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UPDATE ON INDIAN PORT SECTOR

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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-annual publication "Update on Indian Port Sector". Till now 11 issues of the publication have been released. The last issue contained data up to March, 2010.

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, 2010. The 1st container/roll-on/roll-off/civil sector port projects under implementation/construction at Major Ports and Non-Major Ports have also been included. The co-operation extended by the concerned port authorities is gratefully acknowledged.

December, 2010

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UPDATE ON INDIAN PORT SECTOR

(UP TO 30.09.2010)

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I. RECENT TRENDS IN CARGO TRAFFIC AND POLICY INITIATIVES

1.1 International and Domestic Factors Related to Seaborne Trade

1.1.1 After a contraction of 0.6 percent in 2009, global real output is expected to expand by 4.8% in 2010 and 4.2% in 2011. Output of developing economies is projected to expand at rates of 7.1% and 6.4%, in 2010 and 2011, respectively. In advanced countries, however, growth is projected to be modest at only 2.7% and 2.2%, respectively (World Economic Outlook, October 2010 – IMF). World trade, which had plunged by 12% in volume in 2009 recovered by more than 12% in 2010. The global crisis in 2008-2009 was unprecedented in many ways. It was the first time in the post-war period that the global GDP contracted almost all the regions of the world were affected, and the time lag between the financial crises and its impact on the real economic activity was short. No nation was spared by the crisis. The global contagion hit some countries harder than others. While developing countries saw led by recovery, it remained fragile and uneven in developed countries. Strong counter cyclical macroeconomic policies in most developed and developing countries helped the global economy to turn the corner although rates of recovery are uneven across countries and regions.

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

Parameters	2005-06	2007-08	2008-09	2009-10	April- September	
					2009-10	2010-11
Trends in India's Select : Macro Parameters						
I. Total Cargo	12.1	11.8	2.5	-4.2	10.2	7.9
(a) Major Ports	9.5	12.0	2.2	5.7	3.2	1.2
(b) Non Major Ports	19.7	11.6	3.8	36.2	32.6	22.2
II. GDP growth	9.7	9.2	0.7	7.1	7.4	8.5
(a) Agriculture	2.7	4.7	1.6	0.2	1.0	3.8
(b) Industry	13.7	9.3	3.9	9.3	7.1	7.1
(c) Services	16.7	12.5	0.8	8.5	2.2	8.7
III. Foreign Trade						
(a) Export in \$ value	22.3	20.1	7.3	1.0	-26.0#	26.5#
(b) Import in \$ value	24.4	35.0	20.7	-6.0	-21.6#	28.2#
Trends in Selected : Global Indicators						
V. World Output	5.2	5.3	2.2	-0.6	4.8fa	4.2fb
(a) Advanced Economies	3.0	2.7	0.2	-0.2	2.7fa	2.2fb
(b) Developing Economies	5.2	8.7	8.0	2.3	7.1fa	6.4fb
V. World Trade Volume (Goods)	8.8	7.1	2.7	-12.0	12.5fa	10.0#
VI. Export Volume growth (Goods)						
(a) Advanced Economies	9.7	6.1	1.2	13.0	12.4#	5.9fb
(b) Developing Economies	9.6	11.4	4.2	-7.1	12.3fa	8.9fb
VII. Import Volume (Goods)						
(a) Advanced Economies	8.0	6.0	0.1	-13.6	11.8#	6.3fb
(b) Developing Economies	10.4	12.6	0.1	-0.3	14.6#	10.2fb
VIII. World Seaborne Trade*	7.3	4.4	2.5	NA	NA	NA
(a) Goods Loaded	5	4.5	3.6	NA	NA	4%
(b) Goods Unloaded	0.4	4.4	1.5	NA	NA	NA

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

Commodity wise average growth in Trade Data (1993-2003 Period), Commodity wise Export Data;

fa Forecast or Departmental Estimate; fb by Author's Estimation

NA Not Available; *Data as per UNCTAD (October 2010) ITCI

**Based on Port of Mumbai (1993-2003 Period); III-QT2010

Note: 1. All figures in Table 1 relate to the year 2009-2010 unless indicated otherwise. 2. All figures are preliminary;

3. Data is based on latest available figures as of 31st March 2011;

4. Growth in total goods loaded plus unloaded; # pertains to April-June

1.1.2 International maritime trade and services also have a direct relationship with the overall performance of the global economy and total merchandise trade. Seaborne trade (which carries 90% of all world traded goods) declined in volume by 1.5% in 2009 as per UNCTAD (Trade & Development Report, 2010, UNCTAD). The sharpest reduction was in containerized trade at the end of 2008 and into 2009. The bulk sector was less affected owing to large imports by China, which took advantage of low prices of commodities and freight to increase its stocks of raw materials. Prices of maritime freight plummeted by the end of 2008, when the Baltic Exchange Dry Index fell by 90% from its record high in May of that year. By mid 2009 there was a partial recovery, with freight rates at around 40% of their 2008 peak (UNCTAD, 2010). The world merchant fleet capacity grew by 3.7% in 2009 and by another 1% in 2010. Given the scheduled ship deliveries, capacity is expected to expand. As a result it is unlikely that the recovery of trade in goods will lead to a new surge in freight rates in the short run.

World Seaborne Trade

1.1.2 Maritime transport activity depends 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 at a slower rate of 3.5% in 2006 to reach a total volume of 6.17 billion tonnes (Table 2). Exports at Fearnley's, a leading shipbroker, expect world seaborne trade to fall by 1.4% in 2010, before turning around and growing at a slower rate of 2% in 2011. For 2010, Clarkson Research Services are expecting dry cargo volumes to fall by 4.4%, the first drop since 1953. Indeed during the past three decades, the annual average growth in world seaborne trade is estimated at 3.1 percent by the RMT (2008), UNCTAD. The figure of 6.17 billion tonnes of international seaborne trade in 2009 comprised 2.75 billion tonnes of tanker cargo (32.7%) and 5.42 billion tonnes of dry cargo (66.3%). Tanker trades (crude oil and products) posted marginal growth of 1.6% in 2008 in an environment of weak demand. In tanker cargo, in bulk, consisting of 1924 million tonnes (55.7%) of crude oil and 915 million tonnes (33.3%) of petroleum products. Dry bulk trade, the main driver of the shipping industry over the past few years, is driven, inter alia, by industrial production and growth requirements. These shipments accounted for more than two-third of total world goods traded. Dry bulk consisted of 2.10 billion tonnes of the five traditional dry bulk types (iron ore, coal, food grains, and bauxite/alumina and rock phosphate) and other dry cargo of 3.22 billion tonnes which showed an increase of 1.1% and 1% respectively.

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

Year	Container Cargo		Dry Cargo		Total Cargo	
	In tonnes	% change	In tonnes	% change	In billions	% change
1990	1755		2253		4008	
2000	2183		3321		5684	
2001	2177	-0.8%	3844	19%	8071	0.6%
2002	2139	-1.7%	3801	3.0%	8120	1.6%
2003	2226	4.1%	4271	7.4%	8500	2.2%
2004	2310	4.1%	4528	5.9%	8848	3.3%
2005	2427	4.5%	4687	3.5%	7168	3.6%
2006	2643	9.3%	4307	4.7%	7546	6.1%
2007	2705	2.2%	5177	5.7%	7822	4.6%
2008	2740	1.5%	5410	4.7%	8188	3.8%

Source: Review of Maritime Transport 2009, UNCTAD, one century issues

1.1.4 Since 1990, global container trade (in TEUs) is estimated to have increased by a factor of four, which is equivalent to an annual average growth of 8.6 per cent (RMT 2009). Accounting for about 10% of world goods traded in volume terms (tonnes), container trade recorded the sharpest deceleration, with a growth rate falling by more than half, from 11% in 2007 to 4.1% in 2008. Measured in Twenty Foot Equivalent units (TEU), container trade volumes increased from 730 million TEUs in 2007 to 1.97 billion TEUs. Clarkson Shipping Services has projected a 6% drop in container trade in 2009 and sluggish growth of 2.2% in 2010. Similarly, Dryway Shipping Services/Harts is forecasting a fall of -0.3% for 2009 and a marginal growth in 2010. Containerized trade is also a major driver of growth in the dry bulk segment. Strong growth in containerized traffic is fuelled by increased demand for consumer goods in developing regions, growth in intermediate base and industrial inputs (parts and semi-finished goods for assembly) and rising containerization of some traditional agriculture bulk.

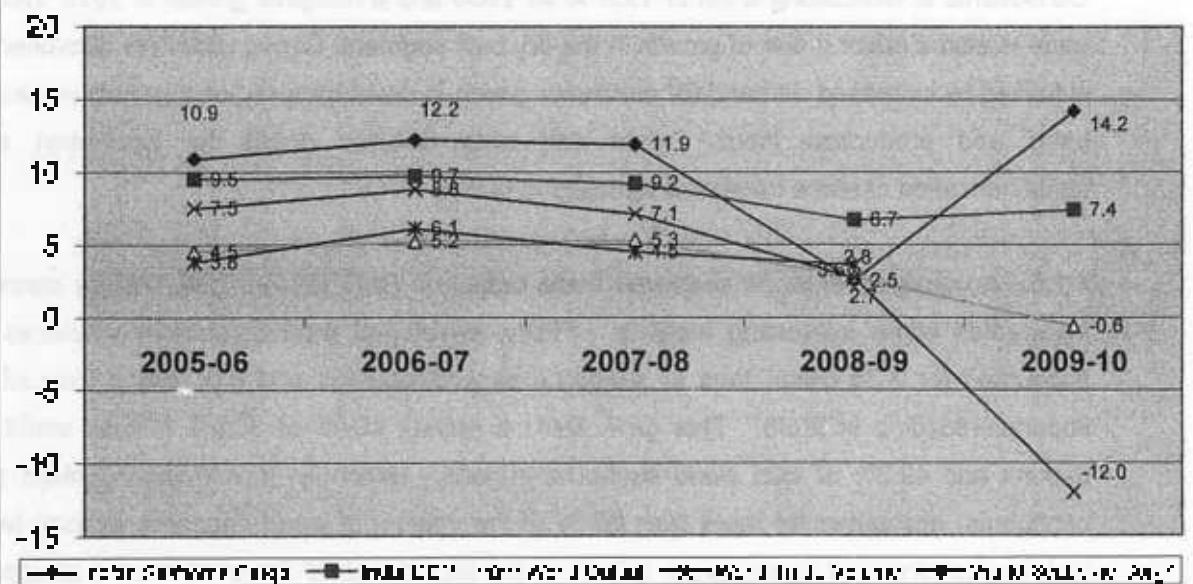
1.1.5 An analysis of world seaborne trade based on RMT (2009), UNCTAD by country groups also yields some interesting insights. Firstly, developed market-economy countries (DMECs) accounted for 2.74 billion tons of seaborne exports (loading) and 4.02 billion tons of seaborne imports (unloading) in 2008. This gave them a market share of 23.8% of total world seaborne exports and 49.3% of total world seaborne imports. Secondly, developing countries (excl. oil-producing) accounted for more than 60% of the volume of world seaborne exports (with a very high market share of liquid cargo, reflecting the importance of Oil producers) and about 50% 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 petrochemical products exports represented about 86% and 35% respectively. For imports, these shares were about 37% for crude and 13% for products. In the dry cargo sector the share of developing countries' exports reached about 53% of world dry cargo exports, while their share of world imports reached 15.5%

Thirdly, developing countries in Asia were the largest importers accounting for about 38 % of the world seaborne goods imported and 40 % of the world seaborne goods unloaded. Further developing countries in Asia accounted for 52.4 % and 36.2 % of total crude and petroleum products loaded in 2007. The corresponding share of crude and petroleum products in total unloading (imports) were 30.8 % and 30.4 % respectively in 2008.

1.2 Cargo Traffic at Indian Ports

1.2.1 During the first half (April-September) of 2010-11 major and non-major ports in India accomplished a total cargo throughput of 426.5 million tonnes reflecting an increase of 7.3 % over the same period last year. This estimated increase during the current year comes on top of more than 14 % growth in cargo traffic at Indian ports in 2009-10 (Table 3). However, during the first half of the current year has seen a moderation in the growth of cargo handled at major and non-major ports to 1.2 % and 22.2 % respectively compared to 20.9 % and 32.0 % achieved in first half of 2009-10. The growth in India's GDP, Port traffic and growth in world output, world export volume and world seaborne trade (loadings and unloading) since 2005-06 is given in Chart I.

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



Note: Growth in the Indian GDP and Indian Seaborne Trade are based on available estimates of Central Statistical Organisation and data available with Central Statistical Bureau or Shipping Board. Port Traffic in Highways and port tonnage in fiscal year. Growth rates in the River, Canal and Tanker Trade will be taken as zero. Data (2008-09 refers to 2009 and so on) based on 'World Economic Outlook' April 2010, IMF.

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

Major/Mon-Major Ports	Traffic Handled				Growth over previous year/period			
	2008-09	2009-10	April-September		09	10	April-September	
			2008-09	2010-11 (P)			2008-10	2010-11 (P)
Major Ports	550834	581380	265170	271285	+2	+5	25	+2
	(171.34)	(161.60)	(67.20)	(33.07)				
Non-Major Ports	213222	206752	103696	109176	+3	+5.9	17.6	+2.9
	(22.30)	(23.60)	(32.14)	(36.30)				
All Ports	711023	718142	385166	426471	+2.5	+6.2	10.2	+7.2
	(100.00)	(100.00)	(100.00)	(100.00)				

Note: Figures within parentheses indicate percentage growth and table percent share in total cargo handled by Major and Non-Major ports respectively. (P) Provisional

1.3 Cargo Traffic at Major Ports

1.3.1. Cargo through put at India's 12 major maintained ports during the first six months (April-September) of 2010-11 grew by mere 1.2%. Growth in cargo through put at major ports shows that only Cochin port attained a double digit growth of 16.3%, followed by Mormugao at (9.5%). Other major ports which clocked positive growth in the range 4.6% to 7.5% were, Chennai (4.8%), JNP (4.3%), Tuticorin (4.1%), Mumbai (2.0%) and Kandla (2.5%). In contrast 5 other major ports were on the West coast, and 7 on the East coast, showed reduction in cargo through put and were : New Mangalore (-14.4%) on the West coast and 4 on the East coast: Ennore (-13.4%), Visakh (-1.5%), Kolkata (-1.2%), & Paradip (-1.0%). Portwise traffic handled during 2008-09, 2009-10 and first half of 2010-11 and 2010-11 is given in Table 4.

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

Ports	2008-09	2009-10 (P)	April-September		
			2008-09	2010-11 (P)	% Change over 09
Kollam	24221	45232	11287	12154	+7.4
Kolkata D9	12428	12428	6946	6946	0.0
Mumbai D1	11765	11780	1174	11752	+0.1
Paradip	26412	26412	26748	26451	-1.1
Visakh	10016	75911	20246	18744	-6.2
Ennore	11840	11738	3886	4971	+24.4
Chennai	11241	11157	21172	20179	-4.2
Tuticorin	24011	22247	11748	12742	+11.1
Cochin	16744	17439	7458	8976	+16.3
New Mangalore	33071	28528	11737	10164	-14.4
Mormugao	11024	40317	10293	11762	+8.9
Mandal	91076	64547	21444	17341	-22.1
JNP	57204	60363	12293	10640	-13.1
Kandla	72204	76233	8247	4616	-37.5
All Ports	49932	50141	220176	221296	+1.1

(P) : Provisional (CPI converted to current price level for September 2008-10)

Commodity-wise Cargo Traffic at Major Ports

1.3.2. In terms of Commodity-wise traffic at 12 major ports, the 1.2% increase in cargo at major ports during the first half of 2010-11 was driven by increase in 3 broad categories of cargo viz. 31.2% in Fertilizer, 15.6% in Coking Coal and 11% in Container traffic (in tonnes); cargo (Table 8). Container traffic has emerged as the driver of visible cargo traffic at major ports. It is noteworthy that during the first six months (April-September) of the current year, container traffic measured in tonnes increased by 5.41 million tonnes in contrast to a fall in non-containerised cargo (dry bulk, liquid bulk & break bulk) of less than 2.29 million tonnes. Iron ore and thermal coal are two commodities which mainly contributed to the reduction in growth of cargo traffic.

Table 8 : Commodity-wise Traffic Handled at Major Ports (Thousand Tonnes)

Commodity	2009-10	2008-09 (P)	April-September		
			2009-10	2010-11 (P)	% Change over CP
POL	174542	173081	85647	87285	1.6
Iron Ore	94001	100553	42119	39027	-14.2
Fertiliser	18203	11717	8771	10950	31.2
a. Finished	12130	10630	5180	7291	38.3
b. Raw	6067	6086	3591	3839	21.1
Coal	70588	77785	35351	35135	-0.7
a. Thermal Coal	43456	43975	22436	20242	-10.0
b. Coking Coal	2713	20334	12525	14894	15.6
Container	62420	51242	13179	14201	11.0
Others	76850	95308	47273	47407	0.1
Total	620812	581080	269170	274298	1.2

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

1.3.2. The shares of different commodities in total cargo traffic are depicted in Table Charts I and II during the first half of 2009-10 and 2010-11. Energy Imports consisting of POL and coal constitute ~3.5% of the total cargo traffic at India's major ports during first half of 2010-11.

Chart II: Major Ports - Commodity Composition of Traffic Handled in April-Sept. 2009-10

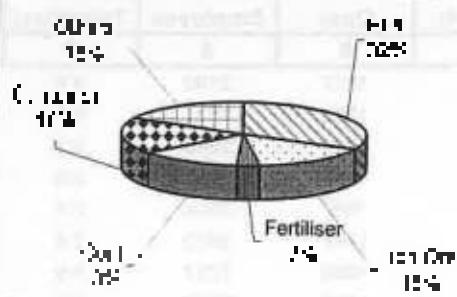
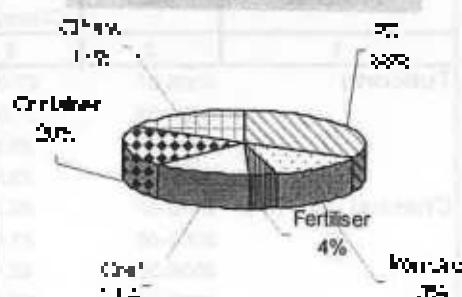


Chart III: Major Ports - Commodity Composition of Traffic Handled in April-Sept. 2010-11



1.3.4 Major Ports - Commodity wise traffic handled at major ports during the last two years and the first six months of 2009-10 and 2010-11 are given in Annexure - II.

Container Traffic

1.3.5 Total Container traffic at major ports has increased both in terms of tonnes and twenty foot equivalent units (TEUs) around 11.1% respectively during the first six months (April-September, 2010-11) of the current financial year. Container Lal Bahadur Port continues to be the leading container handling port in the country with a share of about 53% in terms of tonnage and more than 57% in terms of TEUs in the total container traffic at major ports (Table 6). Efficiency in container handling operations at some of the select container terminals in India is given in Table 7.

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

PORT	2008-09		2009-10 (P)		April-September				% Change over Cr.			
	Tn	TEU	Tn	TEU	2009-10		2010-11 (P)		Tn	TEU	Tn	TEU
					Tn	TEU	Tn	TEU				
Kandla	5126	807	6944	1273	7671	103	8140	106	+1.4	+3.2	+4.2	+0.0
Mumbai	2373	197	3643	124	322	45	4046	41	+15.3	+42.4	+5.6	+2.6
Pondip	82	1	91	1	93	2	55	1	+29.4	+130.0	+4.3	+0.0
Vizhinjam	408	65	1573	36	717	49	1224	52	+22.2	+11.4	+30.1	+8.0
Bhavnagar	2674	1111	23477	5218	1212	311	14722	734	+14.1	+1.1	+30.7	+20.0
Tuticorin	5472	179	4400	645	3290	218	5110	227	+20.4	+22	+3.7	+7.7
Cochin	5832	871	3698	815	2648	124	3660	172	+11.0	+11.1	+11.1	+1.6
New Mangalore	424	29	477	2	121	12	296	20	+17.5	+6.9	+27.2	+2.0
Bonnyport	178	14	182	17	104	3	78	1	+7.2	+2.4	+26.9	+22.2
J. L. Nehru	5342	1262	50495	1370	21814	1333	27158	5147	+1.7	+2.0	+4.9	+0.9
Murti	1201	56	822	30	714	27	822	27	+51.1	+57.0	+6.9	+5.0
Kandla	2136	187	2438	147	1320	80	1184	73	+14.0	+7.5	+0.7	+0.6
All Ports	93440	6573	101164	6865	43779	3382	54511	3724	+3.3	+4.4	+11.0	+11.1

Notes: CP - Corresponding period of previous year. (P) Projections; Tn - tonnes; TEU -twenty foot equivalent.

Table: 7 Performance Indicators of Select Container Terminals

Terminal	Year	Moves / Steady Hr.	Moves / Berth Hr	TEU/hr. Quay	TEU / Employee	Dwell Time(Day)	MTD Day
1	2	3	4	5	6	7	8
Tuticorin	2006-07	27.3*	49.0	10.4*	21.4*	2.6	1.4
	2007-08	27.4	49.0	11.8*	25.7*	3.5	1.5
	2008-09	28.0	48.0	11.8*	23.8*	2.7	0.71
	2009-10	29.0	47.0	11.0*	30.0*	2.3	0.72
Chennai - CGTPL	2006-07	22.1	45.0	9.0	22.0*	2.6	1.02
	2007-08	21.0	42.0	10.0*	26.0*	2.1	1.1
	2008-09	20.1	40.8	10.8*	24.1*	1.5	1.48
	2009-10	20.0	39.0	12.0*	24.0*	2.0	1.10
Chennai - CITPL	2009-10	28.4	51.1	10	23.0	2.8	1.24
JNPT - JNPCT	2006-07	17.5	45.0	17.0*	14.0*	6.86	1.75
	2007-08	16.9	41.0	14.0*	16.0*	7.0	1.7
	2008-09	16.8	40.8	14.0	11.0*	2.14	1.77
	2009-10	16.0	34.0	11.0*	4.0*	2.05	1.08
JNPT - NSICT	2006-07	22.7	54.5	12.0*	22.0*	2.7	1.22
	2007-08	23.0	70.4	15.0*	23.0*	2.08	1.37
	2008-09	22.2	58.2	17.0*	24.0*	2.08	1.41
	2009-10	22.1	50.0	14.0*	21.0*	2.14	1.04
JNPT - GNTCT	2006-07	22.7	49.0	10.0*	18.0*	2.6	1.04
	2007-08	22.1	53.0	14.0*	22.0*	2.42	1.27
	2008-09	27.0	52.0	15.0*	21.0*	2.08	1.11
	2009-10	26.7	41.0	14.0*	16.0*	2.14	1.04
Cochin	2006-07	17.1	41.4	10.0*	16.0*	3.5	1.18
	2007-08	18.1	47.2	10.0	17.0*	3.2	1.07
	2008-09	18.3	24.0	10.0	5.0*	3.4	1.05
	2009-10	18.2	15.0	N.A.	N.A.	7.11	2.06
Kolkata D9	2006-07	19.2	15.0	N.A.	N.A.	6.74	1.63
	2009-10	27.5	6.19@	N.A.	N.A.		

#: Per effective working hour; \$: Import

*: Average for CFS terminals; @: Standing time and Blocking time, have been considered in moves sometimes due to availability of quay space or due to unavailability of suitable quay. The moves/Moves/Berth Hr.: Total number of moves made in a day/number of moves required to do the moves/Moves/Berth Hr.: Total number of moves required to do the moves/number of moves required to do the moves TEU/MTD: Total TEU handled per annum divided by average length in meter

TEU/Employee: Total TEU taken the quay and total handled

Dwell time: Total time of holding time through dwell time/total dwell time

JNPT: Jawaharlal Nehru Port, Container Terminal

NSICT: Nigamath Shiksha International Container Terminal

GT CT: Gateway Terminal India Container Terminal, Thane, Mumbai, India

GCL: Gitanjali Container Terminal Pvt. Ltd.

CGTPL: Chennai Container Terminal Private Limited

1.4 Cargo Traffic At Non - major Ports

1.4.1 In the Tenth Five Year Plan, traffic at non-major ports increased at an annual average growth rate of 13.7% and grew at modest rate of 6.2% in 2007-08 and 3.3% in 2008-09. Thereafter, growth in traffic at non-major ports has improved to 33.6% in 2009-10 and 22.2% in first half of 2010-11. Non Major Ports handled more than 30% of the total inland freight traffic of the country during the first half of the current fiscal year.

1.4.2 Table 8 presents maritime state-wise share and growth of traffic handled at Non-major ports during last two years and the first six months of the current and previous year.

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

Maritime State/UT	Traffic Handled (in 100 Tonnes)				% Change over Previous Year			
	2008-09	2009-10	April-September		2008-09	2009-10	April-September	
			2009-10	2010-11			2009-10	2010-11
Gujarat	132011	200540	51280	12144	15	54.5	26.7	18.2
Maharashtra	10416	11841	6465	3515	-4.3	13.1	-0.8	23.9
Andhra Pradesh	29723	43824	21762	25733	54.1	40.7	0.9	14.0
Goa	11901	13898	2001	3871	-7.2	16.0	22.4	-2.8
Tamilnadu	898	1171	471	1713	1.2	31.1	36.0	10.7
Karnataka	4968	5847	1929	2713	-44.3	17.0	5.3	21.5
Other States/UTs	2612	3575	1346	2429	9.1	42.0	6.2	151.0
All	213222	288352	126998	5679	35	21.1	31.4	22.3
Non-Maritime UTs	(100)	(100)	(100)	(100)				

Note: Figure in parenthesis is the percentage share of traffic handled by the maritime states in the total traffic

1.4.3 The growth in cargo handled by the non-major which was 32.5% in the first half of 2009-10 moderated to 22.2% in the first half of 2010-11 (see 7). The growth in cargo handled at non-major ports has been facilitated by accelerated growth in non-major ports located in Gujarat aided by substantial increase in the cargo traffic of PCL, Building Materials, Fertilizer & FRM in particular (Tables 6 & 8). The growing importance of non-major ports in handling cargo traffic has helped alleviate the congestion at major ports. Table 8 provides traffic handled by non major ports of India's maritime states and Table 9 gives a glimpse of commodity profile of the cargo handled. Table 8 reflects that Gujarat accounted for 72.3% of the total traffic handled by the non major ports followed by Andhra Pradesh (16.6%), Maharashtra (4.2%) and Goa (2.5%) during April – September 2010. Four maritime States, viz., Gujarat, Maharashtra, Goa, and Andhra Pradesh

together accounted for over 60% of the total cargo traffic handled by the non-major ports in the first half of the current year.

1.4.4 Four commodities viz. FOL, iron ore, building materials and coal accounted for more than four-fifth of the total cargo handled at the non-major ports (Table 9).

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

Commodity Category	Traffic Handled (in Million Tonnes)				% Change over Previous Period			
	2008-09		April- September 2009-10		2009-10		April- September 2010-11	
	2008-09	2009-10	2009-10	2010-11	2009-10	2009-10	2010-11	2010-11
COT	67816 (45.88)	14549 (30.96)	25811 (41.13)	27275 (45.71)	+7.4	+9.4	+13.2	+11.1
Iron Ore	35863 (17.82)	45747 (36.01)	24775 (7.54)	12490 (17.67)	+7.1	+36.8	+14.0	+1.6
Building	13212 (15.72)	1877 (3.13)	4878 (3.84)	7505 (4.76)	+15.5	+15.0	+27.0	+6.0
Coal	21437 (14.02)	40362 (12.16)	16845 (16.63)	25308 (18.88)	+9.1	+24.5	+15.5	+40.1
Chemical	7062 (4.12)	10050 (3.48)	9022 (2.16)	8579 (1.27)	+7.1	+12.3	+14	+24.1
Others	31927 (15.87)	20176 (15.91)	16257 (12.29)	18244 (12.56)	+4.2	+17.4	+7.2	+5.2
All	223222 (100)	295192 (100)	126998 (100)	15670 (100)	+9.8	+22.2	+22.7	+7.7

Note: Figures in parentheses is the percentage share of each commodity group in the total traffic handled by all Non-major ports.

Chart IV : Non-Major Ports - Share of Maritime States/UTs in the Traffic Handled April-September 2010-11

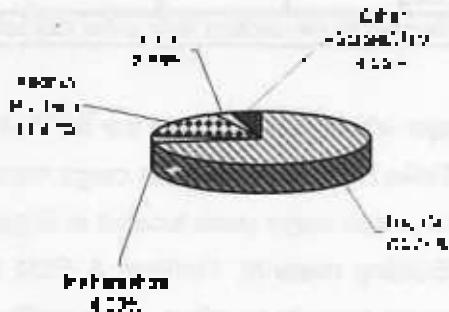
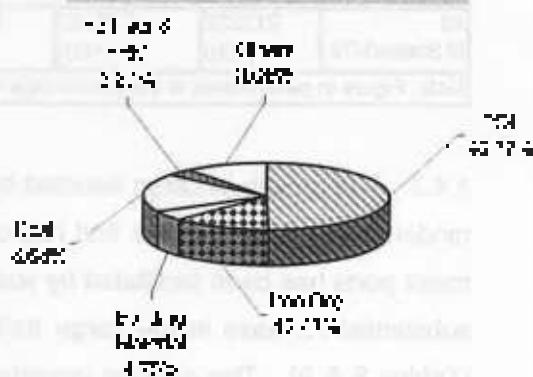


Chart V : Non-Major Ports-Commodity Composition of Traffic Handled - April-September 2010-11



ICIDC: Lakshmi Chakrabarti, 2014, www.karviridhi.com

1.4.5 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.

1.4.6 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 Annexure - III.

1.5 Impact of Global Macro Developments on Maritime Trade

1.5.1 Global Ocean Freight Rates

1.5.1.1 Baltic Dry Index

1.5.1.1.1 The Baltic Dry Index (BDI) is a daily average of prices to ship raw materials and represents the cost paid by an end user to transport raw materials across seas on the Baltic Exchange, the global marketplace for brokering shipping contracts. The BDI is one of the leading indicators of global economic activity. It measures the demand to move raw materials.

1.5.1.1.2 The surge in BDI from 2008 till May 2008 was primarily due to Chinese demand. There was also a shortage of supply for dry bulk cargo ships and a large backlog at shipyards. The combination of these two factors caused a surge in the index. However, during the second half of 2008, BDI lost almost 90% from its record highs. BDI dropped from its all time high of 1,793 on May 20, 2008 to less than 100 by the end of December (774 as on December 24, 2008). BDI Index remained around 50% of its peak (May 20, 2008) during the course of second half of 2009 and touched its low at 563 points on July 31, 2009. However, BDI has gained considerably but remains well below the peak attained in May 2008. The timing of BDI during the course of 2009-2010 is shown substantial increase as indicated below and also moves towards the plant recovery. However, BDI and its sub-indices are well below the peak levels posted in May 2008.

Table 10: Trend In Baltic Indices

Index	20 th May 2008	31 st March 2009	30 th Dec. 2009	End October 2010	% Change End Oct 2010 vs End Dec 2009
Baltic Dry	1,783	1816	2046	2075	+1.9(+2.3%)
Baltic Panamax	1,426	1374	1367	2012	+52.9(+21.7%)
Baltic Supramax	6341	11,631	12,241	17,621	+21.9(+29.4%)
Baltic Cape	18136	20,586	22,677	45,022	+1,44(+24.6%)

(+) within parenthesis indicate % increase in March 2010 vs % percentage of peak level recorded in May 20, 2008. Source: S&P Monthly Reports

1.5.1.1.3 This fall in BDI was due to a simultaneous convergence of several factors. Chief among these is the rapid plunge in the global growth phenomenon. In addition to this, credit has been nearly impossible to get for the purchase of goods and the payment of time charters on the vessel. Many of vessels under shipping companies operate under Contract of Affreightment (is a contract to move cargo over a specified time between

named ports and regions and may be performed by any ship as distinct from charter hire arrangements that pertain to a named ship for a fixed period which have been fixed much earlier or operate under long-term time charter. So, it is only that spot rate that gets affected immediately by this. It needs to be kept in view that the supply of large carriers tends to remain very tight with long lead times and high production costs, the market can experience high levels of volatility if global demand increases or dries off suddenly.

1.5.1.2. Trends in Global shipping charter hire rates

1.5.1.2.1 Capesize were attracting spot rates of less than US \$7,000 a day in November 2009 down to daily operating expenses of about \$ 8,000 from a high of US \$ 177,022 in May 2008. All this has its toll on the charter market. The charter rate of a capes and large bulk carriers/small capes has dropped to around US \$ 30,000 and JS \$ 22,000 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 one fifth to one third of their peak rates in May 2008.

Table 11: Average Dry Cargo Time Charter Earnings (US \$ per day)					
Size Thousand DWT	May 2008	March 2009	December 2009	October 2010	% Change Oct 10/Oct. 08
Capesize 144	177,622	20,100	55,769	27,705	-32.4% (-31%)
Large Bulkers 85-144	110,000	10,500	30,870	10,000	-65.2% (-10%)
Panamax 59-82	81,500	15,700	29,300	21,300	-28.3% (-27%)
Supralandymax 28-55	67,657	15,532	26,300	20,000	-21.4% (-30%)
Hatchmax 40-48	66,942	15,620	26,800	20,797	-23.3% (-34%)
Havfreg®/Havlæs 30-40	81,813	10,500	20,250	14,250	-33.3% (-29%)
Small Bulkers 12-30	43,200	11,200	16,370	10,411	-12.8% (-23%)

Figures within parenthesis indicate levels in March 2010 as a percentage of peak level recorded in May 2008. Source: S&P Maritime Reports

1.6.2 Implications for Maritime Finance

1.6.2.1 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 tightened. Lack of letters of credit, in which banks guarantee payment, for raw materials goods could adversely affect world trade. Letters of credit guarantee 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.

1.5.2.2 Shipping, a capital intensive industry depends on the cross border flow of capital. As a result of US auto plants and housing loan crisis financial institutions are expected to be more cautious on ship financing. As a capital intensive industry with expensive 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 as less money is available to purchase them. Fall in the Baltic Dry Index (BDI) have resulted in a global slump of shares of shipping companies.

1.5.3 Trends in Global top 20 Cargo/Container Ports

1.5.3.1 Growth in cargo and container traffic at world's top major ports/Container terminal is a barometer of trends in seafarers trade. The growth in cargo traffic (million tonnes) at world's top 20 ports decelerated from 11.4% in 2007 to 4.9% in 2008 and contracted by 3.0% in 2009. The growth in container traffic (million TEUs) experienced greater deceleration and fell from 10.0% in 2007 to 5.3% in 2008 to a fall of 10% in 2009. Container trends in Top 20 World Major Ports (in Million Tonnes) and Container Trade (in million TEUs) are given in Table 14 and Table 15 respectively.

Table 13 : Top 20 World Major Ports (in Million Tonnes)

Port	2008	2007	2006	2005
Shanghai (PRC)	537.5	569.0	502.0	490.0
Zhoushan/Ningbo* (PRC)	324.7	173.4	220.1	270.0
Singapore	440.5	485.8	373.1	472.3
Rotterdam (Netherlands)	381.5	402.1	421.1	357.0
Tianjin (PRC)	237.8	300.8	155.4	350.0
Guangzhou (PRC)	302.2	343.8	244.2	312.2
Qingdao (PRC)	254.2	265.0	200.2	315.5
Donggang (PRC)	201.8	245.7	202.2	243.5
Hong Kong	218.2	275.4	203.4	243.0
Eunsan (South Korea)	217.8	226.8	211.7	226.2
Dalian (PRC)	145.2	193.4	165.2	203.7
Nagoya (Japan)	209.0	213.5	216.1	201.0
Shenzhen (PRC)	173.0	86.9	211.2	164.0
Valencia (Spain)	112.1	120.5	151.0	121.9
San Ferdinand (Philippines)	110.8	111.5	100.7	109.4
Antwerp (Belgium)	107.4	132.2	158.7	107.0
Los Angeles (USA)	121.8	120.1	120.0	137.3
Houston (USA)	201.5	225.0	227.0	165.0
Chiba (Japan)	57.0	120.2	170.0	150.0
South Louisiana (USA)	236.0	258.1	232.7	175.0
Total of Top 20 Ports	4863.40	5413.60	5578.70	5476.95

*Source: United Nations, UNCTAD Statistical Database, New York, UNCTAD website (<http://www.unctad.org>)
updated in 2009

Table 14 : Top 20 World Container Ports (in Million TEUs)

Port	2004	2007	2008	2009
Singapore	24.79	27.03	29.92	25.37
Shanghai (PRC)	21.72	23.13	27.86	25.00
Hong Kong (PRC)	23.51	23.80	24.49	23.90
Shenzhen (PRC)	18.47	21.10	21.40	18.25
Busan (Republic Korea)	12.04	13.26	13.45	11.88
Chengdu (PRC)	6.80	9.30	11.00	11.19
Dubai Ports (UAE)	8.02	10.02	11.63	11.12
Zhoushan Ningbo ^a (PRC)	7.07	9.36	11.23	10.50
Guangzhou (PRC)	7.70	9.46	10.39	10.39
Rotterdam (Netherlands)	9.65	10.72	10.72	9.74
Tianjin (PRC)	6.94	7.10	8.60	8.70
Kaohsiung (Taiwan Province of PRC)	9.78	10.26	9.58	9.53
Antwerp (Belgium)	7.02	8.18	8.98	7.31
Port Klang (Malaysia)	6.33	7.12	7.20	7.30
Los Angeles (USA)	8.47	8.39	8.08	7.28
Hamburg (Germany)	8.86	9.83	9.74	7.70
Tanjung Pelepas (Malaysia)	4.77	5.50	5.50	3.60
Lyny Beach (USA)	7.29	7.31	6.49	5.57
Xiamen (PRC)	4.02	4.63	5.04	4.68
Bremen (Germany)	4.43	4.91	5.00	4.93
Total of Top 20 Container Ports	207.41	234.96	247.43	222.57

^a China Port Statistics Board (Ministry of Transport, MoT, MTC; 110.4 includes Macau and China

1.6 Policy Initiatives - Central Government

1.6.1 In October 1999, the Land Ministry of Surface Transport issued guidelines for Private Sector participation in Major Ports. The guidelines were intended to precisely define the options for the involvement of private sector in the Major Ports.

1.6.2 Government also issued guidelines on joint venture formation in Major Ports which came into effect from 1st January 2000. In order to ensure private sector involvement model documents were finalized 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 transparency, stability and reduction in litigations to select the private parties.

1.6.3 The Major Port Trust Act, 1982 was further amended in the year 2000 for allowing Major Ports to form joint ventures with Non-Wing-Foreign Ports as well as companies.

1.6.4 Measures for increasing the capacity of Major Ports are taken as part of an ongoing process keeping in view the demands of maritime trade through two emanation of development plans for the ports improvement in productivity, etc. The Eleventh Five Year Plan has envisaged an increase in the capacity of major port to 1048.56 million tonnes by the end of 2011-12. At the beginning of the Aravinda Five Year Plan the capacity of the Major Ports was 604.76 million tonnes. Thus the proposed capacity addition during Eleventh Five Year Plan at the Major Ports would be 511.80 million tonnes. At the end of March 2010 the cargo handling capacity of Major Ports was 910 million tonnes. Commodity wise capacity of Major Ports at the end of March 2010 is given in Annexure - IV.

1.7 Eleventh Plan (2007-12)

1.7.1 The Approach Paper to the Eleventh Five Year Plan (2007-2012): Towards Faster and More Inclusive Growth (November, 2006)¹⁷ by the Planning Commission has proposed an annual average growth target of 9% in terms of GDP for the Eleventh Plan and has also laid down following aspects for the Port Sector:

- (a) To develop ports and related infrastructure to bring them to international standards in terms of 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 draft of existing ports to be increased, where feasible, through capillary dredging;
- (d) Bulk of capacity augmentation would be undertaken through public-private partnership and captive users; and
- (e) Ref road connectivity of ports with the hinterlands to be improved on priority basis.

1.8 National Maritime Development Programme (NMDP)

1.8.1 The Department of Shipping has finalized a National Maritime Development Programme (NMUP) to implement specific programmes' outcomes for the development of the Port sector. Under the Programme, specific projects to be taken up for implementation over a period upto 2011-12 have been identified. Total Investment involved under the Programme is Rs.100.325 crore. Out of this Rs. 56.804 crore is for the Port Sector and the balance is for the Shipping and Inland Water Transport Sector. In the Major Ports, 273 projects covering the entire gamut of activities, namely, construction/upgradation of berths, deepening of channels, linked connectivity projects, equipment, regionalization modernization schemes and other related schemes for creation of beroup facilities have been identified for inclusion in the Programme. These projects, to be taken up over a period upto 2011-12 will be implemented in phases. Out of these about Rs.24.505 crore is expected from private sector mainly in commercially viable projects like development and

operations of berths, terminals, etc. Public funds will be principally used for creation of common user infrastructure facilities. The objective is to upgrade and modernize the port infrastructure in India which will enable it to benchmark its performance against global standards. 53 projects costing Rs. 5093.78 crore have been completed till September, 2010. The work is in progress in 80 projects with an estimated cost of Rs. 1520.41 crore.

Private Sector Participation

1.8.2 With opening up of the Indian economy, the Government of India has allowed private sector participation in Major Ports to raise funds, adopt latest technology, improved management practices and achieve all round of efficiency. Foreign Direct Investment upto 100% under automatic route is permitted for construction and maintenance of Ports and Harbours. It has been estimated in the 11th Plan Report that private investment of Rs.35859 crore is required in the Major Ports for capacity addition.

1.8.3 To encourage private sector participation uniformly clarity and transparency in the bidding process is of the prime importance. The Department of Shipping has already put in place guidelines for private sector participation. To ensure uniformity in shortlisting and bidding Model RFP and RCU documents have been finalized. A Model Concession Agreement has also been finalized which attempts to bring uniformity to the agreements to be signed by the Major Ports as Concessioning Authority with the various private operators as concessionaire.

1.8.4 The preferred route for private sector participation is Bidding via competitive bidding in which the bidder offering the highest percentage of revenue share out of the operation of the facility which is known as a selected. The tariff fixation is carried out by TAWF which is an independent Regulatory Body. At present the tariff is fixed upfront which act as a ceiling before a project is bid out on revenue share basis as explained above. The private operators are free to charge below the ceiling.

Areas of private investment

1.8.5 The following areas which are indicative in nature have been identified for participation/investment by private sectors:-

- (a) Leasing out existing assets of the Port
- (b) Construction/operation of additional assets such as:
 - ❖ construction and operation of container terminals
 - ❖ construction and operation of bulk, break bulk, multi purpose and specialized cargo berths
 - ❖ warehousing, container freight stations, storage facilities and tank farms

- ❖ managing handling equipment.
 - ❖ setting up of captive power plants.
 - ❖ dry docking and ship repair facilities.
- (g) Leasing of equipment for port berthing and leasing of floating crafts from the private sector.
- (h) Pilotsage
- (i) captive facilities for port based industries.

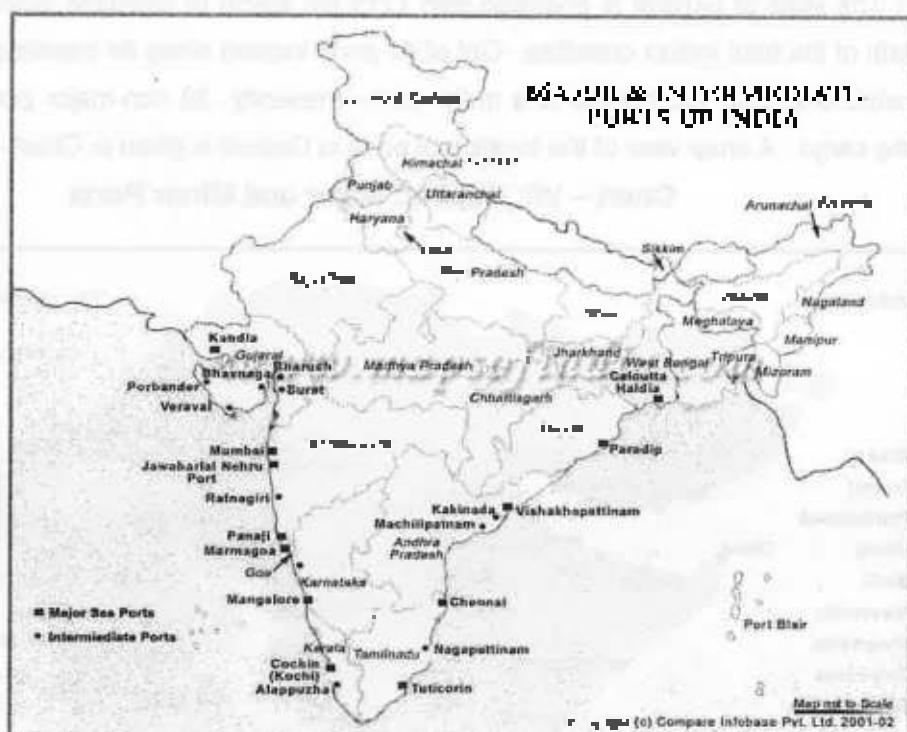
Opportunities for Investment in upcoming projects in the Major Ports

1.1.6 Already a number of private sector projects including captive port projects are operational or are at various stages of implementation. Projects with the capacity of about 8.7 Million Tonnes per Annum (MTPA) were operational and 7 projects with the capacity of 112 MTPA are at various stages of implementation till 31st March 2010. Several PPP projects are scheduled to be awarded in the coming years at all the Major Ports.

II. POLICY AND PERFORMANCE OF MARITIME STATES

2.1 Ports are economic assets serving a variety of irreversible importance since they act as a place for the trans-ways of land transport modes, maritime and air, whether by rail or road. Therefore, the economic aspect of ports lies in their inter-modal value. India has a coastline of around 7517 Km with 13 major ports and 178 notified non-major (intermediate) ports along 14,000 coastline and 112 islands. Of the Non-Major Ports, around 60 are handling traffic. Chart-VI gives the geographical location of the Major and prime Non-Major Ports. The Maritime Port operates within the statutory framework of the Indian Ports Act 1935 which applies to all the ports. However, the Major Ports Act 1953 applies only to Major Ports. Eastward Port is administered by a 'Port Trust' (except for the port of Ennore which is a corporation entity).

Chart - VI



2.2 The Major Ports are under the review of the Central while the Non-Major Ports are under the purview of the States. Port development in the Central Sector has emphasized addition in capacity as well as provision of commodity specific handling facilities i.e. 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 Sector has 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)

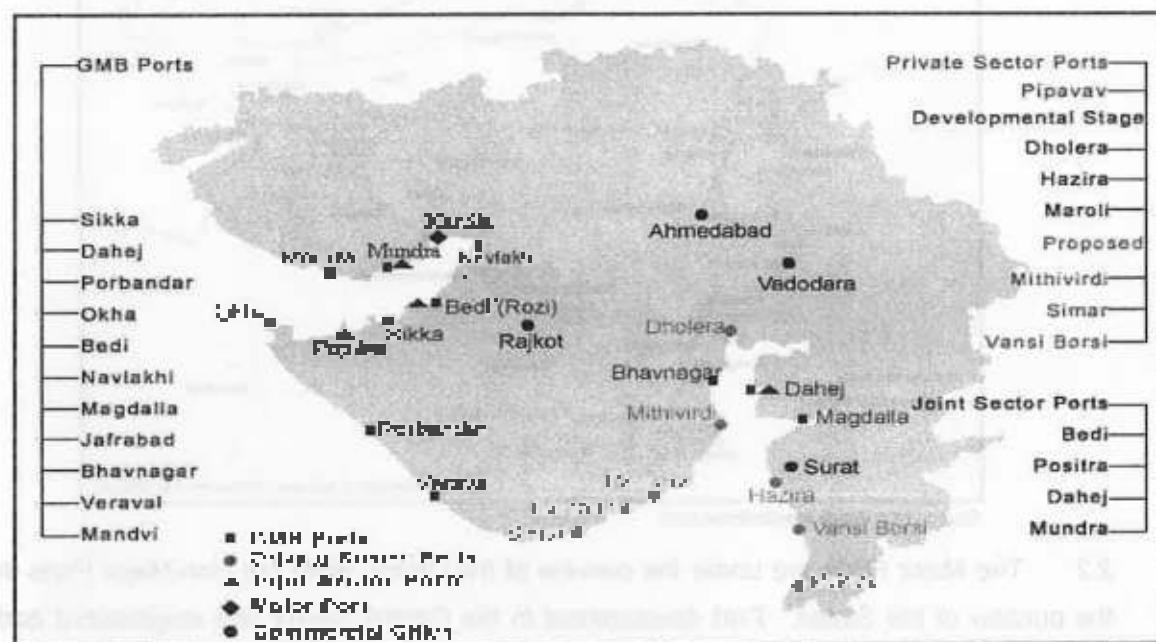
2.3.1 With a view to have an integrated approach for the development of both Major and Non-Major Ports, the Maritime States Development Council (MSDC) was constituted in May, 1999 under the Chairmanship of the Honourable Minister of Shipping. The Ministers from 9 ('9') Ports in all Maritime States, Jatar Territories of Puriucherry, Andaman's & Nicobar Administration, Daman & Diu and Lakshadweep are its members. The deliberations & decisions of the MSDC provide the institutional framework for coordinated development of Major and Non-Major ports. So far fourteen meetings of MSDC have been held.

2.4 PORT POLICY IN MARITIME STATES

2.4.1 GUJARAT

2.4.1.1 The state of Gujarat is endowed with 1215 km length of coastline which constitutes about one sixth of the total Indian coastline. Out of 17 ports located along its coastline, 10 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 summary view of the location of ports in Gujarat is given in Chart - VII.

Chart – VII: Gujarat Major and Minor Ports



Source: I.P. Economic Affairs Report, 2000

2.4.1.2 The trends in the cargo handled at both major and non-major ports of Gujarat State during the last few years and the first six months of the current year are given in Table - 1b. The overall

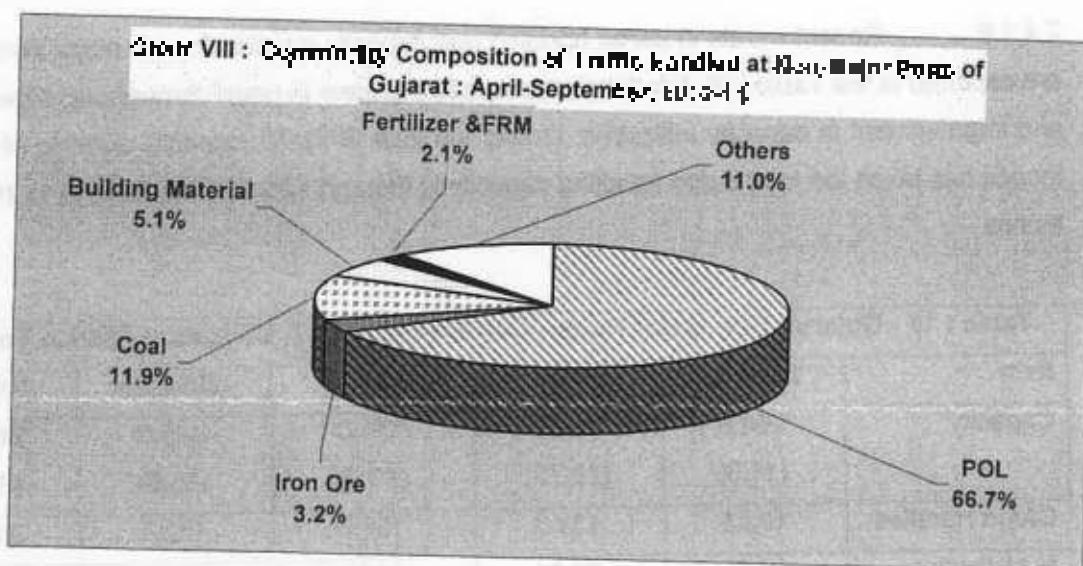
growth in port cargo traffic in case of Gujarat was 18.6% in the first half compared to 7.6% for overall cargo growth for India.

Nature-Major	Table 10 - Gujarat: Trends in Cargo Handled at Major & Non-Major Ports (MT)					
	2006-07	2007-08	2008-09	2009-10(PI)	April-September	
					2009-10	2010-11(PI)
Major Ports	52.80 (15.2)	74.32 (22.6)	72.22 (11.2)	70.6 (12.1)	30.34 (2.9)	40.32 (2.6)
Non Major Ports	31.27 (28.2)	150.52 (14.9)	18.81 (1.5)	203.54 (0.4)	91.28 (29.7)	112.14 (18.9)
All Ports	104.07 (23.3)	210.44 (15.9)	220.03 (4.2)	285.04 (28.7)	121.62 (20.3)	152.47 (14.1)

Figures in bracket represent percentage change over the previous year/period.
 (PI) Preliminary.

2.4.1.3 It is noteworthy that all ports (major and non-major) located along the coast of Gujarat handled about 95% of the total cargo handled by Indian ports in the first half of 2010-11. In particular, non-major ports of Gujarat alone handled more than 72% of total cargo traffic at major non-major ports.

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



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 its 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 trades and commerce in pursuance of the policy of liberalisation and globalization.
- To reduce the burden on existing major ports on the western coast of India.
- To provide port facilities to promote export oriented and port based industries which are estimated to contribute 50% of the total industrial investment in Gujarat.
- To take full advantage of the strategic location of Gujarat coast by (a) encouraging shipbuilding, ship repairing and related manufacturing activities and; (b) providing facilities for coastal shipping and ferrying passengers between Saurashtra and South Gujarat and other destinations.
- To meet Gujarat's potential power requirements by (a) establishing barge mounted power plants and (b) providing exclusive port facilities for importing different kinds of power fuel.
- To attract private investment for the development of minor ports. 2001 framework has been envisaged to provide – (i) timeliness of infrastructure creation, (ii) efficiency of operation and operational autonomy to the private sector, (iii) synchronization with hinterland development, (iv) Government's role to be maintained only in appropriate areas, and (v) Government financial liabilities to be kept to a minimum.

2.4.1.5 Recent trends in cargo handled & capacity creation in non-major ports of Gujarat are captured in the Table 1B. It indicates evolution in cargo throughput, capacity addition and improvement in capacity utilization. During the year 2005-10, capacity addition of 8.83 million tonnes has taken the total cargo handling capacity in the pri. sector in the Gujarat to 243.84 million tonnes.

Table : 1B - Gujarat: Non Major Ports - Current Capacity & Utilization (Million Tonnes)

Item	2005-06	2006-07	2007-08	2008-09	2009-10
Capacity*	164.0 (11.0)	182.0 (13.77)	188.0 (15.0)	235.0 (26.0)	243.84 (30.84)
Cargo Handled	103.5	131.3	150.0	152.0	205.0
% Utilization	66.71	72.14	74.62	91.00	84.25
* Capacity refers to capacity available for private sector under integrated port policy. It includes capacity added from 2005-06 to 2009-10.					

2.4.1.7 As per the port policy, Gujarat Maritime Board (GMB) has selected 10 Green-field sites for development of new ports as 'All Weather Deep Water Direct Berthing Ports'. Amongst 10 ports, 6 ports are to be developed through private investment and remaining 4 ports in the joint

sector. The list of projects undertaken for capacity augmentation and corollary trend in capacity creation are given in the Table 16 & 17 respectively.

Table 16: Major projects undertaken at Non Major Gujarat Ports

No.	Year	Major Projects undertaken	Capacity addition	Cumulative capacity
Up to 2003			138	138
1	2002-04	<ul style="list-style-type: none"> • Container terminal at Mundra • GMR Jetty at Navalgudi • Private jetty at Kathiawad 	8	146
2	2004-05	<ul style="list-style-type: none"> • Dahej LNG terminal 	5	151
3	2005-06	<ul style="list-style-type: none"> • Container and Bulk terminal at Mundra • LNG terminal at Lalesha 	8.5	160
4	2005-07	<ul style="list-style-type: none"> • Harsa: Extension of captive jetty by Desar • Mundra: T-2 bulk terminal at Mundra • Mundra: Additional 2 berths for container 	3	162
	2007-08	<ul style="list-style-type: none"> • Establishment of additional one SPWts at SIKKA by NPS Refinery • Expansion of PPAWts port by Gujarat Pipavav port Ltd. • Private jetty at Navalgudi 	10	172
5	2008-09	<ul style="list-style-type: none"> • Establishment of additional 2 SPWts • SPWts at SIKKA by EORL 	2	174
6	2009-10	<ul style="list-style-type: none"> • Establishment of SPWts at Bhogat by Cairn Energy • Deepwater jetty by PPAWts at Mundra port 	13	245.64 ^(a)
^(a) Actual				
Source : Gujarat Maritime Board				

Table 17 : Trends in capacity creation (Million TPA)

Ports	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Mundra (GAPL)	17.70	28.20	38.20	36.20	36.20	38.20
Mundra (GMR)	0.24	0.24	0.24	0.24	0.24	0.24
Okha	3.85	3.98	3.98	3.65	3.95	3.95
Bedi	5.08	5.09	5.69	5.69	5.69	5.65
Pipavav (GPPL)	9.41	9.01	9.41	14.41	14.41	14.41
Magdalla	14.55	27.02	27.02	27.05	27.05	27.05
Navalakhi	0.92	0.82	3.02	4.62	4.82	4.82
Sikka	57.57	57.57	57.57	57.57	85.93	101.07
Porbander	2.26	5.23	6.28	5.25	5.26	5.26
Veraval	2.17	2.17	2.17	2.17	2.17	2.17
Muldwarka	7.72	7.72	7.72	7.72	7.72	7.72
Jafrabad	4.53	4.53	4.53	4.53	4.53	4.53
Dabhol	12.19	13.19	13.19	13.19	13.19	13.19
Bhavnagar	1.18	1.18	1.18	1.18	1.18	1.18
Jakhau	3.25	3.25	3.25	3.25	3.25	3.25
Mandvi	0.02	0.32	0.32	0.32	0.32	0.32
Gogha	0.06	0.08	0.08	0.08	0.08	0.08
Bhooj	0.00	0.00	0.00	0.00	0.00	0.00
Total	161.00	184.00	182.00	188.00	235.00	243.64

Source: Gujarat Maritime Board

24.2 MAHARASHTRA

The State has a coastline of around 953 km, with 2 major ports viz. Mumbai and Jawaharlal Nehru and 10 non-major ports. Out of 12 non-major ports only 11 handle cargo. The capacity of non-major ports in Maharashtra is estimated at 28.2 million tonnes (as on 31.3.2010). Maharashtra Maritime Board (MMB) is the nodal agency for regulation and development of the State's maritime activities. MMB has taken many policy initiatives for development of port sector which are given in the Box 3.

Box 3-Maharashtra: Policy Initiatives for Port Development:

- Development on BOT basis
- Developer's selection on MOU basis or by tender if many investors interested.
- Concession period of 50 years
- Concessional Wharfage
- Government land available, at market valuation
- Equity participation by Government/MCD up to a maximum of 11 %
- Head Wharfage to national State Highway to be provided by the State
- Relocation by Developers
- FIDC is fixer if

Policy Guidelines for Captive Terminals

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

7.4.2.2 Rewas-Aware and Dighi are both located in Raigad District, are in the process of development since March 2002. The developer of Dighi Port has issued work order for construction of first berth in November 2007. The Rewas-Aware Port Project has secured Environmental Clearance from MoU Environment & Forests in May 2007 and pre-construction activities as well as validation of some earlier data are in progress. Further, 3 more ports viz. Radvi, Vijaydurg and Saligao are likely to come up shortly. Letters of intent have been issued to the concerned developers. It is expected these ports to be ready for cargo handling in next 3-4 years. The proposed capacity of these ports is given in Table 19.

Table 19 : Proposed Capacity Creation (In Million tonnes per annum)

Port	Initial Phase	Ultimate Phase
Rewas-Aware	47.00	127.00
Dighi	3.45	18.75
Sigad (Dhamankhol Bay)	5.70	15.00
Saligao	1.12	2.80
Vijaydurg	7.60	75.20
Radvi	5.10	23.0

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 20.

Yr/07/Yr-08 Year	2006-07	2007-08	2008-09	2009-10(P)	April-September	
					2009-10	2010-11(P)
Major Ports	27.12 (10.2)	112.81 (10.2)	100.18 (-3.5)	715.8 (5.0)	50.10 (4.7)	56.37 (2.6)
Non-Major Ports	11.38 (3.8)	11.26 (-1.5)	10.12 (-8.4)	11.82 (15.0)	4.47 (1.8)	6.02 (45.8)
All Ports	38.50 (10.2)	124.04 (14.2)	110.50 (-3.7)	127.20 (6.4)	50.50 (-1.7)	56.34 (3.9)

Figures in bracket represents percentage change over the previous year/period.
T/P=Projected

2.4.3 GOA

2.6.2.1 Goa with a coastline of about 119 Kms is characterized by 7 rivers. Apart from the major port at Margao there are five non-major ports all of which are riverine ports with an average depth of about 2 meters except Panaji (which is the lone cargo handling non-major port with a depth of 4 meters).

2.4.2.2 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 21.

Major/Non Major	2008-09	2009-10	2010-11	2009-10(P)	April-September	
					2009-10	2010-11(P)
Major Ports	34.24 (8.0)	35.13 (2.6)	47.50 (10.6)	48.25 (17.2)	16.00 (22.2)	17.79 (8.5)
Non-Major Ports	14.3 (21.7)	12.83 (-10.0)	11.90 (-7.2)	12.80 (16.8)	2.80 (22.0)	3.07 (40.8)
All Ports	48.56 (11.4)	47.99 (-1.2)	59.50 (11.7)	62.75 (7.1)	18.8 (22.0)	21.76 (12.7)

Figures in bracket represents percentage change over the previous year/period.
T/P=Projected

2.4.4 KARNATAKA

2.4.4.1 Karnataka has a coastline of about 280 Kms. At present, there is one major sea port, the new Mangalore Port at Mangalore and 10 non-major ports in Kasargod. The ports of Karwar and Mangalore are two cargo handling non-major ports in the state.

2.4.4.2 The trends in the cargo handled at both major and non-major ports of the State during the last few years and first six months of the current and previous year are given in Table 22.

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

Major/Non-Major	2006-07	2007-08	2008-09	2009-10(P)	April-September	
					2009-10	2010-11(P)
Major Ports	32.04 (+7.0)	30.02 (-2.4)	36.69 (+1.9)	35.53 (-3.2)	17.77 (-3.7)	15.18 (-14.6)
Non-Major Ports	8.58 (+2.2)	8.2 (-3.7)	4.37 (-44.2)	8.15 (+1.0)	1.93 (-3.4)	2.72 (+0.5)
All Ports	30.8 (+0.1)	34.82 (+16.4)	41.03 (+1.9)	44.05 (+3.8)	19.67 (-3.9)	17.9 (+9.3)

Figures in bracket ~~represent~~ percentage change over the ~~previous~~ year/period.
** Not available.

2.4.5 KERALA

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

2.4.5.2 The trends in the cargo handled at both major and non-major ports of the State during the last few years and first six months are given in Table 23. In Kerala of the 4 non-major ports 3 viz, Alappuzha, Beypore (handles more than 90 % of the total non-major cargo traffic in the State), and Vizhinjam are handling cargo for the last few years.

Table 23 - Kerala : Trends in Cargo Handled at Major & Non-Major Ports (MT)

Major/Non-Major	2006-07	2007-08	2008-09	2009-10(P)	April-September	
					2009-10	2010-11(P)
Major Ports	15.23 (+2.8)	15.81 (+3.8)	18.5 (+2.0)	17.43 (-12.5)	7.69 (+0.0)	8.32 (+9.2)
Non-Major Ports	2.17 (+2.4)	3.10 (+41.2)	0.15 (-30.6)	0.10 (-29.1)	0.24 (+23.0)	0.06 (-23.0)
All Ports	16.43 (+0.0)	18.91 (+9.1)	18.68 (+1.5)	17.59 (-12.5)	7.73 (-3.1)	8.38 (+12.8)

Figures in bracket ~~represent~~ percentage change over the ~~previous~~ year/period.
** Not available.

2.4.6 TAMIL NADU

2.4.6.1 Tamil Nadu has a coastline of about 935 km, with 3 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 involvement for the development of minor ports in Tamil Nadu has been formulated. Its main objectives are to provide exclusive port facilities for import of Coal/Naphtha/Gilmore Gas for shore 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 at both major and non-major ports of the State during the last few years and thus six months of the current and previous year are given in Table 24.

Table 24 - Tamil Nadu: Trends In Cargo Handled at Major & Non-Major Ports (MT)

Major/Non-Major	2006-07	2007-08	2008-09	2009-10(FP)	April-September	
					2009-10	2010-11(P)
Major Ports	83.12 (+1.6)	94.12 (+1.2)	61 (-5.8)	25.50 (-5.0)	47.74 (+0.4)	45.74 (-2.5)
Non-Major Ports	9.81 (+4.1)	0.29 (-9.3)	0.90 (+1.1)	1.17 (+0.0)	0.57 (-35.7)	0.63 (+10.5)
All Ports	92.93 (+1.7)	94.08 (+0.9)	61.9 (+0.2)	26.67 (+0.2)	48.14 (-3.7)	46.37 (+3)

Figures in bracket represent percentage change over the previous year/period.
FP = Projections

2.4.7 ANDHRA PRADESH

2.4.7.1 The State is endowed with a coastline of about 374 km. There is one major port viz. Visakhapatnam and 15 non-major ports in Andhra Pradesh.

2.4.7.2 The State had prepared a prospective development plan, in its Vision 2020 Document for development of its ports with a view to enhance cargo handling capacity of its Non-Major Ports to another 20.7 million tonnes by 2020. As large investments are required for capacity creation, the State Government policy intends to encourage the participation of private sector in port development. The status of privatized ports and private investment in Andhra Pradesh ports is as follows:

Status of Privatized Ports

- (i) Kakinada Deep Water Port was leased in March 1998 to M/S. SFI on OMST terms for 25 years.

(ii) Krishnapatnam Port was privatized in year 1997 on DCL terms to MR Krishnapatnam Port Company Ltd.(KATCO) for 30 years. Revised agreement was signed on 17-6-2004. Narayana Engineering Company has taken 74% equity stake in KPL and KATCO 26%.

(10) Gangavaram Port was privatised in August,2003 for co-development of Deep Water Port on DCL terms initially for 30 years. The port has started handling cargo.

Proposed Private Investment

The proposed investments in approved port projects are (i) Gangavaram Port (Rs.2750 crore); (ii) Krishnapatnam Port (Rs.2000 crore); and (iii)Kakinada Deep Water Port Expansion (~Rs.500 crore).

The projects under planning are (i) Machilipatnam Port (Rs.1860 crore); and (ii) Nizamabad Port (Rs.151.4 crore).

2.4.7.3 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 financial year are given in Table 26.

Table 26 - Andhra Pradesh: Trends in Cargo Handled at Major & Non-Major Ports (MT)

Major/Non-Major	2006-07	2007-08	2008-09	2009-10(F)	April-September	
					2009-10	2010-11(F)
Major Ports	59.30 (1.1)	64.6 (14.0)	63.51 (-1.1)	65.6 (2.5)	33.05 (-0.3)	32.54 (-1.5)
Non Major Ports	13.61 (3.3)	19.29 (3.7)	29.72 (91.1)	42.62 (16.0)	21.75 (95.0)	25.75 (16.5)
All Ports	75 (2.1)	83.69 (11.9)	93.03 (11.5)	109.12 (19.5)	54.81 (22.1)	59.32 (9.4)

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

2.4.8 ORISSA

2.4.8.1 Orissa has about 476 km coastline with one major port at Paradip and two non-major ports at Cox's Bazar and Dhamra 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.

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 25.

Table - 26 - Orissa : Trends In Cargo Handled at Major & Non-Major Ports (MT)

Major/Non-Major	2006-07	2007-08	2008-09	2009-10(F)	April-September	
					2009-10	2010-11(F)
Major Ports	53.92 (10.3)	62.44 (10.2)	46.41 (8.4)	57.51 (22.5)	28.74 (8.4)	28.47 (-1.3)
Non-Major Ports	-	0.90 (0.0)	0.30 (0.0)	0.42 (0.0)	0.01 (0.0)	0.02 (200.0)
All Ports	54.82 (10.3)	62.74 (11.0)	46.71 (9.2)	57.93 (23.6)	28.88 (8.8)	28.51 (-0.8)

*Excludes break bulk cargo handled through inland ports.
**Data revised.

2.4.5 WEST BENGAL

2.4.5.1 The State of West Bengal has a coastline of about 1600 Kms which has two Docks or Khukkas and Haldia under a single major port and one non-major port. The non-major port namely Kulpi is being developed for which consulations have been finalized. Presently there is no cargo traffic at the major port.

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 and first six months of the current and previous year are given in Table: 27.

Table - 27 West Bengal : Trends In Cargo Handled at Major & Non-Major Ports (MT)

Major/Non-Major	2006-07	2007-08	2008-09	2009-10(F)	April-September	
					2009-10	2010-11(F)
Major Ports	55.05 (8.6)	57.32 (4.1)	54.22 (5.4)	48.53 (14.4)	21.24 (-13.5)	22.80 (+1.2)
Non-Major Ports	-	-	-	-	-	-
All Ports	55.05 (8.6)	57.32 (4.1)	54.22 (5.4)	48.53 (14.4)	21.24 (-13.5)	22.80 (+1.2)

*Excludes break bulk cargo handled through inland ports.
**Data revised.

2.4.6 ANDAMAN & NICOBAR ISLANDS

2.4.6.1 Port Blair was declared as a major port with effect from June 1, 2010. With the issuance of notification, Port Blair becomes India's 13th Major Port. The Port Blair will have territorial jurisdiction over all 29 ports located in Andaman and Nicobar Islands. The trends in cargo handled at ports of

The Union territory during the last few years and first six months of the current and previous year are given in Table 28.

Table 28 - Union Territory: Trends in Cargo Handled at Major Port (MT)

Major/Non-Major	2006-07	2007-08	2008-09	2009-10(P)	April-September	
					2009-10	2010-11(P)
Andaman & Nicobar Islands	1.55	2.16	2.01	1.95	1.05	0.80

2.4.1 OTHER NON-MAJOR PORTS

2.4.1.1 The other non-major ports are spread across the Union Territories ; UTs; of Daman & Diu, Puducherry and Lakshadweep. These ports in the UTs are administered through their respective Departments. 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 29.

2.4.1.2 Presently the cargo handling capacity of at Puducherry is around 200,000 tonnes of cargo per annum. In October 2008, the Government of Puducherry entered into a concession agreement with private developers for the development of deep water ports of 800' depth at Puducherry and Karaikal.

Table 29 - Union Territories: Trends in Cargo Handled at Non-Major Ports (MT)

Major/Non-Major	2006-07	2007-08	2008-09	2009-10(P)	April-September	
					2009-10	2010-11(P)
Lakshadweep	0.03	0.03	0.03	0.03	0.01*	0.01*
Puducherry	0.03	0.01	0.06	1.32	0.22	2.46
(P) Provisional * Estimated						

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 selected years and for current half year in comparison with corresponding period of previous year are elaborated in this section.

3.2 Average Turn Round Time (TRT)

3.2.1 This parameter has improved significantly during the last one and half decades for all the major ports. Average TRT for all major ports improved from 8.10 days in 1990-91 to 4.47 days in 2009-10. However, Average TRT for all major port has shown an increase to 4.2 days in 2008-09 and 4.42 in 2009-10. During April-September 2010, the TRT at 4.5 was slightly higher compared 4.4 days in the corresponding period of the last year with a range between 2.19 days at Cochin port to 8.10 days at Panadip. Amongst the major ports improvement in TRT during April-September 2009-11 as compared to April-September 2008-10 is discernible in case of Panadip, New Mangalore, Haldia D.S., Mumbai, Kolkata D.S and Visakh. Port-wise TRT for selected years are given in Table 22. The path of turn round time at major ports for selected years since 1990-91 to 2008-10 and April-September 2010-11 is presented in the Chart IX.

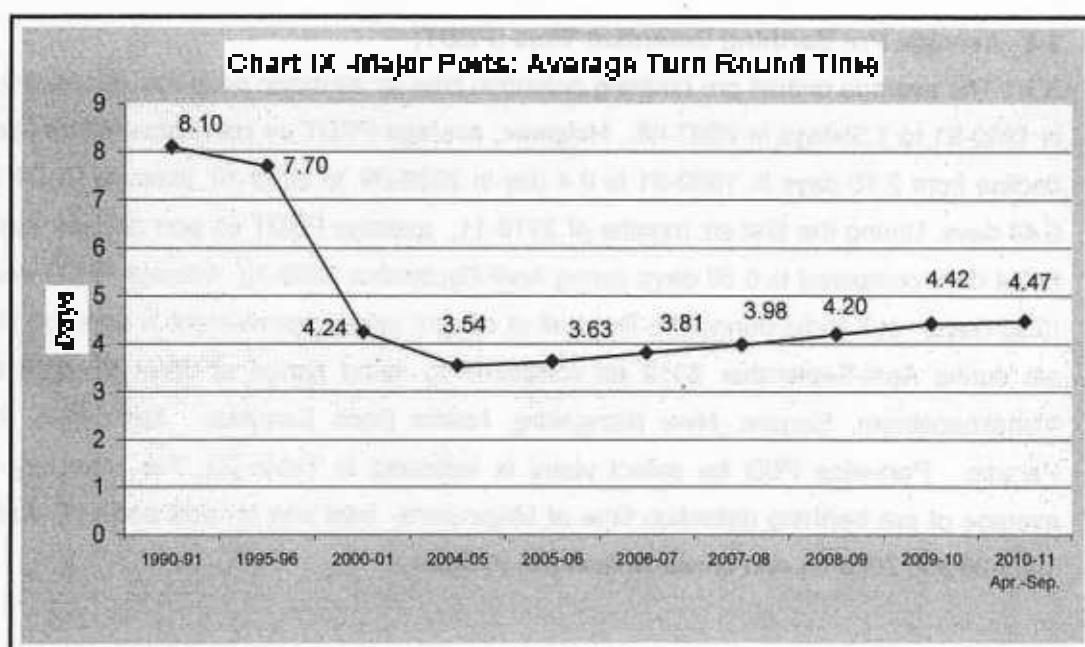


Table 22: Average Turn Around Time (days)

Port	1990-91	2000-01	2007-08	2009-10	2009-10 (P)	April-September	
						2008-10	2010- 11(P)
1	2	3	4	5	5	7	8
Kohat D S	4.15	3.5	5.49	5.70	5.47	4.95	4.78
Haldia D C	6.17	3.87	4.26	4.21	5.01	5.00	4.32
Parasip	3.4	4.5	5.54	4.78	9.04	10.79	9.10
Vizianagaram	7.37	3.71	3.91	3.80	4.78	5.03	5.76
Tiruchir	-		2.08	2.30	2.30	2.29	3.07
Chennai	7.2	5.83	4.65	4.15	4.05	3.94	4.53
Ludhiana	4.75	4.1	3.85	3.64	3.97	3.57	4.11
Gadani	4	3.11	1.54	2.14	2.05	2.27	2.19
New Mangalore	4.93	2.89	3.27	3.00	3.06	3.42	2.82
Mumbai	6.4	4.3	5.24	5.95	5.33	4.92	5.80
JL.Senn	-	2.2	1.80	1.90	2.02	1.94	2.72
Muzore	4.80	6.2	4.07	4.95	4.81	4.29	3.90
Kandla	7.0	4.72	5.10	7.29	5.03	4.86	6.04
All Ports	3.10	4.24	3.06	4.23	4.42	4.39	4.47

(P) Port's own

* Subject to lay back cargo for 40% PWT (Port Work Time) and 10% STT (Standby Time).

Source: Major Ports, ICDR, Port Authorities (I) Ltd.

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 7.2 days in 1990-91 to 1.56 days in 2007-08. However, average PBDT on port account has seen a sharper decline from 2.10 days in 1990-91 to 0.4 day in 2009-08. In 2009-10, average PBDT increased to 0.49 days. During the first six months of 2010-11, average PBDT on port account has decreased to 0.44 days compared to 0.52 days during April-September 2009-10. Average PBDT was maximum (0.86 days) at Kandla during the first half of current year. Improvement in average PBDT on port site during April-September 2010 as compared to entire period of 2009 is evident in case of Vizianagaram, Ennore, New Mangalore Haldia Dock Complex, Mumbai, Murtala and Parasip. 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, 1996-97 and 2000-01 and onwards is shown in Chart 8.

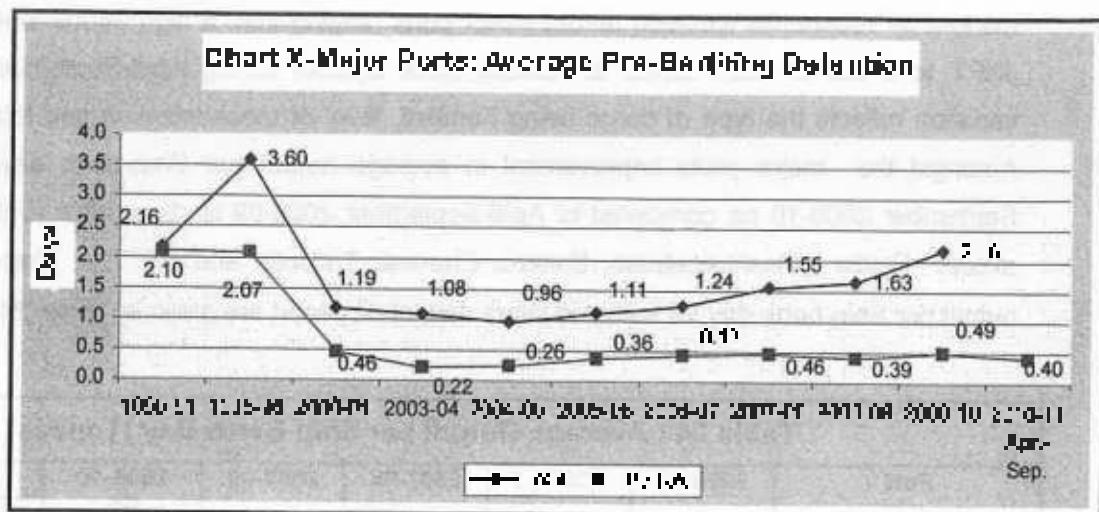


Table 23 : Average Pre-Berthing Detention(Days)

Port	1990-91	2000-01	2007-08	2008-09	2009-10	April-September	
						2009-10	2010-11*
Kandla	5	3	4	5	3	7	3
Kohlapur D.R.	2.8	0.81	0.66	0.99	0.95	0.00	0.10
Mumbai C.S.	1.66	0.91	2.06	3.33	4.50	1.37	0.93
Paradip	1.69	1.17	2.57	2.32	0.30	0.06	0.06
Vishakhapatnam**	1.85	0.76	1.1	1.28	1.90	0.58	0.11
Bengaluru			0.3	0.27	0.41	0.03	0.00
Chennai	2.1	2.46	1.53	1.80	1.66	0.82	0.64
Tiruchirappalli	0.5	1.4	1.24	1.08	1.20	0.26	0.12
Cochin	0.50	0.74	0.3	0.70	0.26	0.17	0.25
New Mangalore	0.79	0.47	0.63	0.66	0.00	0.05	0.02
Mormugao**	2.51	1.32	2.21	1.77	3.72	1.22	0.76
Visakhapatnam		0.87	0.86	0.85	0.89	0.06	0.31
Mumbai	2.4	1.26	0.96	1.21	1.20	0.20	0.23
Kendriya	4.4	1.51	2.61	2.32	2.00	1.06	0.95
All Ports	2.10	1.16	1.05	1.03	2.16	0.61	0.40

(*) Excludes J&K, Lakshadweep and Puducherry. Major Ports include Port of Mumbai and Visakhapatnam.
** From 1st July 2005 onwards, VHP(Mech.) and Bulk Oil Terminal (Conv.)

3.4 Average Output Per Ship Berth-day

3.4.1 During the last 20 years this indicator has seen a tremendous improvement. Average Output per Ship berth day has shown a steady but slow increase from 3,377 tonnes in 1990-91 to 17,406 tonnes in 2009-10 for major ports. However, average output per ship berth day is

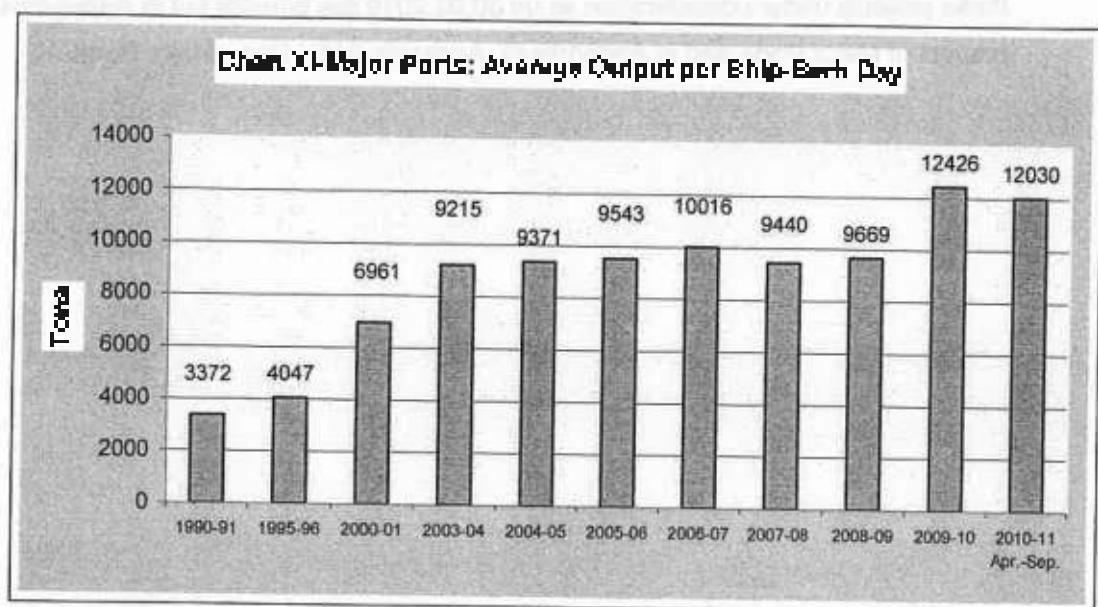
marked by substantial variation across major ports ranging from a high 24009 tonnes in case of JNPT to a low of 2056 tonne at Kolkata Dock System during April-September, 2010. The variation reflects the type of cargo being handled, cost of mechanization and labour practices. Amongst the major ports improvement in average output per Ship-Birth day during April-September 2009-10 as compared to April-September 2008-09 is discernible in all major ports except Haldia, Visakhapatnam, Ennore, Chennai, Tuticorin and NPT. Portwise average output per Ship-Birth day for selected years and latest period are given in Table 24.

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

Port	1990-91	2000-01	2007-08	2008-09	2009-10 (P)	April-September	
						2009-10	2010- 11(P)
1	2	3	4	5	6	7	8
Kollam D.S.	500	2024	3153	3027	2273	2471	2595
2009-10	5059	3354	6353	7732	8743	5515	5348
Visakhapatnam	4082	6601	11121	12030	10953	12725	13381
Mysknapatnam	5353	8742	10113	11171	13270	13132	13162
Ennore	-	-	35260	23424	21585	21331	14016
Chennai	3812	8577	10062	10778	11033	12283	11861
Tuticorin	3150	3283	5174	5317	5505	6735	8216
Cochin	3714	6136	10531	10599	10820	9717	11751
New Mangalore	4312	12192	12861	13345	13895	12529	12009
Mangalore	10429	12136	11332	9299	9010	9128	11754
JL.N.P.T.	-	6388	15482	20344	25527	24157	24009
Mumbai	2010	4213	4519	5717	725	8801	7353
Kandla	4417	8220	11215	13107	12272	13080	13488
Al-Po-Lo	3273	8961	8229	9888	12426	12025	12030

Note: 1. Equivalent to dry bulk cargo for NPT/Mumbai and JLNPT.
2. Data upto Indian Port Audit Report (I.A.).

2.4.2. The average output per ship-day for selected years since 1990-91 is presented in the Chart X.



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 30.06.2011 are brought out in Appendix-I, Appendix-II in respect of Major Ports and in Appendix-III, Appendix-IV to Non-Major Ports.

Appendix - I

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

Sl No	Project Name	Port Name	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
1	Construction of Coal Terminal on BCT basis.	Ennore	5.0 MTPA	4000	Construction work is in progress. Anticipated date of completion is February, 2011.
2	Construction of 1st Oil Terminal on BCT basis.	Ennore	12.0 MTPA	4500	Construction work is in progress. Anticipated date of completion is February, 2011.
3	Construction of Container Terminal on BCT basis	Ennore	18.0 MTPA	10700	Preliminary work are going on and expected to be completed by 2013-14
4.	Construction of two New Oil sheds & Container berths & Development of Container Terminal berth on EC-berth at Mundra Harbour	Mundra Port	0.80 MTPA	14810	Agreement signed on 3.12.2007 with M/s. ICTPL BOT operator has taken over BPX and the commences work on 15.3.2008. EPC contract awarded by BPX operator on 2.12.08. Jetty Construction work is in progress. Piling in approach trestle is in progress. 183 piles out of 269 piles completed. Piling commenced for berth 10000 SC piles out of 775 completed. Jetty construction work is in progress. Piling of approach trestle completed. Jet piling is in progress. The contractor has mobilized GHE for dredging and dredging of berth pockets is in progress. Filling of viscous basin commenced from 04.09.09 and in progress. Anticipated date of completion is Apr 2012.
5.	Construction of 13 th to 16 th Cargo berth on BCT basis	Ranipet	3.0 MTPA	7000	For 13 th Cargo berth Concession Agreement signed with M/s RAS Import Private Ltd. on 3.1.2006. Construction will be started shortly. For remaining 14 th -16 th berths RFP has been issued for bid.

					planned and two bidders submitted their bids opened on 27-07-2010. It is under evaluation. Anticipated date of completion is 22-09-12.
6	Development of dry bulk terminal (DVT) Tulus near Tulu outside Kandla Creek at Kandla Port on 111 Berth	Kandla Port	14.5 MTTPA	1CBDC	PPRAE and security clearance has been received Environmental clearance awaited from MoEF. New DVT project profile fixed. PEP issued to government and issued bidders. Letting will be carried out after CCBA approval. Anticipated date of completion is 20-07-13.
7	Setting up of SPBs and allied facilities off Vizhinjam Jetty at Kollam.	Kollam Port	5.0 MTTPA	RANC Project SEAC BOT Operator	PPRAE memo along with draft RFP and CCBA has been sent to Ministry on 12-2-2010. Environmental Clearance being conducted against the proposed project under Environment Act as per direction of IAMP. Information has been sent to MoS on 24-2-2010 for getting environmental clearance. Anticipated date of completion is 2013-14.
8	Development of Port No. 7 i.e. second coal handling terminal or DAPOT Lekia.	Morungao	4.01 MTTPA	2*20	Memorandum Agreement executed between Adani Morungao Port limited and the Admistrated and Morungao Port Trust on 22-6-2009.
9	Development & Operation of International Container Terminal (ICT) at Vizhinjam BOT basis by MS India Gateway Terminal Pvt Ltd, a subsidiary of the Indian Ports International.	Cochin	Container storage at 125 mts 40 MT in phases	2013	Phase I of the ICT Project reported for commissioning by August 2010
10	Construction of Coal Jetty by M/s. Udyog Power Corporation Ltd. (UPCL) Exclusive Right On BOT (Cochin port)	New Chittur	3.0 MTTPA	2010	Work is in progress. Filling work of jetty and Diaphragm wall are completed. Construction of main jetty work is under process. About 50% of work completed. Anticipated date of completion is December, 2010.
11	Setting up of Mechanised iron Ore loading	New Mangalore	3 MTTPA (Mechanised of Jetty)	2010	High water opinion on 15-03-2009 and the letter of award has been issued on 23 September,

	Completion of Berth No. 14 by KNR Logistics Limited on BOT basis				2008 Construction agreement has been signed on 12.12.2006 and work started in November 2008. Work is in progress. Anticipated date of completion is December 2011.
12	Construction of North Cargo Berth - I (Container)	Tidbinim	7.0 MTPA	2010	Port construction commenced on 16.1.2010.
13	Development of Second Container Terminal (GPTL) on BOT basis.	Grenier	...	1990	Project facilities and services were completed and commercial operation has already been commenced on 22.6.2008.
<p>Note: Information from Kolkata D.C., about H.C. and Ziauddin port has not been received. Latest available information in regard of these ports has been included.</p> <p>Source: Major Ports.</p>					

Appendix - II

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

Sl No	Project	Port Name	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
1.	Development of Deep Berth Iron Ore Borth on BOT basis.	Paradip	10.0 MTPA	69.4	Concession agreement has been signed on 17.09.
2.	Development of Deep Berth Coal Borth on BOT basis	Paradip	10.0 MTPA	4780	Concession agreement has been signed on 10.1.09
3	Development of Multi-Purpose berths to handle dry cargo including container & BOT basis.	Paradip	5.0 MTPA	3575	Invited bids were submitted on 16.06.2010.
4	Construction of LNG Terminal Joint Venture	Unnati	~0 MTPA	2700	The Ministry approved for the proposal for development of LNG beth through Joint Venture with OCLCLPL, awarded by the Ministry on 10.7.2006. Tender documents issued & awarded from OCLCLPL is now preparing IFRS.
5	North Container Terminal (DBFO Basis).	Jawaharlal Nehru	2.8 MTEUs	41000 Phase 1	PPPAAC discussed this project in its meeting held on 11.11.08 and the committee agreed in principle for the proposed development. Receipt of IFRS work scheme presented to Ministry's direction and scheduled for revised on 31.12.2009. A package submitted RFP documents issued on 17.11.2009 in May 2010 and award of work is expected in Dec 2010.
6	Development of Berths and container loading Gally with a quay	Jawaharlal Nehru	10.0 MTPA	6000	PPPAAC discussed this project in its meeting held on 11.11.08 and the committee agreed for the proposed development. Issuance of RFP was suspended upto 28.2.2010 due to occur

	length of 520 m. to the north of NPT.				2002 Port received 6 RFO and informed DGI kept in the safe custody till further orders from the Govt. The port has received approval from the Central Government. Vide E letter dated 16.2.2010 to implementation of this project. Issue of E was authorized in June 2010 and award of work is expected in Nov 2010
7	Development of 1 India Dock and 2 India Docks as dry dock terminal with private sector participation on PSC basis for 25 years	Mumbai	4.0 MTPA	400	The project has been withdrawn as per E of the project agency of which has been informed on 31.3.2010.
8	Development of berth nos. 10/11 India Dock and 12 India Dock as container cargo terminal on EGT basis for 25 years	Mumbai	300	The Board has approved the project on 30.06.2008. RFO issued on 27.06.08. One offer from T prospective bidders were received and opened on 5.10.2008. Six bidders have been shortlisted. RFP issued to bidders on 19.1.2010. Vide E of Shipping vide letter dated 4.3.2010 sought certain clarifications of dimension. Clarifications in MoU have been sent on 13.3.2010. A meeting in the progress of RFP projects was held by Secretary (Shipping) on 29.3.2010. Pre-bid meeting held on 6.2.2010. RFP due for submission on 9.3.2010 is further extended upto 1.12.10. A proposal by Sector of national oil has been submitted to DMRP on 10.11.08. DMRP will hearing on 20.12.08 for finalization of tariff. DMRP has asked to furnish more information with specific reference to capacity calculation. The same has been forwarded to DMRP.
9	New Cruise Terminal near Gateway of India.	Mumbai	...	10000	Consultant, Mr. Deepak Menon Consultant and Services submitted DCR for location at Gateway of India. However they have objected to the location of the Cruise Terminal or possibly granted. Vide E referred to Shipping Ministry for taking up the matter with MoC.
10	Strengthening of Ganda	Gandia	4.2	2770	EPC meeting conducted by Mr.

	Project No. / to G.		MATPA		New Date on 22.02.2010 and recommended to approve. Minutes also attached
11	Construction of Barge Jetty at Burden Basin	Kandla	3.0 MTPA	564	RFO under issuance. Last date of submission of RFO is 21.12.2010
12	Construction of Barge Jetty at Old Kandla (O.C.J)	Kandla	2.0 MTPA	270	Approval letter being received from SIC. DDA submitted to the Ministry for approval. Still it is awaited.
13	Construction of Barge Jetty at Taty	Kandla	0.2 MTPA	1000	Existing Barge Jetty of 100m and 50m wharfage construction
14	Development of Container Terminal on DEDT basis.	New Mangalore	...	2900	SIC documents issued from 20 th July, 2008 to 1 st September, 2009 Pre-application Conference held on 18 th August, 2008. 5 bidders have submitted their RFO application on 30.09.2009. The PAPAC Memo submitted on 14.9.2009. Proposal for security clearance in revised format has been 12.2009. TAME consultative hearing held on 5.10.2009 and approved the project. RFP document issued on 9.10.2009. Pre bid meeting held on 24.11.2009. Bid submission date on 5.12.2010. Anticipated date of completion is December, 2012.
15.	Development of 1000 t berth in Inner Harbour for multi cargoes on -DEDT basis	Vizhinjam port	2.00 MTPA	140	Approval of the Government of India received vide Ministers letter dated 20.1.2010. LCA issued to H1 bidder on 10.1.2010. Concession Agreement is signed on 17.1.2010 with Mr. Vinesh, GM of Multi Port Pvt. LTD. Expected date of completion is November, 2012.
16.	Development of EG-10 berth in Inner Harbour for handling Liquid Cargoes & Chemicals on DE-DT basis	Vizhinjam port	1.00 MTPA	534	Approval of the Government of India received vide Ministers letter dated 17.10.2009. LCA issued on 22.2010. Concession Agreement is signed on 15.09.2010 with Mr. A.S.P. India Pvt. LTD. Expected date of completion is November, 2012.
17.	Mechanized Coal Handling Facilities at Container-bulk Cargo Berth i.e. Outer Harbour (CBFO) basis.	Vizhinjam port	5.50 MTPA	446	Approval of the Government of India received vide Ministers letter dated 11.2.2010. LCA issued to H1 bidder on 1.3.2010. Agreement is signed on 11.03.2010 with Mr. Vinay General Cargo Berth Pvt. LTD. Expected date of completion is September, 2012
18.	Installation of mechanized	Vizhinjam port	3.00 MTPA	2175	RFO opened on 11.08.2010 and the same are under evaluation by MS

	Porter's loading Berth at BO-7 in Inner Harbour on CBPOT basis.				GRBIL, Risk and Infrastructure Ltd. Proposed contract value in Millions on 1-9-2010 for obtaining security clearance. Till 31-3-2011, 7 applications have been addressed for the Harbour; 1 submission of documents. Expected date of completion is March, 2012.
19	Development of WCO-7 berth with Mechanized handling facility in inner harbour on CBPOT basis	Vizianagaram narr	5.86 MTPA	2012	Ministry's response received on 02.09.2010. RFP issued on 5.9.2010 with due date of submission on 30.9.2010. Since no bids are received, proposal for re-issue of RFP is underway. Expected date of completion is March, 2012.
20	Construction of WCO-2 berth with Mechanized handling facility in inner harbour on CBPOT basis	Vizianagaram narr	5.86 MTPA	2007	Ministry's response received on 02.09.2010. RFP issued on 6.9.2010 with due date of submission on 30.9.2010. Since no bids are received, proposal for re-issue of RFP is underway. Expected date of completion is March, 2012.
21.	Development of CII-1 berth including mechanized facilities in inner harbour for handling cement concrete units on CBPOT basis	Vizianagaram narr	6.4 MTPA	2012	RFP issued on 27.8.2010 with due date date on 29.10.2010. Final reply distance received on 22.10.2010. Expected date of completion is March, 2012.
22.	Development of BO-1A berth including mechanized facilities in inner harbour for handling thermal power ash units on CBPOT basis	Vizianagaram narr	7.93 MTPA	2014	RFP issued on 27.8.2010 with bid date date on 24.11.2010. Expected date of completion is March, 2012.
23	Mechanization of Iron Ore handling facility at WCO-1 berth in the inner Harbour on CBPOT basis	Vizianagaram narr	5.87 MTPA	2015	RFO opened on 12.4.2010 and are under evaluation. Revised up-tilt berth project sent to TIDBI on 10.09.2010. Ministry was addressed to give security clearance vide OFM Letter No. 1204E110F1NECHI/WO/11 2010, Dated 27.4.2010. Expected date of completion is 2012.
24	Development of SEM facility for crude oil under joint Venture (HPCL)	Vizianagaram narr	8.0 MTPA	2020	MoU entered with HPCL on 31.3.2008 on alignment of land. Expected date of completion is March 2012.

25.	Development of LNG CNG import terminal at the water front area of Kochi Port Breakwater.	Ministry of Petroleum	6.6 MTPA	72111	Request for Qualification (RQF) issued
26.	Setting up of an International Container Terminal at Cochin Port (Joint Venture through BOT)	Cochin	6.0 MTPA	882	RFO were invited on 27.7.2009 and five firms have been pre-qualified. The proposal for up-front Tariff Setting was submitted to TAMP on 24.11.2009 and TAMP conducted its first meeting on 28.11.2009.
27.	Setting up of an International Container Terminal at Cochin Port (Joint Venture through BOT)	Cochin	...	8760	Consultants furnished the first Feasibility Report and Business Plan on 31/03/2008. M/s. Feedback Ventures Pvt. Ltd., Haryana was appointed as Transaction Adviser on 20.04.2009 and they have commenced the assignment on 09/06/2008. Application seeking 'In Environment' Clearance for the project has been submitted to the MoE&F on 3.10.2009. Proposal seeking In Principle approval of APPPAC enclosing the TPA documents duly prepared by the Transaction Adviser has been submitted to the Ministry on 27.2.09. The proposal for 'In-principle' approval was discussed in the meeting later by the Secretary (Shipping) on 28.7.2009. Accordingly ECI was issued and a meeting convened on 10.11.2009 for the Project Briefing and interaction with the interested parties. Based on subsequent discussions with the Ministry of Shipping and Ministry of Tourism, revised proposal is under preparation.
28	Setting up of LPG Regasification Terminal at Kollam Port Furnished by M/s. Jetrose LNG Ltd. on lease basis.	Cochin	Initial 2.5 MTPA Final 6 MTPA	35005	Land development work has been completed by PLL. Construction of Boundary Wall for LPG Terminal and site grading work is in progress. 7 tanks have been short-listed for the storage of 2 Nos. LNG tanks of 1,95,000 to 1,70,000 cu.m capacity. PLL has awarded the Lump sum EPC contract for the storage tanks to M/s. IHI Japan. The EPC contract with M/s. IHI Japan has been signed on 07.03.2010. Tenders have been invited to EPC contractor for generation of packages and for main works. The Contract Agreement

						between Cochin Port Trust and M/s P.T has been awarded on 12.3.08. EPC contract for storage tanks with m/s IHL, M/SAN has been signed on 07.08.2008 and the work is in progress. Letter of Acceptance for Re-qualification Package was issued to M/s CTC Overseas Corporation Ltd Taiwan on 25.08.2009 and the EPC contract has been signed on 07.09.2009. Letter of Acceptance for Marine Facilities has been issued to M/s. Mecon Infrastructure Ltd on 23.07.2010.
						ECD for Miscellaneous Infrastructure under the Adm Building, Occupation Health Centre Work which were previously listed have been received and the evaluation of LOR is under progress. Exp. Date of completion - 2012.
22.	Development of Major Container Terminal on BOT basis.	Chennal	7.0 MTEUs	2010	Invitation of RFO process completed. Ministry's approval awaited for issue of RFP to be published RFO appears.	
23.	Construction of berth No. 3 as container terminal or BOT basis.	Tuticorin	7.2 MTPA	2012	Waiting Ministry's approval for realisation of Monopoly policy decision. Likely commission period is December 2014.	
31.	Construction of One Number of Shallow Draft) Berth on DBFO basis.	Tuticorin	2.0 MTPA	2014	RFO will be opened by 17.3.2010. Likely commission period is September 2012.	
32.	Development of Non-Cargo Berth - II on DBFO basis.	Tuticorin	7.0 MTPA	2012	On receipt of Ministry's approval for security clearance RFP will be issued to the short listed bidders. Likely commission period is July, 2012.	
33.	Upgradation of Mechanical Handling Equipments in Berth No. 1 & 2 and berth No. 3 on JOC basis.	Tuticorin	15.0 MTPA	2011	RFO will be opened on 05.2010. Likely commission period is August, 2011.	
34.	Construction of a berthing jetty north of 2 nd Oil Jetty through DIBUJI Route	Lader Creek Complex Under XGPT	3.75 MTEUs	2010	RFO has been issued in February 2010 for execution of the scheme.	

85.	Construction of a newer port south of 2 nd CI early through DEPOT Banks.	Hokko Mark Domestic Trade KaFT	1.5 MTT's	471	Feasibility Study being undertaken following which EPG document would be issued
<p>ECT: Build Operate and Transfer; POC: Joint Port Operator; DEPOT: Design, Build, Finance, Operate and Transfer</p> <p>Note: Information from Hokkaido (1.5), Japan (2.0) and India ports has not been received. Latest available information in respect of these ports has been included.</p> <p>Source: World Ports.</p>					

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

Sl No	Project Name	State/Union Territory	Capacity (MT or Tonnes)	Project Cost (Rs. Million)	Project Status
1.	Development of Paradip port through private investment by BCT Group	Koraput Dist, Puducherry	Phase I 4.0 Phase II 3.6	170 N/A	Phase I of commercial operations commenced in June 2003 and is currently functional Phase II related works in progress.
2.	Development of Puducherry port through private investment by BCT Group	Puducherry	Phase I 18.2 Phase II 10.8	27850 N/A	Developer has applied for environmental clearance. Work to commence upon obtaining the same.
3.	Development of coastal and inland water port at BOOGI basin by M/s. Anna Lines Ltd.	Waterfront	To Lateralize the port in Ganti village with total MT of 14.7 MTPA (1.7 MT/1000 container)	48000	Shore holding pattern approved. Land acquisition awaited. Anticipated date of completion 2015
4.	Thoothukudi Port Expansion & Corporation Ltd.	Tiruvalam	2.0	600	Construction in progress.
5.	Modern Dry Dock for Ship repairment	U.P. (Daman & Diu)		250	The port has withdrawn the proposal, hence the U.P. (Daman & Diu) has taken whole project Modern Dry Dock for Ship Repairment at Wadala & the plan and starting of work is now proposed /d. However the concerned party has withdrawn the proposal and hence delayed
6.	Expansion share comment and Operation of Cochin port	Cochin Captive Port Ltd.	10 MTPA	1100	All weather dried berthing facilities from 2012.
7.	Manufacturing, Assembling & Installation of Navigation buoys in Chetham in Port Blair	A & N Islands		170	Buoys brought to the installation being carried out.
8.	Construction of 1400 structures for local villages at Nizamabad			5000	Works discontinued due to non-existence of floating cranes. During demolition floating wall damaged and so on.

6.	Shore deviation at Ranjan Jay Dweep 1	do-		1.23	Main work complete. Additional structure work to be started.
10.	Conduction survey and investigation and bathymetric soundings for construction of jetty at Kausalya Nagar.	do-		1.17	Survey required done & in progress. Hydrographic and bathymetric survey continued. P.D.P. studies agreement exchanged.
11.	Construction of RCC Jetty at Borivali. Also Bathymetric Middle junction	do		9.04	Work awarded. Not yet started owing to fund.
12.	Special repairs to Cargo handling equipments at Campbell bay	-do-		3.52	Balance works are under progress to restore the functions.
13.	Special repairs to jetty at Kausalya	do-	Existing sites are measured for new berthing.	1.50	Work is being done up.
14.	Special repairs to berthing facilities at Narmada and Campbell bay	do-	Safe cargo handling facilities.	4.02	Till date all berths have been repaired. Only berthing repair work is in progress.
15.	Providing berthing facility at Adalas, Ghat, on Hoobur.	do-		8.07	The work of Adalas Ghat, completed. Planned scope of work to be done, etc.
16.	Special repairs to 30 Ton L.L. Wind caneel Hill Bay	do-		2.45	Work commenced to repair LL. Crane to utilize balance facilities.
7.	Providing & laying of oil pipe line to the camp at per area of Hill Bay in Little Waterman	do		1.26	Water supply restored. Construction of airfloat activities in progress.
17.	Special repairs to Nugle port at. of Bay.	do		2.83	SCI called for imports of oil cranes.
18.	Supply of polymer additives to be placed as a sort of light weight along the sea shore at Break water to reduce the force of Break water at Hill Bay.	do		1.02	Supply order placed and Gulfon received at Port Breakwater made.
20.	Development of Multi-purpose and berthing and liquid heat removal terminal, a sectional & storage	Jamnagar (Gujarat)	40	3000	Project has commenced.

	Site by Refineries ports & terminal Ltd				
21.	350m Deep Water Berth by Cenktank terminal Ltd	Vadinar Gujarat	15	500	Project has commenced
22.	Rebuild of Kullam jetty by KR BHCO	Mangalore Karnataka	-	25	Dredging under progress
23.	Oil terminal at Mandvi by NIPPC by Hindustan A SEZ Ltd	Mandvi Gujarat	30	1000	ISL license issued and made operational
24.	Various infrastructure activities by oil companies	Bhogal Uttarpradesh	5	1000	Construction in various stages
25.	Establishment of SMM at Saldanha by Bharat Oils Refinery Ltd	Saldanha Project	0	600	Project has commenced
26.	Development of Oil Terminal & Dredging by Gujarat Pipelines Ltd.	Hiriyur (Gujarat)	282	650	Ongoing dredging and construction of berths and link up area facility in progress
27.	Development of BPZ related port infrastructure at Kochi by Kochi Port Ltd.	Kochi (Kerala)	51	600	DEP has been submitted. Land acquisition process underway initiated. Environment clearances issued
28.	Construction of all weather area - 5th port cluster by Gangaipokkuri Port Ltd.	Gangaipokkuri Project	4	1200	Detailed project report prepared and submitted. Land acquisition process underway initiated. Environment clearances issued
29.	Expansion of LNG berth at Cochin by Reliance LNG Ltd.	Cochin (Kerala)	25	450	Construction permission granted and will be commenced soon
30.	First Deep Port Terminal by Adani Ports (Cochin) Port Ltd	Cochin (Kerala)	17	1100	Construction has been completed. To be interconnected after customs clearance for handling pilgrims is completed
31.	Development of Port Activity Phase 1B by Hochtief Ltd. and LSC and Chittagong Coastal marking.	Chittagong (Bangladesh)	18.0	2200	Adani Ports Private Ltd is developing this port segment to construct a terminal
32.	Expansion of Maitri & In-Kepoty by Larsen & Toubro Ltd	Maitri (Gujarat)	9	100	Design work is completed and made operational
33.	Building of a single Deep Mooring by Reliance Refining Ltd.	Gorai (Gujarat)	6	200	Site has been prepared and permit for permission has been granted
34.	Berth in product	Saldanha	5	100	Construction permission

	Project	Location	Amount	Year	Work done/progress
25.	Development of Mundra port and North side of the peninsula, INR, Liquid Bulk Oil Terminal & General cargo by Mundra port SEZ Ltd.	Mundra Gujarat	125	12/2006	Capital disengaged in progress for south port
26.	Development of Modern sea port at Haldia in West Bengal	New Jalpaiguri West Bengal	12KMTFA (Phase-I)	16/2008	Vis Mineral Enterprises have submitted proposal for Development of Haldia Port on Swiss challenge award. The MFI has drafted the L1m to prepare DPR under preparation
27.	Development of Modern Sea Port at Tarki in Karnataka coastline.	Tarki Fort	34 KMTFA (Phase-I)	30/2008	ICD Nominated KSEIDC as lead agency. KSEIDC appointed MFL & Partners company for preparation of DPR. Land survey and Master plan survey is being done

Note: Except 1 for plan in respect of maritime States Maharashtra & Kerala is in previous period...

Source: Ministry of Shipping Business Review

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

Sl. no	Project	State Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Millions)	Project Status
1	2	3	4	5	6
1.	Landing facilities of cargo & passenger vessel	U.T. of Chennai & C.I.	-	2280	Proposal has been submitted for approval to Ministry of Shipping.
2.	Cargo & Passenger Landing Facility at Vizhinjam Island	U.T Kerala & D.M.	-	600	Proposal has been submitted for approval to Ministry of Shipping.
3.	Guwahati Anchorage Port	Arunachal Pradesh	1.00MT	150	The work is in progress.
4.	Chittagong port	Bangladesh	1.0MT	2500	Work is in progress.
5.	Koraputtham Port and Vizhinjam port	Anchro Prakasli	1.5MT	1000	Work is in progress.
6.	Madraswar Port	Anchro Prakasli	1.2MT	1000	Work is in progress.
7.	Development of Chennai Port by Mrs. G. Venkatesh Shrivastava Ltd. (ECCS7 basis)	Maharashtra	4.02 MTPA	3364	LCI issued in September 2006.
8.	Development of Visakhapatnam Port (ECCS7 basis)	Andhra Pradesh	7.5 MTPA	10000	Proposal under review
9.	Development of Kandla port	Gujarat	7.4 MTPA	9000	Proposed under review
10.	Establishing a captive port at Mangalorean in Uttara Kannada District	Tamil Nadu	8 MT	10000	Preparation of Technical Feasibility Report Under progress.
11.	Establishing a captive port in Cuddalore District	Tamil Nadu	11 MT	4500	Preparation of Detailed Project Report Under progress
12.	Establishing a captive port at Tiruchendur in Nagercoil District	Tamil Nadu	5MT	3650	Preparation of Detailed Project Report Under progress
13.	Establishing a captive port at Kanyakumari District	Tamil Nadu	14 MT	N.A.	Preparation of Technical Feasibility Report Under progress
14.	Survey work of jetties at Paravur Silvassa Sea	Soc	-	300	Administrative work in progress
15.	Establishing a captive port at Kanyakumari in Tirunelveli District	Tamil Nadu	Ship building	1200	Detailed Project Report Under preparation
16.	Establishing and handling facility at Virudhunagar port	Tamil Nadu	0.5	2250	Preparation of Detailed Project Report Under progress
17.	Establishing a captive port at Tamil Nadu	Tamil Nadu	8	7500	Construction of the facility to be commenced

Sl. No	Project	State/ Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
1.	Thiruvananthapuram district				
1a.	Establishing new port at Thiruvananthapuram district	Tamil Nadu	3.5	5770	Technical Feasibility Report under preparation.
2.	Establishing new port at Kanyakumari district	Tamil Nadu	5-10 report under way		Technical Feasibility Report under way.
3.	Construction of jetty at Old Cochin Dandi Gac	Goa		35	Administrative work in progress
21.	Renovation of Marine Stairway, Pithanam Creek	Goa		10	Administrative work in progress
22.	Formation of jetties for Penal Port	Kerala		70	Administrative work in progress
23.	Upgradation/Expansion of Maritime School	Goa		15	Administrative work in progress
24.	Designing of New Zuari & Mandovi & Enhancement of Old berths	Goa		50	Administrative work in progress
25.	Development of Venniar port (BOT)	Vizhinjam Port, Kerala	14.5	18500	The project concluded. Central Government has written to the project.
26.	Development of Kollam port (BOT)	Kollam Port Kerala	125	540	Further invites for approving concession for feasibility study.
27.	Development of Azhikode port (BOT)	Azhikode Port, Kerala	12.5	4510	Consultant selected for feasibility study.
28.	Development of Export Port, Government of Kerala (BOT)	Vesapra Port, Kerala	1.75	1000	Consultant selected for feasibility study
29.	Development of Paravur Port	Paravur Port	18	27500	Proposed site of MPA (CII) Contractor of 40000 kmts land to develop is invited. Developer is to approach Min. Environment (MoEF).
30.	Construction of proposed jetty at physician Bay complex like berthing facilities in Port Blair.	A & N Islands	Safe berthing facilities will be provided to the ships. Factors calling to these is as follows:	6150	Dropped proposal and matter under consideration for shifting location

J1	Developing detailed the proposed Jetty at Phoenix Bay complex for berthing of yachts in Port Blaik.	-do-	-do-	£1.70	Dropped project and matter under consideration for shifting 18 Km.
J2	Construction of 2 Nav. Navigational towers at landing place in shore of Kolama in Nancowry.	-do-	Fresh water Supply to ship calling at Port Blaik Harbor.	0.24	Location yet to be finalized and work is to be started. Surveying chart no. in PWD for finalization of location.
J3	Construction of RCC structures and metal materials of submerged work including fabrication and erection of navigational aids with cylindrical rock in Campbell Bay.	-do-	-do-	1.57	Revised cost estimate under preparation.
J4	Reconstruction of Tunmer destroyed RCC structure and construction of additional JTC structure on local Nanada at eastern entrance of Nancowry Harbor.	-do-	Possibilities will be explored for smooth handling of congru.	21.50	TSC under preparation and location to be finalized.
J5	Constructing of RCC platform for local Maids for making Western entrance of Nancowry Harbor.	-do-	Safe berthing facilities are to be provided to the ships calling in these islands.	34.00	TSC under preparation and location to be finalized.
J6	Special works of Phoenix Bay in Nancowry group of islands.	-do-	-do-	1.00	Jetty submerged. Work could not be taken up.
J7	Rebuild jetty to RCC type at Campbell Bay in Great Knecht.	-do-	Floating offices or main office for providing berth berthing for ships.	4.17	Rebuild estimate has been already finalized.

38	Construction of RCC platforms for local Normals & structures for marking system avoidance of Kavaratti, Lakshadweep	-do-	Safe navigation facilities	02.87	TSM under programme. Location yet to be finalized.
39	Construction of 6 Nos. RCC structures for marking navigational channel at Pithahabi in Great Nicobar.	-do-	-do-	0.65	Rock work under progress. Due to Tsunami effect entire physical structures have been washed away. The location can still be used to construct ACR.
40	Construction of 3 Nos. Navigational towers at landing place of shore at Philothear in Great Nicobar.	-do-	-do-	0.24	Scouting chart was received for the location of Tsunami affected & location yet to be finalized.
41	Construction of 3 Nos. Navigational towers at landing place in shore of Vilankudi in Caneel Islands	-do-	-do-	0.24	Location yet to be finalized. Work under started.
42	Construction of 4 Nos. RCC Structures for marking navigational Channel at Pilumile in Great Nicobar Islands.	-do-	Safe berthing facilities will be provided	0.60	Tsunami affected area, hence work to be declined.
43	Procurement of consultancy services for construction of new jetty of inter island vessels and Safe Berth in Tercor Island on Turnkey basis.	-do-	Providing safe berthing structure at minimum group of islands	39.90	DPR received from the consultant submitted to A&N Admin. and submitted to Ministry of Shipping.
44	Procurement of consultancy services for construction of new jetty of mainland vessels at Kanche on turnkey basis.	-do-	-do-	42.10	DPS received from the consultant submitted to A&N Admin. and submitted to Ministry of Shipping.
	Reconstruction of		To resume		

45	Per. control Tower at Uda Bay in little Andaman	do-	the bathing structures. Providing all round communication facilities from ships to shore and shore to ships.	3.30	Stage of the work cleared by PMH. Required TSC is in progress.
46	Construction of New Navids at Uda Bay	do	Sonic navigation facilities will be provided to the ships calling in these Islands	12.22	CPA, PNRB has informed AIHW to provide floating buoys.
47	Construction of local roads at Cor Kichha	do-	do-	2015.03	CPA, PNRB has informed AIHW to provide RCC structure for communication.
48	Conducting S&E for landing facilities at Uda Bay in Little Andaman.	do.	Establish bathing structures in the surroundings	9.17	Mathematic model studies entailed to CWPRA Pune. Feasibility and seismic survey report is awaited from CWPRA.
49	Expansion of existing Captive jetty at Arikoxi, Koch by Sanghi Enterprises Ltd.	Ratodh (Gujarat)	'	250	Lo principle approval has been granted. Studies and investigations have been carried out.
50	Expansion of existing Captive jetty by Ultra Tech Cement Ltd.	Korava (Gujarat)	2	175	Lo-principle approval has been granted. DPR has been prepared. Environment clearance is awaited.
51	Modernisation of Okha port by GVK power and Infrastructure Ltd.	Okha (Gujarat)	9.28 MMTPA - 0625MTEU	700	Pre-feasibility study has been completed. Detailed studies are underway.
52	Development of port terminal part Maritime city by GVK power and Infrastructure Ltd.	Okha (Gujarat)	100	15500	Pre feasibility study has been completed. Detailed studies are underway.
53	LNG Port Facility by Swec Energy Ltd.	Hipow (Gujarat)	7	1500	Survey and investigations to prepare DPR for the port are in progress.
54	Private terminals near Rangpur and	Vengat (Gujarat)	50	5000	Pre feasibility study has been completed.

	Demand for by Universal Success Enterprise Ltd.				
55	Development of Green-Field port MADUVA by Vinesh Chemical Works Ltd.	Maharashtra (Nagpur)	1	700	Detailed Project Report is under preparation.
56	Development of Gharal port at Sardarpur Port & Lagoon & Tides Ltd.	Saurashtra (Gujarat)	200	1200	Detailed traffic study, Hydrology and Topography surveys have also been completed. However, due to local ignition it has been assumed that no alternatives exist. But study is to be continued and will lead to M& T & T development of green- field port.
57	New Captive Jetty by ARG Ltd.	Guruji (Gujarat)	6	165	The project is awaiting GOI approval.
58	New Captive jetty by Ispatex Ltd.	Ranach (Gujarat)	10	8000	PPR has been prepared and is under scrutiny.
59	Multipurpose jetties by Reliance Industries Ltd.	Sikka (Gujarat)	15	2000	Environmental clearance obtained. Detailed engineering studies underway.
60	SHM at Mundra by MID Adit (through their sub- concerns in India).	Mundra (Gujarat)	18	200	Preliminary studies have been conducted.
61	Revival of Mandvi port by MID Adit	Mandvi (Gujarat)	2	1500	PPR has been prepared and is under scrutiny.
62	Development of new Green-field port Vansi-Borsa	Vansi-Borsa (Gujarat)	1	1500	Fresh EOI has been initiated.
63	Development of new Green-field port Kawali	Maharashtra (Kawali)	1.12 TPH 1.6 MMTPA	2000	Fresh EOI has been issued.
64	Development of new Green-field port Hedi	Gujarat (Gujarat)	10	829	Approval is pending at GOI level.

65	Development of new Gwadar port Master plan	Medina (General)	9.91	852	Approval is pending at GOJ level.
66	North Canara sea port	Commerce	DMPA	2000	North Canara sea ports City PPA(R) has developing the port. PPA under process. Field data collection and site survey is going on.

Plan Outlay and Expenditure : Port Sector (Central Sector)

Name of the Port	Annual Plan 2005-06		Annual Plan 2006-07		Annual Plan 2007-08		Actual Plan 2007-08		Annual Plan 2008-09		Annual Plan 2010-11	
	Ok.	Exp.	Ok.	Exp.	Ok.	Exp.	Ok.	Exp.	Ok.	Exp.	Ok.	Exp.
1	5	3	5	5	6	7	6	9	10	11	12	13
Visakhapatnam	54.72	37.84	12.02	8.39	21.26	13.41	41.53	27.74	72.10	42.89	45.89	46.89
Mumbai	22.53	19.53	12.42	12.53	17.36	14.10	12.53	24.53	32.13	35.23	32.02	17.52
EP	57.01	41.72	46.74	46.74	56.19	46.22	76.17	41.72	121.72	167.13	101.21	168.53
Chennai	48.7	25.41	33.03	23.03	47.71	24.47	42.95	26.95	94.00	56.50	56.94	55.77
Gandhinagar	52.19	34.76	22.04	22.04	126.52	129.04	226.63	129.04	129.04	129.04	129.04	129.04
Visakhapatnam	75.7	43.48	27.31	22.31	68.00	38.4	35.39	31.44	25.01	72.28	51.33	51.33
KOCHI	92.59	71.29	24.22	20.17	17.46	20.03	127.07	72.03	171.03	95.43	58.23	22.48
Adyar Estuary	10.90	7.72	22.06	20.44	11.10	10.08	11.29	7.52	7.72	11.27	7.70	10.73
Paravur	116.00	44.02	44.42	23.19	127.16	42.46	82.17	101.47	215.1	28.1	130.24	136.7
Chennai Harbour	72.02	18.03	16.01	12.02	36.12	29.5	46.00	30.11	36.00	31.37	31.37	29.73
Tiruchirappalli	28.5	13.89	22.40	22.11	27.41	6.11	26.87	42.03	290.50	19.07	52.21	37.00
Port of Kochi	26.70	17.25	7.00	9.17	31.00	24.38	11.24	15.03	51.01	22.42	171.13	51.03
Cochin International Ship Canal Project	100.00	50.00	304.00	194.00	674.79	112.7	1271.07	921.09	1411.0	27.49	57.4	20.79
MTT - Vizianagaram Container Terminal	6.00	0.34	2.55	1.25	4.30	0.30	2.50	10	8.00	2.25	3.00	2.22
Salem Dredging	12.73	7.01	468.73	212.64	474.26	170.24	525.75	44.53	111.53	77.01	56.00	172.51
Surat Dredging	17.50	10.00	21.00	7.00	19.50	0.0	29.00	5.0	15.00	10.00	10.00	10.00
Total	1,324.46	603.91	1394.29	1011.81	2,095.37	801.59	1781.27	1173.70	2416.00	1222.27	2717.70	1771.37

(A) includes Works & Dredging

(B) includes CCA, ECA, RCC, RCC Structures etc., for Dredge, Term or Shipping and Port Areas and Work

(C) net Capital Investment Spent/Spending/PA

Commodity-wise Traffic Handled at Major Ports

Port	Period	TEU's In Millions	Tonnes	Tonnes	Gross Gross	Cargo (TRN/Days)	Avg days	Gross Tn		Tonnes	Tonnes	
								Tonnes	TDU's			
1	2	3	4	5	6	7	8	9	10	11	12	
Mumbai	2008-04	30.94	482	2	5	34	35	11,700	505	54.7%	18,674	
	2008-10 P	3.1	77	2	5	23	3	568	57	61.82	16,405	
	April-Sep.	3.29-10	23	1	1	7	382	1281	102	15.36	6045	
	2008-11 P	6.12	223	3	77	41	142	1023	104	21.81	6253	
Kolhapur	2008-09	0.030	677	1019	472	346	2	2002	157	0.53	41722	
	2008-10 P	0.03	121	1489	480	234	1	805	124	1.00	40274	
	April-Sep.	01-07-11	0.005	284	77	2925	41	361	44	21.01	1747	
	2008-12 P	0.009	1744	561	1001	227	3	608	74	3.95	11.4	
Panaji	2008-09	0.071	22.77	1294	5.84	3570	3	24	2	0.38	464.8	
	2008-10 P	0.026	77.4	2272	8.09	2461	2	44	4	57.72	40.11	
	April-Sep.	07-08-10	0.029	618	7.4	1445	1	21	2	2302	28348	
	2008-11 P	0.026	6357	757	3021	822	4	29	3	1.01	7445	
Visakhapatnam	2008-09	17.08	1292	2446	7202	41.21	537	11,61	58	4.68	18,656	
	2008-10 P	1.78	1942	2371	7261	3462	11	625	37	13.91	62501	
	April-Sep.	2008-10	0.026	1177	174	3062	145	102	45	5014	30248	
	2008-11 P	0.022	1060	1428	3218	2911	4	104	50	5217	30545	
Chennai	2008-09	12.82	5428	2446	7202	41.21	537	11,61	58	4.68	18,656	
	2008-10 P	1.28	627	1292	2371	3462	11	625	37	13.91	62501	
	April-Sep.	2008-10	0.026	4467	322	14.7	248	9	11.13	531	30248	
	2008-11 P	0.024	2371	757	3021	822	4	29	3	1.01	7445	
Cuttack	2008-09	3.02	1.11	2704	3	6	0	4	1	0.16	1596	
	2008-10 P	0.04	21	1297	2	6	0	3	0	0.22	16701	
	April-Sep.	2008-10	0.027	448	4.08	1	7	0	7	0	1.48	
	2008-11 P	0.023	322	3798	4	2	0	0	1	0.22	4471	
Burdwan	2008-09	0.02	0	2327	2	1228	922	5432	78	14.1	22,111	
	2008-10 P	0.014	21	476	9	3821	50	34.11	444	3762	37201	
	April-Sep.	2008-10	0.024	121	2.07	4	11.13	101	32.81	215	4322	15708
	2008-11 P	0.024	35	2370	0	11.2	6	3474	78	2.44	1238	
Dibrugarh	2008-09	2.52	0	293	0	425	0	1522	110	4.1	16264	
	2008-10 P	0.016	7	128	0	384	0	1620	200	17.6	17796	
	April-Sep.	2008-10	0.012	15	0	12.7	0	1548	131	42.1	16262	
	2008-11 P	0.004	0	74	4	112	0	1120	172	47.1	1626	
Pondicherry	2008-09	2.125	6774	6	1.29	913	111	127	86	16.22	24601	
	2008-10 P	0.024	2382	0	284	623	0	475	80	17.44	25526	
	April-Sep.	2008-10	0.027	472	0	27	133	241	42	13.37	15722	
	2008-11 P	0.024	2374	7	1330	124	0	294	20	16.64	16264	
Mangalore	2008-09	1.03	23802	476	4131	182	0	11.2	14	0.19	41881	
	2008-10 P	0.024	41574	957	2794	123	0	35	15	22.21	46447	
	April-Sep.	2008-10	0.011	121	2252	49	0	11.2	5	11.24	15622	
	2008-11 P	0.011	12867	76	5340	122	0	27	5	11.14	15722	
J & K	2008-09	4.02	0	0	0	0	0	50508	664	27.11	17796	
	2008-10 P	0.019	2	0	0	0	0	16200	403	27.5	20723	
	April-Sep.	2008-10	0.014	1	0	0	0	17502	1902	1246	16262	
	2008-11 P	0.011	0	0	0	0	0	21114	2152	16.64	20723	
Cochin	2008-09	3.82	0	3072	0	346	276	1024	52	17.51	51621	
	2008-10 P	0.017	5742	0	442	17	906	47	16205	34647		
	April-Sep.	2008-10	0.014	5142	0	353	5	408	57	11.84	26253	
	2008-11 P	0.012	5123	0	363	286	41	367	57	16.47	34647	
Kochi	2008-09	40229	155	1422	457	9479	028	2114	102	6223	39841	
	2008-10 P	47512	683	6744	474	9723	621	2435	142	14.44	39823	
	April-Sep.	2008-10	24214	563	1024	1201	176	1120	57	16.24	39841	
	2008-11 P	30844	105	1124	471	9479	028	1169	57	5485	38241	
All Ports	2008-09	172323	82425	40045	23300	16277	2021	62102	6073	73389	51625	
	2008-10 P	7902	127223	40279	17062	1717	1927	1032-5	6911	91006	53103	
	April-Sep.	184411	46517	42112	23273	12348	477	40722	5119	21241	53103	
	2008-11 P	41251	46621	27117	14168	17451	11441	21120	2111	21120	5119	

F : Free Trade
Course Water : River or Inland - Port Boundary

Annex-III

Commodity Composition of Traffic Handled at Non-Major Ports.

Maritime State / UTs	Period	POL	Iron Ore	Building Material		Coal	Fertiliser & F.R.M		(000 Tonnes)
				Material	Total		Fertiliser	Others	
Gujarat	2008-09	57362	31976	9585	16434	1052	28368	152011	
	2009-10	140224	6851	11245	21021	5758	20040	205540	
	April - Sept	2009-10	55037	1761	3284	11,13	1830	10745	942010
	2010-11	71753	3629	6771	13332	2338	12312	112174	
Maharashtra	2008-09	0	4273	2352	1400	277	2054	10412	
	2009-10	0	1968	2173	2469	122	2137	11916	
	April - Sept	2009-10	0	1752	1034	342	5	738	4466
	2010-11	0	2735	968	1709	5	1012	3510	
Andhra pradesh	2008-09	3438	6485	156	3520	3231	3914	291201	
	2009-10	3652	15277	311	15151	4243	48215	43523	
	April - Sept	2009-10	2842	3073	226	7158	2072	1152	21758
	2010-11	1773	3805	198	11108	2658	2842	25703	
Goa	2008-09	0	1190	0	0	0	0	0	11901
	2009-10	0	13678	0	218	0	0	0	13556
	April - Sept	2009-10	0	2651	0	0	0	0	2651
	2010-11	0	3674	0	0	0	0	0	3674
Tamil Nadu	2008-09	3104	0	0	0	21	74	838	
	2009-10	1036	0	0	0	44	96	1174	
	April - Sept	2009-10	490	0	0	0	26	56	571
	2010-11	304	0	0	0	24	24	002	
Karnataka	2008-09	17	4283	7	12	29	610	4068	
	2009-10	36	7941	13	0	10	657	5347	
	April - Sept	2009-10	17	1121	8	0	782	1926	
	2010-11	8	2957	17	0	0	126	2716	
Others states / UTs #	2008-09	176	41	1160	0	205	926	24018	
	2009-10	197	121	960	1299	610	981	3676	
	April - Sept	2009-10	133	42	544	110	4	489	1545
	2010-11	131	0	360	2261	157	484	2408	
All Major Ports	2008-09	97616	35826	3220	21457	3632	38572	213222	
	2009-10	125144	46747	4977	40065	101030	289639	289312	
	April - Sept	2009-10	60617	24176	4070	19446	4942	15151	1289718
	2010-11	77229	19859	7355	26993	5075	12844	155175	

Note : All figures for 2009-10 & 2010-11 are provisional

: Comprises of Pondicherry, Orissa, Kerala, Andaman & Nicobar Islands and Lakshadweep Islands.
No traffic was recorded at ports of Daman & Diu

CONTINUITY WITH PREVIOUS. CAPACITY OF MAJOR M&R CONTRACTS AS ON 31.03.2010

GENERAL NOTES										
%	DESCRIPTION	SUMMARY	TYPE	PERIOD	STATION	ROUTE	EXCISE	NEW TAX	STATION	ROUTE
1.	IGCL	16,15, 16-20	1,720	10.8	100	100	140	500	100	100
2.	INDIACOM	6,00	1,90	10.7	100	100	140	500	100	100
3.	OTTERBACH	700	2,00	-	-	-	100	200	-	-
4.	PTTCS	720	1,00	-	-	-	100	200	-	-
5.	PTTCS	716	2,60	20.0	100	100	140	500	100	100
6.	SALSAUTO	22,1	70	10.1	100	100	140	500	100	100
7.	SALSAUTO	22,1	70	10.1	100	100	140	500	100	100
8.	SALSAUTO	22,1	70	10.1	100	100	140	500	100	100
9.	SALSAUTO	22,1	70	10.1	100	100	140	500	100	100
10.	SALSAUTO	22,1	70	10.1	100	100	140	500	100	100
11.	Total	49,6	16,60	2,90	2,90	2,90	100	200	100	100

Note: *Under construction. Estimated figures of traffic & consumption. **2008 Single Estate Meter

**Carry forward capacity from 1st July 2009 to 31st March 2010. In this the last month (i.e. 2009-10) 16,500 units were carried forward and no new unit was issued.

**Under construction. Total number of units issued to date.

**Carry forward capacity on 1st April 2010. Estimated figures of traffic & consumption. Total units have been issued as 0.

**Carry forward capacity on 1st April 2010. Estimated figures of traffic & consumption. Total units have been issued as 0.