

भारत के पर्यावरण का अद्यतन

UPDATE ON INDIAN PORT SECTOR

(30.9.2009)



परिवहन अनुसंधान प्रभाग
TRANSPORT RESEARCH WING
सड़क परिवहन तथा राजमार्ग मंत्रालय
MINISTRY OF ROAD TRANSPORT & HIGHWAYS
भारत सरकार
GOVERNMENT OF INDIA
नई दिल्ली
NEW DELHI

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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 bi-monthly publication "Update on Indian Port Sector". Till now thirteen issues of the publication have been released. The issue contains data up to September, 2009.

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 September, 2009. The major private sector/capital/joint sector port projects under implementation/consideration at Major Ports and Non-Major Ports have also been included. The co-operation extended by the concerned source authorities is gratefully acknowledged.

November, 2009

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UPDATE ON INDIAN PORT SECTOR

(UP TO 30.09.2009)

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I. RECENT TRENDS IN CARGO TRAFFIC AND POLICY INITIATIVES

1.1 International and Domestic Factors Related to Seaborne Trade

The year 2007 to 2008 witnessed perceptible moderation in world economic activity with world output growth decreasing from 5.2% in 2007 to 3.0% in 2008 (IMF, *World Economic Outlook, October 2008*). After years of strong growth, the global expansion is losing momentum. The world economy is projected to grow by 1.7% in 2009. The world economy is experiencing its first contraction since the Second World War. In case of advanced (developed) economies the slow down in output growth was pronounced: from 2.7% in 2007 to mere 0.6% in 2008 with a projected fall in final output by more than 3.8% in 2009. Many developing countries (emerging economies) have not escaped the contagion of slowdown with their growth slowing down from 8.2% in 2007 to 4.0% in 2008 and projected to post a marginal growth of less than 2% in 2009. The pervasive global economic slowdown demonstrates the interdependence of nations which makes it difficult for them to "decouple" from global economic developments. The evolution of world trade has mirrored the global economic activity. Growth in volume of world trade in goods has fallen sharply from 8.3% in 2007 to 1.4% in 2008 and is expected to shrink by 10% in 2009. Trade developments are likely to cast a shadow on the growth of world seaborne trade in 2009 and 2010.

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

Parameter	2005-06	2006-07	2007-08	2008-09	April- September	
	2005-06	2006-07			2005-06	2006-07
Trends in India's Select Macro Parameters						
I. Total Cargo	10.2	-2.1	-1.1	-1.2	7.2	0.4
(a) Major Ports	10.4	8.5	12.0	-1.1	7.7	-1.9
(b) Non Major Ports	2.6	26.7	11.2	-1.1	5.9	26.4
II GDP growth*	9.4	0.0	8.0	8.2	7.92	-0.1%
(a) Agriculture	5.2	9.8	4.9	1.2	5.18	1.4%
(b) Industry	10.1	11.0	5.1	2.9	6.03	5.0%
III Services	10.0	11.1	10.9	0.7	7.78	2.7%
IV. Foreign Trade						
(a) Export in \$ value	23.4	27.5	28.1	3.5		20.5
(b) Import in \$ value	93.5	74.4	30.5	14.4		22.7
Trends in Select Global Indicators						
IV. World Output	4.9	6.1	5.2	3.0	-1.1%	3.1%
V. Advanced Economies	2.0	3.0	7.1	0.8	-0.4%	1.8%
(b) Developing Economies	11.1	7.0	0.5	7.0	1.1%	-1.1%
VI. World Trade Vol. -% (Goods)	7.5	9.0	6.8	2.7	-10.2%	2.7%
VII. Export Volume growth (Goods)						
(a) Advanced Economies	5.6	8.5	5.2	1.1	-13.2%	2.2%
(b) Developing Economies	10.8	10.4	2.0	7.1	-17.9%	2.7%
VIII. Import Volume (Goods)						
(a) Advanced Economies	6.5	7.8	4.2	0.9	-17.2%	1.5%
(b) Developing Economies	2.1	11.8	13.4	9.2	6.7%	7.3%
IX. World Seaborne Trade*	9.6	1.1	4.2	N/A	N/A	N/A
(a) Goods Loaded	2.8	1.1	1.1	N/A	N/A	N/A
(b) Goods Unloaded	6.8	0.0	3.1	N/A	N/A	N/A

I. Based on data from Major Ports and Non Major Ports

II. Based on gross domestic product (GDP) at Factor Cost (1990-2005 Average), UN Statistical Organization

III. Based on Department of Economic & Statistical, DGCI&S data

IV. UNCTAD's Review of World Economic Outlook, October 2008, UNCTAD

VII. Based on Ministry of Shipping Transport, 2008, UNCTAD

X. N/A: Not Available; For Non-Trade, V, 2007-08 refers to calendar year 2007 and 2008-09 refers preliminary estimate; fa: forecast as of 1st July 2009; b: forecast as of 1st July 2010;

* growth in total goods loaded plus unloaded; #: pertains to April-June

1.1.2 The global crises hit developed countries hard in 2008. India was not directly exposed to the main financial crisis that triggered the global financial crises, but was affected by a sharp downturn in the US and the Europe. The main channel by which the global financial crises and economic slump spread to developing countries including India was the collapse of demand in major global markets, adversely affecting exports. Extra ordinary policy actions globally have helped to shore up market confidence, but financial markets are likely to remain under stress as the process of deleveraging continues for some time. Government of India took wide range of decisive fiscal and monetary measures in the wake of global economic crises and was able to contain the fall out of global downturn on the Indian economy. There are incipient signs of global recovery. Nevertheless, the recovery is slow and levels of global economic activity remain below pre-crisis level.

1.1.3 Within the exception of the current global financial turmoil and looming economic recession in the developed countries, the world economy has enjoyed sustained rapid economic growth for the past decades which provided a conducive environment for the expansion of maritime activities. The growth in world trade outstripped the growth in world output during the years preceding the financial crises leading to unprecedented boom in world shipping and rapid increase in the volume of world trade. It is noteworthy that during the years 2003 to 2007 annual average increase in world trade in goods was more than 9% while world output grew at around 4.5%. Despite the current global financial crises and the looming economic recesses in major industrialized countries, India is expected to post a robust economic growth of 5.5% plus in the current year. India's strong economic growth coupled with a dynamic global trade and growth environment lead to an annual average increase in India's seaborne cargo traffic at about 11% during the six years (2002-09).

World Seaborne Trade

1.1.4 Maritime transport activity demands on developments in world trade. An analysis of world seaborne trade based on Review of Maritime Transport (RMT), UNCTAD (2008) shows international seaborne trade (loadings/exports) increased by 4.8% in 2007 to reach a total volume of 8.02 billion tons (Table 2). 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 8.02 billion tons of international seaborne trade in 2007 comprised 2.63 billion tons of tanker cargo (33.4%) and 5.34 billion tons of dry cargo (66.6%). Tanker trades (crude oil and products) posted moderate growth of 3.3% in 2007 in a volatile market. The tanker cargo, in turn, consisted of 1.87 billion tons (69.0%) of crude oil and 815 million tons (30.4%) of petroleum products. Dry cargo shipments grew at 5.6% to reach 5.34 billion

tions in 2007. Demand for dry bulk is driven, inter alia, by industrial production and growth requirements. These shipments accounted for more than two-third of total world goods traded. Dry bulk consisted of 1.98 billion tonnes of the five traditional dry bulk types (iron ore, coal, food grains, and base metals/uranium and rock phosphate) and other dry cargo of 3.34 billion tonnes which showed an increase of 6.4 % and 6.1 % respectively.

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

Year	Tanker Cargo		Dry Cargo		Total Cargo	
	In tonnes	% change	In tonnes	% change	In tonnes	% change
1980	1726		2253		4079	
2000	2163		3821		5954	
2001	2177	0.6%	3844	0.8%	5021	2.6%
2002	2138	-1.7%	3931	3.9%	5120	1.6%
2003	2223	4.1%	4274	7.4%	5500	6.2%
2004	2379	4.1%	4028	-5.0%	5808	5.0%
2005	2422	4.0%	4937	2.5%	7108	3.0%
2006	2685	7.1%	6067	7.5%	8752	4.3%
2007	2681	3.3%	5341	6.6%	8509	1.8%

Source: Review of Maritime Transport:2008, UNCTAD and earlier issues

1.1.5 Since 1980, global container trade (in TEUs) is estimated to have increased by a factor of five which is equivalent to an annual average growth of 9.8 per cent (KMT 2009). In 2007, global container trade was estimated at 142 billion TEUs reflecting a 10.6 % increase over 2006. In tonnage terms, container trade is estimated at 1.24 billion tonnes, accounting for about one-quarter of total dry cargo in 2007. Containerized trade is also a major driver of growth in the dry bulk segment. Strong growth in containerized traffic is fueled 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 trades.

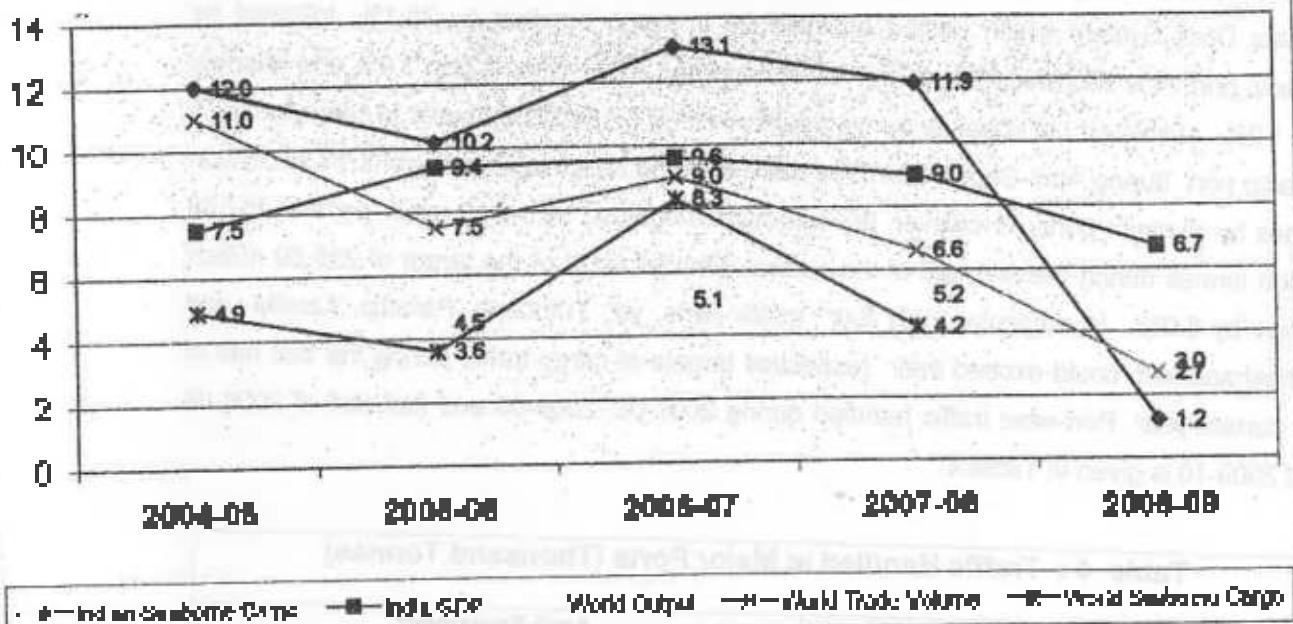
1.1.6 An analysis of world seaborne trade based on EMT (2008), UNCTAD by country groups also yields some interesting insights. Firstly, developed market-economy countries (DMECs) accounted for 2.57 billion tonnes of seaborne exports/loadings and 4.28 billion tonnes of seaborne imports/unloadings in 2007. This gave them a market share of 33% of total world seaborne exports and 55% of total world seaborne imports. Secondly, developing countries (across all continents) accounted for more than 63 % of the volume of world seaborne exports (with a very high market share of 14.10 m tonnes, reflecting the importance of Oil and gas; and about 45% 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 85 % and 48 % respectively. For imports, these shares were about 30% for crude and 39 % for products. In the dry cargo sector, the

share of developing countries' exports reached about 59 % of world dry cargo exports, while their share of world imports touched 62 %. Thirdly, developing countries in Asia were the largest traders accounting for more than 40 % of the world maritime goods loaded/exported and 48 % of the world maritime goods unloaded. Further developing countries in Asia accounted for 44 % and 32 % of total crude and petroleum products loaded in 2007. The corresponding shares of crude and petroleum products in total unloadings (import) were 23 % and 27 %, respectively in 2007.

1.2 Cargo Traffic at Indian Ports

In the first six months (April-September) of 2009-10, Indian Ports (major and non-major taken together) handled a total of 309.08 million tonnes of seafaring cargo compared to 256.77 million tonnes handled over the same period of 2008-09. This represents an increase of 6.4% in comparison to a growth of 7.2% in the same period last year. Composition of growth reveals that while growth in cargo handled at major ports decelerated from 7.7% in April-September, 2008 to 1.9% during April-September, 2009, growth in cargo handled at non-major ports accelerated from 5.9% to 23.41% over the same period. In fact, more than four-fifth of the growth in the first six months of the current year was contributed by non-major ports. It needs to be kept in view that the slump in cargo traffic mainly occurred in the second half of 2008-09 as a result of global slowdown. Also preceding two years were marked by a sudden dip in the rate of growth of cargo throughput from nine to 12% in 2007-08 to a little over 4% in 2008-09. The growth in India's GMDP, world export, world export volume, world seaborne trade (loadings plus unloading) and Indian port traffic since 2004-05 is given in chart 1.

Chart I : Growth in Indian Seaborne Trade vis-a-vis Growth In Select Parameters



Sources: Government of India's CIDE and Cargo Traffic Survey and statistics released by Central Statistical Organization and India's MCA21 and Census of India, Ministry of Civil Aviation, Shipping, Road Transport & Highways and port trust officials on Unpublished Data on World Trade and World Trade Volume for the period 2004-05, 2005-06 and 2007-08. Economic Outlook Report Q2-2009 (IMF).

Table 3: Traffic Handled at Indian Ports (Thousand Tonnes)

Major/Non-Major Ports	Traffic Handled				Growth over previous year/period			
	2007-08	2008-09	April-September (P)		2007-08	2008-09	April-September (P)	
			2008-09	2009-10			2008-09	2009-10
Major Ports	519313	530369	262990	267986	12.0	2.1	7.7	1.0
(`T 1.58)	(`T 2.21)	(`T 3.30)	(`T 3.88)	(`T 4.00)				
Non-Major Ports	206379	204074	95779	121079	11.6	1.1	5.9	26.4
	(`T 8.44)	(`T 7.70)	(`T 6.70)	(`T 1.12)				
All Ports	725619	734443	358769	389065	11.9	1.2	7.2	8.4
	(`T 60.00)	(`T 6.00)	(`T 0.00)	(`T 0.00)				

(P) : Provisional

Note : Figures within parentheses indicate per cent share in total cargo traffic for Major and Non-Major ports respectively.

1.3 Cargo Traffic at Major Ports

The cargo traffic handled at 12 major ports during first six months of 2009-10 was 267.98 million tonnes as compared to 262.99 million tonnes handled in the corresponding

period of calendar year. Out of the 267.00 million tonnes, the cargo unloaded, loaded and transhipped was 159.84 million tonnes, 85.15 million tonnes and 12.01 million tonnes respectively. In terms of port performances, the analysis of cargo handled at 12 major ports reveals that 1.0% increase in cargo traffic during the first half of 2009-10 was driven by govt showing by 1.0% increase in cargo traffic during the first half of 2009-10 was driven by govt showing by Kochi Dock System which posted an increase in cargo handled by 25.1%, followed by Panajip port 24%, Mormugao port 23.2%, Tuticorin port 5.4%, Kandla port 3.9% and Mumbai port 1.2% (Table 4). In absolute terms, the increase of 5.19 million tonnes in cargo traffic by Panajip port during April September 08 is more than the total increase in tonnage of 5.0 million tonnes by all major ports. However, the cargo traffic attained by the 12 major ports at 267.00 million tonnes during the first half of the current year fell short of the target of 265.00 million tonnes by 0.05%. In particular, only four major ports viz., Tuticorin, Panajip, Kandla and Visakhapatnam could exceed their respective targets of cargo traffic during the first half of the current year. Performance metric handled during 2007-08, 2008-09 and first half of 2009-10 and 2009-10 is given in Table 4.

Table 4 : Traffic Handled at Major Ports (Thousands Tonnes)

Ports	2007-08	2008-09 (P)	2008-09 Target	April-September			% Change CP	% Change Target		
				2009-10						
				Target	Actual(Kt)					
Kochi	37120	341151	38780	30410	28201	-10.7	24.9			
Cochin DS	13741	124201	4203	8500	8110	23.1	-3.5			
Mumbai GC	49528	41823	72075	21321	17121	-22.1	-28.7			
Panajip	42437	43412	21564	20760	26744	24.0	3.8			
Vizag	84687	62960	32136	32900	33069	-0.3	3.2			
Chennai	37154	57101	32623	31830	30472	-9.1	-3.7			
Singrauli	1,000	1100	5763	8110	54103	0.4	-11.1			
Tuticorin	71480	22511	1112	10930	11700	5.3	5.7			
Cochin	10210	10220	7022	9180	7520	-2.1	-13.0			
New Mangalore	18010	96691	15423	1830	17517	-3.7	-10.1			
Mormugao	32120	41601	12512	19220	18854	23.2	-12.4			
INR-T	56935	57295	30322	30620	29675	-3.5	-11.0			
Mumbai	37036	51078	2629	26600	26408	1.2	0.0			
Kandla	31820	42221	37255	36580	39301	3.9	7.0			
All Ports	919313	936469	882950	885050	867986	1.9	-4.6			

(P): Previous; CP: Corresponding period April-September, 2007-08

1.4 Commodity wise Cargo Traffic at Major Ports

1.4 : In terms of Commodity-wise traffic at 12 major ports, the 1.0% increase in cargo at major ports during the first half of 2009-10 was driven by increase in four broad categories of cargo viz. 13.5% in Other Cargos, 12.9% in Thermal Coal, 0.7% in Iron ore and 2.7% in PO.

During first six months of current year, non-containerised cargo at major ports has increased by 3.2% while container cargo decreased by 3.8% during that period.

Table 5 : Commodity-wise Traffic Handled at Major Ports (Thousand Tonnes)

Commodity	2007-08	2008-09 (P)	April-September			% Change Over	
			2008-09	2009-10		CP*	Target
				Target	Actual Qty		
1	2	3	4	5	6	7	8
TOT	167435	174384	84154	99530	85017	2.1	-13.7
Iron Ore	92998	94091	44092	48890	41083	4.7	-10.5
Fertiliser	12772	18106	9415	2390	8298	-12.2	-12.0
a. Fertilised	11874	12190	6802	5050	5490	-12.0	-7.7
b. Raw	6405	8068	3113	3440	2778	-10.8	-12.3
Coal	62865	70594	35431	41100	35012	-8.8	-14.9
a. Thermal Coal	32833	43444	19787	28740	22345	12.0	-18.4
b. Coking Coal	31832	27150	15644	14410	12557	-23.9	-12.1
Container	92247	83123	50788	48710	48860	-0.6	0.6
Others	50388	78879	42088	38420	47613	13.6	21.3
Total	619313	630369	362944	365096	367966	1.0	-6.0

(P) - Previous CP : Corresponding period April-September 2007-08

14.2 The shares of different commodities in total cargo traffic are depicted in the Charts II and III during the first half of 2008-09 and 2009-10. Energy imports consisting of PCL and coal constitute more than 40 % of the total cargo traffic at India's major ports.

Chart II: Major Ports - Commodity Composition of Traffic Handled in April-Sept. 2008

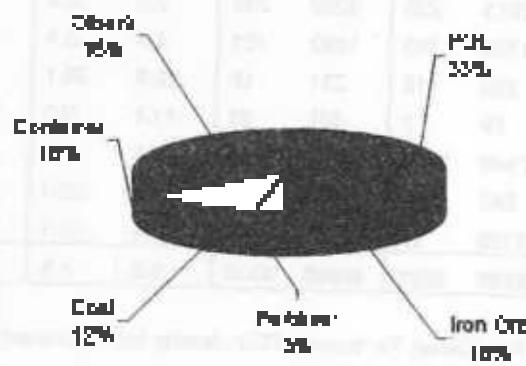
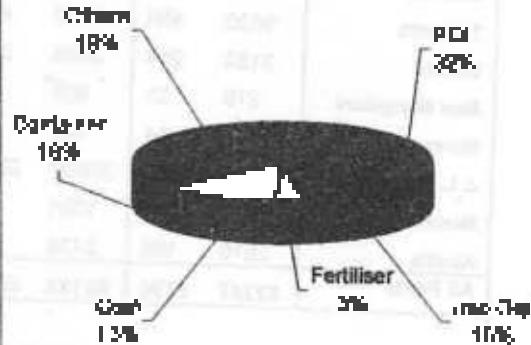


Chart III: Major Ports - Commodity Composition of Traffic Handled in April-Sept. 2009



PCL - Petroleum Oil & Lubricants

IRON - Iron & Steel Raw Material

1.4.3 The Port-wise & commodity-wise traffic handled at major ports during the last few years in the first six months of 2008-09 and 2009-10 are given in Annex 2.

1.4.4 Container Traffic: Total Container traffic at major ports has decreased both in terms of tonnes (3.3%) and twenty foot equivalent units (TEUs) (5.7%) during the first six months (April-September, 2008-10) of the current financial year. Amongst the major ports, Mormugao, Kalkuta Dock system, Vishakhapatnam, Tuticorin, Cochin, New Mangalore etc. Kandla recorded increase in container traffic. The major ports of Mumbai, Jaldapara Complex, Jawahar Lal Nehru, Kandla and Chennai 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 57% in terms of tonnage and about 60% in terms of TEUs in the total container traffic at major ports (Table A) (Annex 5). Efficiency in container handling operations at some of the select container terminals in India is given in Table 6A.

1.4.5 Recent trends in Cargo traffic and container traffic at major ports of the world are given in the Table 6B and 6C respectively. It is noteworthy that Shanghai Port alone handled (362 million tonnes in 2008) more than the combined throughput of India's 12 major ports at 530 million tonnes in 2008-09; also Zhejiang Ningbo (PRC) handled 520 million tonnes alone in the combined traffic of India's 12 major ports (Table 6D).

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

PORT	2007-08		2008-09(P)		April-September				% Change (Apr-Sep.)			
	Tn	TEU	Tn	1EU	2008-09		2009-10(P)		2008-09		2009-10	
					Tn	TEU	Tn	TEU	Tn	TEU	Tn	TEU
Kollam	9124	237	6423	202	2156	107	1849	97	8.7	-1.1	13.8	-2.7
Kandla	3287	176	2328	127	1702	70	920	53	-4.2	-0.1	-24.4	-27.5
Pondicherry	36	4	91	2	3	0	10	7	-48.0	-55.0	-	-
Vizhinjam	1132	71	1822	63	456	48	751	42	20.2	33.2	19.2	4.7
Chennai	15150	172	20501	1143	1230	678	1212	551	14.2	-1.8	11.0	-11.0
Tuticorin	5630	152	5707	429	2413	233	3260	218	-2.0	-3.4	12.5	-8.0
Cochin	3169	251	8276	200	775	141	1252	131	2.3	2.4	6.0	-2.8
New Mangalore	372	21	405	23	326	15	28	15	23.2	32.1	2.7	8.7
Mormugao	165	14	147	14	72	7	102	10	11.7	10.0	22.1	-42.9
J. L. Nehru	5728	4182	20603	9652	2745	2124	20294	1662	2.5	-4.7	32.7	-42.4
Mumbai	1892	118	1721	92	542	57	204	27	21.5	42.0	51.8	-42.0
Kandla	26.5	153	2135	138	1128	32	1080	34	16.4	-16.4	4.1	6.3
All Ports	92247	6704	12123	6586	50799	2424	48990	3319	0.9	-4.0	4.8	-4.7

Note: CP - Commodity reported in million tonnes; (P) - Provisional; Tn - tonnes; TEU - Twenty Foot Equivalent Unit

Table: 6A Performance Indicators of Select Container Terminals

Terminal	Year	Moves / Quay Hr ^a	Moves / Berth Hr ^b	TEU/Mtr. Quay ^c	TEU / Employee ^d	Dwell ^e Day	TAT ^f Day
Tuticorin	2006-05	26.04					
	2006-07	27.04	43.0	1077	2100	3.0	1.08
	2007-08	27.04	62.0	1223	2020	3.6	1.38
	2008-09	26.0	43.0	1129	2010	2.7	0.71
Chennai	2006-09	20.0	45.1	630	1020	2.9	1.38
	2007-07	22.1	63.0	856	2204	2.5	1.00
	2007-08	21.0	63.0	1277	2070	2.9	1.08
	2008-09	22.7	66.8	1098	2717	1.0	1.45
JNPCT	2006-08	18.8	44.0	1067	1478	3.2	1.98
	2006-07	17.3	45.0	1170	1403	0.63	1.89
	2007-08	18.3	41.0	1156	1346	2.2	1.90
	2008-09	15.3	42.6	1140	1153	2.1%	1.69
NSICT	2006-08	21.3	65.0	2036	2037	2.2	1.51
	2006-07	22.7	61.5	2205	2051	2.7	1.36
	2007-08	23.0	70.4	2013	2097	2.5%	1.02
	2008-09	22.8	76.2	2578	2472	2.8\$	0.98
GTICT	2006-07	22.2	49.3	561	932	0.3	0.98
	2007-08	23.7	52.3	1513	2978	2.15	1.21
	2008-09	27.3	73.3	2364	2453	2.05	1.14
Cochin	2007-08	14.0	26.5	469	529	6.53	1.14
	2008-09	10.28	27.3	483	508	7.25	1.37
Kolkata DS	2009-09	10.55	15.61@	NA	NA	/ 14	3.86

#: Per effective Quay hour; \$: for Container Freight Station(CFS)Container - Import

*: Average time (F3) per Berth; @: Shoring times and holding times have been considered as vessels sometimes have to wait at berth after completion of work due to non availability of suitable berths in the river.

Moves /Quay hour(Hr): Total number moves/sum of gross vessel working hours

Moves/Berth hr: Total container vessel moves/sum of gross vessel working hours

TEU/Mtr. Quay: Total TEUs handled per hour/ Total quay length in meter

TEU/Employee: No. of TEUs handled per employee per hour

Dwell Time: Total No. of container storage days/total no. containers

JNPCT: Jawaharlal Nehru Port Container Terminal

NSICT: Nava Shiva International Container Terminal

GTICT: Gateway Terminal India Container Terminal; TAT: Turn Around Time

Table 6B : Top 20 World Major Ports (In Millions Tonnes)

Port	2005	2006	2007	2008
Shanghai (PRC)	443.2	537.5	560.0	582.0
Zhoushan/Ningbo* (PRC)	272.4	309.7	473.4	520.1
Singapore	423.2	442.5	483.6	515.5
Rotterdam (Netherlands)	370.3	381.8	409.1	421.1
Tianjin (PRC)	245.1	257.6	309.6	355.9
Guangzhou (PRC)	241.7	312.0	343.3	344.3
Qingdao (PRC)	184.3	224.2	265.0	300.3
Hong Kong (PRC)	230.1	238.1	245.4	259.4
Qinhuangdao (PRC)	167.5	204.9	245.7	252.2
Busan (South Korea)	217.2	217.3	243.6	241.7
Baltimore (USA)	243.0	282.8	293.1	233.7
Nagoya (Japan)	187.1	208.0	245.0	216.1
Shenzhen (PRC)	153.9	178.0	199.5	211.2
Gwangyang (S Korea)	177.5	193.1	198.2	200.0
Antwerp (Belgium)	160.1	167.4	182.9	189.5
Dalian (PRC)	176.9	145.2	165.4	185.2
Los Angeles (USA)	162.1	181.5	180.1	179.0
Chiba (Japan)	165.7	167.0	169.2	170.0
Rizhao (PRC)	84.2	110.1	130.6	151.11

Source: Port Statistics, Port of Rotterdam Authority, May 2009; *PRC=People's Republic of China

Table 6C : Top 20 World Container Ports (In Million TEUs)

Port	2005	2006	2007	2008
Singapore	23.18	24.79	27.93	29.92
Shanghai (PRC)	23.08	21.72	26.15	28.01
Hong Kong (PRC)	22.93	23.54	23.80	24.46
Shenzhen (PRC)	16.20	18.47	21.10	21.42
Busan (Republic Korea)	11.84	12.04	12.28	13.42
Dubai Ports (UAE)	7.32	8.32	10.66	11.83
Guangzhou (PRC)	4.98	6.60	6.20	11.20
Zhoushan/Ningbo* (PRC)	5.21	7.07	9.36	10.02
Rotterdam (Netherlands)	9.29	9.65	10.79	10.72
Qingdao (PRC)	6.31	7.71	8.48	10.02
Hamburg (Germany)	8.00	8.86	5.85	9.74
Kaohsiung (Taiwan Province of China)	5.47	6.76	10.20	9.98
Antwerpen (Belgium)	6.49	7.02	9.19	8.66
Tianjin (PRC)	4.00	5.35	7.10	5.50
Los Angeles (USA)	7.49	8.47	8.38	8.08
Port Klang (Malaysia)	5.72	6.33	7.12	7.97
Long Beach (USA)	6.17	7.20	7.31	9.43
Tanjung Pelepas (Malaysia)	4.18	4.77	5.50	5.50
Bremen (Germany)	5.74	4.45	4.91	6.02
New York/New Jersey	4.79	5.09	5.35	5.24

Source: Port Statistics, Port of Rotterdam Authority, May 2009; China refers to People's Republic of China; * Ports combined in 2005; TEU=Twenty Foot Equivalent Units

1.5 Non-Major Ports

1.5.1 In the Tenali Five Year Plan, traffic at non-major ports increased at an annual average growth rate of 18.7% and grew at rate of 11.5% in 2007-08, -1.1% in 2008-09 and 26.4% in first half of 2009-10. Non-Major Ports handled more than 30% of the total maritime freight traffic of the country during the first half of the current fiscal year.

1.5.2 Table 7 presents maritime state wise share and growth of traffic handled at Non-major ports during last two years for the first six months of the current and previous years.

Maritime State/UT	Traffic Handled ('000 Tonnes)				% Change over Previous Year			
	2007-08	2008-09	April-September		2007-08	2008-09	April-September P	
			2008-09	2009-10			2008-09	2009-10
Gujarat	156522* (72.0%)	132814 (64.2%)	702238 (38.45%)	822510 (37.87%)	-1.7	1.5	0.1	23.5
Maharashtra	11389 (6.6%)	112472 (6.1%)	4241 (2.10%)	4198 (2.30%)	-1.9	-0.6	-1.7	-4.7
Andhra Pradesh	15292 (8.3%)	16003 (8.2%)	11794 (112.28%)	16772 (113.08%)	3.7	-2.0	-3.5	34.1
Goa	12823 (0.7%)	11001 (0.6%)	2169 (12.86%)	2651 (12.18%)	-40.9	-7.2	8.5	23.4
Tamil Nadu	887 (0.42%)	805 (0.44%)	420 (0.24%)	371 (0.27%)	10.2	1.0	-5.0	32.4
Karnataka	3809 (0.21%)	4009 (0.21%)	224 (2.10%)	1984 (1.36%)	36.0	-44.8	110.4	-42.1
Other States/UTs	2504 (0.8%)	4501 (2.05%)	122 (0.27%)	246 (1.11%)	24.2	22.0	21.2	30.8
All Maritime States/UTs	202378 (100.0%)	204074 (100.0%)	66770 (100.00%)	72270 (100.00%)	11.0	-1.1	-5.6	25.4

Note: Figure in parentheses is the percentage share of traffic handled by the maritime state to the total traffic handled by all the maritime states. Excluded - * Port(s) contributing to <0.01% only.

1.5.3 The growth in cargo handled by the non-major ports was 5.2% in the first half of 2008-09 accelerated to 26.4% in the first half of 2009-10 (Table 7). The growth in cargo handled at non-major ports has been facilitated by sustained cargo growth in non-major ports located in Andhra Pradesh and Gujarat aided by substantial increase in the iron ore, coal and POL in particular (Tables 7 & 8). The growing importance of non-major ports in handling cargo traffic has helped alleviate the congestion at major ports. Table 7 provides traffic handled by non-major ports in terms of maritime states (geographic location) and Table 8 gives a glimpse of commodity profile of the cargo handled. Table 7 reflects that Gujarat accounted for more than three-fourth (78.3%) of the total traffic handled by the non-major ports followed by Andhra Pradesh (13.0%), Maharashtra (3.7%) and Goa (2.2%). Two maritime States, viz. Gujarat and Andhra Pradesh together accounted for more than 80% of the total cargo traffic handled by the non-major ports in the first half of the current year.

1.5.4 Three commodities, viz. POL, iron ore, and coal accounted for more than four-fifth of the total cargo handled at the non-major ports (Table 8).

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

Commodity Group	Traffic Handled [2009 Traintime]				% Change over Previous Period				
	2007-08		2008-09		April-September		2007-08	2008-09	April-September
	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09	2007-08
POL	91026 (44.11)	101605 (49.76)	2044 (452.87)	24003 (48.87)	12.1	11.0	-1.8	16.1	
Iron Ore	34223 (16.68)	26181 (12.83)	5820 (10.26)	73612 (18.81)	11.7	-20.5	16.9	136.2	
Building Materials	15253 (7.90)	14731 (7.22)	67401 (7.04)	50114 (4.14)	19.0	-4.5	31.9	-25.8	
Coal	25443 (1.41)	13525 (0.68)	7487 (7.80)	16703 (12.97)	10.2	20.0	34.9	173.9	
Fertilizer & FFM	712 (2.45)	112028 (6.65)	2678 (4.06)	3858 (3.20)	4.3	58.3	52.4	0.3	
Others	42902 (20.30)	31100 (16.64)	17022 (16.08)	14262 (11.60)	27.5	-25.1	1.1	-11.5	
All	206374 (100.00)	204079 (100.00)	56779 (100.00)	121079 (100.00)	11.8	-1.1	5.9	28.4	

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

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

Chart IV : Non-Major Ports - Share of Maritime States/UT's in the Traffic Handled April-September 2009

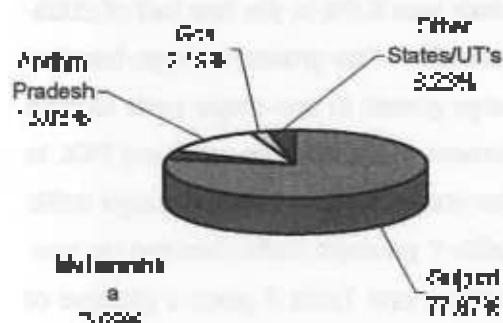
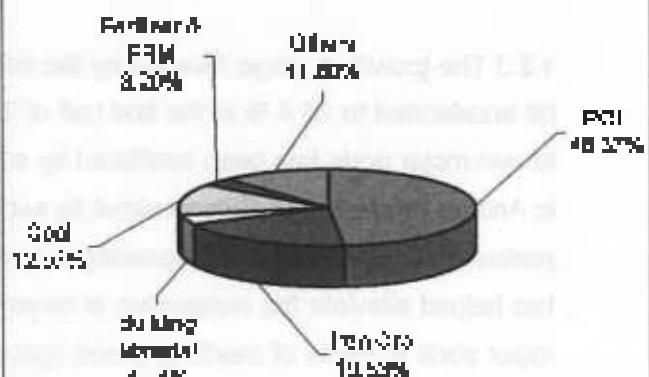


Chart V : Non-Major Ports-Commodity Composition of Traffic Handled - April-September 2009



POL: Petroleum, OIA: Lubricants, FFM: Fertilizers and Mineral

1.5.6 Maritime State-wise & commodity-wise traffic handled at non-major ports during the last few years and the first six months of the current financial year is given in Annex 3.

1.6 Policy Initiatives-Central Government

1.6.1 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 modalities 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 1.8.2000. 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.

1.6.3 The Major Port Trust Act, 1965 was further amended in the year 2000 for allowing Major Ports to form joint ventures with Non-Major Foreign Ports as well as companies.

1.6.4 Given the vital role of maritime infrastructure in economic development and trade, it has been felt that policy framework for maritime sector comprising Ports, Shipping and Inland Water Transport needs to be in position. Accordingly, the Department of Shipping has brought out a Draft Policy for Maritime Sector. 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.

1.6.5 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 Seventh Five Year Plan has envisaged an increase in the capacity of major port to 1016.85 million tonnes by the end of 2011-12. At the beginning of the Eleventh Five Year Plan, the capacity of the Major Ports was 504.70 million tonnes. Through the proposed capacity addition during Eleventh Five Year Plan at the Major Ports amounts to 511.90 million tonnes. At the end of March 2008 the cargo handling capacity of Major Ports was 508.05 million tonnes. Commodity-wise capacity of Major Ports at the end of March 2008 is given in Annex 4.

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, 2005)”, by the Planning Commission has proposed an annual average growth target of 8% in terms of GDP for the Eleventh Plan and has announced the following aspects for the Port Sector:

- (a) To develop ports and related infrastructure to bring them to international standards in terms 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 berths of existing ports to be deepened, where feasible, through sea bed 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.

1.8 Impact of Global Slowdown and Credit Crises on Maritime Trade and Prospects

1.8.1 Global macro developments

1.8.1.1 Growth in developing and emerging-market economies has been fairly resilient, but there is strong evidence that they cannot escape the global slowdown. Despite a global slowdown, output growth in India and China in 2008 is expected to be strong compared to sharp expected slowdown in the advanced economies from 2.7% in 2007 to 0.6% in 2008 and a negative growth of 1.1% in 2009. Volume growth in world trade in goods has fallen sharply from an annual average increase of about 9% during three years (2004-2006) to 9.9% in 2007 to 2.7% in 2008 to a significant projected decline of 13% in 2009 [IMF Outlook (October, 2008)]

1.8.1.2 It needs to be noted that trade is much more volatile than global growth, partly because it is still dominated by construction and manufactured goods whose output is more variable than the service industries that have a larger share of domestic economies. Trade does not transmit weakness around the world with the lightning speed of financial markets. But what it lacks in pace it may make up for in impact. Trade in goods and services remains the dominant transmission mechanism for a global slowdown. Since it takes time for existing contracts to expire a trade slowdown can lead to a deceleration in year-on-year domestic product, which is not immune to global developments, but neither is it hostage to them. Its longer-run growth

trajectory will be much more a function of structural and supply side dynamics. In the short run, the impact of the global slowdown on cargo traffic is likely to be modest.

1.8.2 Impact of global growth on India's seaborne cargo

1.8.2.1 The growth in cargo traffic is in the nature of derived demand. Therefore developments in both global and domestic economy have a bearing on India's seaborne trade. The robust growth in India's GDP and a healthy growth in world economy kept growth in India's seaborne trade at double digit over 10 % in the Tenth Plan (2002-07) and 2007-08 as well. Cargo traffic at India's 12 major ports at 200.3 million tonnes showed a steady growth of 2.1% in 2008-09 compared to 1.7% increase in 2007-08. This meagre 2% growth is barely a one-fifth of the annual average growth of 11% in cargo traffic during the last six years (2002-03 to 2007-08) for major ports. The sharp down turn in the global growth and softening of India's growth momentum has affected the seaborne cargo traffic in 2nd half of the year 2008-09 in particular. Quarterly data (Table A) reveals that it was not until the second half of 2008-09 that global firmer declines began to have negative impact on India's seaborne cargo traffic. In particular, it lead to negative growth in two consecutive quarters (Q3 and Q4) of 2008-09 in India's cargo throughput at major ports. While trades in FCL, coal and fertilizers are largely driven by the dynamics of domestic demand-supply those of iron ore container traffic, 'others' in particular are largely shaped by the state of global demand and economic activity. The impact of weakening of global demand was pronounced in case of iron ore and container throughput. Iron ore cargo traffic experienced negative growth in Q2 and Q3 of 2008-09 and Q1 of 2009-10; container traffic which reflects trends in trade in manufactureds posted negative growth in Q3 and Q4 of 2008-09 and Q1 of 2009-10. Besides, 'others' category of cargo consisting of a heterogeneous group of unclassified cargo experienced sharp contraction in Q3 and Q4 of 2008-09.

Table A: Quarterly Growth Rates in GDP & Cargo Traffic at Major Ports

Parameters	2008-09					2009-10		
	Q1	Q2	Q3	Q4	H1	Q1	Q2	H1
GDP (c/c)	7.8	7.7	6.9	5.2	7.2	4.1	2.9	1.7
Total Docks ^a	9.0	5.4	-2.4	-1.4	7.2	-1.8	2.9	7.2
FCI	11.2	5.2	5.2	5.0	7.0	2.0	-1.0	2.5
FCL ^b	15.0	-14.5	-1.7	5.0	0.2	-4.8	10.5	7.0
Coa	15.1	14.7	-0.1	5.7	0.9	4.7	-4.5	1.5
Fertilizers	21.2	21.5	23.4	48.1	25.2	2.3	22.5	-2.2
Container	17.0	11.2	-0.2	-12.4	14.5	-1.0	2.7	1.1
Others	1.2	5.1	-22.0	-14.5	5.2	-1.5	10.2	-1.1

^a Q2 (Apr-June), Q3 (July-Sept), Q4 (Oct-Dec), H1 (Jan-Mar); ^b 1st - Apr-Sep, 2nd - Oct-Dec. H1 growth rates are based on cumulative data which includes previous year and thus therefore may not exactly correspond to first two quarter averages. -ve % denotes April-June

1.8.3 Impact on Global Ocean Freight Rates

1.8.3.1 Baltic Dry Index

1.8.3.1.1 The Baltic Dry Index (BDI) is a daily average of prices to ship raw materials across seas on the Baltic Exchange, the global marketplace for chartering shipping contracts. The BDI is one of the leading indicators of global economic activity. It measures the demand to move raw materials. Unlike stock and commodities markets, the BDI is devoid of speculative players.

1.8.3.1.2 The surge in BDI from 2005 to the end of 2007 was primarily due to Chinese demand. There was also a shortage of supply for dry bulk cargo ships and a large backlog of shipments. The combination of these two factors caused a surge in the index. However, during the second half of 2008, BDI lost almost 90% from its record highs. BDI dropped from its all time high of 11,792 on May 20, 2008 to less than 1000 by the end of December (774 as on December 24, 2008). BDI index remained around 80% of its peak (May 20, 2008) during the course of second half of 2008 and touched its low at 553 points on July 31, 2009. However, during the course of 2009, BDI has gained considerably but remains well below the peak attained in May 2008. The spurt in BDI in October 2009 over the end October 2009 levels shows substantial increase as indicated below and also points towards implying recovery.

Trend In Baltic Indices					
Index	20 th May 2008	31 st Oct. 2008	24 th Dec. 2008	31 st Oct. 2009	% Change End Oct 08/End 09
Bul-Ba-Sa	11753	751	724	3736	+765%
Bul-Ba-Panamax	11420	377	560	5017	+340%
Bul-Ba-Hemamax	9847	583	421	2150	+440%
Bul-Ba-Cape	11126	1365	927	1450	+144%

Source: S&P Monthly Reports

1.8.3.1.3 This fall in BDI is due to a simultaneous convergence of several factors. Chief among those 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 vessel's under shipping companies operate under Contract of Affreightment (is a contract to move cargo over a specified line between named ports and regions and may be performed by any ship & distinct from charter hire arrangements that pertaining 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 spot rates that gets affected immediately by this. It needs to be noted, however, 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.

1.8.4 Trends in Global shipping charter hire rates

1.8.4.1 Ships are once again operating spot rates of less than US \$ 7,000 a day. In November 2008, these daily operating expenses of about \$ 8,000 from a high of US \$ 177,622 in May 2008. All this has its toll on the charter market. The charter rate of a cargo and large bulk carrier has dropped to around US \$ 40,000 and US \$ 21,221 respectively at present. However, charter spot rates continue to be much below the peaks recorded in May 2008 and continue to languish in the range of 25% to 30% of their peak rates in May 2008.

Average Dry Cargo Time Charter Earnings (US \$ per day)					
Size Thousand DWT	May 2008	Oct.2008	Nov 08	Oct.2009	% Change Oct.09/Oct.08
Cargo 144	17,622	20,307	6,576	40,072	-59%
Liner B.L. & G-124	110,000	17,892	9,700	21,221	32%
Panamax 54,421	61,582	13,387	7,039	22,411	15%
Handy 11,700 DWT	5,717	15,781	7,511	21,701	-36%
Hopper 40,431	20,842	8,800	7,100	10,691	-49%
Bulkers 80,200	31,021	12,700	9,600	14,800	-12%
Small Bulkers 12,900	48,200	12,000	9,000	14,200	18%

Source: S&P Monthly Reports

1.8.5 Implications for Maritime Finance

1.8.5.1 The impact of the sub-prime crisis has spread well beyond the United States, causing a widespread squeeze in liquidity and credit. Letters of credit and the credit lines for trade have been severely affected. Lack of letters of credit, in which banks guarantee payment for merchandise goods, could adversely affect world trade. Letters of credit assure a shipper of payment for cargo after it is loaded on a ship, but before the buyer receives it. About 90 percent of world trade moves by sea. Lack of trade finance has left cargoes stranded at the ports around the world.

1.8.5.2 Shipping, a capital intensive industry depends on the cross border flow of capital. As a result of US sub-prime and housing loan crisis, financing institutions are expected to be more cautious on this financing. As a capital intensive industry with corporates as assets, shipping is expected to feel the effect of the US crisis. Traditional players in ship financing are likely to trim their exposure to shipping and reduce their single client borrowing limit. This will result in less bank lending to shipping companies and less money is available to purchase them. Fall in the Baltic Dry Index (BDI) has resulted in a global slump of over 90% of shipping companies.

I. POLICY AND PERFORMANCE OF MARITIME STATES

2.1 Ports are economic and service provision units of a considerable importance since they act as a place for the interchange of twin transport modes, maritime and land, whether by rail or road. Therefore, the essential aspect of ports lies in their intermodal nature. India has a coastline of around 7517 Kms with 12 major ports and 187 declared non-major (minor/intermediate) ports along the coast-line and sea-islands. Of the Non-Major Ports, around 60 are handling traffic. Chart-VII 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 Mumbai which is a corporatised entity).

Chart - 4



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 (all 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)

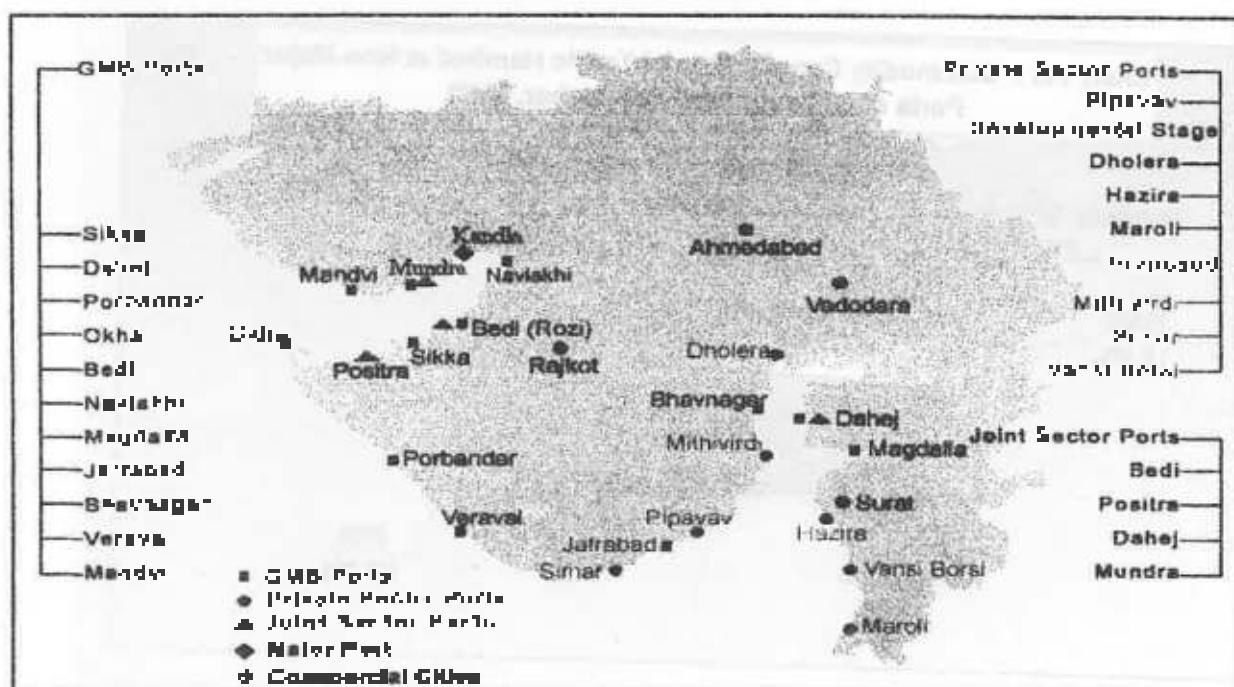
2.3.1 With a view to have an integrated approach for the development of both Major and Non-Major Ports, the Maritime States Development Council (MSDC) was constituted in May, 1987 under the Chairmanship of the Honourable Minister of Shipping. The Ministers-in-charge of Ports in all Maritime States, Union Territories of Puducherry, Andaman & Nicobar Administration, Dadra & 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 nine 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 1000 km length of coastline which constitutes about one-fifth 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.mca.gov.in/port_policies

2.4.1.2 The trends in the cargo handled at both major and non-major ports of Gujarat State during the last four years and the first six months of the current year are given in Table 9. The

overall growth in port cargo traffic in case of Gujarat was 20.3% in the first half compared to 9.4% for overall cargo growth for India.

Table : 9- Gujarat: Trends In Cargo Handled at Major & Non-Major Ports (Million Tonnes)

Major/Non-Major	2005-06	2005-07	2007-08	2008-09(P)	April-September (P)	
					2008-09	2009-10
Major Ports	45.01 (10.5)	52.98 (15.4)	64.92 (22.5)	72.23 (11.3)	37.88 (23.4)	38.34 (3.8)
Non-Major Ports	108.08 (11.3)	131.27 (21.5)	150.52 (14.7)	152.80 (1.5)	73.23 (5.1)	94.28 (28.8)
All Ports	153.09 (11.0)	184.25 (15.7)	215.44 (16.9)	225.03 (4.5)	111.09 (11.4)	133.62 (20.3)

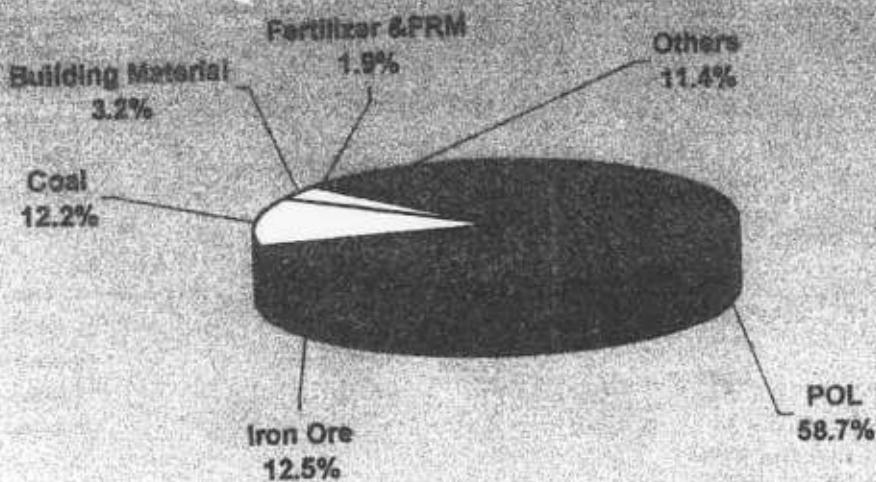
Figures in bracket represents percentage change over the previous year/period

(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 94% of the total cargo handled by Indian ports in the first half of 2009-10. In particular, non-major ports of Gujarat alone handled more than 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 VIII.

Chart VIII : Commodity Composition of Traffic Handled at Non-Major Ports of Gujarat : April-September, 2009



TCL: Fertiliser, Oil and Lubricant

PRM: Fertiliser Raw materials

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 minor 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 carrying passengers between Saurashtra and North Gujarat and other destinations.
- To meet Gujarat's potential power requirements by (a) establishing barge mounted power plants and (b) creating exclusive port facilities for importing different kinds of power fuel.
- To attract private investment for the development of minor ports DOST framework has been envisaged to provide – (i) timeliness of infrastructure creation, (ii) efficiency of generation 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 minimum.

2.4.1.6 Recent trends in cargo handling and capacity creation in non-major ports of Gujarat are captured in the Table: 10. It indicates sustained increase in cargo throughput, capacity addition and improvement in capacity utilisation. During the year 2008-09, 37 million tonnes of capacity addition in the port sector was created, taking the total cargo handling capacity in the port sector in the Gujarat to 235 million tonnes. In 2009-10, capacity addition of 28 million tonnes is envisaged.

Table : 10 - Gujarat: Non Major Ports - Current Capacity & Utilization (Million Tonnes)

Item	2004-05	2005-06	2006-07	2007-08	2008-09
Capacity*	152.23	163.23	182.00	192.00	235.00
	(4.9)	(11.6)	(10.7%)	(5.3%)	(37.0)
Cargo Handled	97.13	100.00	131.27	150.52	162.00
% Utilization	63.8%	66.2%	72.1%	76.4%	69.6%

* including Lighterage For Capacity figures and utilization % do not add up exactly, although it will 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 Outer Berth Only Ports'.

Amongst 13 ports, 6 ports are to be developed through private investment and remaining 4 ports in the jilt sector. The list of projects undertaken for capacity augmentation and projected trend in capacity creation are given in the Table 12 & 12A respectively.

Table : 11 Major Projects undertaken at Non Major Gujarat Ports

No.	Year	Major Projects undertaken	Capacity addition	Cumulative capacity
Up to 2003				122
130				
1	2003-04	<ul style="list-style-type: none"> • Gondalher terminal at Mundra • FAWP Jatty at Navlakhi • Private Jatty at Jakhau 	6	748
2	2004-05	<ul style="list-style-type: none"> • Dahod - NG terminal 	5	151
3	2006-09	<ul style="list-style-type: none"> • Gonjader and Bulk terminal at Mundra • NG Terminal at Mehsa 	8.5	164
4	2006-07	<ul style="list-style-type: none"> • Huzur Extension at captive Jatty by Caisar • Navdriya T-2 bulk terminal at Mundra • Munera: Additional 2 berths for container 	9	182
	2007-08	<ul style="list-style-type: none"> • Establishment of additional one SPW at Galda by M/s Reliance • Expansion of Pipavav port by Gujarat Pipavav port Ltd • Private jatty at Navlakhi 	10	192
5	2008-09	<ul style="list-style-type: none"> • Establishment of additional 2 SPW at Galda by M/s Reliance 	12	235
6.	2009-10*	<ul style="list-style-type: none"> • Establishment of SPMs at Chogat by Cairn Energy • Deepwater jatty by Caisar at Mundra port 	10	250
			15	265

*: expected; Source : Gujarat Maritime Board

Table 12A : Trends in capacity creation (Million tPA)

Ports	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10*
Mundra (CPL)	17.70	28.20	38.20	38.20	38.20	38.20
Mundra (GMR)	0.24	0.24	0.24	0.24	0.24	0.24
Olha	3.68	3.95	3.98	3.99	3.68	3.98
Pavli	5.66	5.80	5.60	5.50	5.60	5.60
Pipavav (GHL)	6.41	8.41	9.41	14.41	14.41	14.41
Mangalore	14.60	17.05	27.05	27.05	27.05	42.05
Navalachi	3.82	3.82	3.82	4.82	4.82	4.82
Sikka	67.57	57.57	57.57	67.57	104.57	104.57
Portbunder	5.20	5.20	5.20	5.20	5.20	5.20
Vapi	2.17	2.17	2.17	2.17	2.17	2.17
Mukhrana	7.72	7.72	7.72	7.72	7.72	7.72
Jaffabed	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
Dharwad	1.18	1.18	1.18	1.18	1.18	1.18
Bawali	3.25	3.25	3.25	3.25	3.25	3.25
Mandvi	0.32	0.32	0.32	0.32	0.32	0.32
Gogha	0.08	0.06	0.08	0.08	0.08	0.05
Bhagat	0.00	0.00	0.00	0.00	0.00	0.00
Total	169.00	164.00	183.00	193.00	235.00	260.00
*Hyperlink						

2.4.2 MAHARASHTRA

The State has a coastline of about 660 km with 2 major ports viz. Mumbai and Jawahar Lal Nehru and 53 non-major ports. Out of 55 non-major ports only 13 handle cargo. Maharashtra Maritime Board (MMB) is the nodal agency for regular or ancillary development of the State's maritime activities. MMB has taken many policy initiatives for development of port sector which are given in the Box 3.

Box 3-Maharashtra: Policy Initiatives for Port Development

- Development on BOOGT basis
- Developer's selection on MCAU basis or by tender & many investors interested.
- Concession period of 50 years
- Concessional Wharfage
- Government land on lease, & available at market valuation
- Equity participation by Government/MID up to a maximum of 11%
- Road linkage to nearest State Highway to be port 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 MID.

2.4.2.2 Raigarh-Aware and Dighi are ports 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 Raigarh-Aware Port Project has secured Environmental Clearance from Mo Environment & Forests in May 2007 and pre-construction activities as well as validation of some tender documents in progress. Further 3 more ports viz. Redi, Vileydung and Jalgaon are likely to come up shortly - others of intent have been issued to the concerned developers. It is expected these ports to be ready in cargo handling in next 3-4 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
Raigarh-Aware	47.00	127.00
Dighi	5.45	19.15
Jalgaon (Chamanekh Bay)	3.00	10.00
Jalgaon	1.12	2.00
Vileydung	7.50	25.00
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 the last few years and first six months of the current and previous year are given in Table: 13.

Table : 13 Maharashtra: Cargo Handled at Major & Non-Major Ports (MT)

Major/non Major	2006-07	2007-08	2007-08	2008-09(P)	April-September (P)	
					2008-09	2008-10
Major Ports	22.01 (20.7)	27.15 (18.9)	12.62 (16.2)	103.17 (-3.3)	50.61 (2.3)	51.18 (C.7)
Non Major Ports	11.18 (8.1)	11.59 (3.8)	11.36 (1.8)	104.1 (-0.4)	4.84 (1.4)	4.47 (C.3)
All Ports	33.16 (18.3)	38.74 (16.7)	24.24 (14.2)	119.56 (-1.5)	51.45 (4.5)	55.62 (-1.4)

*Figure in brackets represent % change over the corresponding period.

(P) Projections

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 commercial ports of 10 which are trade ports with an average depth of about 2 meters except Panaji (which is the 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 the last few years and first six months of the current and previous year are given in Table: 14.

Table :14 Goa : Trends in Cargo Handled at Major & Non-Major Ports (MT)

Year/Non-Major	2006-07	2007-08	2007-08	2008-09(P)	April-September (P)	
					2008-09	2008-10
Major Ports	31.88 (3.4)	34.29 (8.3)	52.12 (2.3)	47.66 (-11.6)	13.61 (2.4)	15.66 (25.2)
Non-Major Ports	11.78 (20.0)	14.31 (21.7)	12.52 (-15.1)	11.30 (-1.2)	2.17 (0.8)	2.66 (22.4)
All Ports	43.45 (11.1)	48.59 (11.3)	64.64 (-1.2)	59.56 (-1.7)	15.08 (2.1)	18.32 (25.1)

*Figure in brackets represent % change over the corresponding period. (P) Projections; MT Million Tonnes

2.4.4 KARNATAKA

2.4.4.1 Karnataka has a coastline of about 280 kms. At present, there are no major sea port the New Mangalore Port at Mangalore and 10 non-major ports in Karnataka. The ports of Karwar, Belgaum and Mangalore are three 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 few years and first six months of the current and previous year are given in Table: 15.

Table :15 Karnataka:Trends In Cargo Handled at Major & Non-Major Ports (MT)

Major/Non-Major	2005-06	2006-07	2007-08	2008-09(P)	April-September (P)	
					2008-09	2009-10
Major Ports	34.43 (1.6)	32.04 (-7.0)	36.02 (12.4)	36.58 (7.9)	16.43 (2.5)	17.74 (-3.7)
Non-Major Ports	4.12 (17.7)	3.65 (-2.2)	3.00 (35.6)	4.91 (-44.8)	2.04 (11.04)	1.98 (-2.3)
All Ports	38.57 (3.1)	35.80 (0.1)	41.02 (16.4)	41.59 (-7.4)	20.47 (8.0)	19.73 (-3.6)

Figures in bracket represents % 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 km, with one major port at Cochin and 13 other non-major ports. The Vallarpadam Container Terminal Project in Cochin is being promoted via 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 the last few years are that six months average tonnage in Table 16. Port capacity of non major ports in Kerala has increased from 1.126 MT in 2002-03 to 2.126 MT in 2008-09 and estimated at 2.175MT in 2009-10. In Kerala of the 4 non major ports 3, viz. Azhikkal, Devapare (handle more than 90 % of the total non major cargo traffic in the State), and Vizhinjam are handling cargo for the last few years.

Table : 16 Kerala : Trends In Cargo Handled at Major & Non-Major Ports (MT)

Major/Non-Major	2005-06	2006-07	2007-08	2008-09(P)	April-September (P)	
					2008-09	2009-10
Major Ports	13.89 (-1.6)	15.28 (9.9)	15.01 (3.6)	15.59 (-3.7)	7.68 (-2.1)	7.53 (-2.1)
Non-Major Ports	0.14 (75.0)	0.17 (21.4)	0.10 (-1.2)	0.19 (80.0)	0.06 (-37.5)	0.06 (0.0)
All Ports	14.03 (-1.1)	15.45 (10.0)	15.91 (3.1)	16.41 (-3.1)	7.74 (-2.5)	7.60 (-2.1)

Figures in bracket represents % 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 906 km with 9 major ports at Chennai, Ennore, and Tuticorin and 15 non-major ports. Out of 15 non major ports, only five handled cargo. A Port Policy for promoting private investment for the development of major ports in Tamil Nadu has been formulated. Its main objectives are to provide exclusive port facilities for import of Coal/Naphtha/UNatural Gas for shale based thermal power plants, private 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. The trends in the cargo handled in both major and non-major ports of the State during the last few years and first six months of the current and previous year are given in Table 17.

Table 17 Tamil Nadu: Trends in Cargo Handled at Major & Non-Major Ports (MT)

Major/Non-Major	2005-06	2006-07	2007-08	2008-09	April-September (P)	
					2008-09	2009-10
Major Ports	73.59 (6.4)	82.13 (11.7)	90.20 (9.8)	81.00 (0.9)	47.37 (7.7)	47.57 (0.4)
Non-Major Ports	0.71 (-16.5)	0.81 (-14.1)	0.89 (10.2)	0.90 (-1.1)	0.42 (5.0)	0.57 (36.0)
All Ports	74.21 (6.2)	82.94 (11.7)	91.09 (9.8)	81.90 (0.9)	47.79 (7.7)	48.11 (0.7)

Figures in bracket shows % increase/decrease over the previous year /period (P) Provisional; MT Million Tonnes

24.6.7 Sethu Samudram Canal Project

24.6.2.1 The project envisaged creation of a land-way navigation channel, connecting the Gulf of Mannar to the Bay of Bengal through a dredged channel on either side of Palk Bay. On setting from Tuticorin Port, crossing Adam's Bridge and passing through Palk Bay & Palk Strait, the project would enter Bay of Bengal.

24.6.2.2 The project is expected to reduce average distance by 335 Nautical Miles and reduce sailing time for the vessels operating between east and west coast of the country by 22.50 Hrs. The total cost of the project is estimated at Rs. 2427 crore. N.C.O.H. has been appointed as a nodal agency for implementing the project. The project work was inaugurated by Honorable Prime Minister on 2nd of July 2005.

24.6.2.3 The dredging work on Adam's Bridge area may commence in December 2006. The quantity dredged upto September 17, 2007 is 11.80 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 in a contract in Palk Strait involving a contract of 13.57 km with an estimated quantity to be dredged at 13.50 million cubic metres. The quantity dredged upto 30.09.2009 at Palk shall be 40.47 million cubic metres (Hon'ble quantity).

24.7 ANDHRA PRADESH

24.7.1 The State is bestowed with a coastline of about 378 kms. There is one major port viz. Visakhapatnam and 2 non-major ports in Andhra Pradesh.

24.7.2 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 179 million tonnes by 2020. As large investments are required for capacity creation, the State Government policy encourages the participation of private sector in port development. The status of centralized ports & its private investment in Andhra Pradesh Ports is as follows:

Status of Privatized Ports

- (i) Kakrada Deep Water Port was privatized in March 1999 to M/S ISPI on BOOT terms for 20 years.
- (ii) Krishnapatnam Port was privatized in Jan 1997 on BOOT terms to M/S Krishnapatnam Port Company Ltd.(KAPCL) for 30 years. Reward agreement was signed on 17-9-2004. Norwegian Engineering Company has taken 74% equity stake in KAPCL and NATEC 26%.
- (iii) Gangavaram Port was privatized in August, 2003 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 proposed port projects are (i) Gangavaram Port (Rs.2000 crore), (ii) Krishnapatnam Port (Rs.850 crore), and (iii) Kakrada Deep Water Port Expansion (Rs.230 crore).

The projects under pipeline are (i) Madhapuram Port (Rs.1000 crore); and (ii) Nizampetam Port (Rs.1000 crore).

24.7.3 The trends in the cargo handled at both major and non-major ports of the State during the last few years and first six months of the current and previous year are given in Table: 18.

Table:18 Andhra Pradesh: Trends in Cargo Handled at Major & Non-Major Ports(MT)

Major/Non-Major	2004-05	2006-07	2007-08	2008-09	April-September (P)	
					2008-09	2009-10
Major Ports	55.80 (1.3)	56.39 (1.1)	54.52 (14.6)	63.91 (-1.1)	33.14 (-0.3)	33.05 (-0.3)
Non-Major Ports	17.87 (17.3)	18.61 (5.3)	18.24 (3.7)	18.90 (-2.0)	17.76 (-3.5)	17.77 (34.1)
All Ports	73.47 (13.8)	75.00 (2.1)	83.89 (11.9)	82.81 (-1.3)	44.90 (4.9)	48.82 (8.7)

Figures in bracket represent percentage change over the corresponding period

IP: Provisional; MT Million Tonnes

2.4.8 ORISSA

2.4.8.1 Orissa has about 170 kms coastline with one major port at Paradip and two non-major ports at Gopalpur and Chittagong which are being developed by private companies. In Orissa the Department of Commerce & Transport is the nodal department for the port activities of the State. There has been no cargo traffic during the last four years at non-major ports of Orissa.

2.4.8.2 The trends in the cargo handled at both major and non-major ports of the State during the last few years and first six months of the current and previous year are given in Table 19.

Table : 19 Orissa : Trends in Cargo Handled at Major & Non-Major Ports (MT)

Major/Non-Major	2005-06	2006-07	2007-08	2008-09	April-September (P)	
					2008-09	2009-10
Major Ports	23.1 (10.0)	38.52 (16.3)	42.24 (10.2)	45.41 (9.4)	52.52 (8.5)	26.74 (24.0)
Non-Major Ports	-	-	0.30	0.20 (-33.3)	0.13 (0.0)	0.15 (0.0)
All Ports	23.11 (10.0)	38.79 (16.3)	42.74 (11.0)	48.81 (9.1)	51.71 (9.2)	26.28 (23.9)

Figures in bracket represents percentage change w.r.t. to previous year period (P) Provisional

2.4.9 WEST BENGAL

2.4.9.1 The State of West Bengal has a coastline of about 108 kms which has two Docks at Kollam 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 the last few years and first six months of the current and previous year are given in Table 20.

Table : 20 West Bengal-Trends in Cargo Handled at Major & Non-Major Ports (MT)

Major/Non-Major	2005-06	2006-07	2007-08	2008-09	April-September (P)	
					2008-09	2009-10
Major Ports	53.14 (15.0)	55.05 (3.6)	57.32 (4.1)	51.05 (-5.7)	59.62 (0.4)	22.20 (-13.7)
Non-Major Ports	-	-	-	-	-	-
All Ports	53.14 (15.0)	55.05 (3.6)	57.32 (4.1)	54.05 (-5.7)	56.85 (0.4)	23.20 (-13.7)

Figures in bracket represents percentage change w.r.t. to 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 the last few years and first six months of the current and previous year are given in Table: 21.

2.4.10.2 Presently, the cargo handling capacity of all Puducherry is around 200,000 tonnes of cargo per annum. In January 2006, 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 is expected to be completed soon.

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

	2005-06	2006-07	2007-08	2008-09(P)	April-September	
					2008-09	2009-10
Andaman & Nicobar Islands	0.92	1.00	2.16	2.01	1.09	1.00
Lakshadweep	0.03	0.03	0.03	0.03	0.01	0.01*
Puducherry	0.10	0.03	0.01	0.04	0.03	0.16
Total						

III. EFFICIENCY INDICATORS OF MAJOR PORTS

3.1 Major ports have improved their efficiency of operations as reflected in select physical performance indicators over the last several years. Some key indicators of physical performance for select years and for current half year in comparison with corresponding period of previous year are elaborated in this section.

3.2 Average Turn Around 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 8.10 days in 1990-91 to 3.85 days in 2008-09. However, during April-September 2008, the TRT at 4.4 was slightly higher compared 4.1 days in the corresponding period of the last year with a range between 1.84 days at Jawahar Lal Nehru (JLN) Port to 10.78 at Paradip Port. Amongst the 12 major ports improvement in TRT during April-September 2007-10 as compared to April-September 2008-09 is discernible in case of Kolkata Dock System, Ennore, Chennai, Tuticorin, J L. Nehru, Mumbai and Kandla. Port-wise TRT for select years are given in Table 22. The path of turn round time at major ports for select years since 1990-91 to 2008-09 and April-September 2008-10 is presented in the Chart IX.

Chart IX -Major Ports: Average Turn Round Time

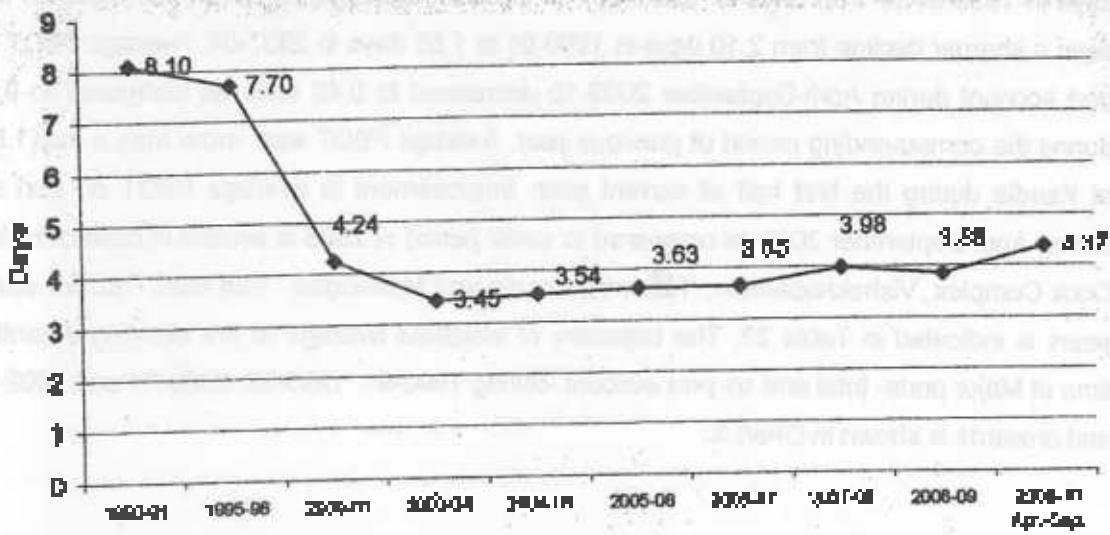


Table 22: Average Turn Round Time (days)

Port	1990-91	2000-01	2005-07	2007-08	2008-09 (P)	April-September	
						2008-09	2008-10(P)
1	2	9	4	5	6	7	8
Kolkata D.G	11.00	5.60	4.30	6.45	4.60	4.75	4.62
Mysore D.G	6.47	3.87	3.85	4.70	4.21	3.78	3.00
Bengaluru	0.40	4.08	3.54	3.54	4.78	5.60	10.76
Vizianagaram	7.07	3.71	3.66	3.91	3.65	4.24	6.08
Brahmapuram	-	-	-	-	-	-	-
Bengaluru	-	-	-	-	-	-	-
Chennai	7.20	5.83	3.38	4.55	4.10	2.55	3.14
Tuticorin	4.70	4.00	3.67	3.82	3.89	3.50	2.07
Cochin	4.00	3.11	2.17	1.91	2.14	2.73	2.42
New Mangalore	4.88	2.89	2.14	3.21	3.00	3.10	2.42
Mumbai	9.40	4.26	6.10	6.24	3.61	3.78	4.84
JN Port	-	2.21	1.49	1.65	1.50	2.30	1.24
Mumba	9.80	5.20	4.58	4.67	4.73	6.34	4.59
Kandla	13.00	4.72	3.16	3.17	5.20	3.70	4.56
AI Port	8.10	4.24	3.35	3.95	3.85	4.10	4.57

(continued)

* Relative to dry bulk cargo to WCOHF/H.Coh/ and Emtc No. 10 C.I.C (March)

Sources: 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 has declined from 2.2 days in 1990-91 to 1.56 days in 2007-08. In contrast, average PBDT on port account has seen a sharper decline from 2.10 days in 1990-91 to 1.56 days in 2007-08. Average PBDT on port account during April-September 2009-10 decreased to 0.42 days as compared to 0.52 during the corresponding period of previous year. Average PBDT was more than a day(1.64) at Kandla during the first half of current year. Interestingly, in average PBDT on port account April-September 2009-10 as compared to same period of 2008 is evident in case of Haldia Dock Complex, Vizianagaram, Tuticorin, Cochin and Mormugao. Port-wise PBDT for selected years is indicated in Table 23. 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 and 2005-06 and onwards is shown in Chart X.

Chart X-Major Ports: Average Pre-Berthing Detention

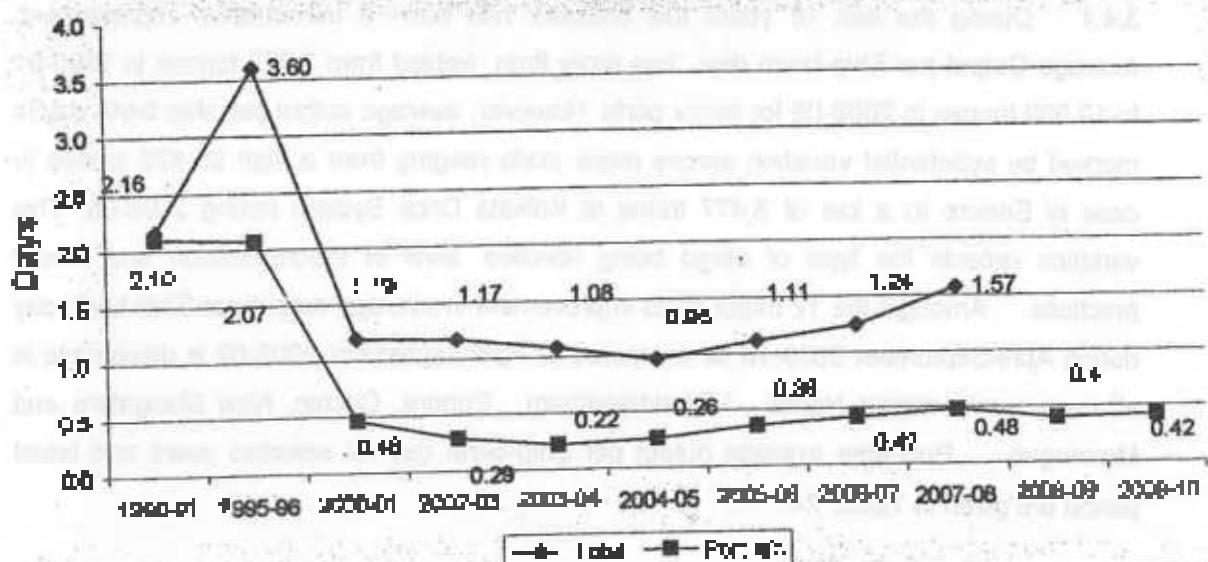


Table 23 : Average Pre-Berthing Detention(Days)

Port	1990-91	2000-01	2006-07	2007-08	2008- 09*	April-September	
						2008-09	2009-10*
1	2	3	4	5	6	7	8
Kolkata (B)	0.90	0.84	0.43	0.58	0.05	0.04	0.06
Haldiram (C)	1.98	0.91	1.02	2.86	1.02	1.37	0.53
Paradip	1.59	1.41	1.04	2.87	0.06	0.06	0.06
Vishakhapatnam	1.83	0.79	0.83	1.10	0.18	0.38	0.18
Ennore			0.19	0.30	0.03	0.03	0.04
Chennai	2.10	2.45	0.58	1.56	0.04	0.04	0.04
Tiruvannamalai	0.90	1.40	1.24	1.24	0.14	0.24	0.16
Govt.	0.69	0.74	0.60	0.80	0.05	0.17	0.03
New Mangalore	0.79	0.77	0.64	0.63	0.04	0.05	0.05
Mormugao**	2.51	1.32	2.53	2.21	0.48	1.14	0.47
J.L. Nehru		0.67	0.58	0.83	0.41	0.26	0.51
Mumbai	2.40	1.20	1.00	0.98	0.30	0.31	0.24
Kandla	4.40	1.51	2.60	2.64	1.17	1.08	1.04
All Ports	2.16	1.18	1.20	1.55	0.40	0.52	0.47

(B) Fertilizers & Fertilizer Co. Ltd.; (C) Coal India Ltd.; *Refers to Port Account Only; Source: Major Ports of Indian Ports Association (IPA); **Refers to dry bulk cargo for MOHP(Mech.) and Berth No. 10 & 11 (Mech.).

3.4 Average Output Per Ship-Berth-day

3.4.1 During the last 10 years this indicator has seen a tremendous improvement. Average Output per Ship-Berth-day have more than tripled from 9,372 tonnes in 1993-94 to 31,960 tonnes in 2008-09 for major ports. However average output per ship berth day is marked by substantial variation across major ports ranging from a high 28,126 tonnes in case of Ernakulam to a low of 9,477 tonnes at Kollam's Back System during 2008-09. 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 April-September 2009-10 as compared to April-September 2008-09 is discernible in all major ports except Haldia, Vizhinjam, Ennore, Cochin, New Mangalore and Mormugao. Per-ports average output per Ship-Berth-day for selected years and latest period are given in Table 24.

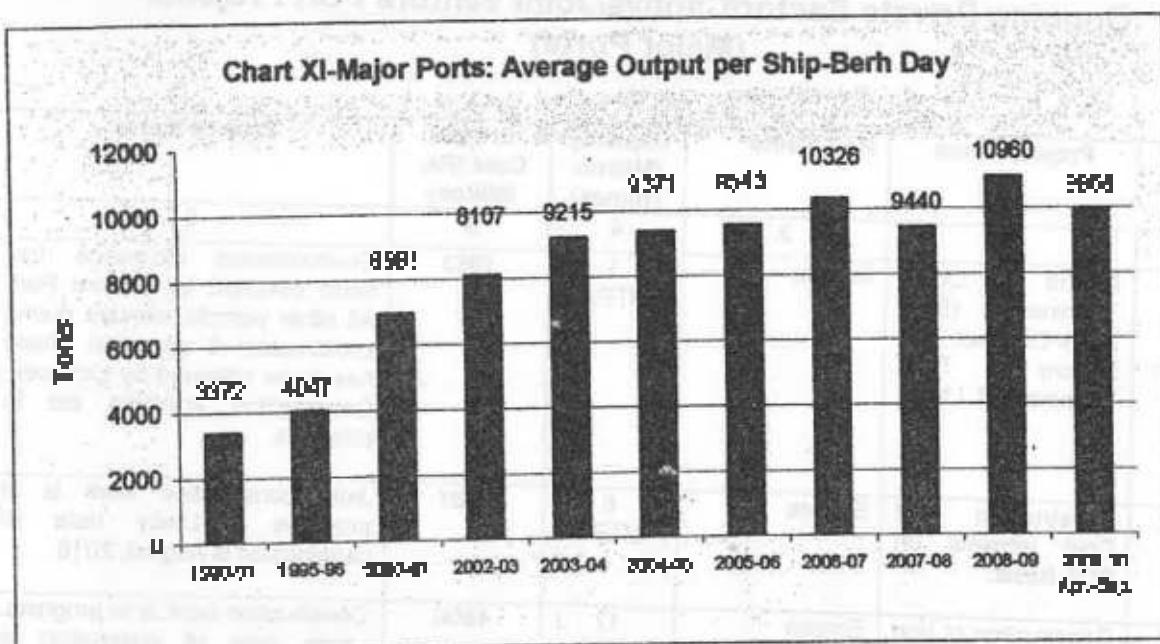
Table 24 : Average Output per Ship-Berth-Day (Tonnes)

Port	1993-94	2000-01	2003-04	2007-08	2008-09 (P ^a)	April-September	
						2008-09	2009-10(P ^b)
1	2	3	4	5	6	7	8
Visakhapatnam	5602	2205	4482	3183	3477	2621	2053
Haldia UDCL	5853	6284	8753	8253	7543	3241	3313
Paradeep	4163	8505	11795	11181	12835	1164	12725
Vizhinjam	5225	5789	30266	10213	1177	10761	10762
Ennore	-	-	2513	36280	28422	29693	21681
Cochin	3312	8977	10160	10392	10693	1059	12283
Tuticorin	2130	2882	3054	3774	5211	6766	
Salem	3714	8149	2252	10861	10417	10207	9618
New Mangalore	4212	12132	13056	12021	13642	12611	12755
Mormugao ^c	10426	12136	17190	10352	20797	16090	15022
J. N. Nehru	-	8293	15727	15408	22777	21654	24157
Wardha	2310	4243	4657	4519	5190	5840	6959
Kandla	4417	6030	9643	1216	12008	13046	13032
All Ports	3652	8561	10223	8110	10910	9513	9950

^{a)} Provisions - 100% LCL cargo for WCO Mumbai and East Ku 10 & 11 Month;

^{b)} 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 XI.



IV. PRIVATE SECTOR/CAPTIVE/Joint Sector Port Projects

4.1 Brief details of the approved Private Sector/Captive/Joint Sector Port Projects and a list of these projects under consideration as on 20.09.2008 are brought out in Appendix-I, Appendix-II in respect of Major Ports and in Appendix-III, Appendix-IV for Non-Major Ports.

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

Sr. No.	Project Name	Port Name	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
1.	Madras Liquid Terminal (BOT) - 1st License Ennore Bulk Terminal Pvt. Ltd.	Ennore	3 MTPA	1963	Environmental clearance has been obtained by Ennore Port. All other permits relevant during construction & operation phase has to be obtained by Licensee. Construction activities are in progress.
2.	Construction of Oil Terminal in DCT Basin.	Ennore	8 MTPA	3201	Jetty construction work is in progress. Likely date of commissioning is August, 2010.
3.	Construction of Oil Terminal at DCT Basin	Ennore	12 MTPA	4800	Construction work is in progress. Likely date of completion is August, 2010.
4.	Construction of two new Oil storage Depots, berths & Development of Container Terminal berths on DCT basin in Mumbai Harbour.	Mumbai Port	0.80 MTPA	143 III	R NRI ICTPL (BOT) operator took over port land and commencement work on 15x5x300 LFL contract awarded by DCT operator on 2.12.08. Jack up platform for civil work has been mobilized by EPC contractor. Fabrication of Gantry is in progress. Work order for dredging work issued on 1.4.09. Pre-dredging survey work completed. Jet probing is in progress. The contractor has mobilized TSHD for dredging and dredging at berth pockets is in progress. Filling of Victoria basin commenced from 04.05.09.
5.	Development, Operation, management and maintenance of Berth No. 11 & 12 & Container Terminal (BOT Under ABB Industries)	Kandla Port	7.25 MTPA	4492 (Investment of Rs. 11 180 and that of ABB 483 is 3205)	The 1 st phase of Container Terminal # Berth No. 11 commenced on 10.03.2007 (achieved) 2 nd Phase is expected to complete in March, 2009.
6.	Phase II : Deepening of entrance channel and turning circle	Vizhinjam	1.2 MTPA	750	The process of filling land for deepening has been initiated.

	from 11ms. To 12.5 ms. Draft.				
7.	Development of Berth No. 7 for handling coal cargo on DBFOT basis	Murugan	481	7520	RPF revised Final pre bid meeting held
8.	Development & Operation of Inland Container Transhipment Terminal (ICTT) at Vizhinjam (BOT basis by Vizhinjam Port Way Terminal Pvt. Ltd A subsidiary of W.M. Graue Ports International)	Cochin	Capacity addition of 12.5 to 40 MMT in phases	21180	<p>Environmental Clearance for the Phase - I Development of Terminal Facilities in the ICTT was issued by MoE&F on 05/12/2006. Cochin Port had issued notice on 27/05/2007 for the Preliminary Design of ICTT furnished by Vizhinjam Gateway Terminal Pvt Ltd.</p> <p>CT have commenced construction of 800m berth and development of container handling area for Phase-I development of the project on 15.12.2007 and physical progress achieved is 75% against the target of 100%. The delivery is scheduled for commissioning by March 2010.</p> <p>National Highway connectivity (four lane) project is executed through National Highway Authority of India (NHAI). Reclamation work for embankment formation is completed. NHAI awarded the contract for road and bridge construction on 18-04-2007, and work commenced on 10-05-2007. Two Lane NH Connectivity has been scheduled for commissioning by 31.10.2010. Physical progress is 45% against the target of 56%. Work was delayed due to delay in land acquisition. Acquisition of land was completed in July 2008.</p> <p>The Rail connectivity project is being implemented through Indian Railways by funding from the Deptt. of Shipping and RERA is the execution agency. Acquisition of land has been completed. RERA awarded the contract for construction on 21-02-2007 and the construction activities commence on 22-02-2007. Physical progress is</p>

					US\$ which is as per target Reachieved date of completion is 31.10.2010
					Regarding Capital dredging for porting approach channels and berth which required for safe maneuvering of container vessels of 2000+ TEU capacity with 14.5m draft, is executed by Cochin Port Trust with backing support from Govt of India. Work commenced on 11.2.2006. Physical work is in 40.5%. Scheduled date of completion is 31.12.2010.
B	Construction of Coal Jetty by Ma. Usul Power Corporation Ltd. (UCL) Erstwhile NECL	New Brighton	2.00 MTW	2300	Work started at site and is in progress. Filling work of jetty is completed. Dredging and levelling completed. Filling work at Masteraling yard is in progress. About 90% of work completed. The inauguration made by the PM on 30.09.2009 is about 75% crisis. Anticipated date of completion is December 2010.

No information from Kollam Port, Ennore, Mamugas Mandi & Chittor Port has not been received.
Latest available information is given in respect of these ports
Sach Major Ports

**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 Deep Draft Iron Ore berths on BOT basis.	Pondip	10 MTPA	5014	Concession agreement has been signed on 17/09/09 and activities are likely to commence from January, 2010.
2.	Development of Deep Draft Coal Berth on BOT basis	Pondip	10 MTPA	4750..	The initial e-subjudice LOA has been issued to River Concordum subject to the outcome of the case in the High Court of Odisha
3.	Development of Multi-Purpose berths to handle clean cargo including container on BOT basis	Pondip	6 MTPA	2873	10 Nos of RFP applications have been received and one under Auspices of P-PAC memo with RFP documents have been submitted to Ministry on 28.3.09 for appraisal.
4.	Construction of Container Terminal (CJL- Phase I)	Borivali Port	16 MTPA	14070	22 Applications submitted their applications. 5 Applicants were shortlisted with the approval of the Board of Directors of EPL on 27.06.2008. The draft RFP document and draft Concession Agreement which issued to short-listed bidders and the Pre-Bid Meeting was held on 27.07.2008 wherein relevant documents of the short listed bidders have been submitted to Ministry on 19.07.2008 for establishing Bidding Reference. The P-PAC memo along with RFP and draft Concession Agreement were forwarded to Ministry for obtaining response of P-PAC on 29.08.2008. Eight WR Petitions have been filed at the High Court of Madras against Ministry of Shipping, Road Transport & Highways, Ministry of Finance, Ministry of Law & Justice and EPL questioning the relevance and basis of the shortlisting of the Bidders. No interim stay has been granted by the High Court of Madras.
5.	Construction of LPG Terminal (Joint Venture)	Chennai Port	5 MTPA	24000	In Principle approval for the proposal for development of LPG berth through joint venture with OCL/LPCL awarded by the Ministry on 15.7.2006

					Proposal implementation schedule is switched from EXC
6.	Construction of general cargo berths	Ennore Port	1100		Environmental Clearance for the proposed extended application to TnPCB submitted for CR2 clearance and EXC. Consulting work is in progress for berth constructor.
7.	4 th Container Terminal & Marine Chemical Terminal (UCL) Area	Jawaharlal Nehru Port	2.0 MTPA	41000 Phase - I 28000 Phase - II	Feasibility Report was submitted by Consultant in June 2003. UCI was invited in June 09. AII series responded to EDI. MoA Adviser Bank was appointed as Advisor. The Adviser after studying various options for the project, considering law & financial aspects, has finally been approached to take up the project on BOT basis. Draft RFQ has been approved by the Ministry on 30.01.06. Soil investigation work is completed. The port has invited UCL and initial conference was held on 15 th April 2006. The Application Due date announced on 30/06/2006 has been extended.
8.	Development of standard container handling facility with a quay length of 330 m. to the north of UPLT	Jawaharlal Nehru	...	EXC	MoA Adya Bank has been appointed as Adviser. They have submitted Feasibility Report. Port has shortlisted two parties based on the RFQ submission. The PPPAC memo has been sent to Ministry on 12.03.06. Approval was sent to Ministry for its approval. The port has replied to the Ministry acknowledging no PPPAC from time to time. Ministry via letter on 14.09.06 asked port to discharge inc. tender and call fresh bids.
9.	Development of 1 India Dock and 2 India Docks as a dry bulk terminal with private sector participation on BOT basis for 20 years.	Number Port	4 MTPA	450	The Board has approved in the meeting held on 30.08.06 private sector participation for development and operation on UCL basis of 1 India Dock & 2 India Docks as dry bulk handling terminal RFQ invited on 02.07.2006. Pre-bid meeting held on 07.08.2006. Submission of RFQ is due on 08.10.2006.
10.	Development of berth nos. 10/11 India Dock and 12 India Docks as commercial cargo terminal on BOT basis for 20 years.	Vizhinjam Port		330	The Board has approved in the meeting held on 30.08.2006 private sector participation for development and operation on BOT basis of 10/11 India Dock & 12 India Dock commercial cargo terminal. RFQ invited on 02.07.2006. Pre-bid meeting held on 07.08.2006. Submission of RFQ is due on

					CD COCO.
1.	New Cruise Terminal near Gateway of India.	Mumbai Port		750K	Final EPC from M/s Zeeva Marine Consultant and Services received on 14.12.2009. Clearance sought on 21.10.2009 and 13.12.2009 respectively for the project. Navy has objected for the location of the Cruise Terminal on security ground. Meeting is being arranged with Navy Authorities to sort out the matter.
2.	Construction of 13" x 16" cargo berths	Kandla Port	2 MTPA	4M	11 tenders have been pre-qualified for the project. PFRB in its meeting held on 27.12.2009 has given final clearance in the proposal. SOEA approval is to be obtained. Abundant proposal for getting sec. atty clearance in respect of 11 bidders from Ministry of Home has been sent to MOEF&GH on 12.8.2009. The transaction agreement is being modified as per requirement MCA by Transaction Advisor. Export Tax has been approved by TIEP on 17.10.2009. A potential meeting PFRB clearance has been submitted to Ministry on 23.12.2009. The proposal was declared fit and discussed at PFRB meeting held on 20.3.2010. The PFR & SOEA which submitted for approval in its meeting dated 4.9.2009
3.	Creation of berthing and related facilities off Tokra near Tura (Ornate Kandla Creek)	Kandla Port	12 MTPA	1820	The work for yardarm installation has been completed. A proposal seeking its prior approval from PFRB has been sent to MoE. Ministry has directed to forward the letter on DPL basis on 25.2.2010. MoE Abacus Legal Group has been appointed as Transaction Advisor. RFO document has been prepared in-house and NIT issued on 11.8.09 and same are under scrutiny.
4.	Setting up of Warehouses for Oil handling operation at Saptakholi	New Mangalore	3 MTPA (Capacity of Jetty)	2500	Bids were opened on 15.09.2009 and the Letter of Award has been issued on 23 rd September 2009 to the selected Bidder M/s SAIL Ingolstadt Limited. Appointment notice issued.
5.	Construction and development of Container Terminals BDT zone	New Mangalore	NA	2780	An intimation by the Ministry "Expression of interest" was issued keeping last date for submission of EOI as 01.11.2009. Till now 31.10.2009. Licit parties have submitted their EOI. Draft Non-Bidder Report has been prepared. RFO documents issued from 20 th July 2009 to 6 th September 2009. Prequalification

					Comments held on 18 th August,2009 and reply to the question may also be annexed. The application for RFP received from 5 holding on due date for submission i.e. 30.09.2009.
16.	Development of water front & back up land for providing berthing facilities on NW Port (BOT Basis)	Visakhapatnam	NA	Yest decision decided	RFP proposed to invite bids for open competition under Land Management Guidelines instead of EOI scheme Approved at the Ministry has been requested in this regard vide letter No. 210/BUNKPF/06-07/CBECITS dated 15.02.2007. Ministry vide their letter dated 31st July, 2005 stated that committee had been constituted under the Chairmanship of Chief Minister, Kolkata Port Trust to review the existing Land Policy Guidelines. Accordingly, Circular has been directed to send the proposal of what would be the new Land Policy Guidelines once in existence.
17.	Development of WO-6 berth in Inner Harbour for Multi purposes or CBFCOT basis	Visakhapatnam	2.1 MTPA	145	RFP issued on 12.08.2009. Due date for submission of RFP extended to 30.10.2009. Revised draft Concession Agreement was sent to Ministry on 16.09.2009.
18.	Development of EO-10 berth in Inner Harbour for handling Liquid Carriers & Chemicals on DBFCOT Basis.	Visakhapatnam	1.80 MTPA	554	RFP issued on 20.07.2009. Revised draft Concession Agreement was sent to Ministry on 16.09.2009. Circular dated 25.08.2009, which is under evaluation.
19.	Mechanized Coal Handling Facilities at General cum bulk cargo Berth P. Godavari Harbour (BOT basis).	Visakhapatnam	2.5 MTPA	400H	RFP issued on 18.07.2009. Public meeting was held on 31.08.2010 Environmental Clearance received from Ministry of Environment & Forest vide In no.10-25102044A/II dated 01.08.2009. Revised RFP issued along with clarifications sought by Ministry was sent on 05.05.2010 TAWP issued to fix a date for joint hearing for finalization of RFP.
20.	Installation of mechanized un-loading facilities for berths of EO-7 in Inner Harbour on DBFCOT basis	Visakhapatnam	4.0 MTPA	1805	RFP issued on 18.06.2009. Pre-application conference was held on 01.07.2009. Objections sought by the applicants are being heard.
21.	Development of WO-7 berth Industrial multi usage facilities in inner harbour on DBFCOT basis	Visakhapatnam	6.93 MTPA	2286	RFP issued on 21.8.2009 with due date of submission on 21.11.2009. A Circular memo with draft RFP, concession agreement and TEPR submitted to the Ministry.

22.	Construction of 100000 tonne with mechanised handling facility at Inner Harbour at DIFCIL site	Vesselport team	1.7 MTPA	2030	RPO issued on 21.3.2006 with letter date of submission on 12.1.2006. SFCCB memo with draft PPP concession agreement and TPA submitted to the Ministry
23.	Development of EC-1A berths on south side of east Gassy in IIPR liability on DEPOT basis	Vesselport team	8 MTPA	2024	MU issued on 20.9.2009. Affidavit with regard to non-compliance of health issued on 12.2.02. SFCCB memo with draft RPA, concession Agreement and L/R submitted to the Ministry
24.	Development of additional 100000 tonne of Breakwater.	Ministry	...	2030	The DPP is already entrusted to the Corporation NSA in consortium with M/s. WIR PROJECT KARACHI and they have submitted the inception report. The final report will be submitted by June 2008.
25.	Construction of Two additional Berths at Vacco Bay	Ministry	5.0 MTPA	2021	The Ministry has been informed that the Port prosector is soon to tender for appointment of consultant for preparation of RPA and Invited bidders for appointing consultant for preparation of feasibility report.
26.	Setting up of an International Bunkering Terminal.	Corporation	5 MTPA	2020	In principle approval for establishing an International Bunkering Terminal at Ocean Port under lease system was received from the Dept. of Shipping on May, 2004 The Port has invited and received RFI twice for the Bunkering Terminal Project. During the interaction with the prospective operator they have informed that their business is in the procurement, storage and supply of bunkers and they are not having expertise in the construction and operation of the terminal building for the receipt of bunker vessels. Their general corporation was that Port should provide the terminal facilities and the operator would provide storage and supply business. It was then proposed that the terminal facilities to be constructed with the internal resources of the Port and the same available on lease basis to the operator for establishment and operation of the bunkering business. As such the original proposal of establishing a Bunkering Terminal under PPP model has been shelved. In this connection, Indian Ports

					<p>Approved by the Government for Preparation of Feasibility Report for Development of a Multi-user Liquid Terminal at Puthiyappoon SEZ under Cochin Port. IPA have submitted the final report on 24/9/09. Tenders for appointing a Transaction Adviser for Project development were invited on 6.2.09 from the firms registered w/ the dept. of economic affairs (I)S. tenders went to Mr. Lst. Mariana has been appointed as Transaction Adviser (TA) for Project Development on 20.2.2009. All C's on DEFOR task were invited on 21.3.2009, being the due date as on 27.3.2009. The applications received from 6 firms are under scrutiny by the TA.</p>
27.	Setting up of an International Oil Gas Terminal at Cochin (36 ml Venture through 40%)	Cochin	-	₹750/-	<p>Committee has finalised the final Feasibility Report and Business plan on 31.3.2009. Mr. Feedback Venkatesh Ed.Ltd. Mariana was appointed as Transaction Adviser on 07.4.2009 and they have commenced the assignment on 06.5.2009. Application seeking prior Environmental Clearance for the project has been submitted to the MoEF&F on 5.5.09. Proposal seeking "in Principal" approval of PPPAC concerning the PPA/C documents duly prepared by the Transaction Adviser has been submitted to the Ministry on 24.7.09.</p>
28.	Setting up of LNG Regassification Terminal at Puthiyappoon by MRG Petronet LNG Ltd. on lease basis	Cochin	Initial 2.5 Subsequent 2 ml LNG	₹3000/-	<p>Land development work has been completed by PL Construction of Boundary wall by LNG terminal and site grading work are in progress. 7 firms have been shortlisted for the small cluster of 2 nos. LNG tanks of 1.00 BBL to 1.75 BBL cum capacity. PL has awarded the lumpsum EPC contract for the storage tanks to Ms. IHI Japan. The EPC contract with Ms. IHI Japan has been signed on 07.10.2009. Letter of intent has been issued for EPC contract for regassification package and for marine works. The Concession Agreement between Cochin Port Trust and MRG PL has been executed on 12.3.09. EPC contract for storage tanks with Ms. IHI Japan has been signed on 07.03.2009 and the work is in progress. Letter of Acceptance for Registration Package was issued</p>

					x M/s GTCI Overseas Corporation Ltd. Letter on 26.10.2008 and the EPC contract has been signed on 07.02.2009. Letter of Acceptance by Wharf Facility has been issued to M/s. Aditya Infrastructure Ltd. On 22.07.2009. -CII for Measurement Infrastructure works at Ad-Industrial Building. Occupation health Centre Work v/s from prospective bidders have been received and the evaluation of EO is under progress. Exp. Date of completion - 30/12.
21.	Development of Special Container Terminal on BOT basis	Chennai	5 Lakh TPA	491/8	RFP bids were received from four qualified applicants and Technical bids opened on 7-11-2008. Short Reasons were obtained from the bidders. Price bid opening deferred till 10-12-08, as advised by Ministry pending security clearance for bidders.
22.	Conversion of berth No. 8 as quay line terminal to DCT berths	Kochi	7.5 MTPA	3/22	RFP meeting held on 13/10 and approved received on 21.10.08 for the project. RFP document will be issued to the two quay line berths after getting approval from the Ministry. Approval of Ministry is awaited to include M/s PEA & CIAL for participation in the bidding process.
23.	Development of Outer Harbour Construction of 6 Berths on BOT basis	Kochi	22 MTPA	3163	Work order issued to M/s NIO, Kochi on 17.5.08 for the preparation of EIA Study Report. Work is in progress. In principle sanction for the project received from the Ministry on 26.2.08. Work order issued to M/s PCL for the preparation of DTR on 12.5.08.
24.	Construction of North Cargo Berth - II on BOT basis	Tuticorin	6.3 MTPA	490	Technical Economic Feasibility Report is being prepared by IITR which is expected to be ready by end of May, 2009. Preparation of RFP, RFQ & MCA documents has been awarded to M/s PCL on 5.5.08.

Note: Latest information from Kollam, malabar, Ennore, Visakhapatnam, Kandla & Chennal Ports has not been received. Appropriate information is given in respect of these ports.

Source: Major Ports

Project Name	Location	Capacity	Owner	Completion Status	Notes
Ennore Container Terminal	Ennore	1000 TEU	M/s. ECT	Completed	Under operation
Visakhapatnam Container Terminal	Vizag	1000 TEU	M/s. VCT	Completed	Under operation
Kollam Container Terminal	Kollam	1000 TEU	M/s. KCT	Completed	Under operation

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

SL No	Project Name	State/ Nitiya Board	Capacity (Million Tonnes)	Project Cost (Rs. M/RS.)	Project Status
1	2	3	4	5	6
1.	Development of Kakinada Port (BOOT)	Kakinada Port Authority	4	3500	Construction work is under progress. Work expected to be completed by June 2008
2.	Kakinada Anchorage Port	Kakinada A.P.	0.50 MT	400	In progress. Likely date of completion is March, 2008
3.	Kakinada Deep Water Port Project (PPP)	Kakinada Deep Water Port, A.P.	0.50 MT	800	Design completed
4.	Rewa Port Project (Captive JvH)	Rewa port, A.P.	2.10 MT		In progress. Likely date of completion is March, 2008
5.	Gangavaram Port (PPP-BOOT)	Gangavaram, A.P.		6000	In progress. Likely date of completion is August, 2008
6.	Kurnool Port (PPP-BOOT)	Kurnool, A.P.		1000	In progress. Likely date of completion is August, 2008
7.	Vizianagaram Port (PPP-BOOT)	Vizianagaram, A.P.			In progress. Likely date of completion is March, 2012
8.	Machilipatnam Port (PPP-BOOT)	Machilipatnam, A.P.			In progress. Likely date of completion is March, 2012
9.	Development of all weather and Multi user port on BOOST basis by Adani Amara JvH	Andhra Pradesh	0.75MT to 10MT port in South Andhra with total 20 Mtrs. 44.7 MTAA; 17 WTEUs; container	42000	Shore holding plan & approvals. Environmental clearance issued. Anticipated date of completion is 2010
10.	Development of all weather and Multi user Port on BOOST basis by MS Belgaum Micro Project Ltd.	Karnataka	6 WTPA in phases 18.5 MTAA (D 20 Mtrs) Co. later	8000	Detailed engineering design under way. Anticipated date of completion is 2008
11.	Thiruvanmanapuram Corporation JvH	Tamil Nadu	9.3	6000	Construction to be commenced
12.	Coal Handling Jetty/Cogeneration Power Co. Ltd.	Tamil Nadu	3.5	3200	Detailed project report under preparation
13.	Salemengalur Drydock & Shipbuilding Pvt Ltd	Tamil Nadu	Ship building	1000	Detailed project report under preparation
14.	Tiruchengode Port/ Trade Port & Power Co. Pvt. Ltd.	Tamil Nadu	20	7500	Detailed project report under preparation
15.	Kattupalli Port/ Shipbuilding Ltd	Tamil Nadu	Ship building	12000	Conceptual work will commence soon

Sl. No	Project Name	State/ Carribean Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
16.	Warappad Port Indian Gas Ltd.	Tamil Nadu	-	10000	Detailed project review Under preparation
17.	Construction of Madam City Dock for Ship repair (by ADOT Board by Three Circle Contractors, Kovalam)	DL (Daman & Di.)		230	The concerned party has withdrawn from the project. Hence L.T. Admin of Daman and Di has closed the process of Madam City Dock for Ship Repair Yard at Madam in Diu district and decided to re-invest proposals. This concerned party has asked for Arbitrator and hence the project is delayed

Note : Latest Information in respect of Warapad Sisters U's other than Kovalam, Soc, Puducherry & Co. is not available. Earlier available information is given in respect of Other Projects U's.

Source: Various State/Carribean 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.	Landing facilities for cargo & passenger vessel	Du		23	Proposal is submitted for approval of Ministry.
2.	Cargo & Passenger Landing Facility at Malala on BOT basis.	Du		500	Proposal is submitted for approval of Ministry.
3.	Kakinada Port	Andhra Pradesh	1.00 MT	150	Work is in progress.
4.	Kakinada Deep Water Port (PPP-BOOT) by M/s KPCL	Andhra Pradesh	3.20 MT	2300	Scheme completed.
5.	Ravva Port Project (Import Jetty-BOOT) by M/s Cairn Energy Ltd.	Andhra Pradesh	0.50 MT		Likely date of completion is March 2009
6.	Gangavaram Port (PPP-BOOT) by GPCL	Andhra Pradesh	26 MT	20000	Work is in progress. Likely date of completion is Sept 2009.
7.	Krishnapatnam Port (PPF BOOT) by M/s KPCL	Andhra Pradesh	17 MT	2500	Work is in progress. Likely date of completion is August 2009.
8.	Nizampatnam Port(PPP-BOOT) by M/s MITHAS	Andhra Pradesh	10 MT	10000	Likely date of completion is March 2012.
9.	Machilipatnam Port (PPP-BOOT) by M/s MITHAS	Andhra Pradesh	17 MT	15900	Likely date of completion is March 2011.
10.	Development of Jalgan Port by M/s. Shringar Seaway Ltd. (BOOST basis)	Maharashtra	2.02 MTPA	31542	LOI issued in September 2008. Likely date of completion is 2010
11.	Development of Visakhapatnam Port (BOOST basis)	Maharashtra	7.6 MTPA	10000	Proposal under scrutiny
12.	Development of Ratnagiri Port	Maharashtra	1.4 MTPA	6000	Proposal under scrutiny
13.	Development of Captive port facilities at Dhamankhol Bay (Jaigarh)-BOOT basis by M/s. JSW Infrastructure and Logistics	Maharashtra		4000	LOI issued 1- September 2008.
14.	Development of captive port facilities at Gogabai Bay near Vizianagaram	Maharashtra	Captive port facilities for import of coal for power generation <1000 MW ultra mega power plant		Power financing corporation is handling the project. Final MOU entered into held in Sep. 2008
15.	Establishing captive port Marakkanam	Tamil Nadu	0 MT	1300	Preparation of Detailed Project Report under progress.

Sl. No	Project	State/ Maritime Bowl	Capacity (Million Tonnes)	Project Cost (Rs. -Million)	Project Status
1	2	3	4	5	6
16.	Villupuram District Establishing Container port in Cuttack District	Tamil Nadu	14 MT	4650	Preparation of Detailed Project Report Under progress.
17.	Establishing Container port at Tiruchendiyur Nagapattinum District	Tamil Nadu	4.5 MT	3650	Preparation of Detailed Project Report Under progress.
18.	Establishing a cargo port at Chavakkad in Villupuram District	Tamil Nadu	1 MT	1000	Preparation of Detailed Project Report Under progress.
19.	Construction of port at Port Blair Island Goa	Goa		500	Administrative work in progress
20.	Construction of port at Old Goa - Dang Goa	Goa		80	Administrative work in progress
21.	Renovation of Marine Slipway, Baramunda Goa	Goa		100	Administrative work in progress
22.	Port of vessels for Panaji Port	Goa		70	Administrative work in progress
23.	Development and expansion of Maritime Services	Goa		15	Administrative work in progress
24.	Dredging of River Kaveri & Mandovi & strengthening of river banks	Goa		50	Administrative work in progress
25.	Development of Vizhinjam Port, Kerala	Vizhinjam Port, Kerala	14.5	10500	Under process completed. Central Government has agreed to this project.
26.	Development of Kollam port. (BOT)	Kollam Port Kerala	1.25	500	Identified for aspect concerning feasibility study.
27.	Development of Azhikal port. (BOT)	Azhikal Port, Kerala	12.5	4510	Consultant selected for feasibility study.
28.	Development of Beypur Government Port, Kerala (BOT)	Beypur Port Kerala	1.75	1050	Consultant selected for feasibility study.
29.	Development of Pondicherry port	Pondicherry	18	18570	Revised DPR submitted by the developer is under scrutiny.
30.	Development Karaikal Port	Karaikal	4	9500	Construction work under progress.

Note : Above information in respect of maritime SEZs/HITs other than Kerala, Goa, Puducherry & Dadra and Nagar Haveli. Earlier available information is given in respect of Other States/UTs.

Source : Maritime Classification Boards

Plan Outlay and Expenditure : Port Sector (Central Sector)

(Rs. Crore)

Name of the Port	Xth Plan Mlyrs	Annual Plan 2004-05		Annual Plan 2005-06		Annual Plan 2006-07		Annual Plan 2007-08		Annual Plan 2008-09		Annual Plan 2009-10	
		Qty.	Exp.	Qty.	Exp.	Qty.	Exp.	Qty.	Exp.	Qty.	Exp.	Qty.	Exp.
		1	4	3	6	7	8	9	10	11	12	13	4
1. Cochin	210.0	46.25	51.44	34.74	50.12	30.04	31.93	24.21	30.04	32.51	51.24	36.03	31.16
2. Vizhinjam	190.0	56.16	47.46	72.27	72.23	52.82	14.97	50.25	49.11	40.02	77.53	90.06	21.51
3. Kollam	200.0	27.1	21.47	36.34	32.71	30.14	29.7	16.18	22.71	22.11	16.22	32.00	27.11
4. Chennai	366.70	12.73	22.28	46.71	12.1	35.03	7.00	22.08	44.87	72.72	45.93	34.26	25.43
5. Visakhapatnam	362.77	55.4	47.50	51.19	54.76	71.59	42.08	136.50	102.14	221.63	246.89	191.73	92.1
6. Mandovi River	300.00	51.44	57.23	37.00	12.72	27.5	46.00	36.00	27.47	31.44	31.21	36.00	36.00
7. Baroda	410.7	32.93	57.57	51.37	11.29	51.38	49.16	47.04	35.25	112.34	36.02	1.3.26	31.16
8. Mumbai, JNPT	346.00	83.25	10.27	21.90	12.92	28.28	81.77	10.19	11.10	30.37	11.42	7.70	10.93
9. Paradip	220.0	84.75	98.50	14.33	44.02	52.40	21.15	100.00	45.05	224.30	101.2	215.51	96.00
10. New Mangalore	140.00	32.70	24.67	24.70	10.08	9.20	30.00	40.00	27.00	30.00	40.00	24.0	16.00
11. Tuticorin	200.00	95.17	54.93	42.67	16.08	51.31	79.11	78.42	37.16	54.37	45.12	255.80	16.82
12. Ennore Terminal	300.00	92.00	23.81	19.31	16.10	17.4	9.57	31.00	31.52	37.20	102.43	25.21	25.00
13. Sethusamudram Ship Canal Project	100.0	12.00	5.00	102.00	10.00	50.00	334.50	75.00	15.42	14.17	212.75	16.50	13.2
14. WEB Based e-Governance Community System	40.0	10.00	0.00	6.00	0.34	1.51	1.00	7.00	0.00	6.00	1.00	1.00	0.73
15. CEN-IND	50.00	221.00	19.40	225.24	29.17	180.14	21.354	477.20	170.60	50.538	31.50	60.20	23.00
16. P. G. Madras	564.00	131.00	0.00	20.00	0.00	20.00	1.00	1.00	0.00	12.00	5.00	10.00	0.00
Total	2,118.29	1063.71	360.57	17.91	407.81	1354.25	1000.87	2108.51	644.40	249.97	1179.12	2416.85	657.2

(a) Includes Multi-Modal Services

(b) Total Plan Expenditure for the year 2009-10 under the 12th Five Year Plan

(c) Expenditure upto September 2009

(d) Total Disbursement as of 31st August 2009

Container/Rail-wise Traffic Handled at Major Ports

(X10³) Tonnage/Tonnes

Port	Period	POL & kg Products	Iron Ore	Thermal		Coking		Petrol & PMM		Fuel		Container		Others	Total	
				Coke	Coal	Coke	Coal	PMM	Fuel Gash	Tonnes	TEDs					
Mumbai	2007-08	45223	268	0	0	25	0	0	0	6129	297	3862	13741			
	2008-09 P	3106	767	0	5	0	220	0	0	0	0	2701	15427			
	Apr.-Sept.	3223	297	0	0	6	126	7155	457	1230	457	4330	4330			
	2009-10 P	361	755	0	0	13	282	7140	106	1311	106	1811	1811			
Mysore	2007-08	17602	5862	1797	6476	712	5	7387	121	5714	41587					
	2008-09 P	19872	8123	1073	5630	541	0	2340	0	5123	41583					
	Apr.-Sept.	20184	2161	4078	904	3447	274	0	1402	0	2213	2213	2213			
	2009-10 P	5483	2642	733	7372	115	0	950	0	2150	1710					
Panaji	2007-08	1165	12550	10127	5772	5879	0	52	4	7144	42487					
	2008-09 P	8243	14272	14236	5484	5629	0	81	2	5138	4542					
	Apr.-Sept.	2008-09	817	6307	6124	3254	1059	0	0	0	21804					
	2009-10 P	4828	3147	7542	1624	1452	0	20	2	2503	20744					
Visakhapatnam	2007-08	10320	18258	2505	3472	5258	132	117	71	2072	67097					
	2008-09 P	16750	17530	3440	7031	417	353	1073	0	8735	53876					
	Apr.-Sept.	2008-09 P	8170	636	1408	4962	2140	137	629	43	5723	5723				
	2009-10 P	9204	2582	1886	5602	1630	46	75	46	5862	53049					
Chennai	2007-08	12713	12781	1600	6703	251	64	18251	1122	4077	57154					
	2008-09 P	12112	6297	2426	1664	791	25	20251	1143	10662	57451					
	Apr.-Sept.	2008-09	8516	4474	1057	1314	416	19	11921	629	5873	80539				
	2009-10 P	6580	4293	989	902	249	0	11212	581	6893	30472					
Ernakulam	2007-08	318	2190	906	0	0	0	0	0	0	0	1	11370			
	2008-09 P	388	1111	5608	0	0	0	0	0	0	0	311	11370			
	Apr.-Sept.	2007-08	134	577	4762	0	0	0	0	0	0	270	4758			
	2009-10 P	125	482	2000	0	0	0	0	0	0	0	5205				
Tuticorin	2007-08	484	0	1112	0	1230	443	5030	450	7161	27450					
	2008-09 P	508	0	3700	0	1528	196	6482	450	8227	26211					
	Apr.-Sept.	2007-08	225	0	2695	0	507	129	2219	288	4761	11112				
	2009-10 P	263	0	2587	0	110	151	2280	219	4384	11726					
Cochin	2007-08	1307	72	246	0	564	0	3180	264	684	16310					
	2008-09 P	2481	21	295	0	150	0	1256	200	717	15220					
	Apr.-Sept.	2007-08	517	0	202	0	207	0	1213	143	311	7122				
	2009-10 P	5043	0	413	0	139	0	1262	157	4119	7122					
Kovalam	2007-08	11712	10264	0	1621	896	57	319	21	2045	36519					
	2008-09 P	21525	6774	0	1628	917	111	404	29	22626	86587					
	Apr.-Sept.	2007-08	9728	6230	0	1598	401	87	226	15	7230	53426				
	2009-10 P	10260	4116	0	572	471	130	311	16	1357	17737					
Mormugao	2007-08	87	27329	153	2687	157	0	159	14	2323	13428					
	2008-09 P	1260	32548	440	4107	152	0	147	14	23624	41121					
	Apr.-Sept.	2008-09	442	5512	170	2002	20	1	72	1	1137	12512				
	2009-10 P	459	2147	521	2292	43	1	102	10	1180	18934					
J. L. Nehru	2007-08	2168	0	0	0	0	0	0	0	51626	4070	1727	60816			
	2008-09 P	4501	0	0	0	0	0	0	0	50632	3952	2141	67260			
	Apr.-Sept.	2008-09	1590	0	0	0	0	0	0	27345	2128	1110	37052			
	2009-10 P	2429	0	0	0	0	0	0	0	25854	1228	1346	23666			
Mumbai	2007-08	37074	0	2872	0	3221	532	1638	118	14934	57238					
	2008-09 P	34371	0	3900	0	3110	14	1251	92	12624	61276					
	Apr.-Sept.	2008-09	16772	0	1276	0	179	4	842	57	7103	26150				
	2009-10 P	13887	0	2140	0	280	9	370	77	7147	26450					
Kandla	2007-08	25226	417	1015	244	4076	1073	2046	1026	17707	54620					
	2008-09 P	45043	102	1492	427	6180	1028	2138	131	18726	52125					
	Apr.-Sept.	2008-09	25277	0	1062	250	2773	738	1128	32	1326	37256				
	2009-10 P	23007	203	1077	327	2508	407	1150	38	10425	30341					
All Ports	2007-08	46745	4295	16031	21332	1820	2350	0227	6704	27369	538710					
	2008-09 P	174324	34091	13144	21729	12168	2103	51121	53766	27072	531158					
	Apr.-Sept.	2008-09	24154	45032	19737	18644	5415	1326	507161	25228	416096	382104				
	2009-10 P	23781	41945	28943	17662	8288	7260	49350	2310	45762	267545					

P = Prevalent

Source: Major Ports and Indian Port Authorities.

Commodity Composition of Traffic Handled at Non-Major Ports

(000 Tons)

Non-major Status / UTs	Period	POL	Iron Ore	Building Material	Coal	Fertiliser & FMM*	Others	Total	
Gujarat	2007-08	80484	6078	12430	13313	4361	30857	150521	
	2008-09	91169	5873	11281	10161	5771	21576	152802	
	April - Sept	2008-09	48123	3174	5418	6452	2274	12555	73226
	2009-10	25367	11761	3064	11513	1836	10745	54200	
Maharashtra	2007-08	366	3736	2251	1992	412	2547	11363	
	2008-09	-	4162	2163	480	30	2587	10117	
	April - Sept	2008-09	-	2457	847	496	82	1255	4841
	2009-10	-	1752	1034	942	-	736	4466	
Andhra Pradesh	2007-08	9738	3583	97	19	1971	4366	150781	
	2008-09	5446	1805	71	881	3032	5608	18923	
	April - Sept	2008-09	3060	1149	29	1402	2214	11784	
	2009-10	2627	6117	288	3149	1986	1873	15772	
Goa	2007-08	-	12736		89	-	-	12825	
	2008-09	-	11901			-	-	11801	
	April - Sept	2008-09	-	2182		-	-	2185	
	2009-10	-	2861			-	-	2851	
Tamil Nadu	2007-08	75	-	5		53	76	587	
	2008-09	901	-			21	74	998	
	April - Sept	2008-09	283	-		17	26	429	
	2009-10	490	-			26	55	571	
Karnataka	2007-08	55	8042	5		36	737	8889	
	2008-09	17	2322	0	13	0	2657	4908	
	April - Sept	2008-09	8	850	0	5	0	1078	
	2009-10	4	7341	0	2	0	617	1994	
Others states / UTs *	2007-08	179	41	1478		203	395	2564	
	2008-09	177	28	1251	0	1425	1380	4251	
	April - Sept	2008-09	81	70	619	0	104	1221	
	2009-10	81	20	618	58	104	474	1345	
All Major Ports	2007-08	151035	34223	18284	15449	7112	42382	208378	
	2008-09	101900	26187	14725	18525	11329	31703	204074	
	April - Sept	2008-09	53145	8826	6740	7167	3879	17322	
	2009-10	58560	21642	9014	15703	2909	4282	121079	

: Consists of Pondicherry, Orissa, Kerala, Andaman & Nicobar Islands and Lakshadweep Islands.

* : Includes Igneous Fertiliser & Phosphate also.

Note : (1) All figures in 2008-09 & 2009-10 are provisional.

(2) No traffic was found at all ports Orissa & Cks.

(3) Data of 10 other ports except Pondicherry have been taken as total of corresponding period of previous year.

CONTRIBUTIONS OF MARKETING PRACTITIONERS AS ON 31ST MARCH

לעומת הכתובים במקרא, מילויו של השם נזקק לארון קדש.

THE HISTORY OF THE TURKISH EMPIRE

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בְּשָׁמֶן וְבְשָׁמֶן מִצְרַיִם וְבְשָׁמֶן כְּלֹתָה

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תְּהִלָּה בְּשֶׁבֶת וְעַמְּדָה בְּבֵית