms of tonnes (25.4%) and twenty foot equivalent units (TEUs) (21.1%) during 2007-08. Growth in the container traffic (in terms of tonnes) at 25.4 has been more than double the overall cargo growth (11.9%) at major ports during 2007-08. However, amongst the major ports, the port at Mumbai witnessed fall in container traffic. Jawahar Lal Nehru Port continues to be the leading container handling port in the country with a share of 56.4% in terms of tonnage and about 80 % in terms of TEUs in India's total container traffic at major ports (Table 5) (Annex 3).

Table 5 Container Traffic at Major Ports (thousand Tonnes)

PORT	2006-07		2007-08 ^(a)		2007-08 ^(b)		% Change over previous year			
	Tons	TEL	Tons	TEL	Tons	TEL	Tons	TEL	Tons	TEL
Mumbai	3234	203	4099	212	5178	287	37.7	27.7	25.0	17.7
Haldia	1313	111	1818	113	2242	128	5.3	14.7	0.4	0.0
Patnaip	45	8	52	2	54	4	45.2	50.0	-28.9	-31.2
Vizagapatnam	821	47	739	36	1170	74	-9.3	2.2	25.9	16.1
Chennai	1737	735	1456	825	18040	1128	132	19.1	20.5	20.5
Govt.										
Kollam	3458	327	4014	367	5630	450	7.0	4.6	7.0	17.4
Cochin	2612	203	3036	267	3280	254	13	9.7	5.4	11.2
New Mangalore	142	10	205	7	218	21	5.2	11.1	77.0	50.0
Namakkal	125	0	127	13	135	14	-14.5	-10.0	21.0	14.4
J. L. Nehru	13777	7367	18111	1287	51820	4630	17.5	12.6	20.8	27.2
Mumbai	2142	160	1650	183	1982	118	-9.6	-29.3	-11.2	9.3
Kandla	211	120	2775	172	7528	137	-73.1	-11.1	73.2	16.2
All Ports	82021	4318	78435	5542	92134	8712	11.9	8.9	15.5	21.1
(^a) Provisional										

Table : 6 . World's Top Container Ports 2007

Ranking		Port	Country	TEU(in million)		% Change
2006	2007			2006	2007	
1	1	Singapore	Singapore	24.8	27.9	12.6
3	2	Shanghai	China	21.7	26.15	20.5
5	3	Hong Kong	China	23.28	23.5	-1.0
4	4	Shenzhen	China	18.6	21.1	14.1
6	5	Busan	South Korea	12.03	13.27	10.9
7	6	Auckland	New Zealand	8.7	10.5	11.3
8	7	Dubai	UAE	6.57	10.7	29.0
9	9	Hongkong	Taiwan	9.77	10.76	6.0
10	8	Hamburg	Germany	8.9	9.8	11.2
11	10	Qianzhuo	China	7.7	9.48	22.9
13	11	Ningbo	China	7.07	8.56	20.4
15	12	Guangzhou	China	6.03	5.3	-40.3
10	13	Los Angeles	US	8.17	8.36	1.3
14	14	Anwerp	Belgium	7.0	8.0	14.3
12	15	Long Beach	US	7.29	7.37	0.9
16	16	Port Klang	Malaysia	5.82	7.12	19.7
17	17	Tianjin	China	5.85	7.1	19.3
		Tarapur				
15	18	Pearas	Malaysia	4.77	5.2	10.4
18	19	New York	US	6.1	5.2	3.9
20	20	Bremenhaven	Germany	4.4	4.9	11.4

Source : The International Maritime Transport Economic – Volume 5 – April 2008

1.5 Non-Major Ports

1.5.1 During the Tenth Five Year Plan the annual average growth rate of traffic at non-major ports was 12.6%. However, cargo traffic at non-major ports showed a moderation in growth to 8.4% in 2007-08 from 16.5% in 2006-07. Non-Major Ports handled around 27 % of the total maritime freight traffic of the country during 2007-08.

1.5.2 Table 7 provides traffic handled by non-major ports in terms of maritime states (geographic location) during the last few years. Non-major Ports accounted for more than a quarter (27 %) of the total cargo handled at the Indian Ports. It is noteworthy, Gujarat accounted for three fourth of the total traffic handled by the non-major ports in the country followed by Andhra Pradesh around 13%, Goa 7% and Maharashtra about 6%. These four maritime states together accounted for close to 90% of the total cargo traffic handled by the non-major ports in India during 2007-08. The growing importance of non-major ports in handling cargo traffic has helped alleviate the congestion at major ports. Table 8 gives a glimpse of commodity profile of the cargo handled at non-major ports in the country.

Table 7 : Traffic Handled by Non-major Ports by Maritime States/UTs

Maritime State/UT	Traffic Handled (100 Tonnes)				% Change over Previous Year			
	2006-07	2007-08	2008-09	2009-10	2004-05	2005-06	2006-07	2007-08
Karnataka	97128 (70.28)	108274 (70.54)	132442 (72.13)	147548 (75.18)	+1.7	+1.3	+2.6	+1.4
Maharashtra	12143 (70.78)	17158 (71.18)	17308 (70.62)	17528 (70.86)	+7.5	+0.1	+0.4	-2.7
Andhra Pradesh	18267 (10.80)	18127 (11.06)	18580 (10.77)	19258 (9.04)	+0.4	+2.3	+0.9	+3.6
Goa	8467 (5.12)	11712 (7.07)	12108 (7.80)	12226 (0.08)	+2.5	+0.1	+1.8	+0.6
Tamil Nadu	354 (0.52)	714 (0.46)	648 (0.35)	738 (0.16)	+23.2	+16.7	+21.8	+22.0
Kerala	3658 (2.59)	4717 (2.56)	22340 (1.22)	23122 (1.38)	+30.2	+7.4	+4.1	+3.2
Other States/UTs	1048 (0.76)	1172 (2.74)	1054 (0.60)	1122 (2.36)	+0.6	+1.4	+6.7	+6.4
All India Total	138203 (100.00)	155420 (70.00)	187112 (70.29)	196873 (70.36)	+15.2	+12.5	+16.5	+8.4

Note: Figures in parenthesis indicate the percentage share of maritime state/UT to total cargo traffic handled at Non-major ports.

1.6.3 Four commodities, viz. PCL, iron ore, building materials and coal accounted for more than three-fourth (77%) of the total cargo handled at the non-major ports in 2007-08 (Table 8).

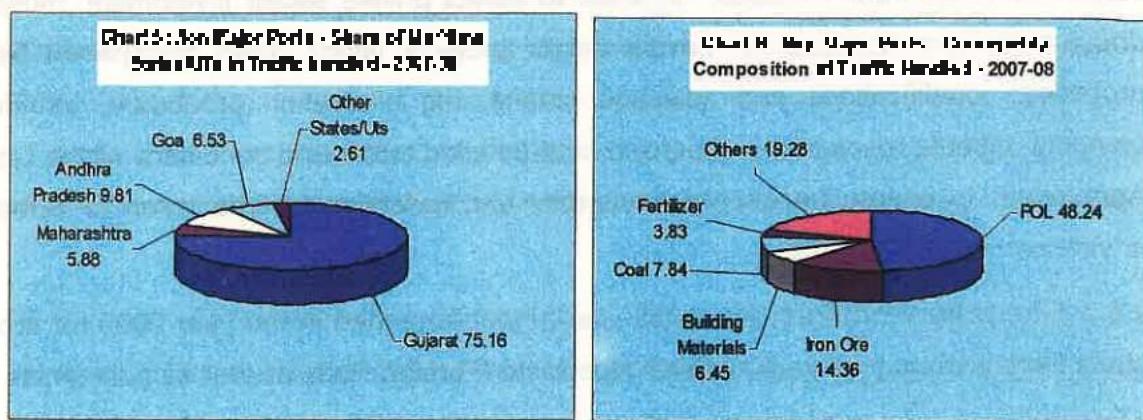
Table 8 : Commodity-wise Traffic Handled by Non-Major Ports

Commodity Group	Traffic Handled (100 Tonnes)				% Change over Previous Period			
	2006-07	2007-08	2008-09	2009-10	2004-05	2005-06	2006-07	2007-08
PCL	67756 (49.38)	78174 (44.89)	91670 (49.26)	94729 (49.71)	+2.2	+2.9	+17.6	+3.7
Iron Ore	21258 (15.48)	265520 (18.58)	29212 (18.13)	30262 (14.75)	+29.4	+54.0	+1.5	+1.1
Building Materials	14722 (10.58)	132144 (16.92)	12380 (17.50)	12664 (24.45)	+6.0	+5.2	+1.5	+4.2
Coal	136118 (9.78)	132588 (8.79)	14048 (7.98)	13367 (7.84)	+37.2	+0.4	+5.6	+4.8
Petroleum	8009 (5.23)	56114 (3.51)	7568 (2.89)	7520 (3.83)	+10.8	+12.6	+25.5	+8.7
Others	17482 (1.21)	24252 (1.22)	26544 (18.51)	37180 (10.23)	+9.1	+10.0	+45.6	+7.1
All	138203 (100.00)	155420 (100.00)	187112 (120.00)	196873 (100.03)	+15.2	+12.5	+16.5	+8.4

Note: Figures in parenthesis indicate the percentage share of commodity to total cargo handled of all commodities.

1.6.4 The share of Maritime States/UTs in the total traffic and Commodity-wise composition of traffic handled at non-major ports during 2007-08 is revealed in the pie

Charts 6 and 8 respectively. Commodity-wise traffic handled at non-major ports for maritime states for the last few years is given in Annex 4.



POL : Petroleum, Oil & Lubricants FKM : Ferrous Raw Materials

1.6.5 Table 9 provides an estimate of cargo handling capacity at the end of Tenth Plan (end March 2007) and likely capacity at the end of Eleventh Plan (end March, 2012). The share of Gujarat in the cargo handling capacity at non major ports is expected to decline from close to four-fifth as of now to about two-fifth at the end of Eleventh Plan due to proposed capacity expansion in non major ports in other major maritime states.

Commodity	Capacity to be on (million tonnes per annum)	
	March 31, 2007	March 31, 2012 (likely)
1. Andhra Pradesh	18.50 (8.10)	102.80 (17.82)
2. Gujarat	192.00 (79.72)	238.22 (41.54)
3. Maharashtra	11.35 (4.86)	65.29 (16.79)
4. Tamil Nadu	0.85 (0.37)	20.65 (5.17)
5. Karnataka	4.00 (1.75)	30.00 (5.23)
6. Orissa	3.00 (0.0)	13.20 (2.30)
7. Goa	11.75 (5.15)	15.78 (2.75)
8. Kerala	0.14 (0.06)	27.85 (4.08)
9. West Bengal	0.00 (0.0)	7.80 (1.38)
10. Puducherry	0.00 (0.0)	12.14 (2.12)
11. Total	228.31	573.50

Note: Figures in parentheses reflect share of maritime States in total non major port capacity

1.8 Policy Initiatives-Central Government

1.8.1 In October 1998, 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.

1.6.2 Government also issued guidelines on joint venture formation in Major Ports which came into effect from 1.6.2000. 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, uniformly and succinctly taken to select the private parties.

1.6.3 The Major Port Trust Act, 1962 was further amended in the year 2003 for allowing Major Ports to form joint ventures with Non-Major/Foreign Ports as well as companies.

1.6.4 Given the vital role of maritime infrastructure in economic development and trade, it has been felt that policy for Maritime sector concerning Ports, Shipping and Inland Water Transport needs to be in position. Accordingly the Department of Shipping had brought out a Draft Policy for Maritime Sector (which could be accessed at the Department's website <http://shipping.nic.in>). Suggestions/views were invited from all those connected with the Maritime sector. Based on this feed back from the various stake-holders, the policy is in the process of finalisation. Box 1 gives a snapshot of major achievements related to the Port Sector during 2007-09.

1.7 Eleventh Plan (2007-12)

1.7.1 The Approach Paper to the Eleventh Five Year Plan (2007-2012): Towards Faster and More Inclusive Growth (November, 2006); by the Planning Commission has proposed an annual average growth target of 9% in terms of GDP for the Eleventh Plan and laid emphasis on following aspects for the Port Sector:

- (a) To develop ports and related infrastructure to bring them to international standards in turn around time and clearing of import & export cargoes;
- (b) Substantial capacity augmentation at major and minor ports;
- (c) A deep sea port to be developed and drafts of existing ports be deepened, where feasible, through capital dredging;
- (d) Bulk of capacity augmentation would be undertaken through public private partnership and captive users and
- (e) Rail road connectivity of ports with the hinterlands to be improved on priority basis.

Box 1 - Port Sector Major Achievements: 2007-08

Major Berth Development Projects completed

- Berth No. 2, Haldia Dock Complex 2 million tonnes per annum (MTPA) capacity at an estimated cost of Rs. 47 Crore;
- Berth No.13 at Haldia Dock Complex 1 MTPA capacity at an estimated cost of Rs. 40 crores;
- Crude oil Single Point Mooring (SPM); <JIL Cochin Port Trust 18 MTPA capacity at an estimated cost of Rs. 720 crore;

Major Berth Development Projects Approved/Awarded/Work in Progress

- Manne Liquid Terminal I, Ennore Port Ltd (EPL) at an estimated cost of Rs. 200 Crore;
- Iron Ore Terminal at EPL at an estimated cost of Rs. 500 crore;
- Coal Terminal at EPL at an estimated cost of Rs. 360 cr
- Second Container Terminal at Chennai Port Trust at an estimated cost of Rs. 485 Crore;
- International Trans-shipment Container Terminal at Vellarpadam, Cochin Port Trust at an estimated cost of Re 2118 Crore;
- 2M-tonne Container Terminal at Mumbai Port Trust at an estimated cost of Rs. 1229 Crore;
- Development of Harbour Wall Boms at Mumbai Port Trust at an estimated cost Rs. 353 Crore;
- Second Chemical Jetty at Mumbai Port Trust at an estimated cost of Rs. 119 Crore;
- Outer Harbour Expansion Project & Upgradation of Iron Ore Handling Facilities at Visakhapatnam Port at an estimated cost of Rs. 185.75 cr.

Capital Dredging Projects

- FID Approval obtained for Deepening of Channel and Inner Harbour at Tuticorin Port Trust at an estimated cost of Rs. 538 crore;
- Commencement of Capital Dredging, Phase 1, EPL at an estimated cost of 91 crore;

II. Policy and Performance of Maritime States

2.1 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 at Ennore which is a corporatised entity). The country's coastline of 7517 kms spread over 13 States/UTs is studded with 12 Major Ports and 187 Non-Major Ports. Of the Non-Major Ports, around 80 are handling traffic. Chart-7 gives the geographical location of the Major and prime Non-Major Ports.

Chart - 7



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 addition 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)

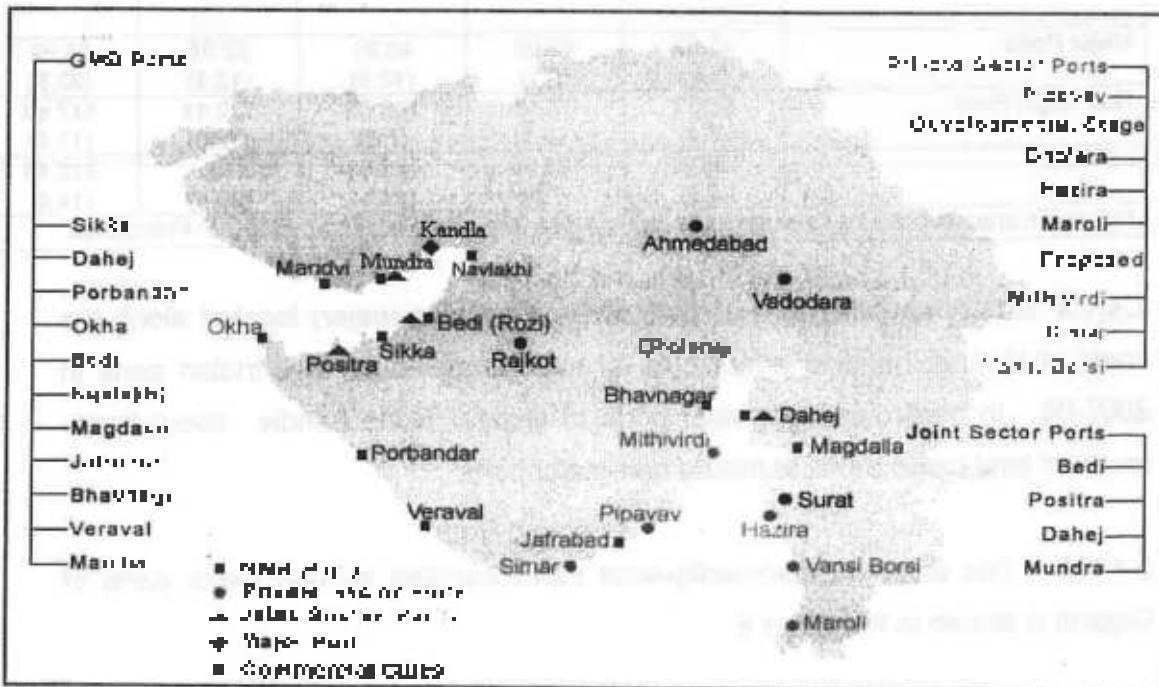
2.3.1 With a view to have an integrated approach for the development of both Major and Non Major Ports the Maritime States Development Council (MSDC) was constituted in May, 1987 under the Chairmanship of the Honourable Minister of Shipping. The Ministers in-charge of Ports in all Maritime States UTs of Puducherry, A&N Administration, Daman & Diu and Lakshadweep are its members. So far nine meetings of MSDC have been held.

2.3.2 The deliberations and decisions of the MSDC provide the institutional framework for coordinated development of Major and Non-Major ports.

2.4 Port Policy in Maritime States

2.4.1 GUJARAT The state of Gujarat is endowed with 1710 km length of coastline which constitutes about 1/6th of the total Indian coastline. Out of 41 ports located along the coast 40 are non-major ports while one port viz. Kandla is a major port. During 2006-07 only 15 non-major ports in the state handle cargo. A broad view of the location of important ports in Gujarat is given in Chart -5.

Chart - 8 : Gujarat: Major and Minor Ports



<http://www.mca.gov.in>

2.4.1.1 The Government of Gujarat announced its integrated Port Policy in December, 1995. The main objectives of this policy are, inter-alia, increasing Gujarat's share in the export and import sector in national and international trade and commerce in pursuance of liberalization and globalisation policy; catering to the needs of increasing traffic emanating from the western and northern states and offering port facilities to promote export oriented industries and port based industries. In addition the policy aims at encouraging ship-building, ship-repairing and also manufacturing facilities for cranes, dredgers and other floating crafts. Besides providing facilities for coastal shipping or passenger and cargo traffic the policy aims to attract private sector investment in the existing minor and intermediate ports and at new port locations.

2.4.1.2 The trends in the cargo handled at both major and non-major ports of Gujarat State during the last few years are given in Table 10. The overall growth in cargo traffic in case of Gujarat at 14.6% in 2007-08 was less than the growth (20.4%) achieved in 2006-07.

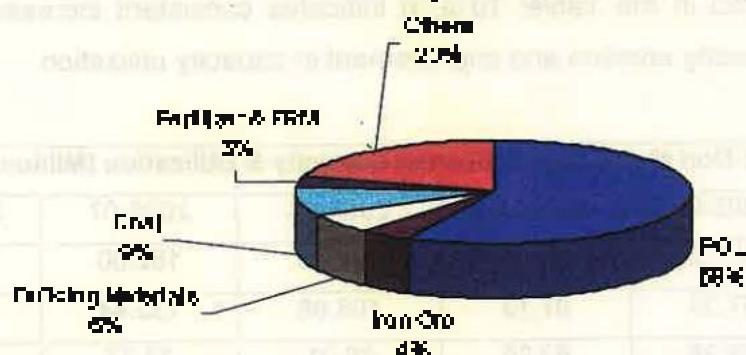
Table : 10- Gujarat: Trends in Cargo Handled at Major & Non-Major Ports (Million Tonnes)					
Major/Non-Major	2003-04	2004-05	2005-06	2006-07	2007-08(P)
Major Ports	41.52 (2.2)	47.56 (15.1)	55.91 (18.5)	62.38 (13.1)	94.89 (22.5)
Non-Major Ports	87.29 (7.1)	97.13 (10.7)	108.52 (12.3)	132.41 (19.2)	147.60 (11.4)
All Ports	128.81 (5.6)	144.68 (17.0)	159.24 (11.0)	195.42 (23.4)	242.49 (14.6)

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 about 30% of total cargo handled at Indian ports in 2007-08. In particular, non-major ports of Gujarat alone handle about three-fourth 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 8.

Chart 8 : Commodity Composition of Traffic Handled at Non-Major Ports of Gujarat - 2007-08



2.4.1.9 Amongst the Maritime States of India, Gujarat is one of the States, which has played a very proactive role in the development of minor ports on its coastline. It announced an integrated Port Policy in December 1995 (Box 2).

Box 2: Gujarat's 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 carrying passengers between Saurashtra and South Gujarat and other destinations.
- To meet Gujarat's potential power requirements by (a) establishing large run-of-river power plants and (b) providing exclusive port facilities for impounding different kinds of power fuel.
- To attract private investment for the development of minor ports EORT framework has been envisaged to provide - (i) incentives 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 liability 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: 10 a. It indicates consistent increase in cargo throughput, capacity addition, and improvement in capacity utilization.

Table : 10 a- Gujarat: Non Major Ports - Current Capacity & Utilization (Million Tonnes)					
Year	2003-04	2004-05	2005-06	2006-07	2007-08
Capacity*	127.23	152.23	163.23	182.00	197.00
Cargo Handled	87.33	97.12	108.08	132.44	147.60
% Utilization	59.28	63.00	66.21	72.77	74.92

* Including Lighterage Port Capacity

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 Direct Berthing Ports'. Amongst 10 ports, 8 ports are to be developed through private investment and remaining 4 ports in the joint sector. The GMB has identified some major projects for capacity augmentation for the Eleventh Plan period (2007-12). The list of projects indicated by the GMB for capacity augmentation is given in the Table 11.

Table : 11 Proposed Capacity Augmentation during Eleventh Plan (Million Tonnes)		
Year	Cumulative Capacity	Major Projects
2006-07	163	10 Cedar Bulk Terminal, 8 Mundra Bulk & Container Terminal
2007-08	182	5 Piplonjet LNG Terminal, 3 Pipavav Container Terminal
2008-09	197	5 Dabhol Bulk Terminal, 2 GMB Private Jetties
2009-10	220	20 Reliance Sikka 88M, 3 Gujarat Ambuja Bulk Terminal
2010-11	230	3 Gujarat Sidhi Bulk Terminal, 5 Hazira Shell Bulk Terminal
2011-12	239	10 Green Field Port -Maroil

Source : Gujarat Maritime Board

2.4.2 MAHARASHTRA

2.4.2.1 The State has a coastline of around 655 km. with 2 major ports viz Mumbai and Jawahar Lal Nehru Port and 63 non-major ports. Out of 63 non-major ports only 11 handle cargo. Maharashtra Maritime Board (MMB) was established in 1936 and 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 in the State. Main Initiatives are listed in Box 3

Box 3 - Maharashtra: Policy Initiatives for Port Development:

- Development on BOOT basis
- Developers selection on MOU basis or by tender if many investors interested.
- Concession period of 50 years
- Concessional Wharfage
- Government aid on lease, if available, at market valuation
- Equity participation by Government in 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

24.2.2 Rewas-Aware and Dighi are both located in Raigad District and are in the process of development since March 2002. The developer of Dighi Port has issued work order for construction of fuel berth in November 2007. The Rewas-Aware Port Project has secured Environmental Clearance from Mo 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. Radhi, Viraydung and Jalgaon are likely to come up shortly. Letters of Intent have been issued to the concerned developers. The Concession Agreement to be signed for these port development projects is being examined. It is expected these ports to be ready for cargo handling in next 2-4 years. The proposed capacity of these ports is given in Table: 12.

Table 12 : Proposed Capacity Creation (In million tonnes per annum)

Port	Initial Phase	Ultimate Phase
Rewari-Aware	47.00	127.00
Dighi	6.45	18.15
Jalgad (Dhamankhol Bay)	5.00	18.00
Jaigad	1.12	2.90
Vijaydurg	7.50	76.00
Redi	5.00	33.0

2.4.2.3 The trends in the cargo handled at both major and non-major ports of the State during the last five years are given in Table: 13.

Table : 13 Maharashtra: Trends In Cargo Handled At Major & Non-Major Ports (Million Tonnes)

Major/Non-Major	2003-04	2004-05	2005-06	2006-07 (P)	2007-08 (P)
Major Ports	61.78 (14.1)	68.00 (11.1)	62.03 (20.7)	97.12 (18.5)	112.88 (16.16)
Non-Major Ports	10.88 (19.8)	12.14 (17.5)	11.16 (-8.1)	11.21 (5.8)	11.56 (-2.1)
All Ports	71.52 (14.9)	80.14 (12.0)	73.19 (16.3)	109.68 (19.95)	124.44 (14.18)

Figures in bracket represents percentage change over the previous year/period

(P) Provisional

2.4.3 GOA

2.4.3.1 Goa with a coastline of about 180 km 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 in 2005-06) 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 the last five years are given in Table: 14.

Table :14 Goa: Trends in Cargo Handled at Major & Non-Major Ports (Million Tonnes)					
Major/Non-Major	2003-04	2004-05	2005-06	2006-07 (P)	2007-08 (P)
Major Ports	27.87 (17.8)	30.8K (10.0)	31.69 (3.4)	31.24 (3.0)	35.13 (2.6)
Non-Major Ports	2.44 (31.5)	8.46 (0.2)	11.78 (39.0)	14.27 (21.7)	12.83 (-10.5)
All Ports	36.31 (24.3)	39.12 (7.7)	43.45 (11.1)	46.55 (11.7)	47.96 (1.15)

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

2.4.4 KARNATAKA

2.4.4.1 Karnataka has a coastline of about 783 kms. At present, there is one major sea port, the New Mangalore Port at Mangalore and 10 non-major ports in Karnataka. The ports of Karwar and Margakere are two 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 the last five years are given in Table: 16

Table :15 Karnataka: Trends in Cargo Handled at Major & Non-Major Ports (Million Tonnes)					
Major/Non-Major	2003-04	2004-05	2005-06	2006-07 (P)	2007-08 (P)
Major Ports	26.67 (24.4)	38.59 (27.1)	54.45 (17.0)	52.04 (-7.0)	35.02 (-12.4)
Non-Major Ports	1.17 (74.5)	0.21 (206.0)	4.12 (17.4)	2.22 (-46.1)	2.61 (19.1)
All Ports	27.84 (25.0)	37.40 (31.3)	58.67 (3.1)	54.26 (-11.3)	38.63 (-2.5)

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

2.4.5 KERALA

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

2.4.6.2 The trends in the cargo handled at both major and non-major ports of the State during the last five years are given in Table: 19.

Table : 16 Kerala : Trends in Cargo Handled at Major & Non-Major Ports (Million Tonnes)					
Major/Non-Major	2003-04	2004-05	2005-06	2006-07(P)	2007-08(P)
Major Ports	13.57 (4.2)	14.10 (3.9)	13.28 (-1.5)	15.26 (9.9)	15.81 (3.6)
Non-Major Ports	3.03 (-32.3)	0.08 (95.9)	0.14 (17.0)	0.17 (21.4)	0.17 (0.0)
All Ports	13.63 (4.2)	14.18 (4.0)	14.03 (-1.1)	15.43 (10.0)	15.88 (3.6)

Figures in bracket represents percentage change w.r.t. the previous year/period

(P) Provisional

2.4.6 TAMIL NADU

2.4.6.1 Tamil Nadu has a coastline of about 905 km, with 3 major ports at Chennai, Ennore and Tuticorin and 15 non-major ports. Out of 15 non-major ports only six 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 share 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 planned.

2.4.6.2 The trends in the cargo handled at both major and non-major ports of the State during the last five years are given in Table 17.

Table 17 Tamil Nadu: Trends in Cargo Handled at Major & Non-Major Ports (Million Tonnes)					
Major/Non-Major	2003-04	2004-05	2005-06	2006-07(P)	2007-08(P)
Major Ports	53.67 (7.8)	69.10 (16.0)	73.66 (6.5)	82.12 (11.7)	86.20 (5.0)
Non-Major Ports	9.89 (13.3)	0.86 (23.2)	0.71 (-10.6)	0.54 (-9.3)	0.90 (40.6)
All Ports	63.56 (7.8)	69.05 (14.8)	74.27 (8.2)	82.77 (11.4)	87.10 (6.1)

Figures in bracket represents percentage change w.r.t. the previous year/period

(P) Provisional

2.4.6.3 Sethu Samudram Canal Project

2.4.6.3.1 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.

2.4.6.3.2 The project is expected to reduce average distance by 335 Nautical Miles and reduce sailing time for the vessels operating to/for east and west coast of the country by 22.50 Hrs. The total cost of the project is estimated at Rs. 2427 crore. Tuticorin Port has been appointed as a nodal agency for implementing the project. The project work was inaugurated by Hon'ble Prime Minister on 2nd of July 2005.

2.4.6.3.3 The dredging work on Adam's Bridge area was launched in December 2008. The quantity dredged up to September 17, 2007 is 11.85 million cubic metres. The work has been temporarily suspended since September 17, 2007 on the basis of order passed by Hon'ble Supreme Court of India. Dredging Corporation of India has been entrusted with the dredging work of a stretch in Palk Strait involving a length of 13.57 kms with an estimated quantity to be dredged at 13.66 million cubic metres. The quantity dredged up to 31.3.2008 at Palk Strait is 22.7E million cubic meters (Hopper Quantity).

2.4.7 ANDHRA PRADESH

2.4.7.1 The State is bestowed with a coastline of about 874 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 its VISION 2020 Document for development of its ports with a view to enhance cargo handling capacity at its Non-Major Ports to around 173 million tonnes by 2020. As large investments are required for capacity creation the State Government's policy intends to encourage the participation of private sector in port development.

2.4.7.3 The status of privatized ports and private investment in Andhra Pradesh Ports is as follows:

STATUS OF PRIVATISED PORTS

- (i) Kakinada Deep Water Port was privatized in March 1999 to M/S ISPL on OMST terms for 20 years.
- (ii) Krishnapatnam Port was privatized in January 1997 on BOOT terms to M/S Krishnapatnam Port Company Ltd.(NATCO) for 30 years. Revised agreement was signed on 17-4-2004. Nayantra Engineering company has taken 74% equity stake in KPCL and NATCO 26%.
- (iii) Gangavaram Port was privatized in August,2003 for development of Deep Water Port on BOOT terms initially for 30 years.

PRIVATE INVESTMENT IN PORTS

- (i) The proposed investments in approved port projects are (i) Gangavaram Port (Rs.2000 crore); (ii) Krishnapatnam Port (Rs.550 crore) and (iii)Kakinada Deep Water Port Expansion (Rs.750 crore)
- (ii) The projects under pipeline are (i) Machilipatnam Port (Rs.1000 crore); and (ii) Nizampatnam Port (Rs.1000 crore).

2.4.7.4 The trends in the cargo handled at both major and non-major ports of the State during the last five years are given in Table 18.

Table:18 Andhra Pradesh: Trends in Cargo Handled at Major & Non-Major Ports(Million Tonnes)					
Major/Non-Major	2003-04	2004-05	2005-06	2006-07 (P)	2007-08(P)
Major Ports	47.74 (3.8)	50.15 (5.0)	55.80 (11.3)	56.39 (1.1)	64.60 (14.6)
Non-Major Ports	19.02 (-2.1)	15.07 (50.4)	18.43 (22.3)	16.00 (0.9)	19.26 (3.5)
AIR Ports	07.76 (2.7)	65.22 (12.9)	74.23 (13.8)	74.99 (1.0)	83.86 (11.8)

Figures in bracket indicate percentage change over the previous year. (P) Provisional

2.4.8 ORISSA

2.4.8.1 Odisha has about 478 km coastline with one major port at Paradip and two non-major ports at Gopalpur and Chilika which are being developed by private companies. There has been no cargo traffic during the last four years at non-major ports of Odisha.

2.4.8.2 The trends in the cargo handled at both major and non-major ports of the State during the last five years are given in Table 19.

Table : 19 Odisha : Trends in Cargo Handled at Major & Non-Major Ports (Million Tonnes)					
Major/Non-Major	2003-04	2004-05	2005-06	2006-07(P)	2007-08(P)
Major Ports	25.51 (C.B)	30.10 (16.0)	33.11 (10.0)	30.52 (10.2)	42.73 (10.2)
Non-Major Ports	-	-	-	-	-
All Ports	25.51 (C.B)	30.10 (16.0)	33.11 (10.0)	30.52 (10.2)	42.73 (10.2)

Figures in brackets denote the percentage change over the previous year's port
P: Projections

2.4.9 WEST BENGAL

2.4.9.1 The State of West Bengal has a coastline of about 160 kms which has two Docks at Kolkata and Haldia under a single major port and one non-major port. Consultants have been short listed for a modern deepsea port in West Bengal. 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 the last five years are given in Table 20.

Table : 20 Trends in Cargo Handled at Major & Non-Major Ports - West Bengal (Million Tonnes)					
Major/Non-Major	2003-04	2004-05	2005-06	2006-07 (P)	2007-08 (P)
Major Ports	41.36 (16.2)	43.21 (12.0)	63.14 (15.6)	55.05 (3.8)	57.28 (4.1)
Non-Major Ports	-	-	-	-	-
All Ports	41.36 (16.2)	43.21 (12.0)	63.14 (15.6)	55.05 (3.8)	57.28 (4.1)

Figures in brackets denote the percentage change over the previous year's port
P: Projections

2.4.10 OTHER NON-MAJOR PORTS

2.4.10.1 The other non-major ports are spread across the Union Territories (UTs) of Dadra & Dho, 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.

2.4 10.2 The trends in the cargo handled at both major and non-major ports of the State during the last five years are given in Table: 21.

Table : 21 Union Territories: Trends in Cargo Handled at Non-Major Ports(Million Tonnes)

	2003-04	2004-05	2005-06(P)	2006-07 (P)	2007-08 (P)
Andaman & Nicobar Islands	0.98 (-6.6)	0.88 (-27.5)	0.92 (1.5)	1.06 (59.5)	1.58 (51.0)
Lakshadweep	0.03 (-83.3)	0.03 (0.00)	0.03 (0.00)	0.03 (0.0)	0.03 (0.0)
Pondicherry	0.11 (450.0)	0.06 (-45.5)	0.10 (66.7)	0.07 (-36.3)	0.04 (-85.7)

Figures in bracket represents percentage change over the previous year

(P) Provisional

Major ports like Mumbai, Kandla, Jaitapur, Mundra, etc. which handle bulk of the total cargo handled by the State, have shown a steady decline in cargo handled by them in recent years due to lack of demand from major industrial units. The major port of Mumbai has suffered a sharp decline in cargo handled by it, which will be reflected in the figures of cargo handled by the State. The cargo handled by the State has declined from 10.6 million tonnes in financial year 2003-04 to 8.2 million tonnes in financial year 2007-08.

Category	Trends in Cargo Handled at Non-Major Ports(Million Tonnes)				
	2003-04	2004-05	2005-06(P)	2006-07 (P)	2007-08 (P)
Andaman & Nicobar Islands	0.98 (-6.6)	0.88 (-27.5)	0.92 (1.5)	1.06 (59.5)	1.58 (51.0)
Lakshadweep	0.03 (-83.3)	0.03 (0.00)	0.03 (0.00)	0.03 (0.0)	0.03 (0.0)
Pondicherry	0.11 (450.0)	0.06 (-45.5)	0.10 (66.7)	0.07 (-36.3)	0.04 (-85.7)

OTTOMAN COLONIAL TRADE (P-4)

In political terms, the Ottoman Empire was one of the largest empires in the world, with an area of 5,000,000 square kilometers and a population of 100 million people. It was a major power in Europe and North Africa, and its influence extended across the Mediterranean, Black Sea, and Central Asia. The Ottomans were known for their military strength, especially in naval warfare, and their empire was one of the most powerful in the world at the time.

III. EFFICIENCY INDICATORS OF MAJOR PORTS

3.1 Over the last several years both physical performance of major ports has improved. Some key indicators of physical performance for select years and the last three consecutive financial years are given below.

3.2 Average Turn Round Time (TRT)

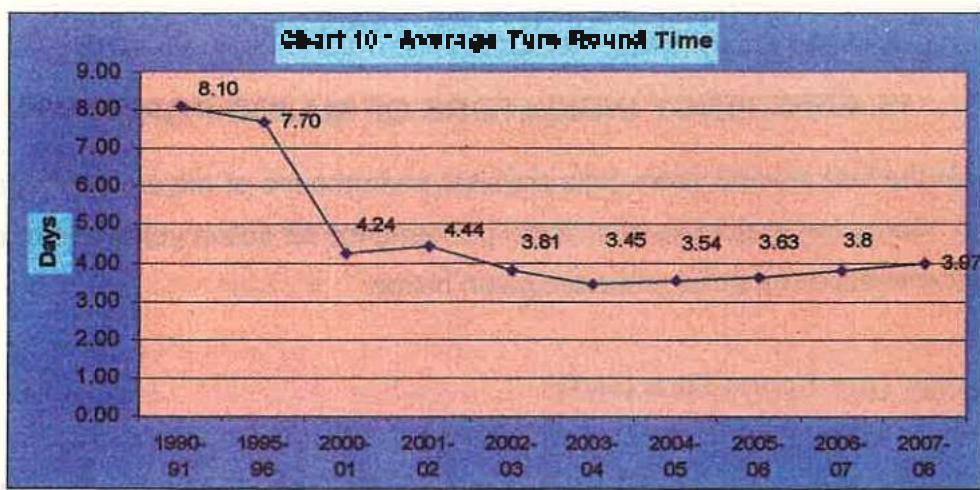
3.2.1 This parameter has improved significantly during the past one and half decades for all the major ports. Average TRT for all major ports improved from 9.10 days in 1990-91 to 3.63 days in 2005-06. During 2006-07 & 2007-08, the TRT however marginally increased to 3.90 and 3.87 respectively. During 2007-08 it varied between 1.85 days at J.L. Nehru Port to 5.54 at Paradip. Amongst the 12 major ports improvement in TRT during 2007-08 as compared to 2006-07 is discernible in case of Cochin, Mormugao, Mumbai, Kandla and J.L. Nehru Port. Port-wise TRT for selected years are given in Table 22. The path of average turn round time at all ports level for selected years since 1990-91 to 2007-08 is presented in the Chart 10.

Table 22: Average Turn Round Time (days)

Port	1990-91	1995-96	2000-01	2005-06	2006-07	2007-08(P)
1	2	3	4	5	6	7
Kolkata D.S	11.90	8.63	5.50	4.12	3.89	4.67
Haldiram D.C	6.47	6.84	9.57	4.89	4.87	4.45#
Paradip	6.40	6.29	4.16	3.56	3.54	6.54
Vishakhapatnam	7.07	7.57	3.71	3.79	3.65	3.82
Ennore				2.23	1.89	2.09
Chennai	7.20	7.60	5.83	3.32	3.36	4.55
Tuticorin	4.70	5.84	4.10	2.83	3.67	3.80
Cochin	4.00	4.00	3.11	2.70	2.75	1.99
Near Mangalore	4.58	8.13	6.49	3.56	3.14	3.26#
Mormugao	6.40	6.61	4.25	4.02	4.46	4.03
J.L.Nehru			5.20	2.21	1.97	1.54
Mumbai	10.80	7.40	6.20	4.06	4.63	4.44
Kandla	10.00	14.77	4.72	4.39	5.46	5.13
All Ports	5.10	7.70	4.24	3.63	3.80	3.57

(P) Provisional * Relate to Vessels handled at Berth; # Exclude PUD on non-Port berths;

Source: Major Ports Indian Ports Association (IPA)



3.3 Average Pre Berthing Detention Time (PBDT)

3.3.1 The average overall pre berthing detention time for all major ports declined from 2.2 days in 1990-91 to 1.2 days in 2006-07. In contrast, average PBDT on port account has seen a sharper decline from 2.10 days in 1990-91 to 0.35 day in 2005-06, but has edged upwards to 0.46 days in 2007-08 for all major ports. However, average PBDT (on Port a/c) has varied from a low of 0.01 day at Kolkata DS to 1.4 days at Haldia DS. Improvement in average PBDT is noticeable in all major ports in 2007-08 as compared to 2006-07 in case of all major ports. Port-wise PBDT for select years is indicated in Table 23. The trajectory of weighted average pre berthing detention time at Major ports total and port account during 1990-91, 1995-96 and 2000-01 and onwards is given in Chart 11.

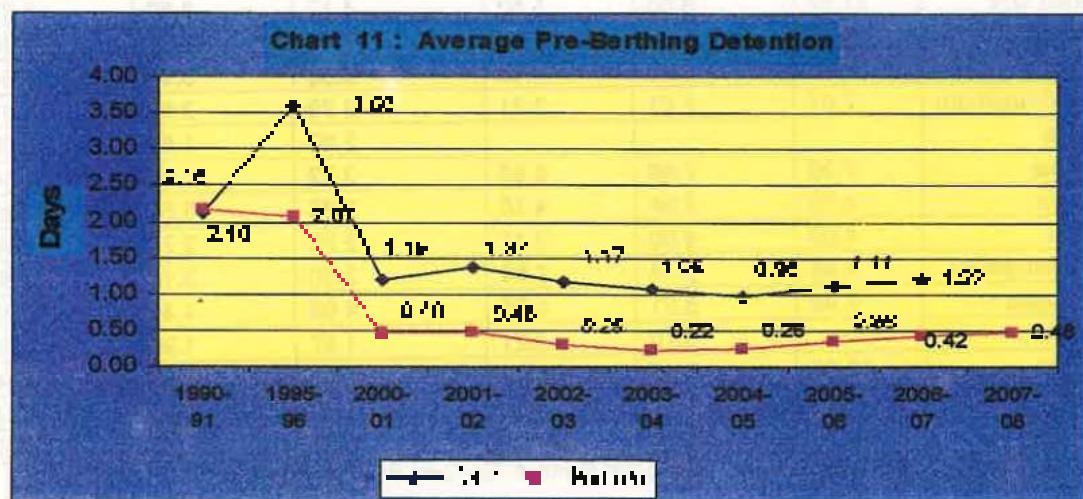


Table 23 : Average Pre-Berthing Detention(Days)

Port	1990-91	1996-97	2000-01	2005-06	2006-07	2007-08(P)*
Kollam (I.S)	0.80	1.38	0.61	0.40	0.29	0.01
Haldia D.C	1.89	2.81	0.91	2.13	1.80	1.38
Darjeeling	1.02	2.49	1.41	1.04	1.09	0.68
Vizianagaram	1.83	3.30	2.73	1.03	0.83	0.21
Ennore				0.19	0.13	0.09
Chennai	2.10	3.41	2.45	0.63	0.68	0.64
Tuticorin	0.80	2.26	1.40	0.73	1.24	1.18
Cochin	0.62	1.20	0.74	0.67	0.69	0.66
New Mangalore	0.79	1.72	0.77	0.74	0.64	0.08
Mumbai	2.51	2.58	1.32	2.11	2.55	0.76
JNPT		2.50	0.57	0.86	0.91	0.43
Mumbai	2.40	4.50	1.26	1.02	1.17	0.21
Kandla	2.40	8.20	1.51	1.38	2.32	1.35
At Port	2.18	3.60	1.18	1.11	1.22	0.45

(P): Provisional. * Relates to Port Account only; Source: Major Ports Under Public Account (MPA)

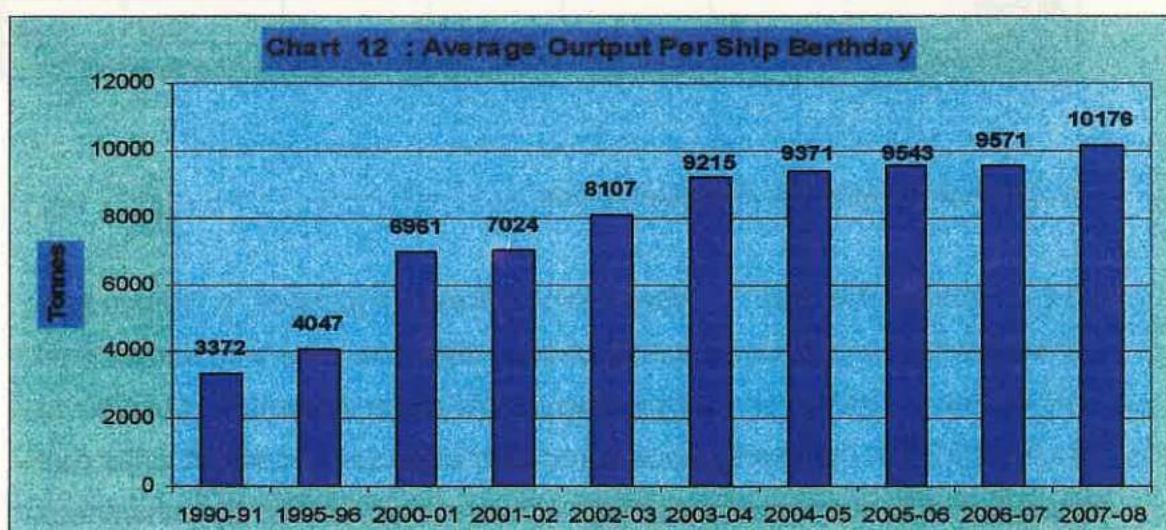
3.4 Average Output Per Ship-Berth-day

3.4.1 During the last 15 years this indicator has seen a tremendous improvement. Average Output per Ship-Berth day has more than trebled from 3372 tonnes in 1990-91 to 10175 tonnes in 2007-08 at all major ports level. In the year 2007-08, the average output per Ship-berth day at 10,79 tonnes was higher by 6.3 % compared to 2006-07. However, it is marked by tremendous variation across major ports ranging from a high 35,251 tonnes in case of Ennore to a low of 3702 tonne at Kakinada I.S. This huge variation reflects the type of cargo being handled, level of mechanization and labour practices. The increase in average output per ship berth day was of the order 32% in Cochin followed by Mumbai (21.1%), JNPT (17.5%), Kandla (12.6%), Tuticorin (5.8%), Chennai (5.4%) and Ennore (0.4%). Port-wise average output per Ship-berth day for selected years and last three consecutive years are given in Table 24.

Table 24 : Average Output per Ship-Berth-Day (Tonnes)

1	2	3	4	5	6	7
Kolkata D.S	360	1120	2376	3891	4180	5702
Haldia D.C	5938	5126	6344	6725	5793	6579
Patna	4382	6320	6502	11210	11785	11181
Vizagapatnam	5325	5151	5496	10557	10298	10617
Trivandrum				35814	35112	33251
Chennai	3072	4760	6377	10872	9314	10347
Tuticorin	2132	2527	3451	5382	5662	5349
Cochin	3174	5864	6132	7772	5282	10634
New Mangalore	4472	6567	12192	16057	13079	12654
Mormugao	10429	8478	12444	18831	17789	17116
JL Vizhinjam		3525	6362	16150	17168	20171
Mumbai A	2370	2575	4212	6314	5942	7198
Kerala	4177	5229	8246	8700	49474	11079
AI Fathima	3272	4247	696	5643	5671	10178
(P) Provisional & Includes Steam Vessels except for 2007-08. (Source: Major Ports Indian Ports Association (IPA)).						

3.4.2. The average output per ship-berth-day for selected years since 1990-91 is presented in the Chart 12.



IV. PRIVATE SECTOR/CAPTIVE/Joint Sector Port Projects

Brief details of the approved Private Sector/Captive/Joint Sector Port Projects and a list of these projects under consideration as on 31.03.2006 are brought out in Appendix-I, Appendix-II in respect of Major Ports and in Appendix-III, Appendix-IV for Non-Major Ports.

Chennai - 14
Ennore - 14

Tamil Nadu
Visakhapatnam
Cuddalore
Tuticorin
Madras
Kollam
Paravur ✓
Mormugao ✓
Mumbai ✓
Ennore ✓
New Mangalore ✓
JNPT ✓
Cochin ✓

Appendix - 1

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	Native Liquid Terminal (BOT) Ennore Ennore Tank Terminal Pvt. Ltd.	Ennore	2 MTPA	1300	Environmental clearance has to be obtained. All other permits required during construction & operation phase will be obtained by Licensee. Certain represent- ative and warranties set in the License Agreement. Likely date of completion is October, 2010.
2	Construction of Coal terminal on BOT Basis.	Ennore	8 MTPA	2001	Jetty construction work is in progress. Likely date of commission is August, 2010.
3	Construction of new Coal terminal on BOT Basis	Ennore	12 MTPA	4500	Soil investigation work is in progress. Likely date of commission is August, 2010
4	Extension of con- tainer berths by 330 m. towards north	Jawaharlal Nehru		3000	SBI (I) Bank has been appointed as Advisor for the project. The Advisor has submitted Feasibility Report. The Board has approved to take-up the work in BOT basis. In Principle Approval from MoS(EMR) has been received on 29.9.2007 to go ahead with global competitive bidding. Accordingly Port is in process for issuance of RFP. Draft RFP document modified as per the mode RFP document circulated by Ministry of Finance. The same will be sent to Ministry along with PPPAC filled up form shortly. Likely date of commissioning January 2010.
5	Construction of two New Off-shore Container berths & Development of Container Terminal berth on BOT basis in Visakh Harbour.	Visakh Port	0.20 MTEUs	12280	i) LOI issued to BOT operator by Samman India Ltd. on 5.8.2007. Performance Guarantee from ECT Operator received on 26.8.2007. Agree- ment signed on 9.12.2007. ii) Draft PfB for sanction of estimate of MbPT component of project sent to Ministry on 21.8.06. Govt's approval re- ceived on 18.11.07. iii) Govt has approved on 10.7.07 for appointment of Mr. CES as

					7.12. Appointment of PMC made on 23.7.2007. Inception report received on 12.9.07. (v) Lender for MPPC component of work initiated on 21.3.08 & is due for submission on 7.6.08. Anticipated date of completion is Dec., 2010.
6.	Development & Operation of Container Terminal (DOT Basis - via ABG industries)	Kandla Port	7.20 MTPA	44B6 Investment of Port is 1160 and that of M/s ABG is 3700;	Ministry approved proposal for Container Terminal on 21.3.08. LC issued on 31.3.08 and same has been accepted on 17.4.08. Licence Agreement signed on 23.6.08. 11 th Cargo train & 23 hectares of back-up area handed over to M/s ABGCTL on 29.9.08. 2 Nos. Harbour Mobile Cranes received. The 1 st phase of terminal commenced from 10 th March, 2009. 2 nd Phase is expected to be commissioned by March, 2010.
7.	Development of existing B Berth as Container Terminal	Tuticorin	3.6	1900	The R&D stage has been completed. PPPAC Clearance is sought.
✓ 8.	Development & Operation of International Container Transhipment Terminal (ICTT) at Vellore padam (BC) being by M/s India Gate way Terminals Pvt Ltd. A subsidiary of M/s Dubai Ports International;	Vellore	Capacity addition of 12.6 to 40 MMT in phases	18630	Environmental clearance for the Phase I - Development of terminal facilities for the ICTT was issued by MoEF. Port had issued consent on 21.3.2007 to the Preliminary Design of ICTT furnished by M/s. India Gateway Terminal Pvt. Ltd. Construction drawings furnished by M/s. IGTPL. Rail connectivity project is implemented through Indian Railways by funding from Deptt. of Shipping and RINL is the execution agency. RINL have issued the work order to M/s. Asian Infrastructure Ltd. on 21.2.2007 & the construction activities commenced on 23.3.2007. Earthwork for approach & piling work and substructure for A2 alignment of major bridge VR4 completed. Substructure for A1 alignment in progress. Piling work commenced on 13.6.2007 and is in progress. Casting of L-Section and trough girder are in progress.

No information from Haldia, Tuticorin & Chennai Ports has not been received. Latest available information is given in respect of these ports.

Source: Major Ports.

Appendix - II

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

Sl. No	Project	Port Name	Capacity (Million Tonnes)	Project Cost (Rs. Millions)	Project Status
1	2	3	4	5	6
1.	Construction of Deep Drought Iron Ore berth on BOT-PPP basis.	Parasip	10 MTPA	3040	The proposal for fixation of upfront tariff cap has already been submitted to TANP for necessary approval. After receiving the approval, the same will be incorporated in the RFP documents.
2.	Construction of Deep Drought Coal Borth on BOT-PPP basis	Paradip	10 MTPA	3878	The proposal for fixation of upfront tariff cap has already been submitted to TANP for necessary approval. After receiving the approval, the same will be incorporated in the RFP documents.
3.	Development of Southern Deck Complex (4 Berths) on BOT-PPP basis	Paradip	16 MTPA	5000	Feasibility study is under progress.
4.	Construction of Container Terminal (BOT-Basis)	Ennore Port	19 MTPA	13000	RFO for selection of the operator published on 7.9.2010. The last date for submission of application has been extended to 20.6.2011. Likely date of commission is Jan., 2011.
5.	Construction of LNG Terminal (Joint Venture)	Ennore Port	5 MTPA	27000	In Principle' approval for the proposal for development of LNG berth through joint venture with IOC-GAIL granted by the Ministry on 10.7.2006. IOC informed on 22.10.2010, that IOC is entering into an MoU with Polarmar LNG Ltd. for jointly developing the proposed LNG terminal through a JV.
6.	Construction of general cargo berth	Ennore Port		1300	Response to additional inputs/ comments of EPL sought by DoE for taking up multipurpose general cargo berth project by EPL on its own instead of taking up in BOT form was submitted on 11.4.2008.

✓	4 th Container Terminal & Warehousing Chemical Terminal (BOT Basis)	Narmada Port	12 MTPA	41000 Phase -1	Feasibility Report is submitted by Corryport Mr. Consulting Engineering Services, ECI for the development of the project is invited. 41 bidders have submitted the EOI and same are under scrutiny.
✓	New Cruise Terminal near Gateway of India (BOT Basis)	Gumhal Port	-	1500	Protocol to appoint M/s Zeta Veritas Consultant (I) & Services for carrying out feasibility study was sent to Ministry on 22.6.07 for sanction which has been approved on 10.10.07 & consultant appointed on 18.10.07. Site selection report submitted on 16.1.08. Draft CIPR from consultant is expected in June, 2008. Expected date of commencement agreement is April 2009.
✓	Construction of 1 st to 16 th cargo berths.	Karla Port	8 MTPA	4400	11 bidders have been pre-qualified for the project. PPPAC in its meeting held on 21.12.2006 has granted final clearance to the proposed CCBA approval is to be obtained. Meantime proposal for getting security clearance in respect of 11 bidders from Ministry of Home has been sent to MODR&H on 10.8.2007.
✓	Creation of berthing and allied facilities off Tavarneur Tump (Outside Karla Creek)	Karla Port	12 MTPA	4820	Work order for conducting CEIA studies has been passed in favour of NIOST, Madras. The FEIA Report submitted by M/s. NIOST, which is under finalization. The work of Geotechnical investigation has been completed. IIT, Madras has submitted techno-economic feasibility report. A proposed meeting in principle approval from PPPAC has been sent to MoD on 20.9.2006 and approval awaited. Till date 19 organizations have shown their keen interest. The modified protocol with two options of implementing the project was sent to MoD on 4.7.2007 for getting principle clearance from PPPAC.

1.	Installation of transhipping, working, handling & loading plant of iron Ore (BOT - Private Sector)	New Mangalore	BMTPA (Capacity of Jetty)	1600	Govt. approval has been conveyed on 24.8.2006. Ministry has directed to revise the RFP and MCA. The bid invited clauses cancelled and revised RFP and MCA will be circulated to the already short listed bidders. The security clearance for the subject proposal is awaited.
12.	Construction and development of Container Terminal at New Mangalore Port	New Mangalore	IA	3300	The proposal to create a Container Transhipment Terminal at New Mangalore Port was included in Tenth Five Year Plan under BOT scheme. The port has got certain advantages like deep draft and also proximity to international sea route for setting up of Container Transhipment Terminal. However this required further study and also building up confidence by the private operators. The project will be taken up at appropriate time. Medium Plan of Port also suggest that the Port can in future action once the EUs expected to reach 1,00,000 TEU's.
13.	Acknowledgment of land for construction of Cruise Lounge.	New Mangalore	-	-	Since no response has been received for the expression of interest, the Port has decided to construct the cruise lounge by modifying area of the existing shed at Berth No. 4 from its limited resources. Tenders received for letting out the operation and maintenance of Cruise Lounge under BOT basis is under evaluation.
14.	Dedicated Berth for Suzlon	New Mangalore	NB	1400	In-principle approval of the Ministry has been received to provide Port facilities to Mr. Suzlon. Mr. SBI Capital Markets Ltd. has been appointed for preparation of License Agreement and Delimitation of Term Structure for captive port. The feasibility study regarding using of berth will be finalized shortly.

15.	Construction of Coal Jetty by M/s. Nagarjuna Power Corporation Ltd (NPCL) (Captive User)	New Mangalore	800 MTPA	2300	The revised draft MCU and the proposal for allotment of land and water front at the changed location was placed before the Board meeting held on 20-10-2004. The Port Trust Board has approved the proposal. Accordingly the matter was been referred to the Ministry on 10-11-2004 for approval. The Ministry vide their letter dated 5-4-2005 have made certain observations on the proposal. As directed by the Ministry 'Expression of interest' for handling coal for Thermal Power Plant located nearby Mangalore has already been invited. Except NPCL none of the firms have responded. M/s TECBEC has calculated the upfront fee and royalty rate afresh. M/s IDFC has prepared the Draft License Agreement to be entered between NMPL and M/s NPCL. The proposed commissioning of License Agreement and report on the minimum royalty to be fixed for bulk coal handling facility have been submitted to the Ministry on 24-9-2005. Approval to the draft License Agreement and approval to Captive Jetty under Section 43 (3) and 3 (A) have been received from the Ministry. Approval of the Ministry is awaited.
16.	Allotment of waterfront & back-up land for providing bunkering facilities at NM Port (BOT Basis)	New Mangalore	NA	Yet to be decided	M/s. NSDRC have furnished the final feasibility report and the same has been approved by the Port Trust Board in-principle approval from the Ministry is sought for to invite bids on BOT Basis. Ministry has asked some clarifications on the feasibility report which has been clarified on 8-10-05. Expression of Interest has been called for from the parties who are interested for "Creation of Bunkering Facilities on ECT Basis to the ships at Anchorage/

					Offshore location stipulating the last date for submission of applications as on 30.6.06. A final RFP will be submitted after which are under scrutiny. It is proposed to invite bids on open competitive bidding and Management Guidelines instead of Bidding scheme. Approval of the Ministry has been requested on 15.2.2007.
17.	Development of berth No 6 for bulk cargo in the Inner Harbour for multi purposes on BOT basis.	Visakhapatnam	1.0	900	Revised RFQ will be issued duly including equipment cost.
18.	Construction of BC-10 Berth in Inner Harbour for handling Liquid Cargo & Chemicals on BOT Basis.	Visakhapatnam	1.00	425	Tariff fixation as per guidelines is being sent to TAMP for approval.
19.	Installing Mechanized Coal Handling Facilities at Biomass-dum-bulk at Outer Harbour (BOT basis).	Visakhapatnam	2.0	3350	RFQ duly incorporating the cost of strengthening and deepening by PWD for 20000 DWT vessels.
20.	Installation of mechanized unloading facilities for fertilizers at Inner Harbour On BOT basis.	Visakhapatnam	2.0	2230	Draft final Technical Economic Feasibility Report submitted by IPA on 31.3.2008 is under consideration.
21.	Designing, Construction, operating, Developing, Operating and maintaining suitable facility for handling any type of Bulk and cr. Arrears. Bulk cargo including Containers at berth No 7 on BOT basis.	Morongao	To handle roll on roll off from Bellary, Hosur Region and other origins.	1450	The sanction from Govt was received with certain pre-conditions. As per the deliberation and the time frame fixed, it was decided in the meeting on 12-13 March, 2005 to develop Berth No 7 as coal handling terminal. It has been decided to clear the tenders for appointment of PMC. The Port will carry out in-house feasibility study. A Dissemination advisor will be appointed to carry various transaction of the project.
22.	Construction of Two additional Berths at Vizag Bsp.	Vizagapatnam	1.0	2500	The Ministry has been informed that the Port proposes to clear the tender for appointment of consultant for preparation

					of CPAs and invite bidders for preparing consultant for preparation of feasibility report.
23.	Setting up of an International Bunkering Terminal	Cochin	5MTPA	SGD	'In principle' approval has been received from the Ministry for establishing an International Bunkering Terminal at Cochin Port under license system. The Port had invited & received 13:01 bids for the Bunkering Terminal Project. During the interactions with the prospective operators they informed that their expertise is in the procurement, storage and supply of bunkers and they are not having expertise in the construction and operation of the terminal facilities and the operation of terminal facilities for the receipt of bunker vessels. Their general consensus was that Port should provide storage and supply facilities. It has been proposed that the terminal facilities to be constructed with the internal resources of the Port and land be made available on lease basis to the operators for establishment and operation of the bunkering facilities. As such the original proposal of construction of bunkering terminal under PFI model has been shelved.
24.	Setting up of an International Cruise Terminal at Cochin (Joint Venture through BOT)	Cochin	-	-	Work order issued to M/s MIR Projects & Consultants, Kochi and M/s Transvalama, USA on 11.3.07 for preparation of a feasibility report & business plan to develop an international cruise terminal - a public place at Wellington Island for a total lumpsum charge of Rs. 78,00 CRORE. Consulting service to the Consultants furnished the final feasibility report and business plan on 31.3.2008.
25.	Setting up of LNG Regasification Terminal at	Cochin	Final 2G NTATPA Final 5	SGD	An area of 32.28 hectare of land at Puthiyypeen has been allotted to M/s PLL to

	Puthuvypeen by M/s PLL on going basis		NMPA		set up the Terminal. Site Leveling Work arranged through by PLL has been completed. PLL have awarded the work of Construction of Boundary Wall for LNG Terminal is in progress. The anticipated date of commissioning the Terminal 2011.
25.	Development of Second Container Terminal on BCJ basis	Chennai	8 Lakh TEUs	401/8	RPF bids were received from three qualified applicants and Technical bids opened on 7-11-2005. Clarifications were obtained from the bidders. Price bid opening deferred till 15-08-06 as advised by Ministry pending security clearance for bidding. The award of work and signing of License Agreement was expedited during Sept., 2006.

Note: Latest information from Haldia, Tuticorin & Chennai Ports has not been received. Available earlier information is given in respect of these ports.
Source: Major Ports.

Appendix - IV

**Ongoing Private Sector Capital Joint venture Port Projects
(Non-Major Ports)**

Sl. No.	Project Name	Sister Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
1.	Development of Achankovil Port-Phase-I (By State Govt.)	Achankovil Kerala		52.5	The Scheme may be awarded in June 2007.
2.	Kakinada Anchorage Port	Kakinada A.P.	0.20 MTPA	400	In progress. Likely date of completion is March, 2006
3.	Kakinada Deep Water Port Project (PPP)	Kakinada Deep Water Port, A.P.	0.80 MTPA	800	Scheme complete.
4.	Rewa Port Project (Captain Jetty)	Rewa port A.P.	0.10 MTPA		In progress. Likely date of completion is March, 2009
5.	Gangavaram Port (PPP-BOT)	Gangavaram A.P		5000	In progress. Likely date of completion is August, 2008
6.	Kollamportant Port (PPP-BOT)	Kollamportant A.P		1000	In progress. Likely date of completion is August, 2008
7.	Nagapattinam Port (PPP-BOT)	Nagapattinam A.P.			In progress. Likely date of completion is March, 2012
8.	Machilipatnam Port (PPP-BOT)	Machilipatnam A.P.			In progress. Likely date of completion is March, 2011
9.	Development of all weather and Multi user Port or BOBOT basis by Sri Amma Lines Ltd.	Venice Shipyards	To become hub port in South Asia with shall 20 ft & 44.7 MTPA (17 MTEU); container	42000	Shore holding patent approved. Environmental clearance awaited. Anticipated date of completion is 2010
10.	Development of all weather and Multi user Port or BOBOT basis by Sri Dala Itra Projects Ltd.	Venice Shipyards	5 MTPA in phases 0.5 MTPA (0.25 MTEU) Container	6000	Detailed engineering design under scrutiny. Anticipated date of completion is 2008
11.	Thiruchopuram Port/Negaduna Oil Corporation Ltd.	Tamil Nadu	9.8	8000	Construction is to be commenced.
12.	Coal Handling Jetty/Cuddalore Power Co. Ltd	Tamil Nadu	2.6	9200	Detailed project report under preparation.
13.	Silambimangalam Shipyard/Goat earth Ship-building Pvt. Ltd.	Tamil Nadu	-	10000	Detailed project report under preparation
14.	Thirukkuvalai Port/Tidem Port & Power Co. Pvt. Ltd.	Tamil Nadu	20	7500	Detailed project report under preparation.
15.	Kattupalli Port/Shipbuilding Ltd	Tamil Nadu	-	12000	Detailed project report under preparation.
16.	Manappad Port/ Indian Gas Ltd	Tamil Nadu	-	12000	Detailed project report under preparation

17.	Construction of Modern Dry Dock for Ship repair (BY BOOT Basis by Three Circle Contractors, Mumbai)	DR (Daman & Diu)		260	The primary party has withdrawn from the project. Hence U.T. Admin. of Daman and Diu has closed the process of Modern Dry Dock for Ship Repair Yard at Malab In DR district and decided to terminate fresh processes. The concerned party have asked for Arbitrator and hence the project is delayed.
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Note : Latest information in respect of remaining States/UTs other than Andhra Pradesh, Tamil Nadu & Delhi is not available. Earlier available information is given in respect of responded States/UTs.

Source: Maritime Statistics Directorate, Bulgaria

Appendix – IV

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

Sr. No	Project	State/ Territory/ Union Territory Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
1.	Landing facilities for cargo & passenger vessel	DU		20	Proposal is submitted for approval of Ministry.
2.	Cargo & Passenger Landing Facility at Manjala on BOT basis.	DU		800	Proposal is submitted for approval of Ministry
3.	Karimnagar Anchorage Port	Andhra Pradesh	1.00 MT	100	The work is in progress.
4.	Kalvandhra Deep Water Port (PPP- BOOT) by Mr. KMCIL	Andhra Pradesh	3.80 MT	2000	Scheme completed.
5.	Ravva Port Project (Captive Jetty-BCC) by Mr. Caltex Energy Ltd.	Andhra Pradesh	0.50 MT		Likely date of completion is March 2010
6.	Gangavaram Port (PPP-BOOT) by EPL	Andhra Pradesh	35 MT	20000	Work is in progress. Likely date of completion is Dec 2010
7.	Kurnoolpetam Port (PPP-BOOT) by Mr. (PC)	Andhra Pradesh	17 MT	8500	Work is in progress. Likely date of completion is August 2011
8.	Mazumuduram Port (PPP-BOGT) by Maric India	Andhra Pradesh	10 MT	10000	Likely date of completion is March 2012
9.	Mazumuduram Port (PPP-BOGT) by Mr. MTRAS	Andhra Pradesh	12 MT	16900	Likely date of completion is March 2011.
10.	Development of Jagath Port by Mr. Ganguly Steamship Ltd. (BOGT basis)	Maharashtra	4.02 MTPA	2854.2	LOI issued in September 2006. Likely date of commission is 2010
11.	Development of Visyadurg Port (BOGT basis)	Maharashtra	7.6 MTPA	13000	Proposal under scrutiny
12.	Development of Redi Port	Maharashtra	7.4 MTPA	8500	Proposal under scrutiny
13.	Development of Captive port facilities at Chennarkoil Bay (Jagathy)-BOGT basis by Mr. JSW Infrastructure and Logistics	Maharashtra		4000	LOI issued in September 2006. Likely date of commission is 2008
14.	Development of other port facilities at Gopu Bay near Visyadurg Private	Maharashtra	Captive port facilities for import of coal for pro- posed 4000 MW ultra deep water power plant		Power financing corporation is handling the project. Pre bid conference held in Sept, 2008

Sl. No	Project Name	State/ Maritime Board	Capacity (In Million Tonnes)	Project Cost (Rs. Millions)	Project Status
1	2	3	4	5	6
15.	Establishing a captive port at Marudhampuram in Villupuram District	Tamil Nadu	8 MT	12800	Preparation of Detailed Project Report under progress.
16.	Establishing a captive port at Cuddalore District	Tamil Nadu	14 MT	4300	Preparation of Detailed Project Report under progress.
17.	Establishing a captive port at Thiruthundiyur in Nagapattinum District	Tamil Nadu	6.5 MT	3850	Preparation of Detailed Project Report under progress.
18.	Establishing a cap- tive port at Chettiyur in Villupuram District	Tamil Nadu	11 MT	5000	Preparation of Detailed Project Report under progress.

Annexure -1

Plan Outlay and Expenditure : Port Sector (Central Sector)

(Rs. Crore)

Name of the Port	Xth Plan Outlay	Annual Plan 2002-03		Annual Plan 2003-04		Annual Plan 2004-05		Annual Plan 2005-06		Annual Plan 2006-07		Annual Plan 2007-08	
		Oly.	Exp.	Oly.	Exp..								
		1	2	3	4	5	6	7	8	9	10	11	12
Kovalam	789.42	199.92	6.85	210.30	10.48	46.22	47.55	54.04	59.66	50.04	71.99	37.37	63.05
Mumbai	880.20	109.05	100.76	94.21	57.81	58.15	44.49	74.53	17.23	59.86	14.55	50.36	76.70
JNPT	262.75	146.36	40.26	143.02	12.73	107.14	58.85	96.84	65.77	136.14	40.71	177.18	70.28
Chennai	326.70	95.99	85.50	36.69	29.51	16.75	22.68	46.71	25.11	35.00	26.07	47.01	44.41
Cochin	96.5:		10.02	18.88	10.86	53.47	7.52	55.12	24.76	73.84	72.89	158.52	197.07
Visakhapatnam	240.84	42.06	51.30	51.00	55.65	54.44	27.68	27.00	17.68	27.33	43.80	83.00	36.61
Kerala	416.71	94.78	55.89	66.71	41.50	92.98	52.89	93.30	51.29	94.66	25.19	177.49	38.25
Maunglam	348.06	30.86	26.53	87.14	43.06	53.85	11.05	33.50	7.92	28.06	30.77	10.10	11.18
Kandla	222.70	39.00	44.42	53.40	14.56	37.16	28.99	116.00	44.02	83.40	73.15	100.00	42.05
New Mangalore	147.40	35.00	24.61	25.00	5.14	20.00	29.60	26.00	18.09	18.00	18.02	36.00	25.81
Nilambur	230.00	56.10	36.02	17.54	21.84	25.81	5.48	43.47	13.56	32.31	29.11	37.46	63.36
Trans Port Ltd.	300.00	1.00	0.00	150.00	0.99	95.00	2.32	76.00	13.40	70.00	9.57	61.00	34.53
Sethusamudram Ship Canal	0.00	0.00	0.00	0.00	0.00	10.00	0.00	157.00	150.00	304.00	334.66	664.22	19.47
WEB Based ECI Port Community System	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.34	7.83	1.66	7.50	0.04
Others :	527.00	24.88	53.98	277.00	44.06	311.04	11.87	237.74	79.14	369.78	213.64	477.26	175.67
Survey Vessel	300.00	45.00	5.95	50.00	0.00	100.00	0.00	50.00	0.00	20.00	0.00	7.00	0.00
TOT	1182.29	1139.00	54.89	1200.89	147.89	1066.95	849.97	1163.45	439.97	1364.25	1033.8	2125.27	834.63
(a) includes Haldia & Kakinada													
(b) includes CCI, RINR, R&D Studies, Port Revenue, i.e., Major Port Trustee, etc.													
Source: Department of Shipping, MCA													

Annex-2

Plan Outlay and Expenditure : Ports & Light Houses (State Sector)

(Rs.Lakhs)

STATE/UT	Plan Outlay	Annual Plan		Annual Plan		Annual Plan		Annual Plan		Annual Plan	
		2002-03		2003-04		2004-05		2005-06		2006-07	
		Re. Crly.	Apx.	Re. Crly.	Apx.	Re. Crly.	Apx.	Re. Crly.	Apx.	Re. Crly.	Apx.
1	2	3	4	5	6	7	8	9	10	11	12
States	20621	5481	5267	5013	23130	6377	5582	7483	3482	3043	14710
1. Andhra Pradesh	838	1000	2228	200		5150	3737	5150	3383	5150	6150
2. Goa	78	5	2	17	1	23	24	7	8	70	70
3. Gujarat	0	0	0	0	0	0	0	0	0	0	0
4. Karnataka		456				524	526	573	571	680	700
5. Kerala	6700	750	367	1224	404	453	379	1670	678	4690	4500
6. Maharashtra	20300	3644	1759	3393	1568		290	346	472	1300	1500
7. Odisha	1328	60	599	290	367	50	25	50	170	130	100
8. Tamil Nadu	3000	0	0	0	0	0	0	0	78	890	2500
9. U.P.	17032	2349	2044	2830	9045	3790	2409	4246	5463	8728	5739
10. A.N.D Islands	7126	1183	1477	1500	1500	1898	1514	2377	3009	4999	4069
11. Daman & Diu	180	23	20	34		34	32	32	39	63	62
12. Lakshadweep	7706	1745	170	751		258	291	365	421	270	270
Total(State+UT)	11120	9329	7410	7909	4426	9003	9081	11521	10944	21729	20149
Excl. Expenditure	Revised Outlay, Ap.O.G, Approved: Crly. Exco. Planning Comptor										

Commodity-wise Traffic Handled at Major Ports

Port	Period	POL & its Products	Iron Ore	Therm. Coal	Other Coal	Ferti. & FRM\$	Food Grdn	Container		Others	(000 Tonnes/TEUs) Total
								Tonnes	TEUs		
Kolkata	2004-05	5534	28		8		35	2357	159	1983	9945
	2005-06	4934	146		46	1	10	3234	203	2433	10806
	2006-07	5181	196		38	13	37	4003	239	3126	12596
	2007-08	4523	488			11	560	5139	297	3020	13741
Haldia	2004-05	16474	5366	3157	5743	941	49	2029	129	2503	36262
	2005-06	17689	7941	3408	7099	1425	34	1910	110	2831	42337
	2006-07	18054	8312	2443	7383	1393	7	1918	110	2944	42454
	2007-08	17841	9821	1797	5462	713	7	2242	128	5658	43541
Paradip	2004-05	839	9051	10942	3267	3418		31	2	2556	30104
	2005-06	910	10273	12529	3758	2496		49	3	3094	33109
	2006-07	1376	11880	12475	3222	4254		31	2	2847	38517
	2007-08	1764	12960	13348	4733	3556		54	4	6023	46388
Visakha-pattam	2004-05	14628	16587	2524	7573	2441	825	635	46	4935	50148
	2005-06	16941	16170	2740	9427	3624	543	631	47	5725	55801
	2006-07	18178	14718	2406	9860	3916	980	799	56	5528	56385
	2007-08	19803	13882	2895	7475	4700	486	1133	71	10122	64597
Chennai	2004-05	11422	9615	1976	2751	1030	30	9864	617	4333	43806
	2005-06	13113	9521	1914	5164	1116	1	11757	735	4657	47248
	2006-07	12987	10532	1730	7617	1084	661	14166	886	4942	53414
	2007-08	12794	10815	2383	1681	582	82	18049	1128	10988	57154
Ennore	2004-05	104	520	3808						0	9480
	2005-06	244	537	8387						0	9168
	2006-07	188	1724	8802						0	10714
	2007-08	319	2190	9051						3	11(F)
Tuticorin	2004-05	743	42	5374	1227	1241	130	3205	307	3849	15811
	2005-06	774		6146	1094	1651	61	3000	321	3985	17139
	2006-07	738		5608	1306	1503	200	4011	377	4635	18177
	2007-08	460		6112		1730	298	5630	450	7771	21480
Cochin	2004-05	10277		210		566		2323	185	727	14103
	2005-06	9641		199		727		2428	203	833	13888
	2006-07	10476		219	0	640	176	2545	227	797	15257
	2007-08	11299		246		354		3528	254	672	15810
New Mangalore	2004-05	21434	10275		315	569	10	132	9	1152	33891
	2005-06	22392	9307		513	153	7	146	10	1194	14431
	2006-07	21868	9249	0	1047	1291	88	198	17	1268	32042
	2007-08	21781	9266	1921	141	56	516	21	2066	36019	
Mormugao	2004-05	1010	2477	384	3-07	579		129	10	503	30659
	2005-06	833	2394	331	3747	605		130	9	681	31688
	2006-07	786	26741	341	4734	620		127	13	885	34241
	2007-08	874	27329	357	3887	192		139	14	2354	35128
J. L. Nehru	2004-05	2460				37		28747	271	1564	32808
	2005-06	2545				38		33777	2801	1481	37836
	2006-07	2625				30		40810	2848	1350	42813
	2007-08	2188						51923	4060	1727	55838
Mumbai	2004-05	19396				574	224	2571	219	12422	35187
	2005-06	27781		1844		595	98	2145	156	11727	33187
	2006-07	32171		2533		473	308	1580	138	15299	52364
	2007-08	37074		2951		310	41	1632	118	15030	57038
Kandla	2004-05	22120	0	0	229	3119	2535	2754	181	10794	47661
	2005-06	24297	2	0	434	4137	1379	2311	149	13347	45907
	2006-07	29711	234	293	411	3993	2024	2778	178	13538	52982
	2007-08	38177	419	935	244	4076	1373	2639	167	17030	64893
All Ports	2004-05	126441	7864n	33323	27324	14515	3838	54791	4235	47321	383755
	2005-06	142094	79217	27541	31282	17300	2133	62009	4613	51988	423568
	2006-07	16179	80585	37307	37345	2122	4481	73437	5541	57159	463782
	2007-08	168897	91974	39580	25145	16664	2903	92134	6712	81943	519240

Note: Figures for 2007-08 are provisional. \$ Includes Liquid Fertilizer Raw Material(FRM) except for 2007-08
 Other Coal includes All coals & Coke other than Thermal Coal except for 2007-08. Data for 2007-08 is only for 'Coking Ccs'.
 Source: Major Port PAs.

Annex 4

Commodity Composition of Traffic Handled at Non-Major Ports

Port Name Status / LTR	Period	POL	Iron & Steel	Bulking Material	Cool	Fertiliser & Phosphate	Others	Total	(000 Tons)
Gujarat	2003-04	2706	4812	11236	5030	1289	10807	87322	
	2004-05	36479	4062	11672	7906	2342	12617	87128	
	2005-06	85149	5191	11046	1541	3630	17563	104049	
	2006-07	71893	5761	11206	11248	4185	23215	130442	
	2007-08	64178	6075	11628	12578	4629	26215	147188	
Maharashtra	2003-04	182	4573	1034	2911	117	1212	10332	
	2004-05	307	6271	1286	3152	194	1250	12143	
	2005-06	280	4047	1408	2250	178	1586	11106	
	2006-07	584	4502	1862	2763	704	1509	11208	
	2007-08	390	4383	2004	2278	444	2117	11256	
Andhra Pradesh	2003-04	8448	30	469	32	121	1267	10221	
	2004-05	9295	867	910	-	1303	1541	13087	
	2005-06	8507	9878	410	138	1827	1458	18427	
	2006-07	8518	2903	54	128	1858	4030	18530	
	2007-08	9174	1382	72	49	192	4272	19253	
Goa	2003-04	-	8307	-	418	-	11	9438	
	2004-05	-	8187	-	-	-	262	8457	
	2005-06	-	1428	-	925	-	1	11762	
	2006-07	-	18528	-	278	-	621	14828	
	2007-08	-	12622	-	38	-	112	12825	
Tamil Nadu	2003-04	658	-	2	-	24	38	630	
	2004-05	755	-	18	-	43	28	954	
	2005-06	692	-	-	-	56	63	711	
	2006-07	612	-	8	-	34	31	643	
	2007-08	735	-	-	-	86	21	766	
Karnataka	2003-04	154	492	8	-	23	488	1165	
	2004-05	105	2724	-	-	15	863	3548	
	2005-06	85	3298	9	4	30	376	4112	
	2006-07	123	1673	-	2	79	441	3202	
	2007-08	73	1850	-	-	62	732	2573	
Other non-major/ Ultra	2003-04	130	-	358	-	2	387	663	
	2004-05	150	1	384	-	2	429	1045	
	2005-06	148	-	483	-	7	527	1773	
	2006-07	145	-	483	-	73	412	1064	
	2007-08	172	-	1002	-	16	623	1423	
All Major Ports	2003-04	9,101	1,243	13385	2027	1200	14067	116005	
	2004-05	87782	21798	14122	12018	2808	17494	136403	
	2005-06	65794	26840	13864	13568	5914	24291	135400	
	2006-07	81970	29272	13590	14048	7540	15241	131112	
	2007-08	84738	26712	12674	13267	7580	17886	132275	

Note : All figures for 2006-07 & 2007-08 are provisional.

P : Commodity of Petroleum, Mining & Chemicals (14,122), and Land Transport (12,018) includes

Iron Ore was handled at ports of Orissa and Odisha & Orissa

Includes Liquid Bulkware (non-mineral oil).