

भारत के पत्तन क्षेत्र का अद्यतन

UPDATE ON INDIAN PORT SECTOR

(30.09.2012)



सत्यमेव जयते

परिवहन अनुसंधान प्रभाग

TRANSPORT RESEARCH WING

सडक परिवहन तथा राजमार्ग मंत्रालय

MINISTRY OF ROAD TRANSPORT & HIGHWAYS

भारत सरकार

GOVERNMENT OF INDIA

नई दिल्ली

NEW DELHI

भारत सरकार, नई दिल्ली

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I. RECENT TRENDS IN CARGO TRAFFIC AND POLICY INITIATIVES

1.1 International and Domestic Factors Related to Seaborne Trade

1.1.1 The global economy lost steam in 2011, with gross domestic product (GDP) growing by 2.7 per cent compared with 4.1 per cent in 2010. In addition to the sovereign debt crisis in Europe, the slow recovery in the United States of America, and other difficulties facing advanced economies, a number of factors have weighed down on global growth. These include, in particular, heightened global financial risks, political and social unrest in North Africa and Western Asia, natural disasters in Japan and Thailand which have disrupted regional and global supply chains, rising oil prices and volatility, austerity measures, the fading of the stimulus effect of 2010, and geopolitical tensions in the Strait of Hormuz. Many of these factors remained relevant in 2012, and, depending on how they evolve, they could impact dramatically on the global economic outlook.

1.1.2 The slowdown in demand and the overall weak growth in advanced economies translated into weaker imports in developed regions. In 2011, imports grew at a modest 3.5 per cent, a sharp fall from the 11 per cent recorded in 2010. While growth in developed economies weakened in 2011, developing countries continued to drive world economic expansion and to account increasingly for a larger share of world GDP. This share is estimated by UNCTAD to have increased from 21.6 per cent in 1980 to 32.6 per cent of world GDP (at constant prices 2005) in 2010. In 2011, growth in China remained robust, although it decelerated to 9.2 per cent. The country continues to be, however, the engine of regional growth.

1.1.3 World economic developments in 2011 highlighted the continued strong interdependence among economies. From the second quarter of 2011, economic growth in most developing countries and economies in transition started to decelerate, suggesting that these countries are not immune to the problems facing advanced economies and that they remain vulnerable to contagion through various channels, including trade, supply chains and the global financial system.

1.1.4 In 2012, WTO projects a further deceleration in trade growth with global merchandise trade volumes expected to grow by just 2.5 per cent, a rate well below the 6 per cent average recorded over the period 1990-2008. Apart from current global economic uncertainties, the outlook for merchandise trade is also clouded by the risk of a lack of trade finance. A report of International Chamber of Commerce and IMF revealed a pessimistic outlook for trade finance in 2012. A surge in protectionist measures is another driver of uncertainty in view of the current difficult economic climate and the lack of progress on the adoption of a multilateral trading system under the WTO Doha Round negotiations. Relevant protectionist measures included trade remedy actions, tariff increases, import licenses and custom controls.

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

Table 1: Growth in Cargo handled at Indian Ports and related parameters (in %)						
Parameters	2008-09	2009-10	2010-11	2011-12	April- September	
					2011-12	2012-13
Trends in India's Select : Macro Parameters						
I. Total Cargo	2.5	14.3	4.2	3.0	4.6	1.8
(a) Major Ports	2.2	5.7	1.6	-1.7	3.1	-3.3
(b) Non Major Ports	3.3	35.7	9.1	11.5	8.2	10.3
II. GDP overall	6.7	8.4	8.4	6.5	7.3	5.4
(a) Agriculture	0.1	1.0	7.0	2.8	3.4	2.1
(b) Industry	4.4	8.4	7.2	3.4	4.7	3.2
(c) Services	10.0	10.5	9.3	8.9	9.5	7.0
III. Foreign Trade						
(a) Export in \$ value	13.6	-3.5	40.5	21.3	40.5	-7.9
(b) Import in \$ value	20.7	-5.0	28.2	32.3	38.1	-3.6
Trends in Select : Global Indicators						
IV. World Output	2.8	-0.6	5.1	3.8	3.3F	3.6f
(a) Advanced Economies	0.1	-3.5	3.0	1.6	1.3F	1.5f
(b) Developing Economies	6.1	2.7	7.4	6.2	5.3F	5.6f
V. World Trade Volume (Goods)	2.5	-11.5	14.1	6.3	3.4F	4.6f
VI. Export Volume growth (Goods)						
(a) Advanced Economies	2.2	-11.3	12.0	5.3	2.2F	3.6f
(b) Developing Economies	3.9	-7.6	13.7	6.5	4.0F	5.7f
VII. Import Volume (Goods)						
(a) Advanced Economies	1.0	-11.9	11.4	4.4	1.7F	3.3f
(b) Developing Economies	8.6	-8.3	14.9	8.8	7.0F	6.6f
VIII. World Seaborne Trade*	2.1	-5.0	7.4	3.9	NA	NA
(a) Goods Loaded	2.4	-4.5	7.0	4.0	NA	NA
(b) Goods Unloaded	1.8	-5.5	7.8	3.9	NA	NA
I. Based on data from Major Ports and Non Major Ports						
II. Based on gross domestic product (GDP) at Factor Cost (2004-05 Prices), Central Statistical Organization;						
III. Based on Department of Commerce, DGCI&S and RBI Bulletin						
IV, V, VI & VII Based on World Economic Outlook, October ,2012, IMF;						
VIII. Based on Review of Maritime Transport, 2012, UNCTAD						
Note : MT: Million Tonnes; For item Nos IV, V, VI & VII year 2007-08 refers to calendar year 2007 and so on; F refers to forecast for 2012 and f refers to forecast for the year 2013;						
* growth in total goods loaded plus unloaded; NA : Not Available						

Developments affecting Seaborne trade

1.1.6 Fortunes of maritime trade move in tandem with worldwide macroeconomic conditions. Developments in the world economy and merchandise trade are primary drivers in seaborne trade. Maritime transport activity depends on developments in world trade. An analysis of world seaborne trade (**Table :2**) based on Review of Maritime Transport (RMT), UNCTAD (2012)

shows that world seaborne trade held steady in 2011 and grew by 4 per cent, with total volumes reaching a record 8.7 billion tonnes.

Table 2 : Developments in International Seaborne Trade (Million Tons)				
Year	Oil and gas	Main Bulk#	Other Dry Cargo	Total
2000	2163	1295	2526	5984
2006	2698	1814	3188	7700
2007	2747	1953	3334	8034
2008	2742	2065	3422	8229
2009	2642	2085	3131	7858
2010	2772	2335	3302	8409
2011	2796	2477	3475	8748
# iron ore, grain, coal, bauxite/alumina and phosphate . The data for 2006 onwards are based on various issues of the Dry Bulk Trade Outlook, produced by Clarkson Research services. Source: Review of Maritime Transport,2012,UNCTAD				

Trends and Developments in World Seaborne Trade

1.1.7 The expansion in world seaborne trade was driven by rapid growth in dry cargo volumes propelled by upbeat container and major bulk trades, which grew by 8.6 per cent (expressed in tonnes) and 5.4 per cent, respectively. In 2011, container trade flows were sustained by non marilane trade as United States and Europe continued to struggle with sluggish growth and uncertainty, while dry bulk volumes held strong with continued import demand for raw materials in large developing economies, notably China & India.

1.1.8 Developing countries which contributed increasingly larger shares and growth to the world GDP and merchandise trade, their contribution to world seaborne trade has also been increasing. In 2011, a total of 60 per cent of the volume of world seaborne trade originated in developing countries and 57 per cent of this trade was delivered on their territories. The contribution of various regions to world seaborne trade volume underscores the dominance of developing countries both as exporters and importers, a shift from earlier patterns when they served mainly as loading areas of high volume goods. The share of imports outweighs exports totaling 41% and 34% respectively. Asia maintained its lead position and continued to fuel world seaborne trade with its share of goods loaded amounting to 39%, while that of goods unloaded reaching 56%. Clarkson Research Services are forecasting a 4.3 per cent annual growth rate in the volume of world seaborne trade in 2012.

Crude oil and petroleum products

1.1.9 Demand for crude oil tankers is closely related to global oil demands. Over the past decade, crude oil volumes increased at a relatively slower pace than other market segments. Between 2000 and 2011, crude oil shipments grew annually at an average rate of less than 1 per cent while in 2011, they declined by 1.4 per cent. In 2011, the total volume of crude oil loaded

globally amounted to about 1.8 billion tons. Western Asia remained the largest loading area, followed by Africa, developing America and the transition economies. Major importing areas were in ascending order, Japan, North America, Europe and developing Asia. Tanker trade has also been affected by rising operating costs resulting from the higher oil and bunker fuel prices that prevailed in 2011.

1.1.10 2011, world shipments of petroleum products and gas, including Liquefied Natural Gas (LNG) and Liquefied Petroleum Gas (LPG) increased by 5.1%, taking the total to 1.03 billion tonnes. The growth rate reflects booming LNG trade. If gas trade were to be excluded, the Clarkson Research Service estimates that the growth rate would moderate to 3.3% in 2011.

Dry cargo bulks

1.1.11 The momentum of growth in 2010 was maintained for dry cargo trade in 2011, which increased by a firm 5.6 per cent, taking the total to nearly 6 billion tonnes. Dry bulk cargo, including the five major commodities (iron ore, coal, grain, bauxite/alumina and phosphate rock) and minor bulks (agribulks, fertilizers, metals, minerals, steel and forest products) increased by 5.6 per cent, down from the 12.3 per cent increase recorded in 2010. The total volume of dry bulk trade amounted to 3.7 billion tonnes in 2011. Growth in the five major bulks remained closely linked to steel production, growing infrastructure development needs of emerging developing countries, urbanization and the evolution of the global manufacturing base.

Coal

1.1.12 With a share of 30.3% of global energy consumption, coal is the second most important primary energy source used mainly in power generation. Global coal production increased by 6.1% in 2011. Developing countries accounted for most of the growth with China accounting for over two-third of the total. In 2011, coal consumption grew by 5.4% globally. The consumption rose by 8.4% in countries outside OECD while consumption declined by 1.1% in OECD countries.

1.1.13 In 2011, the volume of coal shipments (thermal and coking) increased by 5.1% to 944 million tonnes. Indonesia remained the leading exporter of thermal coal with a share of 44.9% followed by Australia (20.4%) in 2011. Strong demand in China, India as well as in Europe has boosted thermal coal imports. Import level in Japan and the USA dropped due to stringent environment regulation in the aftermath of March 2011 disaster in Japan and low gas prices in USA.

1.1.14 Coking coal shipments declined by 5.5% in 2011 reflecting the developments on the demand side as well as supply side constraints resulting from tighter market conditions caused by

output cuts in Australia. The outlook for coal trade remains promising as developing countries will continue to require more coal to meet their energy needs. However, developments in coal production and consumption patterns in China will impact coal trade.

Iron ore and steel production and consumption

1.1.15 Global Iron ore trade increased by 6 per cent in 2011, taking the total volume past 1 billion tonne. This growth remains highly concentrated with China being the main driver. Reflecting their weaker economic stance, European countries reduced their iron ore imports by 3.7 per cent, while Asian developing countries recorded an increase of 2 per cent. The outlook for iron trade remains positive which is projected by Clarkson Research Services to grow by 6 per cent in 2012. This however, is subject to developments in the wider economy and the steel-making sector, and more importantly, to the effect of new macroeconomic policies being pursued by China, , with shipment projected by.

1.1.16 A new trend observed with respect to iron ore trade is the evolution of purpose-built very large ore carrier (VLOCs). To capitalize on the important iron ore demand from China and to ensure high market share on this trade, Vale, The Brazilian mining giant ordered a giant fleet of 80 VLOCs by 2015. Of these, 36 ships will be of 400,000 deadweight tons (DWT), which is roughly twice as large as existing Capesize ships.

Dry cargo: minor bulks

1.1.17 In world economy of 2011, growth in minor bulks trade decelerated to 6.1 per cent. Global volumes reached 1.2 billion tonnes, a level surpassing the pre-crisis peak of 1.1 billion tonnes achieved in 2007.

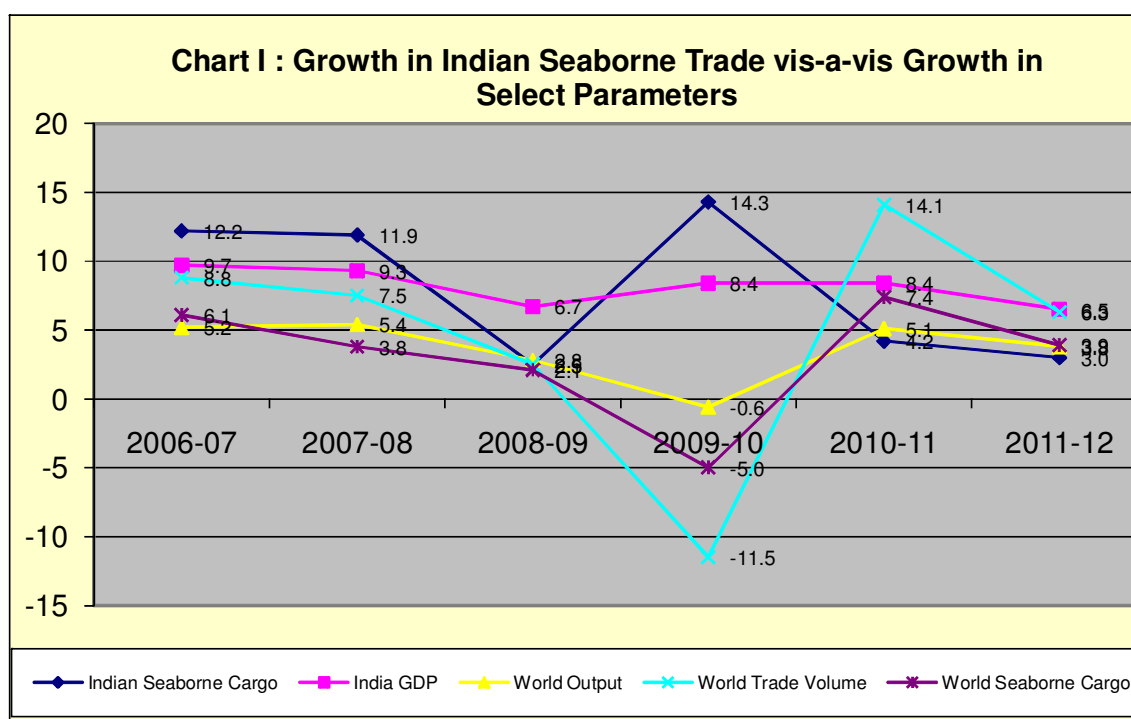
1.1.18 The balance of 2.2 billion tonnes of dry cargoes is made up of containerized (62%) and general cargoes. Driven largely by increasing international division of labour and productivity gains within the sector, container trade, the fastest growing cargo segment expounded at an average rate of 8.2% between 1990 and 2010. World container trade, expressed in 20-foot equivalent units (TEUs), grew by 7.1 per cent in 2011, down from 12.8 per cent in 2010.

1.1.19 According to Clarkson Research Services, total container trade volumes amounted to 151 million TEUs in 2011, equivalent to about 1.4 billion tonne. Growth was mainly generated by increased demand for imports in developing regions, with container trade volumes expanding strongly on the non-mainlane East-West, North-South and intra-regional lanes. One current opinion maintains that greater containerization could help generate additional cargo for container shipping. It is argued that unconventional commodities can be carried increasing in containers. For these

ideas to materialize, however, prevailing price and cost barriers need to be removed and cost-effectiveness and vessel specifications need to be assessed. Import demand from China could also have a deep impact on future container trade patterns. Supported by the policy within China of promoting greater consumer spending, some rebalancing of container trade flows is emerging, breaking away from past trends as containerships are increasingly sailing full to China. In a separate development and against a background of increasing costs and lower earnings, container shipping witnessed a structural change in 2011 with the emergence of alliances and oligopolistic competition.

1.2 Cargo Traffic at Indian Ports

1.2.1 During the first half (April-September) of 2012-13 major and non major ports in India accomplished a total cargo throughput of 455.8 million tonnes reflecting an increase of only 1.8% over the same period last year (**Table: 3**). This is mainly attributable to a decline of 3.3% in the cargo handled at major ports during the first half of the current year. In contrast, non-major port's growth increased to 10.3% in the first half of 2012-13 compared to 8.2% in the corresponding period of 2011-12. The growth in India's GDP, Port traffic and growth in world output, world export volume and world seaborne trade (loadings and unloading) since 2006-07 is given in **Chart-I**



Source: Growth rates for India's GDP and Cargo Traffic are based on statistics released by Central Statistical Organization and data available with Transport Research Wing of M/o Shipping, Road Transport & Highways and pertain to fiscal year. Growth rates in the World Output and World Trade Volume refer to calendar years (2006-07 refers to 2006 and so on) based on (World Economic Outlook, October 2012, IMF)

Table 3: Traffic Handled at Indian Ports (Thousand Tonnes)								
Major/Non-Major Ports	Traffic Handled				Growth over previous year/period			
	2010-11	2011-12	April-September		2010-11	2011-12	April-September	
			2011-12	2012-13			2011-12(P)	2012-13
Major Ports	570086 (64.4)	560134 (61.4)	279880 (62.5)	270561 (59.4)	1.6	-1.7	3.2	-3.3
Non-Major Ports	315358 (35.6)	351545 (38.6)	167969 (37.5)	185206 (40.6)	9.1	11.5	8.2	10.3
All Ports	885444 (100)	911679 (100)	447849 (100)	455767 (100)	4.2	3.0	5.0	1.8
Note : Figures within parenthesis indicate percent share in total cargo traffic for Major and Non-Major ports respectively. (P) : Provisional								

1.3 Cargo Traffic at Major Ports

1.3.1. Cargo traffic at India's 12 major ports during April-September, 2012, at 270.56 million tonnes declined by 3.3% compared to 279.88 million tonnes handled during April-September, 2011. During first Six months of 2012-13, Ennore port recorded highest growth in traffic (22.5%) followed by Mumbai (8.0%), Kandla (7.5%), NMPT (4.3%) and Cochin Port (3.9%) over April-September 2011-12. The growth in traffic for two other ports during the same period was, however, marginal viz. Tuticorin (1.3%) and JNPT (0.9%). Major ports which recorded a negative growth in traffic during April-September 2012 were: Mormugao (22.9%) followed by Haldia Dock Complex (HDC) (17.9%), Vishakhapatnam (16.0%), Paradip (8.5%), Chennai Port (7.3%) and Kolkata Dock System (KDS) (7.8%).

Port wise traffic handled during 2010-11, 2011-12 and first half of 2011-12 and 2012-13 is given in **Table: 4**.

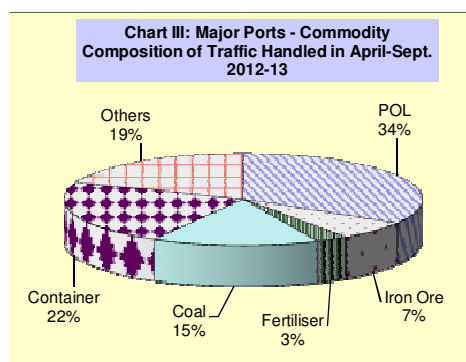
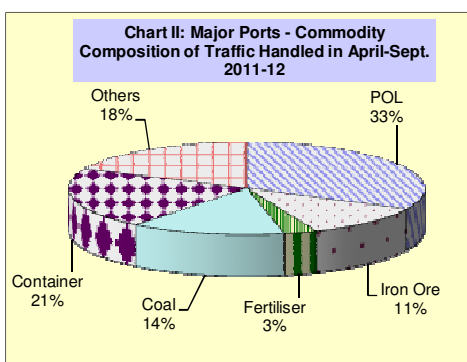
Table 4 : Traffic Handled at Major Ports (Thousand Tonnes)					
Ports	2010-11	2011-12(P)	April-September *		
			2011-12	2012-13 (P)	% Change over CP
Kolkata	47545	43245	23353	19808	-15.2
Kolkata DS	12540	12233	6242	5754	-7.8
Haldia DC	35005	31012	17111	14054	-17.9
Paradip	56038	54254	27996	25629	-8.5
Vizag	68041	67420	36097	30309	-16.0
Ennore	11009	14956	6527	7997	22.5
Chennai	61460	55707	29269	27127	-7.3
Tuticorin	25727	28105	13852	14037	1.3
Cochin	17873	20091	9754	10134	3.9
New Mangalore	31550	32941	16042	16736	4.3
Mormugao	50060	39001	16409	12656	-22.9
Mumbai	54586	56186	26661	28788	8.0
JNPT	64317	65727	32352	32653	0.9
Kandla	81880	82501	41568	44687	7.5
All Ports	570086	560134	279880	270561	-3.3
Source : IPA (P): Provisional CP: Corresponding period of April-September, 2011-12					

Commodity wise Cargo Traffic at Major Ports

1.3.2 At a broad commodity level, during first six months of 2012-13, Coal, Container, Others Cargo and POL traffic posted growth of 3.8%, 2.7%, 2.4% and 0.5% respectively (**Table 5**). The traffic in Iron ore was affected during April-September, 2012 recording a negative growth of 43.1% primarily due to a ban on mining of Iron Ore. The Cargo traffic during April- Sept, 2012 ,in respect of Fertilizer & FRM declined by 5.2% over corresponding period of previous year.

Table 5 : Commodity-wise Traffic Handled at Major Ports (Thousand Tonnes)					
Commodity	2010-11	2011-12(P)	April-September		
			2011-12	2012-13	% Change over CP
POL	179882	179104	90558	90978	0.5
Iron Ore	87686	60692	31593	17970	-43.1
Fertiliser	20798	20389	8361	7928	-5.2
a. Finished	12367	12219	4528	4221	-6.8
B. Raw	8431	8170	3833	3707	-3.3
Coal	75146	78831	39275	40786	3.8
a. Thermal Coal	46145	50834	24521	25515	4.1
b. Coking Coal	29001	27997	14754	15271	3.5
Container	114158	120202	59333	60906	2.7
Others	92416	100916	50760	51993	2.4
Total	570086	560134	279880	270561	-3.3
(P) : Provisional; CP : Corresponding period-April-September 2011-12					

1.3.3 In terms of composition of cargo traffic handled at major ports during April – Sept., 2012, the largest commodity group (with share in percent in total cargo handled) was POL (34%) followed by Container traffic (22 %), Other cargo (19%) and Coal (15%). Iron Ore has a smaller share in total cargo handled during the first half of 2012 as compared to the same period of the previous year due to ban on mining of iron ore in some States. The shares of different commodity groups in total cargo traffic during first half of 2011-12 and 2012-13 at India's major ports is depicted in **Charts II and III**.



POL : Petroleum, Oil & Lubricants

1.3.4 The Port-wise & Commodity-wise traffic handled at major ports during the years 2010-11 and 2011-12 and the first six months of 2011-12 and 2012-13 are given in **Annexure - II**.

Container Traffic

Table 6: Container Traffic at Major Ports (in Thousand Tonnes/TEUs)												
PORT	2010-11		2011-12(P)		April-September				% Change over CP			
	Tn	TEU	Tn	TEU	2011-12		2012-13		April- Sep. 2011-12		April- Sep. 2012-13	
					Tn	TEU	Tn	TEU	Tn	TEU	Tn	TEU
Kolkata	6220	377	6818	412	3310	201	3478	230	5.4	8.6	5.1	14.4
Haldia	2835	149	2619	140	1201	69	1362	75	19.1	-6.8	13.4	8.7
Paradip	69	4	109	8	39	3	91	7	34.5	50.0	133.3	133.3
Visakhapatnam	2572	146	4214	234	1901	106	2363	130	85.6	76.7	24.3	22.6
Chennai	29421	1485	30075	1558	15329	794	15515	804	4.8	4.8	1.2	1.3
Tuticorin	8169	468	9227	477	4409	240	4546	240	29.3	5.7	3.1	0.0
Cochin	4419	310	4715	337	2592	184	2435	177	5.1	2.9	-6.1	-3.8
New Mangalore	568	40	646	45	333	24	347	25	13.3	20.0	4.2	4.2
Mormugao	220	18	231	22	104	9	90	9	36.8	28.6	-13.5	0.0
J. L. Nehru	56426	4332	58233	4321	28465	2150	29330	2155	4.8	1.9	3.0	0.2
Mumbai	653	72	551	58	328	31	404	31	1.5	-16.2	23.2	0.0
Kandla	2586	160	2764	166	1322	81	945	59	11.6	76.0	-28.5	-27.2
All Ports	114158	7561	120202	7778	59333	3892	60906	3942	8.4	5.2	2.7	1.3

Note: CP - Corresponding period of previous year. (P) Provisional; Tn: Tonnes; TEU –Twenty foot Equivalent Units

1.3.5 Total Container traffic at major ports has increased both in terms of tonnes and twenty foot equivalent units [TEUs] by 2.7 % and 1.3 % respectively during the first six months (April-

September, 2012-13) of the current financial year. Jawahar Lal Nehru Port continues to be the leading container handling port in the country with a share of more than 48% in terms of tonnage and more than 55% in terms of TEUs in the total container traffic at major ports during the period under reference above.(Table:6). Efficiency in container handling operations at some of the select container terminals in India is given in **Table: 7**.

Table 7: Performance Indicators of Select Container Terminals							
Terminal	Year	Moves /	Moves /	TEU /Mtr.	TEU /	Dwell	TRT
		Crane Hr.	Berth Hr.	Quay	Employee	Time(Day)	Day
1	2	3	4	5	6	7	8
Tuticorin	2010-11	23	42	1204	3042	2.4	1.16
	2011-12	22	43	606	1544	2.7	1.2
	2012-13	22	45	644	1730	1.4	1.1
Chennai - CCTPL	2010-11	26	51	1303	2744	2.7	1.3
	2011-12	21	38	620	1382	3.4	1.7
	2012-13	23	46	556	1240	2.5	1.4
Chennai - CITPL	2010-11	32	28	441	3426	3.5	4.5
	2011-12	30	42	294	1254	3.5	0.04
	2012-13	30	33	373	1592	3.5	0.04
JNPT - JNPCT	2010-11						
	2011-12	14.8	36.2	12.6	0	4.8	1.94
	2012-13	15.8	46.6	17.6	0	4.3	2.3
JNPT - NSICT	2010-11	NA	NA	NA	NA	NA	NA
	2011-12	21.9	74.0	1223	NA	3	NA
	2012-13	22.6	73.7	911	NA	3.4	NA
JNPT - GTICT	2010-11	NA	NA	NA	NA	NA	NA
	2011-12	31.83	96.8	1329	1775	2.9	NA
	2012-13	30.3	102.8	1385	1933	3.2	NA
Cochin	2010-11						
	2011-12	26.5	54.1	304	118	11.0	13.8
	2012-13	25.6	48.44	292	102	7.0	12.5
Kolkata DS	2010-11	29.5	17.1@	NA	NA	6.0\$	4.45
	2011-12	NA	NA	NA	NA	NA	NA
	2012-13	NA	NA	NA	NA	NA	NA
Visakhapatnam	2010-11	22	30.1	324	866	4.8	0.76
	2011-12	NA	NA	NA	NA	NA	NA
	2012-13	NA	NA	NA	NA	NA	NA

#: Per effective crane hour; \$: Import *: Average for CFS containers;
 @: Starting times and finishing times have been considered as vessels sometimes have to wait at berth after completion of work due to non-availability of suitable tide in the river.
 Moves /Crane Hour(Hr): Total container vessel moves/sum of gross craned Hours
 Moves/Berth Hr: Total container vessel moves/sum of gross vessel working hours
 TEU/Mtr. Quay: Total TEUs handled per annum / total quay length in meter
 Dwell time: Total No. of container storage days/total no. containers
 JNPCT: Jawaharlal Nehru Port Container Terminal NSICT: Nhava Sheva International Container Terminal
 GTICT: Gateway Terminals India Container Terminal; TRT:Turn Around Time
 CCTPL: Chennai Container Terminal Pvt. Ltd. CITPL: Chennai International Terminal Private Limited.

1.4 Cargo Traffic at Non - major Ports

1.4.1 During the Eleventh Five Year Plan (2007-12), traffic at non-major ports increased at an annual average growth rate of close to 14.1%. Non-Major Ports handled more than 40% of total maritime 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

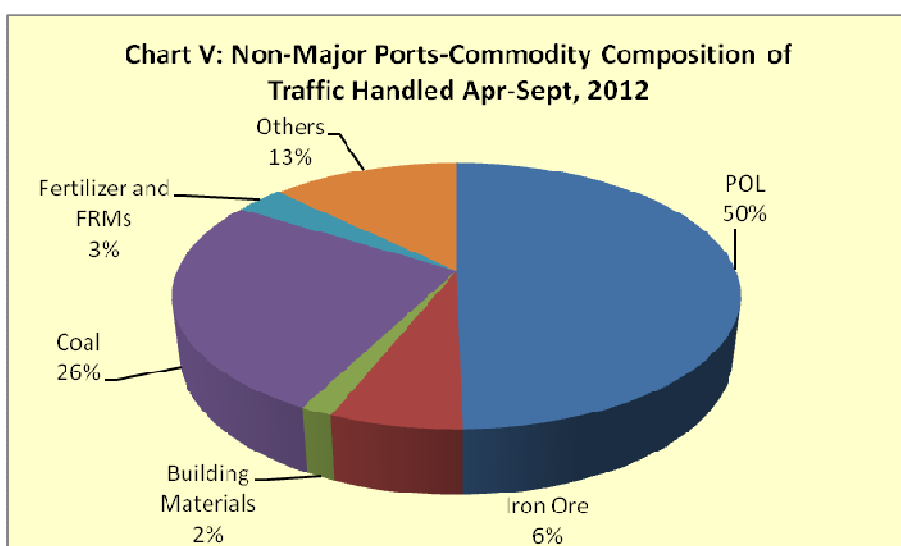
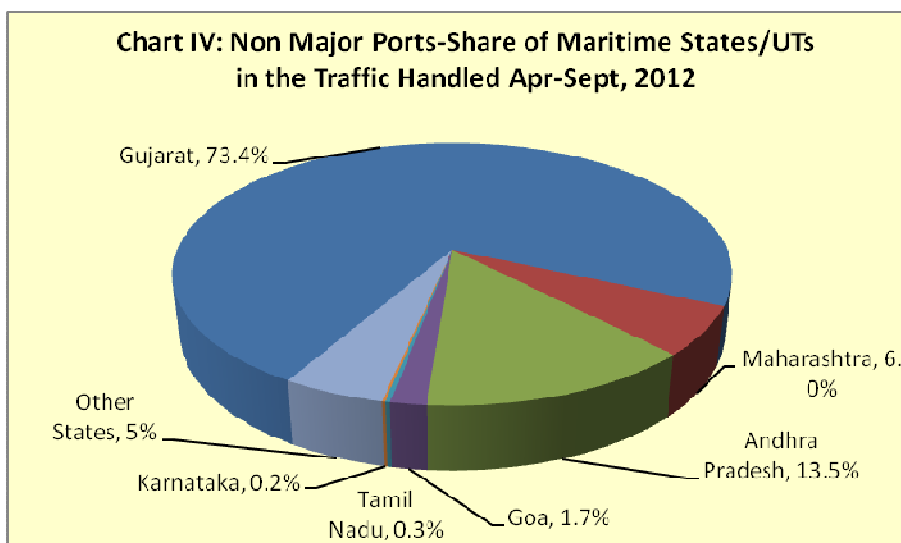
Table 8 : Traffic Handled by Non-Major Ports by Maritime States/UTs								
Maritime State/UT	Traffic Handled ('000 Tonnes)				% Change over Previous Year			
	2010-11	2011-12	April-September		2010-11	2011-12	April-September	
			2011-12	2012-13(P)			2011-12	2012-13(P)
Gujarat	230907 (73.22)	259029 (73.68)	126859 (75.53)	135969 (73.42)	12.32	12.18	13.12	7.18
Maharashtra	14875 (4.72)	19948 (5.67)	8074 (4.81)	11136 (6.01)	23.48	34.10	23.87	37.92
Andhra Pradesh	43267 (13.72)	43924 (12.49)	21491 (12.79)	24905 (13.45)	-0.97	1.52	-16.81	15.89
Goa	14581 (4.62)	14470 (4.12)	5233 (3.12)	3217 (1.74)	4.92	-0.76	31.68	-38.52
Tamil Nadu	1611 (0.51)	1210 (0.34)	658 (0.39)	474 (0.26)	37.22	-24.89	4.11	-27.96
Karnataka	3095 (0.98)	581 (0.17)	245 (0.15)	279 (0.15)	-63.79	-81.23	-90.99	13.88
Other States/UTs	7022 (2.23)	12383 (3.52)	5409 (3.22)	9226 (4.98)	75.55	76.35	58.76	70.57
All M.States/UTs	315358 (100)	351545 (100)	167969 (100)	185206 (100)	9.14	11.47	8.21	10.26
P- Provisional Note: Figure in parenthesis is the percentage share of traffic handled by the maritime state to the total traffic handled by all the maritime states;								

1.4.3 The growth in cargo handled by non-major ports during the first half of 2012-13 was 10.3% compared to 8.2% in the first half of 2011-12 .(**Table:8**). The growth in cargo handled at non-major ports has been facilitated by sustained growth in non-major ports located in Maharashtra and Gujarat aided by substantial increase in the cargo traffic of Coal and POL in particular (Tables 8 & 9). 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 by these ports.

Table:8 reflects that Gujarat accounted for about three-fourth of the total traffic handled by the non-major ports followed by Andhra Pradesh (13%), Maharashtra (6%) and Goa (2%) during April – September 2012. Four maritime States, viz, Gujarat, Maharashtra, Goa, and Andhra Pradesh together accounted for close to 94% of the total cargo traffic handled by the non-major ports in the first half of the current year.

1.4.4 Two commodities, viz. POL, and coal accounted for more than three-fourth of the total cargo handled at the Non- major ports during April – September,2012.(Table :9).

Table 9 : Commodity-wise Traffic Handled by Non-Major Ports								
Commodity Group GROUP	Traffic Handled ('000 Tonnes)				% Change over Previous Period			
	2010-11	2011-12	April-September		2010-11	2011-12	April-September	
			2011-12	2012-13			2011-12	2012-13
POL	145378 (46.10)	161133 (45.84)	77646 (46.23)	92074 (49.71)	5.56	10.84	0.59	18.58
Iron Ore	38266 (12.13)	36277 (10.32)	13815 (8.22)	11731 (6.33)	-21.61	-5.20	-21.52	-15.09
Building Materials	12327 (3.91)	8210 (2.34)	9975 (5.94)	2892 (1.56)	-6.20	-33.40	35.53	-71.01
Coal	58462 (18.54)	78426 (22.31)	37341 (22.23)	48578 (26.23)	41.64	34.15	28.79	30.09
Fertilizer & FRM	12725 (4.04)	15695 (4.46)	8458 (5.04)	6189 (3.34)	33.93	23.34	63.06	-26.83
Others	48200 (15.28)	51804 (14.74)	20734 (12.34)	23742 (12.82)	25.24	7.48	9.76	14.51
All	315358 (100)	351545 (100)	167969 (100)	185206 (100)	9.14	11.47	8.21	10.26
Note: Figure in parenthesis is the percentage share of major commodity groups in the total traffic handled by the Non major ports.								



POL : Petroleum, Oil & Lubricants FRM : Fertiliser Raw Material

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 two 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 Impact of growth on India's seaborne cargo

1.5.1.1 Maritime Transport activity is driven by developments in the world economy viz. growth in world output & trade as well as in Indian economy (coastal trade). Thus volume of seaborne cargo traffic is essentially in the nature of derived demand and is mainly shaped by the levels and

changes in both the global and domestic activity. During 2011-12, the GDP posted a growth of 6.5% compared with an increase of 8.4% in 2010-11. In the first six months of 2012-13, the GDP has seen downward trend in growth to 5.4%. However, Cargo traffic at India's 12 major ports (which accounts for 61.4% of India's total seaborne cargo) at 560 million tonnes showed a decline of 1.7% in 2011-12. In first six months of 2012-13, the cargo traffic at major ports has also shown a decline of 3.3% compared to an increase of 3.2% in the corresponding period of previous year. The trajectory of growth in cargo handled at India's major ports comes into sharp focus when these growth rates are viewed in terms of quarterly GDP growth trajectories. This reveals that growth in total cargo throughput at Major Ports remained subdued in Q3 and Q4 of 2011-12 and Q1 and Q2 of 2012-13. The manufacturing sector which is a major factor influencing seaborne cargo traffic continued to record low GDP growth (0.5%) in first half of 2012-13 which was 0.8% in first half of 2011-12. The GDP of Industry sector comprising of Mining & Quarrying; manufacturing; electricity, gas and water supply and construction activities recorded quarterly growth of 3.6% in Q1, 2.8% in Q2 in 2012-13 as against 5.6% in Q1 and 3.7% in Q2 of 2011-12. While trends in POL, coal and fertilizers are largely driven by the dynamics of domestic demand supply; those of iron ore, container traffic, "others" in particular are largely shaped by the state of global demand and economic activity and government policies. The impact of pick up in global demand was pronounced in case of container traffic, which reflects trends in trade in manufactures, recorded growth of 2.5% in Q1 and 3.0% in Q2 of 2012-13. Coal recorded an increase of 1.9% in Q1 and 7.3% in Q2 of 2012-13. Iron ore cargo traffic posted sharp decline 33.3% and 58.6% in Q1 and Q2 of 2012-13 mainly due to ban of iron ore exports by the state of Karnataka. Other commodity groups recorded meager to modest growth.

1.5.1.2 **Table 10** gives Quarter wise trend in growth of cargo traffic handled at Major ports, GDP and GDP of Manufacturing sector during 2011-12 and 2012-13.

Table 10 : Quarter wise Trend in Growth of Cargo Traffic at Major Ports & GDP							
Commodities	2011-12				2012-13		
	Q1	Q2	Q3	Q4	Q1	Q2	Half-yearly Growth
POL	10.2	-1.8	-10.1	3.5	-5.1	7.6	0.5
Iron Ore	-14.3	-9.0	-30.8	-53.5	-33.3	-58.6	-43.1
Coal	17.7	3.7	2.9	7.0	1.9	7.3	3.8
Fertilizer	-20.5	-26.0	34.0	30.7	-26.7	12.8	-5.2
Container (in tonnes)	7.8	9.6	5.8	-1.0	2.5	3.0	2.7
Other cargo	7.3	7.3	4.1	-1.5	2.5	-0.2	2.4
All Cargo	5.2	1.0	-4.7	-7.5	-5.5	-0.8	-3.3
GDP overall	8.0	6.7	6.1	5.3	5.5	5.3	5.4
GDP -Manufacturing	7.3	2.9	0.6	-0.3	0.2	0.8	0.5
GDP: Gross Domestic Product at factor cost at 2004-05 prices.							

1.5.2 Global Ocean Freight Rates

1.5.2.1 Freight rates in 2011 and the beginning of 2012 have often remained at unprofitable level. Within the three segments – dry bulk, liquid bulk and containerized cargo, substantive freight rates drops have been reported. The driving factor identified behind freight rates drop is vessel over supply. While freight rates have declined or remained at historically low levels, ship operating cost has grown moderately. In addition, bunkering prices continued to recover from their collapse during the economic crises, offsetting temporary freight rate increases. The developments in freight rates in 2011 and the beginning of 2012 for three major Cargo types: containers, liquid bulk and dry bulk shipping are given in the following paragraphs:

1.5.2.2 Container Freight rates

1.5.2.2.1 The current freight rates of containers are still well below the pre-crises levels of 2008. The recovery has been sluggish in 2011. After a temporary resurgence, the time charter rates for container ships have declined from May to December, 2011 for most ship types, reaching a loss of 66% within the 2,300-3,400 (20-foot equivalent (TEU) class). This is reflected by the New ConTex Index, a condensed freight rate indicator covering a wide range of ship sizes, which experienced a dip of almost 60% of its value from May to December 2011.

1.5.2.2.2 An overstretched container cargo market on the supply side precipitated low freight rate levels in 2011. While demand is still recovering from the seaborne trade collapse during financial

crisis, the growth rates of global container carrier capacity have remained relatively stable. In addition ship operators are suffering from substantial bunkering price increases. The industry is experiencing aggressive pricing policies of box ship operators competing for market share. High volume routes are experiencing an increasing competition. Shipping lines are building alliances to share costs, bundle capacity and streamline their operations. As a result, individual shipping lines with smaller vessels will find it increasingly difficult to remain competitive on the world's busiest shipping lanes. Furthermore, with a growth rate predicted at 25% for the above 8000 TEU fleet in 2012, large scale capacity is continuing to enter this market segment.

1.5.2.3. Tanker freight rates

1.5.2.3.1 The tanker market, which encompasses the transportation of crude oil and petroleum products represents approximately one third of the world seaborne trade volume.

1.5.2.3.2. The comparison of oil prices and tanker market freight rates since January, 2001 demonstrates that freight rates and oil prices trend in similar patterns. This is because vessel bunkering contributes a large share to total ship operating costs. In addition world demand for oil and maritime transport services are both strongly linked to overall economic growth. From 2009 onwards however, divergence between the trends of oil price and freight rate has been observed. While crude prices have recovered to pre-crises level, tanker freight rates have not shown substantial signs of recovery. On the contrary freight rates on most routes have decreased in 2011.

1.5.2.3.3. Tankers connect oil producing countries with energy consumers. A change in the geographical structure of oil demand and supply will therefore cause modifications within the global tanker route network. British Petroleum which forecasts an oil demand shift from OECD countries to Asia, with China contributing 50% to the oil consumption growth till 2020. Production from Middle East, South & Central America then will add another 30% to demand expansion. On the production side, Middle East will supply more than 60% growth in oil production capacity and another 35% by countries from North America & South America.

1.5.2.3.4 Development in tankers freight rates will depend heavily on the willingness of oil producing and buying countries to invest in their tanker fleets. China has announced that it aims to ship more of its seaborne oil imports with domestically owned fleet. This strategic goal is reflected in the growth of VLCC fleet, which has increased from 11 Vessels in 2006 to 38 in 2011. European ship-owners have halved their market share on middle East- China lane losing capacity to their Chinese competitors. If industry policies of emerging economies increasingly focus on expanding their market shares in oil transportation, this will add more supply to the current over supply and

keep freight rates at low levels. Mcquilling predicts that tanker freight rates will continue to be under pressure estimating a total delivery of 767 tankers over the next five years. Surplus increases are going to be more pronounced among longer ship sizes with a forecasted number of 62 VLCCs and 43 Suezmax entering the market in 2012.

1.5.2.4. Dry bulk freight rates

1.5.2.4.1. The dry bulk shipping market can be classified into the two categories major bulk and minor bulk. Major bulk includes iron ore, coal and grain, typically transported by large Capesize and Panamax vessels. They contribute about two third of the world dry bulk trade. Minor bulks include fertilizers, steel products, construction materials such as cement and aluminum, non-grain agricultural products, forest products and sundry minerals (for example, phosphate rock), these goods are most commonly shipped by the smaller Handymax and Handysize vessels.

1.5.2.4.2 The increasing vessel utilization rate reinforced hopes of a market recovery in mid-2011. This indicator reached 88 per cent in August 2011, making the difference between a sluggish and a firm market environment. Freight-rate increases were reflected in the changes in the Baltic Exchange Dry Index. The index picked up in August 2011 from 1,256 points to 2,173 points in October. However, this was a short-lived trend. Since October a continuous decrease of the index has been observed persisting until February 2012 where it reached its bottom value of 647 points. Because of the unique characteristics of each individual ship class, large gaps in freight rates occur between the different dry bulk vessel segments.

1.5.2.4.3 Capesize vessels are facing the most difficult market environment when compared to smaller bulk ships. From January 2011, daily earnings of Capesize carriers dropped over a period of several months to levels below those of the smaller Handysize, Supramax and Panamax ships. This can be described as a post-financial crises phenomenon. According to Baltic Exchange, between 2000 and 2008, Capesize vessels have constantly reached higher daily earnings than smaller ships. On 5 June 2008, Baltic Exchange reported record earnings for Capesize vessels of \$ 244,000 per day. Four years later, in May 2012, the same ships could be chartered for around \$ 8,000 per day.

1.5.2.4.4. Pronounced fluctuations of freight rate in the Capesize segment are often the result of demand volatility in the coal and iron-ore market, these being goods typically transported by large bulk carriers. Low raw material prices most commonly indicate a sluggish world demand for these goods. Daily earnings of capsize vessels dropped below those of the significantly smaller Handy size class in same months of 2011.

1.5.3 Trends in Global Top 20 Cargo/Container Ports

1.5.3.1 Growth in cargo and container traffic at world's top major ports/container terminals is a barometer of trends in seaborne trade. The growth in cargo traffic (million tonnes) at world's top 20 ports increased by more than 8.2 % in 2011 as compared to 13.7% in 2010. Similarly, the growth in container traffic (million TEUs) which reflects growth in manufactured goods increased by 7.8 % in 2011 as compared to 14.8% in 2010. Recent trends in Top 20 World Major Ports (in Million Tonnes) and Container Ports (in million TEUs) are given in **Table 12** and **Table 13** respectively.

Table 12 : Top 20 World Major Ports (in Million Tonnes)				
S.No.	Port	2009	2010	2011
1	Shanghai (PRC) 1	590.0	653.0	727.6
2	Zhoushan/Ningbo* (PRC)	570.0	627.0	691.0
3	Singapore	472.3	503.3	531.6
4	Tianjin (PRC)	380.0	408.0	451.0
5	Rotterdam (Netherlands)	387.0	430.2	434.6
6	Guangzhou (PRC)	375.0	400.0	429.0
7	Qingdao (PRC)	315.5	350.1	375.0
8	Dalian (PRC)	203.7	300.8	338.0
9	Tangshan (PRC)	175.6	250.6	308.0
10	Qinhuangdao (PRC)	243.8	257.0	287.0
11	Hong Kong 2	243.0	267.8	277.4
12	Busan (South Korea)3	208.1	241.1	269.9
13	Yingkou (PRC)	176.0	225.0	261.0
14	Rizhao (PRC)	181.3	221.0	252.6
15	Port Hedland (Australia)	159.4	178.6	224.3
16	Shenzen (PRC)	194.0	221.0	223.0
17	Los Angeles (USA)	157.5	187.8	203.9
18	Antwerp (Belgium)	157.6	178.2	187.2
19	Nagoya (Japan)4	151.9	170.8	171.4
20	South Louisiana (USA)4	195.5	223.3	170.4
	Total of Top 20 Ports	5537.2	6294.6	6813.9
Source: Port Statistics, Port of Rotterdam Authority;				
PRC: Peoples Republic of China				
: 1) Including domestic trade, 2) Including river trade, 3) Converted from freight ton to metric ton 4)				
Converted from short ton to metric ton.				

Table 13 : Top 20 World Container Ports (in Million TEUs)				
S.No.	Port	2009	2010	2011
1	Shanghai (PRC) ¹⁾	25.00	29.07	31.74
2	Singapore	25.87	28.43	29.94
3	Hong Kong (PRC) ²⁾	21.04	23.70	24.22
4	Shenzhen (PRC)	18.25	22.51	22.57
5	Busan (Republic Korea)	11.98	14.19	16.19
6	Zhoushan/Ningbo (PRC)	10.50	13.14	14.69
7	Guangzhou (PRC)	11.19	12.55	14.40
8	Qingdao (PRC)	10.26	12.01	13.02
9	Dubai Ports (UAE)	11.10	11.60	13.00
10	Rotterdam (Netherlands)	9.74	11.15	11.89
11	Tianjin (PRC)	8.70	10.08	11.50
12	Kaohsiung (Taiwan Province of PRC)	8.58	9.18	9.64
13	Port Klang (Malaysia)	7.31	8.87	9.60
14	Hamburg (Germany)	7.01	7.90	9.01
15	Antwerpen (Belgium)	7.31	8.47	8.66
16	Los Angeles (USA)	7.26	7.83	7.94
17	Tanjung Pelepas (Malaysia)	6.02	6.53	7.50
18	Xiamen (PRC)	4.68	5.82	6.46
19	Long Beach (USA)	5.07	6.26	6.06
20	Bremen (Germany)	4.57	4.89	5.92
	Total of Top 20 Ports	221.44	254.18	273.94
Source: Port Statistics, Port of Rotterdam Authority; PRC: Peoples Republic of China; 1) Including domestic trade 2) Including River trade				

1.6 Policy Initiatives - Central Government

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

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

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

1.6.4 Measures for increasing the capacity of Major Ports which are under the control of Central Government are taken as part of an ongoing process, keeping in view the demands of maritime trade through implementation of development plans for the ports, improvement in productivity, etc. At the beginning of the Eleventh Five Year Plan the capacity of the Major Ports was 504.75 million tonnes. At the end of March 2012, the cargo handling capacity of Major Ports was 696.53 million tonnes. Commodity-wise capacity of Major Ports at the end of March 2012 is given in **Annex 4**.

Maritime Agenda 2010-20

1.6.5 In the Maritime Agenda a target of 3130 MT Port capacity has been set for the year 2020. More than 50% of this capacity is to be created in the Non-Major Ports. The Non-Major Ports are expected to play a major role and by the year 2020, the traffic handled by Non-Major Ports is expected to increase to 1280 Million Tonnes (MT). The objective is not only creating more capacity but to bring out ports at par with the best international Ports in terms of performance. This will reduce the transaction cost considerably for our trade, thus making them globally competitive. The total proposed investment in Major and Non-Major Ports by 2020 is expected to be around Rs.2,96,000 crore. Most of this investment has to come from the private sector. Public Funds will be mainly deployed for common user infrastructure facilities like deepening of port channels, rail and road connectivity from ports to hinterland etc. Foreign Direct Investment up to 100% under automatic route is permitted for construction and maintenance of Ports.

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

1.6.8 The agenda for the Ports are:-

- Develop Two New Major Ports one each on east and west coasts.
- Full mechanization of cargo handling and movement
- Major Ports to have draft of not less than 14 metres and hub ports 17 metres.
- Identification and implementation of projects for rail, road and inland waterway connectivity to ports.

- Development of two hub ports on each of the West and the East coasts – Mumbai (JNPT), Kochi, Chennai and Visakhapatnam.
- Port Policy Measures
 - Corporatization of Major Ports
 - New Land Policy for Major Ports
 - New Policy on captive berths
 - Establishing a Port Regulator for all ports for setting, monitoring and regulating service levels and technical & performance standards.
 - New Policy on dredging
 - Shifting of transshipment of Indian containers from foreign ports to Indian ports.
 - Policy on co-operation and competition amongst Indian Ports
 - Establishing 'Indian Ports Global' for overseas investments by Indian Ports.

Private Sector Participation

1.6.9 With opening up of the Indian economy, the Government of India has allowed private sector participation in Major Ports to infuse funds, induct latest technology, improved management practices and above all addition of capacity. Foreign direct investment upto 100% under automatic route is permitted for construction and maintenance of Ports and Harbours. It has been estimated in the Maritime Agenda 2010-20 that investments required in new projects of Major ports will be Rs.109449.41 crore, of which Rs.72878.16 crore have been estimated to come from Private sector participation and the balance Rs.36571.25 would be funded through Internal Resources/EBR and Government Budgetary support etc. The states have also identified projects for development of non-major ports at an estimated cost of Rs 167930.84 crore for creation of additional capacity of 1293.56 million tonnes. Private sector is envisaged to fund most of the projects through PPP or BOT or BOOT basis. It is envisaged that private sector will meet 96.1% of the cost of development amounting to Rs 161332.91 crore. Remaining requirement of Rs. 3678.34 crore is planned to be contributed by State Governments through Internal Resources / Gross budgetary Support/ Internal Extra budgetary Resources.

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

2011-12, three Public Private Partnership (PPP) projects were awarded at an estimated cost of Rs. 7977.58 crore for capacity addition of 79.32 MT in the port sector comprising construction of berths and terminals, mechanization of existing berths etc.

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

Areas of private investment

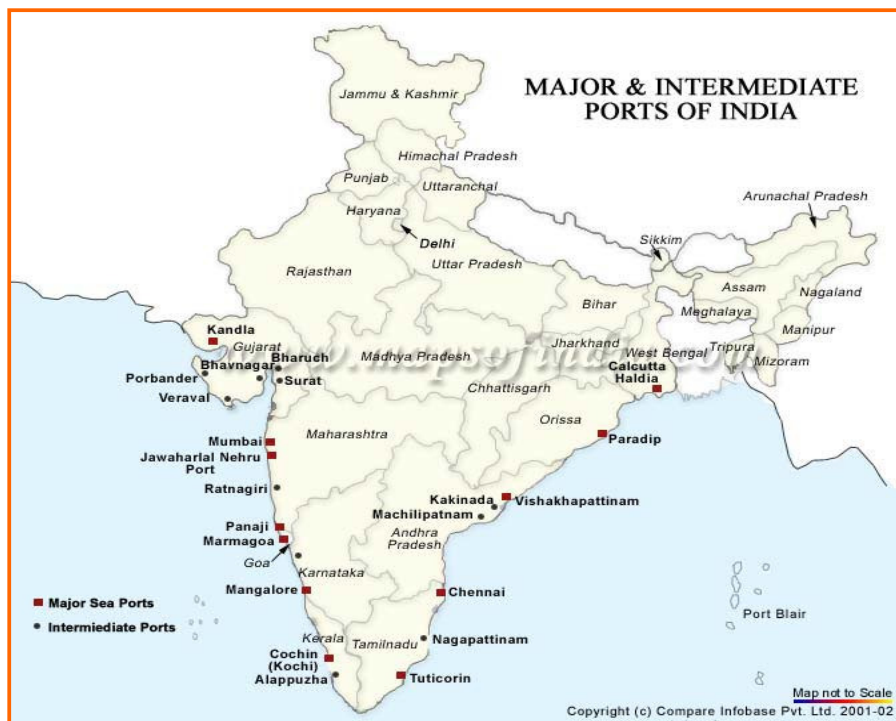
1.6.12. The following areas which are indicative in nature have been identified for participation/investment by private sector:-

- (a) Leasing out existing assets of the Port.
- (b) Construction/creation of additional assets, such as:
 - ❖ construction and operation of container terminals.
 - ❖ construction and operation of bulk, break bulk, multipurpose and specialized cargo berths.
 - ❖ warehousing, container freight stations, storage facilities and tank farms.
 - ❖ cranes/handling equipment.
 - ❖ setting up of captive power plants.
 - ❖ dry docking and ship repair facilities.
- (c) Leasing of equipment for port handling and leasing of floating crafts from the private sector.
- (d) Pilotage.
- (e) Captive facilities for port based industries.

II. POLICY AND PERFORMANCE OF MARITIME STATES

2.1 Ports are economic and service provision units of a remarkable importance since they act as a place for the interchange of two transport modes, maritime and land, whether by rail or road. Therefore, the essential aspect of ports lies in their intermodal nature. India has a coast-line of around 7517 Kms with 12 major ports and 199 notified non-major (minor/intermediate) ports along the coast-line and sea-islands. Of the Non-Major Ports, around 61 ports are handling cargo traffic. **Chart-VI** gives the geographical location of the Major and prime Non-Major Ports. The Maritime Ports operate within the statutory framework of the Indian Ports Act 1908 which applies to all the ports. However, the Major Ports Act 1963 applies only to Major Ports. Each Major Port is administered by a 'Port Trust' (except for the port of Ennore which is a corporatised entity).

Chart - VI



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

2.3 Maritime States Development Council (MSDC)

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

2.4 PORT POLICY IN MARITIME STATES

2.4.1 GUJARAT

2.4.1.1 The state of Gujarat is endowed with 1215 km length of coastline which constitutes about one-sixth of the total Indian coastline. Out of 42 ports located along its coastline, 41 are non major ports while one port, viz. Kandla is a major port. A snap view of the location of ports in Gujarat is given in **Chart –VII.**

Chart – VII: Gujarat: Major and Minor Ports



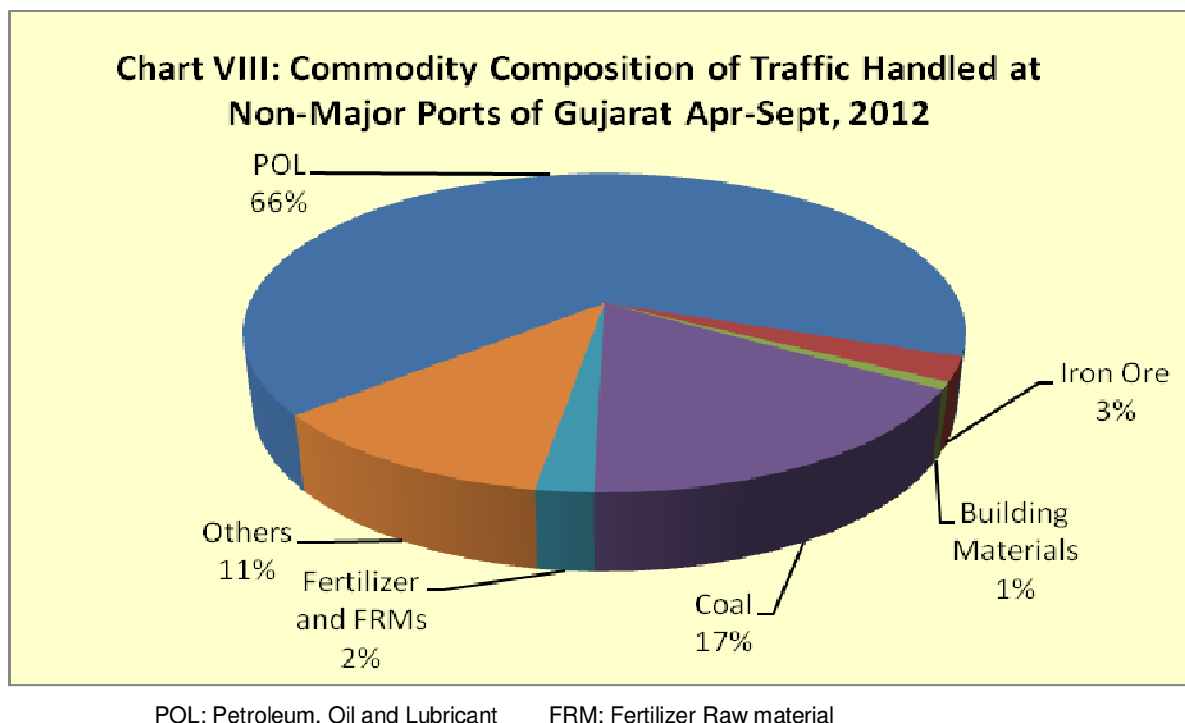
Source : http://www.gmbports.org/port_pog.htm

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: 14. The overall growth in port cargo traffic in case of Gujarat was 7.3% in the first half of 2012-13 as compared to 1.8% for overall cargo growth for India.

Table 14 - Gujarat: Trends in Cargo Handled at Major & Non-Major Ports (MillionTonnes)								
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	April-September	
							2011-12(P)	2012-13(P)
Major Ports	52.98	64.92 (22.5)	72.22 (11.2)	79.5 (10.1)	81.88 (3.0)	82.50 (0.8)	41.57 (3.1)	44.69 (7.5)
Non-Major Ports	131.27	150.52 (14.7)	152.81 (1.5)	205.54 (34.5)	230.91 (12.3)	259.03 (12.2)	126.86 (13.1)	135.97 (7.2)
All Ports	184.25	215.44 (16.9)	225.03 (4.5)	285.04 (26.7)	312.79 (9.7)	341.53 (9.2)	168.43 (10.45)	180.66 (7.3)
Figures in bracket represents percentage change over the previous year/period. (P) Provisional								

2.4.1.3 It is noteworthy that all ports (major and non-major) located along the coast of Gujarat handled about 40% of the total cargo handled by Indian ports in the first half of 2012-13. In particular, non-major ports of Gujarat alone handled more than 73% of total cargo traffic at India's non-major ports.

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



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

Box: 2-Gujarat: Objectives of Integrated Port Policy

- To increase Gujarat's share in the export and import sectors in national and international trade and commerce in pursuance of the policy of liberalisation and 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 BOOT framework has been envisaged to provide – (i) timeliness of infrastructure creation, (ii) efficiency of operation and operational autonomy to the private sector, (iii) synchronization with hinterland development, (iv) Government's role to be maintained only in appropriate areas, and (v) Government financial liabilities to be kept to a minimum.

2.4.1.6 Recent trends in cargo handled and capacity creation in non major ports of Gujarat are captured in the **Table: 15**. It indicates sustained increase in cargo throughput, capacity addition and improvement in capacity utilization. In 2010-11, 40 million tonnes of capacity is estimated to have been added at non-major ports in Gujarat.

Table : 15 - Gujarat: Non Major Ports - Current Capacity & Utilization (Million Tonnes)						
Item	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Capacity*	182.0 (18.77)	198.0 (15.0)	235.0 (38.0)	243.64 (8.64)	283.64(P) (40.00)	323.00(P) (39.36)
Cargo Handled	131.3	150.5	152.8	205.5	230.9	259.0
% Utilization	72.14	74.92	64.89	84.35	81.30	80.19
* Including Lighterage Port Capacity; Figures within parenthesis indicate capacity addition in Million Tonnes during the year. (P) Provisional						

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 port wise trend in capacity creation are given in the **Table16 & 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	2003-04	<ul style="list-style-type: none"> • Container terminal at Mundra • GMB jetty at Navlakhi • Private jetty at Jakhau 	6 1 1	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 Hazira 	8.5 2.5	164
4	2006-07	<ul style="list-style-type: none"> • Hazira: Extension of captive jetty by Essar • Mundra: T-2 bulk terminal at Mundra • Mundra: Additional 2 berths for container 	8 6 2	182
	2007-08	<ul style="list-style-type: none"> • Establishment of additional one SPMs at Sikka by M/s Reliance. • Expansion of Pipavav port by Gujarat Pipvav port Ltd. • Private jetty at Navlakhi 	10 5 1	198
5	2008-09	<ul style="list-style-type: none"> • Establishment of additional 2 SPM • SPM at Sikka by BORL 	25 12	235
6.	2009-10	<ul style="list-style-type: none"> • Establishment of SPMs at Bhogat by Cairn Energy • Deepwater jetty by Essar at Magdalla port 	10 15	243.64
7.	2010-11	NA	40	283.64
8.	2011-12	NA	39.36	323.00
Source : Gujarat Maritime Board NA : Not Available				

Table 17 : Portwise Capacity						
Ports	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Mundra (GAPL)	28.20	36.20	36.20	36.20	36.20	41.20
Mundra (GAB)	0.24	0.24	0.24	0.24	0.24	0.24
Okha	3.96	3.96	3.96	3.96	3.96	3.96
Bedi	5.69	5.69	5.69	5.69	5.69	5.69
Pipavav (GPPL)	9.41	9.41	14.41	14.41	14.41	23.41
Magdalla	17.05	27.05	27.05	27.05	27.05	43.05
Navalakhi	3.82	3.82	4.82	4.82	4.82	4.82
Sikka	57.57	57.57	67.57	95.93	104.57	104.57
Porbander	5.26	5.26	5.26	5.26	5.26	5.26
Veraval	2.17	2.17	2.17	2.17	2.17	2.17
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
Dahej	13.19	13.19	13.19	13.19	13.19	16.19
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	0.32	0.32	0.32	0.32	0.32	0.32
Gogha	0.08	0.08	0.08	0.08	0.08	0.08
Total	164.00	182.00	198.00	235.00	243.64	267.64*
Source: Gujarat Maritime Board						
*- Revised capacity of ports in Gujarat at the end of March 2011 was 283.64.						
2011-12 – Port-wise capacity is not available						

2.4.2 MAHARASHTRA

2.4.2.1 The State has a coastline of around 653 km, with 2 major ports viz. Mumbai and Jawahar Lal Nehru and 48 non-major ports. Out of 48 non-major ports only 13 handle cargo. The capacity of non- major ports in Maharashtra is 19.95 million tonnes (as on 31.3.2012). 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 BOOST basis
- Developer's selection on MOU basis or by tender if many investors interested.
- Concession period of 50 years
- Concessional Wharfage
- Government land on lease, if available, at market valuation
- Equity participation by Government/MMB up to a maximum of 11 %
- Road linkage to nearest State Highway to be part funded by the State
- Rail connectivity by Developer
- Freedom to fix tariff

Policy Guidelines for Captive Terminals

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

2.4.2.2 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 M/o Environment & Forests in May 2007 and pre-construction activities as well as validation of some earlier data are in progress. Further, 3 more ports viz. Redi, Vijaydurg and Jaigad are likely to come up shortly. Letters of Intent have been issued to the concerned developers. It is expected these ports will be ready for cargo handling in next 3-4 years. The proposed capacity in Million tones per annum of these ports is given below:

Port	Initial Phase (Million Tones)	Ultimate Phase
Rewas-Aware	47.00	127.00
Dighi	5.45	18.15
Jaigad (Dhamankhol Bay)	5.00	18.00
Jaigad	1.12	2.90
Vijaydurg	7.50	75.00
Redi	5.10	33.0

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

Table 18 - Maharashtra: Cargo Handled at Major & Non-Major Ports (Million Tonnes)								
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	April-September	
							2011-12 (P)	2011-12 (P)
Major Ports	97.18	112.88 (16.16)	109.18 (-3.28)	115.3 (5.61)	118.90 (3.12)	121.91 (2.53)	59.01 (1.2)	61.44 (4.11)
Non-Major Ports	11.58	11.36 (-1.90)	10.42 (-8.27)	12.51 (20.06)	14.87 (18.86)	19.95 (34.16)	8.07 (23.8)	11.14 (38.04)
All Ports	108.76	124.24 (14.23)	119.60 (-3.73)	127.81 (6.86)	133.77 (4.67)	141.86 (6.05)	67.08 (3.5)	72.58 (8.20)
Figures in bracket represent percentage change over the previous year/period. P- Provisional								

2.4.3 GOA

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

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

Table 19: Goa : Trends in Cargo Handled at Major & Non-Major Ports (MillionTonnes)								
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	April-September	
							2011-12(P)	2012-13(P)
Major Ports	34.24	35.13 (2.60)	41.68 (18.65)	48.85 (17.20)	50.06 (2.48)	39.00 (-22.09)	16.41 (-7.8)	12.66 (-22.85)
Non-Major Ports	14.31	12.83 (-10.34)	11.90 (-7.25)	13.90 (16.81)	14.58 (4.89)	14.47 (-0.75)	5.23 (31.7)	3.22 (-38.43)
All Ports	48.55	47.96 (-1.22)	53.58 (11.72)	62.75 (17.11)	64.64 (3.01)	53.47 (-17.28)	21.64 (0.6)	15.88 (-26.62)
Figures in bracket represents percentage change over the previous year/period. (P) Provisional.								

2.4.4 KARNATAKA

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

2.4.4.2 The trends in the cargo handled at both major and non-major ports of the State during the last few years and first six months of the current and previous year are given in **Table: 20**.

Table 20 - Karnataka: Trends in Cargo Handled at Major & Non-Major Ports (Million Tonnes)								
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	April-September	
							2011-12(P)	2012-13(P)
Major Ports	32.04	36.02 (12.42)	36.69 (1.86)	35.53 (-3.16)	31.55 (-11.20)	32.94 (4.41)	16.04 (5.7)	16.74 (4.36)
Non-Major Ports	6.56	8.9 (35.67)	4.97 (-44.16)	8.55 (72.03)	3.01 (-64.80)	0.58 (-80.73)	0.25 (-90.8)	0.28 (14.29)
All Ports	38.6	44.92 (16.37)	41.66 (-7.26)	44.08 (5.81)	34.56 (-21.60)	33.52 (-3.01)	16.29 (-9.0)	17.02 (4.51)
Figures in bracket represents percentage change over the previous year/period. (P) Provisional.								

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 Vallarpadam Container Terminal Project in Cochin has been commissioned 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: 21**. In Kerala of the 4 non major ports 3 viz, Azhikkal, Beypore (handled more than 90 % of the total non major cargo traffic in the State), and Vizhinjam are handling cargo for the last few years.

Table 21 - Kerala : Trends in Cargo Handled at Major & Non-Major Ports (Million Tonnes)								
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	April-September	
							2011-12(P)	2012-13(P)
Major Ports	15.26 (-9.90)	15.81 (3.60)	15.5 (-1.96)	17.43 (12.45)	17.87 (2.52)	20.09 (12.42)	9.75 (-51.47)	10.13 (3.90)
Non-Major Ports	0.17 (-21.40)	0.10 (-41.18)	0.13 (30.00)	0.12 (-7.69)	0.12 (0.00)	0.13 (8.33)	0.05 (-61.54)	0.03 (-40.00)
All Ports	15.43 (-10.00)	15.91 (3.11)	15.63 (-1.76)	17.55 (12.28)	17.99 (2.51)	20.22 (12.40)	9.80 (-51.53)	10.16 (03.67)
Figures in bracket represents percentage change over the previous year/period. (P) Provisional.								

2.4.6 TAMIL NADU

2.4.6.1 Tamil Nadu has a coastline of about 906 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 investment for the development of minor ports in Tamil Nadu has been formulated. Its main objectives are to provide exclusive port facilities for import of Coal/Naphtha/Oil/Natural Gas for shore based thermal power plants, promote export oriented and port based industries along the coastal districts of Tamil Nadu, encourage ship-repairing, ship-breaking and manufacture of cranes and floating cranes. In addition, leisure tourism and water sports along the coastline are also aimed. 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 - Tamil Nadu: Trends in Cargo Handled at Major & Non-Major Ports (Million Tonnes)								
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	April-September	
							2011-12(P)	2012-13(P)
Major Ports	82.12	90.19 (9.83)	91 (0.90)	95.55 (5.00)	98.20 (2.77)	98.77 (0.58)	49.65 (1.9)	49.16 (-0.98)
Non-Major Ports	0.81	0.89 (9.88)	0.9 (1.12)	1.17 (30.00)	1.61 (37.61)	1.21 (-24.84)	0.66 (4.8)	0.47 (-28.79)
All Ports	82.93	91.08 (9.83)	91.90 (0.90)	96.72 (5.24)	99.81 (3.19)	99.98 (0.17)	50.31 (1.9)	49.63 (-1.35)
Figures in bracket represents percentage change over the previous year/period. (P) Provisional.								

2.4.7 ANDHRA PRADESH

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

2.4.7.2 The State had prepared a perspective developmental plan, in its *VISION 2020 Document* for development of its ports with a view to enhance cargo handling capacity at its Non-Major Ports to around 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 privatized in March 1999 to M/S ISPL on OMST terms for 20 years.
- (ii) Krishnapatnam Port was privatized in Jan 1997 on BOOT terms to M/S Krishnapatnam Port Company Ltd.(NATCO) for 30 years. Revised agreement was signed on 17-9-2004. Navayuga Engineering Company has taken 74% equity stake in KPCL and NATCO 26%.
- (iii) Gangavaram Port was privatized in August,2003 for development of Deep Water Port on BOOT terms initially for 30 years. The port has started handling cargo.

Proposed Private Investment

The proposed investments in approved port projects are (i) Gangavaram Port (Rs.2750crore); (ii) Krishnapatnam Port (Rs.2000 crore); and (iii)Kakinada Deep Water Port Expansion (Rs.900 crore).The projects under pipeline are (i) Machilipatnam Port (Rs.1860 crore); and (ii) Nizampatnam Port (Rs.15414crore).

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 and previous year are given in **Table: 23**.

Table 23 - Andhra Pradesh: Trends in Cargo Handled at Major & Non-Major Ports (Million Tonnes)								
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	April-September	
							2011-12(P)	2012-13(P)
Major Ports	56.39	64.6 (14.56)	63.91 (-1.07)	65.5 (2.49)	68.04 (3.88)	67.46 (-0.85)	36.09 (10.9)	30.31 (-16.02)
Non-Major Ports	18.61	19.29 (3.65)	29.72 (54.07)	43.69 (47.01)	43.27 (-0.96)	43.92 (1.50)	21.49 (-16.7)	24.91 (15.91)
All Ports	75	83.89 (11.85)	93.63 (11.61)	109.19 (16.62)	111.31 (1.94)	111.38 (0.06)	57.58 (-1.3)	55.22 (-4.10)
Figures in bracket represents percentage change over the previous year/period. (P) Provisional.								

2.4.8 ORISSA

2.4.8.1 Orissa has a Coast line of 480 K.Ms. from Andhra Pradesh border in Ganjam District to West Bengal border in Balasore District. It is endowed with conducive, unique, natural and strategic port locations. The Government of Orissa has identified 14 potential sites for development of Minor Ports. To facilitate developers for development of Minor Ports, Government of Orissa has framed the Port Policy during the year 2004.

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

Name of the Port Locations	District
(1)	(2)
Gopalpur	Ganjam
BahudaMuhan (Sonepure)	Ganjam
Palur	Ganjam
Baliharichandi	Puri
Astaranga	Puri
Jatadhar Muhan	Jagatsingpur
Barunei Muhan	Kendrapara
Dhamra	Bhadrak
Chudamani	Bhadrak
Inchuri	Balasore
Chandipur	Balasore
Bahabalpur	Balasore
Subarnarekha Mouth (Kirtania)	Balasore
Bichitrapur (Talashari)	Balasore

Dhamra Port

2.4.8.3 Government of Orissa had signed a Memorandum of Understanding with International Sea Ports Limited on 31.03.1997 for development of Dhamara Port. Concession Agreement was signed between Government of Orissa and International Sea-Ports Limited on 02.04.1998. The Special Purpose Company i.e. Dhamara Port Company Limited (Tisco and L&T 50%:50% basis) is developing the port. The Dhamra Port has started operations from May 2011. The Company shall share with the Government ITS gross income in accordance with formula given below:

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

Gopalpur Port

2.4.8.4 Gopalpur Port was operating as a seasonal lighterage port from 1986-87 by Government. This port was closed during 2003-04. The Concession Agreement between Government of Orissa and Gopalpur Ports Limited was signed on 14th September, 2006 on BOOST basis. The Company will share with the Government, "Gross Revenue of Company" on the basis of sharing percentages mentioned below:-

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

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

Subarnarekha Mouth (Kirtania)

2.4.8.6 For development of Port on Subarnarekha Mouth (Kirtania) in Balsore district, Government has entered into an MOU with Creative Port Development Private Limited, Chennai on 18th December, 2006. Government of Orissa has signed the Concession Agreement with the developer on 11th January, 2008. Environment scoping application submitted and clearance of terms of reference (TOR) obtained from MOEF, Government of India. Detailed land survey for port area (961 acre) has been made and alienation work of these lands is in progress.

Astaranga Port

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

Chudamani Port

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

Jatadhar Port

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

2.4.8.10 The trends in the cargo handled at both major and non-major ports of the State during the last few years and first six months of the current and previous year are given in **Table: 24**.

Table 24 - Orissa : Trends in Cargo Handled at Major & Non-Major Ports (Million Tonnes)								
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	April-September	
							2011-12(P)	2012-13(P)
Major Ports	38.52	42.44 (10.18)	46.41 (9.35)	57.01 (22.84)	56.03 (-1.72)	54.25 (-3.18)	28.00 (5.78)	25.63 (-8.46)
Non-Major Ports	- -	0.3	0.3 (0.00)	0.42 (40.00)	0.47 (11.90)	4.83 * (927.66)	1.67 * (172.46)	4.55 (172.46)
All Ports	38.52	42.74 (10.96)	46.71 (9.29)	57.43 (22.95)	56.50 (-1.62)	59.08 (4.57)	29.67 (11.9)	30.18 (1.72)
Figures in bracket represents percentage change over the previous year/period. (P) Provisional. *: Dhamra Port has started operations in May 2011.								

2.4.9 WEST BENGAL

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

2.4.9.2 The trends in the cargo handled at both major and non-major ports of the State during the last few years and first six months of the current and previous year are given in **Table: 25**.

Table 25 - West Bengal :Trends in Cargo Handled at Major & Non-Major Ports (Million Tonnes)								
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	April-September	
							2011-12(P)	2012-13(P)
Major Ports	55.05	57.33 (4.14)	54.22 -(5.42)	46.43 -(14.37)	47.55 (2.40)	43.25 -(9.04)	23.35 (1.7)	19.81 -(15.18)
Non-Major Ports	-	-	-	-	-	-	-	-
All Ports	55.1	57.3 (4.14)	54.2 -(5.42)	46.4 -(14.37)	47.5 (2.40)	43.2 -(9.04)	23.4 (1.7)	19.8 -(15.18)
Figures in bracket represents percentage change over the previous year/period. P- Provisional								

2.4.10 ANDAMAN & NICOBAR ISLANDS

2.4.10.1. 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: 26**.

Table 26 - Union Territory: Trends in Cargo Handled at A & N Islands Port (Million Tonnes)								
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	April-September	
							2011-12(P)	2012-13(P)
Andaman & Nicobar Islands	1.56	2.16	2.01	1.65	1.68	1.21	0.58	0.67

2.4.11 OTHER NON-MAJOR PORTS

2.4.11.1. 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: 27**.

2.4.11.2 In January 2006, the Government of Puducherry entered into a concession agreement with private developers for the development of deep water ports on BOT basis at Puducherry and Kariakal.

Table 27 - Union Territories: Trends in Cargo Handled at Non-Major Ports (Million Tonnes)								
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2010-11	April-September	
							2011-12(P)	2012-13(P)
Lakshadweep	0.03	0.03	0.03	0.03	0.03	0.03	0.01*	0.01
Puducherry	0.03	0.01	0.05	1.32	4.73	6.2	3.1	3.97

*** Estimated P- Provisional**

III. EFFICIENCY INDICATORS OF MAJOR PORTS

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

3.2 Average Turn Round Time (TRT)

3.2 1. This parameter has improved significantly during the past one and half decades for all the major ports. Average TRT for all major ports improved from 8.10 days in 1990-91 to 3.63 days in 2005-06. Thereafter, Average TRT for all major port has shown an increase to 4.63 days in 2009-10 and 5.29 in 2010-11. Average TRT in 2011-12 had decreased to 4.44 days. During April-September 2012, the TRT at 4.15 was lower compared to 4.80 days in the corresponding period of the last year with a range between 1.54 days at Cochin Port to 6.27 days at Kandla Port. Port-wise TRT for select years are given in Table:28. The path of turn round time at major ports for select years since 1990-91 to 2011-12 and April-September 2012-13 is presented in the Chart- IX.

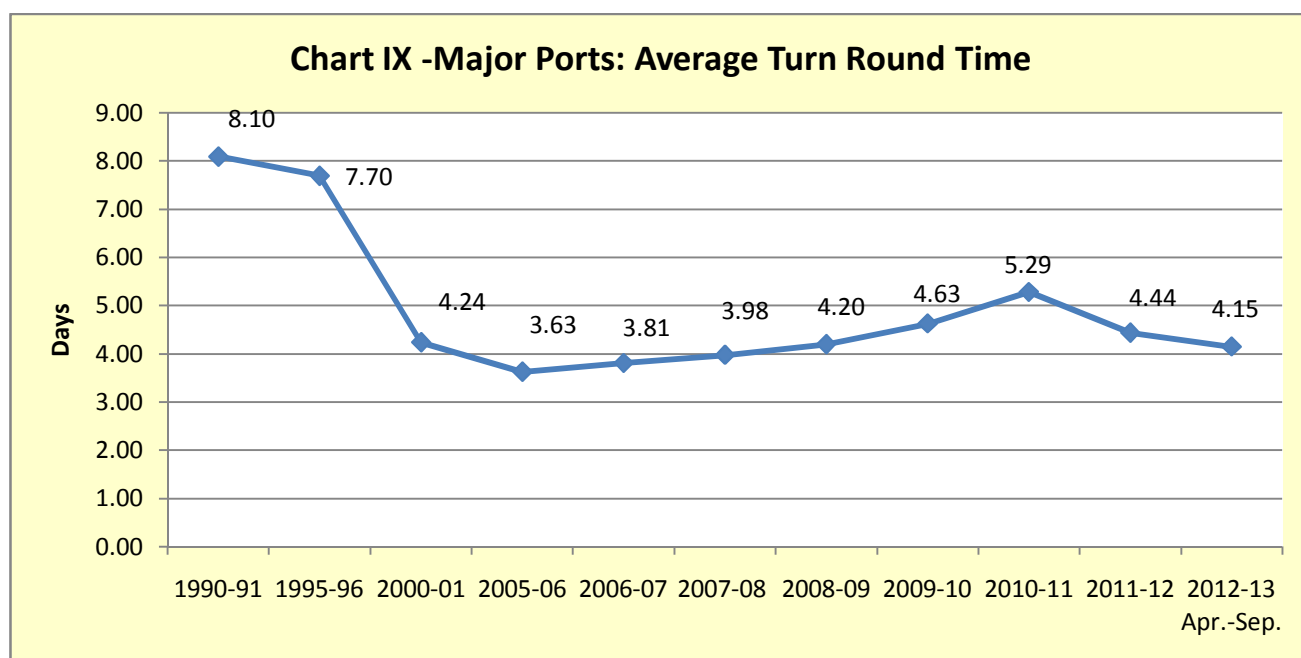


Table 28: Average Turn Round Time (days)								
Port	1990-91	2000-01	2008-09	2009-10	2010-11	2011-12(P)	April-September	
							2011-12(P)	2012-13(P)
1	2	3	4	5	6	7	9	10
Kolkata D.S	11.9	5.5	5.1	6.8	6.21	4.96	5.21	4.64
Haldia D.C	6.47	3.97	4.21	5.01	4.45	3.65	4.21	3.73
Paradip	8.4	4.16	4.78	9.04	7.73	6.33	7.65	3.99
Vishakhapatnam	7.07	3.71	3.93	4.78	5.84	5.68	6.00	5.38
Ennore	-	-	2.35	2.11	2.78	2.17	1.96	2.47
Chennai	7.2	5.83	4.15	4.04	4.36	3.91	3.89	3.40
Tuticorin	4.70	4.1	3.64	3.9	4.00	4.89	5.15	4.43
Cochin	4	3.11	2.14	2.08	2.20	1.82	1.98	1.54
New Mangalore	4.96	2.89	3	3.06	2.70	2.94	2.96	3.03
Mormugao *	6.4	4.25	5.95	8.91	10.43	4.80	5.64	4.28
J.L.Nehru	-	2.21	1.9	2.01	2.64	2.46	2.69	2.76
Mumbai	10.80	5.2	4.95	4.61	4.96	4.93	4.90	4.76
Kandla	10	4.72	7.26	5.03	5.90	6.42	7.12	6.27
All Ports	8.10	4.24	4.2	4.63	5.29	4.44	4.80	4.15
(P) Provisional * Relate to dry bulk cargo for MOHP(Mech.) and Berth No. 10 &11 (Conv) Source: Major Ports/ Indian Ports Association (IPA)								

3.3 Average Pre Berthing Detention Time (PBDT)

3.3.1 The average overall pre berthing detention time (PBDT) for all major ports declined from 2.2 days in 1990-91 to 0.96 days in 2004-05. Thereafter, average PBDT for all major ports has shown an increase to 1.63 in 2008-09 and 2.32 in 2010-11. However, average PBDT on port account has seen a sharper decline from 2.10 days in 1990-91 to 0.2 day in 2004-05. In 2011-12, average PBDT on Port account increased to 0.46 days. During the first six months of 2012-13, average PBDT on port account remained almost at the same level of 0.51 days compared to 0.52 days during April-September 2011-12. Average PBDT was maximum (1.97 days) at Kandla during the first half of current year. Improvement in average PBDT on port a/c during April-September 2012 as compared to corresponding period of 2011 is evident in case of all Major Ports except New Mangalore, Haldia Dock Complex, Mormugao, JNPT and Kandla. Port-wise PBDT for select years is indicated in Table 29. The trajectory of weighted average of pre berthing detention time at Major ports- total and on port account -during 1990-91, 1995-96, 2000-01, 2004-05 and onwards is shown in **Chart X**.

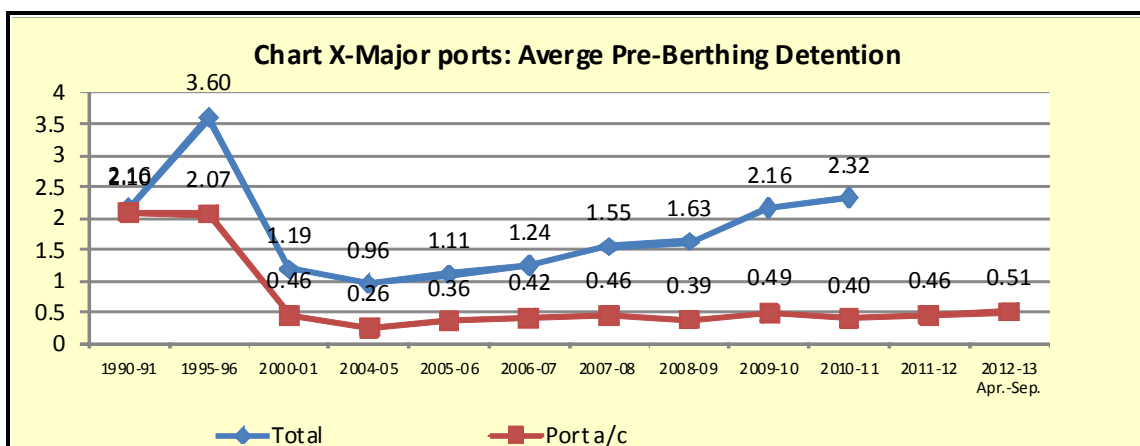


Table 29 : Average Pre-Berthing Detention(Days)

Port	1990-91	2000-01	2008-09	2009-10	2010-11	2011-12*	April-September	
							2011-12*	2012-13*
1	2	3	4	5	6	7	8	9
Kolkata D.S	0.9	0.61	0.66	1.31	1.23	0.03	0.05	neg
Haldia D.C	1.66	0.91	3.38	4.39	3.73	0.54	0.74	0.78
Paradip	1.59	1.41	2.32	6.30	5.04	0.05	0.05	0.03
Vishakhapatnam	1.83	0.75	1.28	1.90	2.81	0.09	0.11	0.07
Ennore			0.27	0.37	0.65	Neg.	Neg.	Neg.
Chennai	2.1	2.45	1.39	1.35	1.61	0.04	0.04	0.04
Tuticorin	0.9	1.4	1.09	1.36	1.29	0.79	0.82	0.41
Cochin	0.83	0.74	0.7	0.85	1.03	0.15	0.27	0.06
New Mangalore	0.79	0.77	0.65	0.81	0.59	0.04	0.04	0.05
Mormugao**	2.51	1.32	1.77	3.46	4.07	0.63	0.60	0.85
J.L.Nehru		0.67	0.95	0.98	1.51	0.35	0.45	0.46
Mumbai	3.4	1.26	1.41	1.06	1.23	0.32	0.31	0.30
Kandla	4.4	1.51	2.62	2.60	3.32	1.79	1.93	1.97
All Ports	2.16	1.19	1.63	2.16	2.32	0.46	0.52	0.51

(P): Provisional. * Relates to Port Account only; Source: Major Ports/ Indian Ports Association(IPA)

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

Neg : Negligible

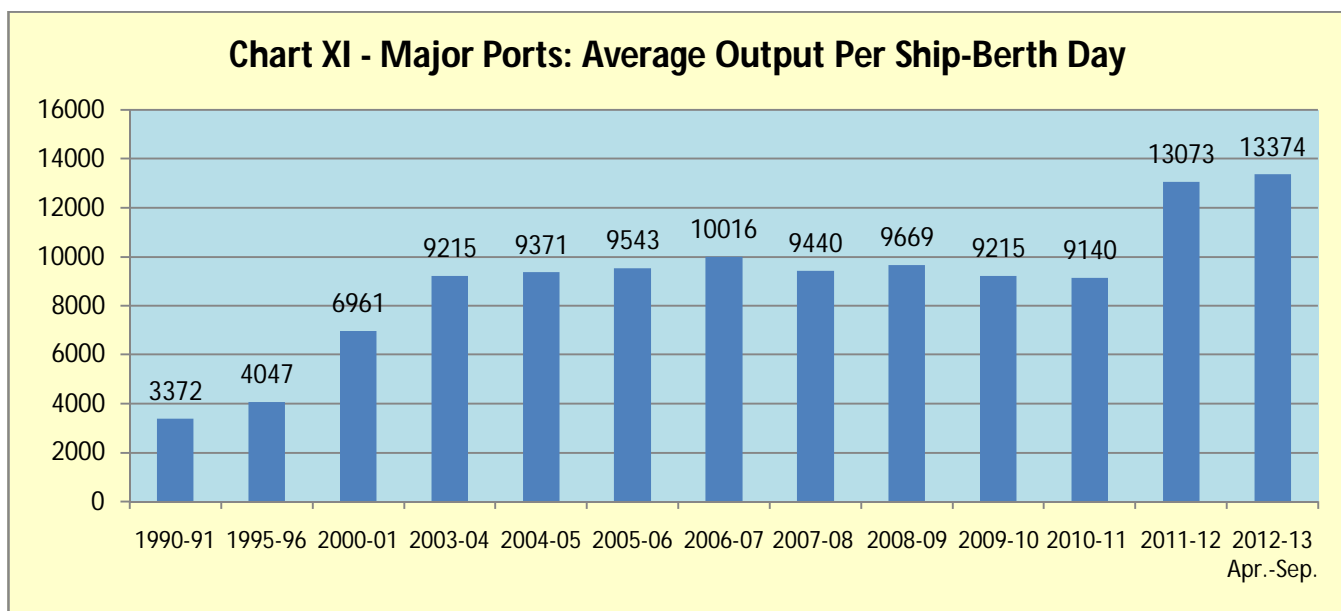
3.4 Average Output Per Ship Berth-day

3.4.1 During the last 20 years this indicator has seen a tremendous improvement. Average Output per Ship-berth day has shown close to four fold increase from 3,372 tonnes in 1990-91 to 13073 tonnes in 2011-12 for major ports. However, average output per ship berth day is marked by substantial variation across major ports ranging from a high 25643 tonnes in case of

JNPT to a low of 3037 tonnes at Kolkata Dock System during April-September, 2012. This variation reflects the type of cargo being handled, level of mechanization and labour practices. Amongst the major ports improvement in average output per Ship-berth day during April-September 2012-13 as compared to April-September 2011-12 is discernible in all major ports except Haldia DC, Vizag, Ennore and Mormugao. Port-wise average output per Ship-berth day for selected years and latest period are given in **Table: 30**.

Table 30 : Average Output per Ship-Berth-Day (Tonnes)								
Port	1990-91	2000-01	2008-09	2009-10	2010-11	2011-12(P)	April-September	
							2011-12(P)	2012-13(P)
1	2	3	4	5	6	7	8	9
Kolkata D.S	560	2305	3027	1917	2253	2778	2657	3037
Haldia D.C	5659	6384	7732	6243	6563	6701	6608	6417
Paradip	4082	8503	12635	13853	14243	15995	15443	16283
Visakhapatnam	5325	9799	11171	10484	10334	10701	10964	10818
Ennore	-	-	28424	21665	17699	27466	26936	24322
Chennai	3912	6977	10778	11428	10984	10888	11008	11740
Tuticorin	2130	3983	5817	6934	7035	6562	6334	6912
Cochin	3714	6138	10599	11089	11752	15783	14900	17261
New Mangalore	4412	12192	13645	13896	14211	13960	13877	15918
Mormugao*	10429	12438	6290	5002	4409	16537	14431	13236
J.L.Nehru	-	6383	20344	21563	20393	25762	25183	25643
Mumbai	2310	4213	5717	6122	6042	7709	7395	8838
Kandla	4417	8230	13107	13549	14137	13886	13670	14299
All Ports	3372	6961	9669	9215	9140	13073	12825	13374
(P): Provisional. *Relate to dry bulk cargo for MOHP(Mech.) and Berth No. 10 &11 (Conv.)								
Source: Major Ports /Indian Ports Association (IPA).								

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



IV. PRIVATE SECTOR/CAPTIVE/JOINT SECTOR PORT PROJECTS

4.1 Brief details of the approved Private Sector/Captive/Joint Sector Port Projects and a list of these projects under consideration as on 30.09.2012 are brought out in **Appendix-I**, **Appendix-II** in respect of Major Ports and in **Appendix-III**, **Appendix-IV** for Non-major Ports.

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

Sl. No	Project Name	Port Name	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
1	Construction of Container Terminal on BOT basis	Ennore	18.0 MTPA	14070	As the process of achieving financial closure not achieved the award is being cancelled.
2.	Construction of two New Off-shore Container berths & Development of Container Terminal berth on BOT basis in Mumbai Harbour.	Mumbai Port	1.00 MTEUs	14610	Agreement signed on 3.12.2007 with M/s. ICTPL. BOT operator has taken over BPX yard and commenced work on 15.6.2008. EPC contract awarded by BOT operator on 2.12.08. Jetty Construction work is in progress. Pilling in approach trestle is in progress. All 259 piles completed. Pilling commenced for berth pockets. 748 piles out of 833 completed. Precast members 5749 units out of 6048 units completed. Total investment till date is 499.41 crore. Dredging contract for MbPT component awarded to M/s. Jaisu Shipping Co. Pvt. Ltd. on 1.4.09. Filling of Victoria basin commenced from 04.09.09 and is in progress. Filling of Princess Dock commenced from 16/06/2010. Present progress: Soil dredging: 6.65 million cu.m. Rock dredging 5,15,400 cu.m, Filling : 14,00,000 cu.m, Anticipated date of completion is Oct 2013.
3.	Construction of 13 th to 16 th Cargo berth on BOT basis.	Kandla Port	8.0 MMTPA	7555	13th Berth - Work in Progress. 14th Berth - RFP received from 5 bidders on 29.6.12 Environmental clearance received on sept.12 15th Berth - LoA issued on 7.12.10 to M/s IMC Ltd. and executed agreement with KPT on 18.2.11. Date of award has been declared on 27.9.11. Work in progress. 16th Berth - LoA issued on 7.12.10 to M.s PSL Ltd and executed agreement with KPT on 18.2.11. Conditions precedents are being fulfilled by PSL.

4	Development of dry-bulk terminal Off Tekra near Tuna outside Kandla Creek at Kandla Port on BOT basis	Kandla Port	14.1	10600	The bids will be opened after receipt of the security clearance of consortium member for one of bidders. Concession agreement will be signed with successful bidder by Feb 2012. Environment/CRZ clearance received. However, formal orders in this regard, yet to be received.
5	Setting up of SPM and allied facilities off Veera in Gulf of Kutch.	Kandla Port	12.0	6285	RFQ opened on 29.6.12. Nine bidders submitted. RFQ are under evaluation. CCI note is under sublimation. Security clearance proposal sent on 27.7.12
6	Construction of barge jetty at IFFCO	Kandla Port	2	277	Award of concession given to M/s IKBLL on 11/8/11.
7	Barge handling facilities at Bunder Basin on BOT basis	Kandla Port	3	1096	2 RFQ qualified clearance from all agencies except MHA received.
8	Development of oil jetty to handle liquid cargo & ship bunkering terminal at old Kandla on PPPmode	Kandla Port	3	2765	EOI evaluation completed. Feasibility report, RFQ and TAMP proposal under approval. RFQ to be invited shortly.
9	Development of Berth No. 7 as second coal handling terminal on DBFOT basis.	Mormugao	4.61	406.00	Concession agreement has been executed between Adani Mormugao Port Terminal Pvt. Ltd. Ahmedabad and Murmugao Port Trust on 22.9.2009. The date of award of concession is 15.5.2010. work is in progress
10	Development & Operation of International Container Transshipment Terminal (ICTT) at Vallarpadam (BOT basis by M/s India Gateway Terminal Pvt. Ltd. a subsidiary of M/s. Dubai Ports International)	Cochin .	Capacity addition of 12.5 MT to 40 MT in phases	21180	Phase I of the ICTT Project consisting of construction of 600 m berth & development of stacking area and other allied facilities commissioned on 11 th February 2011. Stage II work off capital dredging for providing draft of 14.5m is in progress
11	Setting up of LNG Regasification Terminal at Puthuvypeen by M/s Petronet LNG Ltd. on captive basis.	Cochin	Initial 2.5 MT Final 5 MT	41500	The project was initially scheduled for commissioning in the first quarter of 2012 but now PLL has informed that they are taking up the additional facilities required to regasify 5 MMTPA also at this stage and the augmented facility is now scheduled for commissioning in the fourth quarter of 2012.

12	Setting up of Mechanised Iron Ore handling facilities at berth No. 14 by M/s. SICAL Logistics Limited on BOT basis.	New Mangalore	3.62 MTPA (Capacity of Jetty)	2960	Bids were opened on 15.09.2009 and the Letter of Award has been issued on 23 rd September, 2009. Concession agreement has been signed on 19.10.2009 and work started in November 2009. Work delayed due to ban on export & movement of Iron Ore fines imposed by Govt. of Karnataka. Performance Excuse under Force Majeure clause which is under examination.
13	Construction of North Cargo Berth – I (Captive use)	Tuticorin	7.0 MTPA	445	Berth construction commenced on 15.2.2010. All the work except fixing of tender completed.
14	Development of Mega Container Terminal	Chennai	4 MTEU (48 MTPA)	36860	Ministry accorded approval on 22.10.2010 for the project. Fresh Bids invited in accordance with clause 3.3.1 of RFP on 10.1.2012. Seven Bidders have received the RFP documents. The Bid Due Date was extended from 27.2.2012 to 22.3.2012. Two bids were received and will be opened on receipt of Security clearance from the Ministry.
15	Development of Ro Ro cum Multi Purpose Berth and Multi Level Car park in Bharathi Dock	Chennai	1 MTPA	1000	DPR is finalized appointment of TA under process. RFQ was invited and opened on 26.3.2012. 16 applications have been received. Applicants are being referred to the Ministry for national security clearance. Revised SFC memo with documents forwarded to Ministry on 17.9.12.
16	Development of Barge handling facility	Chennai	1 MTPA	260	RFQ was invited and opened on 28.3.2012. 7 Application have been received. Revised SFC memo with draft RCP document sent to ministry on 17.9.12
17	Development of Rajiv Gandhi Dry Port and Multi Modal Logistic hub at Mappedu, Sriperumbudur	Chennai		4150	Bids opened on 31.8.12. 11 firms submitted RFQ applications witch is under scrutiny by Transaction Adviser.
18	Development of WQ 6 berth in Inner Harbour for handling Multi cargo on - DBFOT basis.	Visakhapatnam	2.08	1145	Concession was awarded on 7.10.2011 and the work is in progress. Expected date of completion is October, 2013.
19	Development of EQ-10 berth in Inner Harbour for handling Liquid Cargoes & Chemicals on	Visakhapatnam	1.84	553.8	Concession was awarded on 10.10.2011 and work is in progress. Expected date of completion is April, 2013.

	DBFOT Basis.				
20	Mechanized Coal and up gradation of the General-cum-Bulk berth in Outer Harbour of Visakhapatnam Port to cater to 200,000 DWT vessels on DBFOT basis.	Visakhapatnam	10.18	4441	Construction work is in progress Expected date of completion is October, 2012.
21	Development of Deep Draft Iron Ore Berth on BOT basis	Paradip Port	10.00	5913	Concession agreement has been signed with M/s Blue water Iron Ore Terminal Pvt. Ltd. on 01.07.2009. Environmental clearance and CRZ clearance have been accorded by MoEF on 4.1.2011. BOT operator has been asked to complete the formalities by 8.8.12 and begin the mobilization activity to the site. In response the BOT operator asked time till 8.10.12 for submission of required document.
22	Development of Deep Draft Coal Berth on BOT basis	Paradip Port	10.00	4790	Concession agreement has been signed with M/s Essar Paradip Terminal Ltd. 10.11.2009. Environmental clearance and CRZ clearance have been accorded by MoEF which is likely by May, 2012 on 4.1.2011. BOT operator has been asked to complete the formalities by 8.8.12. and begin the mobilization activity to the site. In response the BOT operator asked time till 8.10.12 for submission of required document
23	Mechanization of CQ-III Berth	Paradip Port	4.00	400.00	Ship loader installed in berth. Laying of Conveyor gallery is in progress. Expected date of completion is 10.12.12
BOT: Build Operate and Transfer; BOO: Build Own Operate; DBFOT: Design, Build, Finance, Operate and Transfer					

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

Sl. No.	Project	Port Name	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
1.	Development of Multi-Purpose berths to handle clean cargo including container on BOT basis.	Paradip	5.0 MTPA	3873	Letter of Awards has been issued to the H1 bidder i.e. Consortium of Sterlite – Leghton @ 23.40% revenue share to the port. Environmental and CRZ clearance have been received on 13.7.12. Forest clearance is also under process.
2.	Construction of LNG Terminal (Joint Venture)	Ennore	5.00	4320	“In Principle” approval for the proposal for development of LNG berth through Joint Venture with IOCL/CPCL, granted by the Ministry on 18.7.2005. IOCL has submitted environmental clearance application to TNPCL after preparation of environmental Assessment Study
3.	Fourth Container Terminal (DBFOT Basis).	Jawaharlal Nehru	30 MTPA Phase-I	41000 Phase -1	The JNPT has issued LOA to consortium of M/s.PSA Mumbai Investment Pvt Ltd. M/s ABG Ports Pvt Ltd. Vide letter of 26.09.2011.Concession Agreement has not been signed by M/s PSA.
4.	Development of standalone container handling facility with a quay length of 330 m. to the north of JNPT.	Jawaharlal Nehru	10.0 MTPA	6000	The Port had reinvited the RFP in Nov-2009 as per the direction of MoS . M/s. DP World filed the writ petition in the Mumbai High Court challenging the discharge of earlier tenders and the judgment was in favour of JNPT. Subsequently M/s DP World filed the SLP in the Supreme Court. The case came for hearing on 14.02.2012, wherein the apex court has dismissed the SLP filed by M/s DP World. The RFP submission date is extended to 4.10.12 as directed by Hon'ble High Court.
5.	New Cruise Terminal near Gateway of India.	Mumbai	...	18600	Consultant, M/s. Zepec Marine Consultant and Services submitted DPR for location at Oyster Rock. However, Navy has objected for the location of the Cruise Terminal on security ground. An alternative location off Nariman Point is ruled out because of high cost of rock dredging. As instructed by the Ministry existing

					Cruise Terminal at BPX and submitted report. The Report is being examined.
6.	Barge handling facilities at Khor Creek	Kandla	4	1000	Under planning stage
7.	Construction of T shape Jetty at Tekra (Phase-II)	Kandla	14	15000	The scheme will spill over in 13 th five year plan. Under planning stage.
8.	Setting up of barge jetty at Tuna on captive use basis	Kandla	1.5	220	EOI invited. Only M/s Shree Renuka Sugars has submitted application till due date. Committee recommended the proposal submitted by M/s Shree Renuka Sugars and also recommended to put up to the Board for approval.
9.	Construction of barge jetty at Tuna on BOT basis	Kandla	5.49	2553	Feasibility Report, RFQ and TAMP proposal under approval.
10.	Strengthening of oil jetty 1 & 2 to handle 13/14 m. draught vessels	Kandla	1.57	154	Detailed estimate under preparation.
11.	Development of Port based multi product SEZ	Kandla	-	10950	In-principle approval from MoS for formation of SPV is awaited. Concurrence of GoG is still awaited. KPT has appointed NIO, Mumbai for carrying out EIA studies.
12.	Development of Container Terminal on BOT basis.	New Mangalore	4.50(3.74 lakh TEUs)	2697.3	RFQ documents issued from 20 th July, 2009 to 5 th September, 2009. Pre-application Conference held on 18 th August, 2009. 5 bidders have submitted their RFQ application on 30.09.2009. The PPPAC Memo submitted on 14.9.2009. Proposal for security clearance in revised format sent on 2.12.2009. TAMP consultative hearing held on 6.1.2010 and approved the project. RFP document issued on 2.2.2010. Two pre bid meetings held on 24.2.2010 and 14.5.2010. Bids were due for receipt on 30.6.2010. No bids were received. The project is under review. Port has requested for relaxation of conditions of upfront tariff fixation order to attract bidders for the project.
13.	Installation of Mechanized fertilizer handling facilities at EQ-7 In inner Harbour on DBFOT basis	Visakhapatnam	5.21	2175.8	Bids opened on 30.1.2012. Board has accorded approval to accept the single offer. Concession agreement signed on 18.5.2012. Bids for consultancy service opened on 21.8.12. and under evaluation by Transaction Advisers.

14.	Development of EQ-1 berth by replacing the existing EQ1 berth and part of EQ2 berth in inner harbour for unloading of Steam coal on DBFOT basis.	Visakhapatnam	6.41	3231.8	The concession was awarded on 08.08.12.
15.	Development of EQ-1A berth on South side of EQ-1 berth in inner harbour for handling Thermal coal & steam coal on DBFOT basis.	Visakhapatnam	7.36	3133.9	Concession Agreement signed on 3.2.12. Extension of time up to 15.9.12. in requested by Concessionaire for fulfillment of condition precedent.
16.	Installation of mechanized iron ore handling facilities at WQ-1 berth in inner harbour on DBFOT basis	Visakhapatnam	8.98	2752	Approval of Ministry communicated on 9.8.12. RFP issued on 28.1.12. Due date of opening now rescheduled.
17.	Development of WQ-7 berth with mechanized facilities in inner harbour for handling import other dry bulk cargo	Visakhapatnam	5.11	2009.3	SFC meeting held on 18.1.2012. approval of Govt is awaited RFP issued on 28.1.12. Due date of opening now rescheduled.
18.	Development of WQ-8 berth including mechanized facilities in inner harbour for handling export other dry/break and import general cargo.	Visakhapatnam			RFQ issued on 30.06.12. due date of submission extended up to 7.9.12.
19.	Development of Iron Ore export terminal at the waterfront west of existing breakwater.	Mormugao	7.2	7210	CCI note circulated to MOEF,DEA DLA on 2.3.12. MOEF has furnished interim comments pending public hearing.
20.	Development of mechanized coal import terminal at berth No.11	Murmugao	2.00	2040	PPPAC memo. sent to MoS. TAMP notified upfront tariffs. 13 parties short listed subject to security clearance.
21.	Multi User Liquid Terminal (MULT) at Puthuvyppeen SEZ(nternational Bunkering terminal at Cochin)	Cochin	4.10	2063	RFQ were invited on 21.7.2009 and five firms have been pre qualified. The proposal for up-front Tariff Setting was submitted to TAMP on 24.11.2009. EIA studies report is under finalization. The two Member Committee comprising

					Secretary(DEA) and Secretary (Shipping) has granted final approval to the project, subject to the condition that the proposal is placed for approval of Cabinet Committee on Infrastructure (CCI).However proposal for construction of Oil and LPG Jetty at Puthuvypean by IOCL in place of proposed MULT is now under process .
22.	Setting of up an International Cruise Terminal at Cochin Port (Joint Venture through BOT)	Cochin	-	2725	The proposal to develop an International Cruise Terminal with private participation has been dropped in view of the decision to develop a Cruise Passenger Facilitation Centre, by converting 1500 sq.m of the existing Exhibition-cum-Public assembly hall adjacent to BPT jetty at a cost of Rs. 7 crore with 100% financial assistance from the Ministry of Tourism the proposal was sanctioned for an amount of Rs. 4.915 crore,Gok for Rs. 1.32 crores. The civil portion of the work costing Rs. 3.74 crore was awarded on 18.1.2012 with a completion period of 4 months. The Board has accorded in –principle approval for development and operation of the 6,000 sq.m Exhibition cum Public Assembly Hall as Cruise Terminal cum Exhibition/Convention Hall.
23.	Development of General Cargo Terminal at Q8-Q9 berths	Cochin	10.00	4460	A detailed feasibility report has been prepared. RFQ for the project were invited on 25.1.2012. Seven application submitted the RFQ. The proposal is under recast and retendering stage
24.	Development of an International Ship Repair facility at Cochin Port	Cochin	120 nos. medium size vessels and 90 nos small size vessels	7850	Expression of Interest was invited. Seven firms have submitted Eols. A DPR and Valuation Report sent to the Ministry of Shipping for seeking 'In-principle' approval for taking up the project on BOT basis on 14.12.2012. A proposal has been submitted on 26.3.2012 seeking permission for awarding the Ship repair yard project on lease basis.
25.	Conversion of berth No. 8 as container terminal on BOT basis.	Tuticorin	7.2 MTPA	3122	VOCT Board has awarded project to ABG Container handling Pvt Ltd. on 7.8.12
26.	Construction of One Number of Shallow Draught Berth on DBFOT Basis.	Tuticorin	2.0 MTPA	654	RFQ opened on 10.6.2010 and evaluation completed. RFP documents from qualified bidders received on 14.10.11. and kept un opened. Security clearance received on 02.07.12.
27.	Development of North Cargo	Tuticorin	7.0 MTPA	3322	LOA issued to m/s ABG-LDA Bulk Handling Pvt Ltd and Louis Drefus

	Berth – II on DBFOT basis.				Afmaters SAS Mumbai. Concession Agreement signed as 11.09.10. Design look is in progress
28.	Upgradation of Mechanical Handling Equipments in berth No, 1 to 6 and berth No. 9 on BOO basis.	Tuticorin	11.9 MTPA	801	RFQ will be opened on 18.5.2010. Likely commission period is August, 2011.
29.	Construction of a riverine jetty north of 3 rd Oil Jetty through DBFOT Basis.	Haldia Dock Complex under KoPT	3.75 MTPA	995	RFQ has been issued in February 2010 for execution of the scheme.
30.	Construction of a riverine jetty south of 2 nd Oil Jetty through DBFOT Basis.	Haldia Dock Complex under KoPT	1.5 MTPA	471	Feasibility Study being undertaken, following which RFQ document would be issued.
31.	Construction of a riverine jetty south of 2 nd Oil Jetty through DBFOT Basis.	Haldia Dock Complex under KoPT	1.5 MTPA	471	Feasibility Study being undertaken, following which RFQ document would be issued.
32.	Construction of a riverine jetty south of 2 nd Oil Jetty through DBFOT Basis.	Haldia Dock Complex under KoPT	1.5 MTPA	471	Feasibility Study being undertaken, following which RFQ document would be issued.
33.	Construction of a riverine jetty south of 2 nd Oil Jetty through DBFOT Basis.	Haldia Dock Complex under KoPT	1.5 MTPA	471	Feasibility Study being undertaken, following which RFQ document would be issued.
34.	Construction of a riverine jetty south of 2 nd Oil Jetty through DBFOT Basis.	Haldia Dock Complex under KoPT	1.5 MTPA	471	Feasibility Study being undertaken, following which RFQ document would be issued.
BOT: Build Operate and Transfer; BOO: Build Own Operate; DBFOT:Design, Build, Finance, Operate and Transfer.					

Appendix – III

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

Sl. No	Project Name	State/ Ports Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
1.	Development of Coal terminal for UMPP at Mundra port.	Mundra, (Gujarat)	15	20000	Three berths of 1120 mt is completed. The company has planned to complete the terminal in the year 2011-12.
2.	Navy jetty at porbandar	Porbandar, (Gujarat)	1	500	Construction is in progress.
3.	Establishment of SBM at Bhogat by cairn energy.	Bhogat, (Gujarat)	7	10000	Construction work is in final stage of completion.
4.	Second SBM at Mundra and Crude oil terminal	Mundra, (Gujarat)	9	9000	The SBM is installed.
5	Coal jetty at Salaya by Essar	Salaya, (Gujarat)	5	10000	Construction is in progress.
6	Dahej port development on BOOT basis linked port	Dahej, (Gujarat)	14	12000	Construction is in progress.
7	Bulk General cargo terminal at Hazira.	Hazira, (Gujarat)	15	10000	Construction of 2 berths completed and remaining construction is in progress.
8	Expansion of LNG handling facilities at Dahej.	Dahej, (Gujarat)	3	4500	Construction is in progress
9	Cement jetty by ABG Cement at Akrimoti, Kutch	Akrimoti, (Gujarat)	4	610	Construction is in progress.
10	Cement jetty by JP Associates at Kharo Creek	Kharo Creek, (Gujarat)	3	1400	Construction is in progress
11.	Ro Ro jetty at Dahej	Dahej (Gujarat)	1	1000	Construction is in progress
12	Development of South basin initial two container berths at Mundra	Mundra (Gujarat)	15	50000	Environmental clearance obtained. This work shall be taken up as a part of South port development for which GMB approved DPR on January 2009. Work is in progress.
13	Development of an all weather and Multipurpose Port at Dighi, Dist. Raigad	Rajpuri, (Dighi) Maharashtra	30	35000	One berth of 255 M out of a total length of 650 Mtrs is ready for commissioning shortly. Construction of remaining berth is in progress.

14	Development of an all weather and Multipurpose port at Rewas-Aware, Dist. Raigad	Thal, Rewas-Aware Maharashtra	50	52000	Environmental clearance received. Technical studies/ investigations completed. Pre- construction activities in progress.
15.	Development of an all weather and Multipurpose port at Dhamankhol- Jaigad Port Dist. Ratnagiri	Jaigad, (Dhamankhol Bay) Maharashtra	50	29000	Two berths having a total length of 550 mtrs. Already commissioned in first phase. Detailed Project Report for (Phase-II) for additional 5 berths approved. Proposal for environmental clearance under consideration of MoEF. The proposal is pending due to moratorium issued by MoEF.
16	Development of an all weather and Multipurpose port at Lavgan- Jaigad Port Dist Ratnagiri (Cargo facility + Ship Repair system)	Jaigad, (Lavgan-Bay) Maharashtra	1.2 + Ship repair	7000	The cargo berth having a quay length of 700 M commissioned in April 2012. Ship repair facility under construction.
17	Development of an all weather and Multipurpose port at Redi Port, Dist Sindhudurg	Redi, Maharashtra	5.16	44000	Master plan of the project approved. Public hearing conducted. Proposal for Environmental clearance under consideration. Land acquisition in progress.
18.	Development of an all weather and Multipurpose port at Vijaydurg Port Dist. Sindhudurg	Vijaydurg, Maharashtra	7.5	10000	Detailed Project Report under scrutiny. Terms of Reference (ToR) being obtained from MoEF. MoEF has issued moratorium till 31.12.2011 banning infrastructure projects in Sindhudurg & Ratnagiri districts. Matter taken up with MoEF for lifting of moratorium.
19	The demolition of old existing jetty and reconstruction of new jetty of length 169.5 mts. at panaji.	Panaji, Goa	The jetty will cater to low craft passenger vessel and other small crafts. No cargo will be discharged/ loaded at this jetty.	80.2	The demolition of old existing jetty and re-construction of new jetty, work is in progress
20.	Establishing a captive port at Thiruchopuram	Thiruchopuram	9.3	3840	Construction work has commenced.

	in Cuddalore district by M/s. Nagarjuna oil corporation Ltd.	Tamil Nadu			
21	Additional Rly lines into 5th berth at Kakinada Deep Water Port	Kakinada Deep Water Port Andhra Pradesh	-	125	Feasibility report completed.
22	Expansion development and Operation of Gopalpur port.	Gopalpur, Orissa	10 MT- PA	11500	MOEF clearance received on 30.03.2011. Construction activities are in progress. All Weather Direct Berthing port is scheduled for operation from Nov 2013.
23	Development of Port at Astaranga Puri.	Astaranga Puri Orissa	60 MT- PA	85000 Including Connectivity	Concession Agreement concluded, Land allotment, DPR preparation is in progress.
24	Development of Karaikal Port through private investment on BOT basis	Karaikal, Puducherry	Phase – 1 4.0 Phase - II 2.6	4170 21,000	Phase 1 of commercial operations commenced in June 2009 and is currently functional Phase II related works estimated at Rs 2100 Crores are in progress. Upon completion of phase 2, the total handling capacity would be 20.5 million tons per annum.
25	Development of Pondicherry Port through private investment on BOT basis	Pondicherry	Phase – 1 16.2 Phase - II 10.8	27850 N.A	Developer has issued "Notice" of intent to terminate the Concession Agreement entered for the project.
26	Captive port owned by M/s Chemplast Sanmar, Chennai.	Captive Maritime Terminal facility, Karaikal, Puducher	0.055	300	Commercial operations commenced in September 2007 and is functioning
27	Development of Ponnani Port under PPP	Ponnani Kerala	-	7630	Work awarded to M/s Malabar Pvt Ltd. And the concession agreement signed on 29/09/2011. EIA studt is in progress

Source: Maritime States/Maritime Boards

Appendix – IV

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

Sl. No	Project	State/ Ports Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
1.	Expansion of UTCL jetty at Kovaya	Pipavav (Gujarat)	5	2500	Environment clearance received. Construction approval is to be granted.
2.	Private terminals at Bhogat by USEL.	Bhogat (Gujarat)	10	20000	Environment clearance to be obtained. Land acquisition initiated.
3.	Private jetty at Rozi port- Ruchi Infrastructure, Arcadia shipping etc.	Bedi (Gujarat)	2	150	Environment clearance received and Construction is to be start soon (Pvt -2)
4.	Port terminal facilities at Bagasara	Bagasara (Gujarat)	1	500	EIA initiated. Tenders for PQ are under progress.
5.	Expansion of Cement terminals at Jakhau by sanghi	Jakhau (Gujarat)	8	4500	Environment clearance in process. Land Acquisition is in progress.
6.	Greenfield port development at Chhara	Chhara (Gujarat)	8	12000	DPR Approved. Environment clearance in advance stage.
7.	LNG terminal at Pipavav by SWAN.	Pipavav (Gujarat)	5	15000	DPR Submitted. Commercial terms with GPPL are under discussion.
8.	LNG terminal at Mundra port.	Mundra (Gujarat)	5	30000	Environment clearance received. Technical Studies have been initiated.
9.	Development of Kachhigadh by L&T	Kachhigadh (Gujarat)	5	20000	Land identified. DPR under way.
10.	Multipurpose Terminal Navlakhi- DMCC.	Navlakhi (Gujarat)	4	3000	DPR approved. Applied for extension of validity of Environment Clearance.
11.	SPM at Magdalla by ONGC.	Magdalla (Gujarat)	5	4000	Basic Engineering is in progress. Environment clearance is in process.
12.	New Cement jetty in Kutch	Kharo and kori Creek(Gujarat)	4	3500	Common port facilities for various cement industries is planned and DPR to be prepared.

Sl. No	Project	State/ Ports Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
13.	SPM at Magdalla by ONGC.	Magdalla (Gujarat)	4	3500	Environment clearance is in process Basic engineering completed. Detailed Engineering is in progress.
14.	Cement jetty by ABG Cement at Mora village, Surat.	Magdalla (Gujarat)	3	1000	Under Government approval.
15.	Multipurpose jetty at Sikka by Reliance Industries Ltd.	Sikka (Gujarat)	15	20000	Environment clearance obtained. Detailed engineering underway.
16.	Expansion of Coal jetty & phase 2 dredging at pipavav	Pipavav (Gujarat)	5	6500	Development envisaged in the DPR submitted for expansion of the port, However detailed implementation plan and DPR for Phase 2 is to be submitted to GMB based on requirements of thermal power plants companies.
17.	Greenfield port at Mahuva	Mahuva (Gujarat)	3	4250	DPR under progress
18.	Greenfield port at Nargol	Nargol (Gujarat)	10	17500	Selection of developer under approval of GOG
19.	Greenfield port at Vansiborsi	Vansiborsi (Gujarat)	8	17730	Pre- Feasibility Report under way.
20.	Greenfield port in lieu of Khambhat port	Khambhat (Gujarat)	3	1200	Location shifting is in process at GOG level.
21.	Greenfield port in lieu of Dholera	Dholera (Gujarat)	10	10000	Location shifting is in process at GOG level.
22.	Captive port facility by M/s. Udangudi Power Corporation Ltd.	Udangudi Thoothukudi Tamil Nadu	6	90830	Port has been notified. Detailed Project Report under preparation.
23.	Captive port facility by M/s. NSL Power Ltd.	Vanagiri Nagapattinam Tamil Nadu	5.5	70040	Port has been notified. Detailed Project Report submitted.
24.	Captive port facility by M/s. Indian Gas Ltd.	Manappad Thoothukudi Tamil Nadu	6.5	18000	Port has been notified. Quarrying or rock stones required for breakwater construction is in progress.
25.	Captive port facility by M/s. NTPC Ltd.	Marakkanam Villupuram Tamil Nadu	13	100000	In principal approval accorded. Reports are awaited.
26.	Captive port facility by M/s. Goodearth shipbuilding Ltd.	Silambimangalam in Taluk Cuddalore Tamil Nadu	Shipbuilding	140000	Port has been notified Fencing works are under progress. Financial closure yet to be achieved.

Sl. No	Project	State/ Ports Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
27.	Captive port facility by M/s. Sindya power Generting CoPrivateLtd	SirkazhiTaluk Nagapattinam Tamil Nadu	3	50000	In principle approved accorded. Financial closure yet to be achieved.
28.	Captive ship repair facility by M/s. Marg Swarnabhoomi Port Private Ltd.	Mugaiyur Kancheepura Tamil Nadu	Ship repair facility	6000	Port has been notified. Coastal land has been allotted.
29.	Captive port facility by M/s. PEL Power Ltd.	Kaveri Nagapattinam Tamil Nadu	4	50000	Port has been notified. Studied are being conducted.
30.	Captive port facility by M/s. Coastal Tamil Nadu Power Ltd.	Cheyyur Kancheepura Tamil Nadu	13	160000	Detailed Project Report submitted and the port limits are yet to be assessed.
31.	Captive port facility by M/s. Cuddalore Powergen Corporation Ltd.	Cuddalore Tamil Nadu	4	50000	Acquiring pf private lands under progress.
32.	Captive port facility by M/s.IL & FS Ltd.	Parangipettai Tamil Nadu	13	12600	Port has been notified. Consent from TNPCB received.
33.	Captive port facility by M/s. Empee Power and Infrastructure Private Ltd.	Neithavasal Nagapattinam Tamil Nadu	4	50000	In principle approved accorded. Financial closure yet to be achieved
34.	Captive port facility by M/s. Tridem port and Power and Infrastructure Private Ltd.	ThirukkuvalaiN agapattinamTa mil Nadu	6.5	6000	Port has been notified. Clearance from Ministry of Environment and Forests awaited.
35.	Captive port facility by M/s. Chettinad Power Corporation Ltd.	Tharangamba di Taluk Nagapattinam Tamil Nadu	3.5	75000	In principle approved. Declaration of Port limits under consideration of Government.
36.	2nd stage Development of Modern Sea Port	Karwar Karnataka	5	1500	Issue of bid documents is under progress.
37.	Development of Modern Sea Port at Tadri in Karnataka coast line.	Tadri Karnataka	34	3000	IDD Nominated KSIIDC as nodal agency Preparation of DPR is under progress.
38.	New Haldipur Port	Haldipur Karnataka	18	1900	DPR under progress by MEL Bangalore.
39.	Development of Honnavar anchorage port	Honnavar Karnataka	2	200	M/s. Honnavar Port Ltd., is preparing DPR and in the process of obtaining environmental clearamce.
40.	Development of Manki port near Honnavar	Manki Karnataka	1	46	M/s. Renuka Sugar is in the process of preparing DPR for construction of captive jetty.
41.	7th Berth at Kakinada	Kakinada Deep Water Port Andhra Pradesh	2.5	600	Yet to commence.

Sl. No	Project	State/ Ports Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
42.	Development of Machilipatnam port Ltd.	Machilipatnam Andhra Pradesh	31MTPA Phase – 1 200 MTPA Master Plan	50740	Construction work is scheduled to commence upon handing over of land for Port Development by GoAP.
43.	VANPIC	Vadarevu Port Andhra Pradesh	24	18420	1. DPR approved by Govt. of AP 2. All clearances including Environmental clearance from MoEF, GoL, obtained 3. Port Construction is awaiting : a) Transfer of lands on lease by Govt.of AP (GoAP) to VANPIC Ports b) Approval of R&R scheme c) Provision by GoAP of External Infrastructure by GoAP
44.	Development of Kollam port.	Kollam, Kerala		400	Tender for selecting developer will be opened 26/6/12
45.	Development of alappuzha Marina & cargo	Alappuzha Kerala		3851	The consultant has submitted the DFR and the preparation of RFP is in progress.
46.	Development of Beypore Port,	Beypore, Kerala		1635	Tender for selecting developer will be opened 03/07/2012.
47.	Development of Azhikal port.	Azhikal, Kerala		4630	Tender opened on 15/05/2012. Azhikkal port proposal for developing a cement terminal received. Project report is awaited.

Annexure-I

Outlay And Expenditure - Port Sector (Central)

(Rs. In crore)

Port	Annual Plan (2007-2008)		Annual Plan (2008-2009)		Annual Plan (2009-2010)		Annual Plan (2010-11)		Annual Plan (2011-12)		Annual Plan (2012-13)	
	App. Outlay	Actual Exp.	App. Outlay	Actual Exp.	App. Outlay	Actual Exp.	App. Outlay	Actual Exp.	App. Outlay	Actual Exp.	App. Outlay	Actual Exp.*
1	2	3	4	5	6	7	8	9	10	11	12	13
Kolkata (a)	37.37	63.05	44.97	53.64	58.00	48.85	50.88	49.76	63.73	21.29	46.98	2.60
Mumbai	50.36	26.10	150.00	23.50	192.00	146.09	179.58	116.76	176.57	142.05	377.11	66.33
JNPT	188.18	70.28	175.17	48.77	324.00	177.94	89.61	38.24	153.69	140.52	419.76	9.14
Chennai	47.81	44.41	72.95	48.98	34.00	58.37	243.00	184.46	136.00	4.44	157.82	46.49
Cochin	158.52	139.07	255.65	246.33	191.97	190.93	259.35	160.86	115.08	92.21	108.44	26.16
Visakhapatnam	83.00	36.61	39.97	31.44	65.01	75.74	151.00	121.19	190.00	113.45	322.40	29.19
Kandla	89.49	38.25	140.87	58.07	115.00	62.64	45.66	52.70	92.27	52.82	111.97	42.68
Mormugao	10.10	11.18	22.07	17.52	71.00	31.01	66.29	71.52	108.93	69.17	58.78	20.85
Paradip	100.00	42.05	288.00	101.47	276.51	128.19	166.21	81.26	70.00	74.80	174.09	30.96
New Mangalore	36.00	25.81	30.00	30.11	34.00	32.48	31.00	24.56	36.00	38.45	36.00	20.90
Tuticorin	79.46	63.16	96.87	65.12	220.50	39.03	90.94	172.08	291.97	369.65	188.88	13.20
Ennore Port Ltd.	61.00	34.53	70.00	102.43	95.01	50.52	95.00	70.12	60.00	61.92	125.00	20.49
Sethusamudram Ship Canal Proj	664.22	119.47	1581.07	152.24	161.10	20.98	10.00	6.02	10.01	8.51**	10.00	0.48**
WEB Based EDI Port Community	7.50	0.04	6.00	1.00	3.00	3.33	4.88	4.46	2.38	2.01	3.00	0.00
Others (b)	477.26	170.67	598.38	88.50	564.90	161.68	362.86	223.31	673.09	518.08	908.13	270.56
Survey Vessels	19.00	0.00	79.00	5.00	10.00	0.00	15.00	15.00	15.00	15.00	15.00	0.00
Total	2109.27	884.68	3650.97	1143.10	2416.00	1227.8	1861.26	1392.30	2194.72	1724.37	3054.36	600.03

Source : Annual Plan - Port Sector (Deptt. of Shipping)/IPA

(a) Includes Haldia and RR Schemes.

(b) Includes DCI, ALHW, R&D Studies, Post Tsunami Works, Minor Ports Studies etc.

* Expenditure upto Sept.,2012 ** The amount is received as equity from Government of India and other stakeholders.

App.Outlay: Approved Outlay

Commodity-wise Traffic Handled at Major Ports

(000 Tonnes)

Port	Period	POL & its Products	Iron Ore	Thermal Coal	Coking Coal	Ferti. & FRM (Dry)	Food grain	Container		Others	Total
								Tonnes	TEUs		
1	2	3	4	5	6	7	8	9	10	11	12
Kolkata	2010-11	878	827	0	97	62	11	6220	377	4445	12540
	2011-12(P)	682	450	0	8	14	455	6818	412	3806	12233
	April-Sept.	2011-12	342	291	0	4	14	266	3310	201	2281
	2012-13(P)	366	71	0	5	0	159	3478	230	1675	5754
Haldia	2010-11	10606	5952	2173	6010	459	0	2835	149	6970	35005
	2011-12(P)	7900	3921	2351	4939	531	3	2619	140	8748	31012
	April-Sept.	2011-12	4249	2928	1186	2836	182	0	1201	69	4529
	2012-13(P)	3453	836	952	2579	0	0	1362	75	4872	14054
Paradip	2010-11	12845	13795	13280	6060	4362	0	69	4	5627	56038
	2011-12(P)	15091	6551	16405	5508	4826	0	109	8	5764	54254
	April-Sept.	2011-12	7311	4962	7981	2936	2132	0	39	3	2635
	2012-13(P)	8105	1112	8721	2718	1872	0	91	7	3010	25629
Visakhapatnam	2010-11	19242	19347	3538	7926	4079	203	2572	146	11134	68041
	2011-12(P)	18437	16243	3189	6874	4549	518	4214	234	13396	67420
	April-Sept.	2011-12	10049	9717	1597	3714	120	1901	106	7075	36097
	2012-13(P)	7831	6645	1513	3455	1566	478	2363	130	6458	30309
Chennai	2010-11	13991	2114	1417	606	771	86	29421	1485	13054	61460
	2011-12(P)	13295	97	610	351	633	191	30075	1558	10455	55707
	April-Sept.	2011-12	6419	51	610	351	126	0	15329	794	6383
	2012-13(P)	6541	0	0	0	281	40	15515	804	4750	27127
Ennore	2010-11	509	401	9265	103	0	0	0	0	731	11009
	2011-12(P)	502	0	12646	465	0	0	0	0	1343	14956
	April-Sept.	2011-12	305	0	5483	111	0	0	0	628	6527
	2012-13(P)	425	0	6298	441	0	0	0	0	833	7997
Tuticorin	2010-11	741	64	5349	0	1901	80	8169	468	9423	25727
	2011-12(P)	839	33	6050	0	2025	304	9227	477	9627	28105
	April-Sept.	2011-12	430	14	2977	0	811	87	4409	240	5124
	2012-13(P)	407	0	3233	0	645	87	4546	240	51119	14037
Cochin	2010-11	12121	0	40	0	429	0	4419	310	864	17873
	2011-12(P)	14010	0	34	0	430	0	4715	337	902	20091
	April-Sept.	2011-12	6569	0	16	0	167	0	2592	184	9754
	2012-13(P)	7118	0	0	0	184	0	2435	177	397	10134
New Mangalore	2010-11	21551	3744	0	2856	788	116	568	40	1927	31550
	2011-12(P)	22246	3036	0	4022	825	58	646	45	2108	32941
	April-Sept.	2011-12	11362	1353	0	1714	178	0	333	24	16042
	2012-13(P)	11090	1474	0	2782	0	0	347	25	1043	16736
Mormugao	2010-11	939	40625	1633	4933	232	0	220	18	1478	50060
	2011-12(P)	923	29370	1163	5669	93	0	231	22	1552	39001
	April-Sept.	2011-12	382	11889	201	3028	17	0	104	9	788
	2012-13(P)	451	7421	641	3057	78	0	90	9	918	12656
J. L. Nehru	2010-11	5043	0	0	0	870	0	56426	4332	1978	64317
	2011-12(P)	4926	0	0	0	0	19	58233	4321	2549	65727
	April-Sept.	2011-12	2634	0	0	0	19	28465	2150	1234	32352
	2012-13(P)	2099	0	0	0	0	0	29330	2155	1224	32653
Mumbai	2010-11	32990	0	6368	0	455	745	653	72	13375	54586
	2011-12(P)	33315	0	4321	0	404	75	551	58	17520	56186
	April-Sept.	2011-12	16459	0	1898	0	144	0	328	31	7832
	2012-13(P)	17161	0	2260	0	283	21	404	31	8659	28788
Kandla	2010-11	48426	817	3082	410	6390	674	2586	160	19495	81880
	2011-12(P)	46938	991	4065	161	6059	1292	2764	166	20231	82501
	April-Sept.	2011-12	24047	388	2572	60	2669	400	1322	81	10512
	2012-13(P)	25931	411	1897	234	2559	1612	945	59	11098	44687
All Ports	2010-11	179882	87686	46145	29001	20798	1915	114158	7561	90501	570086
	2011-12(P)	179104	60692	50834	27997	20389	2915	120202	7778	98001	560134
	April-Sept.	2011-12	90558	31593	24521	14754	8361	59333	3892	49868	279880
	2012-13(P)	90978	17970	25515	15271	7928	2445	60906	3942	49548	270561

Source: Major Ports and Indian Ports Association.

P : Provisional

Annexure - 3

Commodity Composition of Traffic Handled at Non- Major Ports.

(000 Tonnes)										
Maritime Status / UTs	Period	POL	Iron Ore	Building Material	Coal	Fertiliser & FRM	Others	Total		
Gujarat	2010-11	140874	7156		8798	29731	6085	38263	230907	
	April - Sept	2011-12	157233	12490		5195	38352	7634	38125	259029
		2011-12	75960	3481		8138	19885	4404	14991	126859
		2012-13	90315	3336		1036	22928	2946	15408	135969
Maharashtra	2010-11	0	5120		2277	4997	228	2253	14875	
	April - Sept	2011-12	0	6544		2490	7443	0	3471	19948
		2011-12	0	2788		1121	2417	0	1748	8074
		2012-13	0	3888		837	4880	0	1531	11136
Andhra pradesh	2010-11	2786	8957		484	19618	5799	5623	43267	
	April - Sept	2011-12	2394	2873		82	23483	6879	8213	43924
		2011-12	1038	2313		441	11263	3469	2967	21491
		2012-13	1009	678		595	13907	2949	5767	24905
Goa	2010-11	0	14581		0	0	0	0	14581	
	April - Sept	2011-12	0	14305		0	165	0	0	14470
		2011-12	0	5233		0	0	0	0	5233
		2012-13	0	3217		0	0	0	0	3217
Tamil Nadu	2010-11	1503	0		7	0	58	43	1611	
	April - Sept	2011-12	1114	0		7	0	46	43	1210
		2011-12	473	0		0	0	28	157	658
		2012-13	311	0		0	0	20	143	474
Karnataka	2010-11	31	2322		77	0	17	648	3095	
	April - Sept	2011-12	178	0		0	0	0	403	581
		2011-12	85	0		0	0	0	160	245
		2012-13	145	0		0	0	0	134	279
Others states / Uts #	2010-11	184	130		684	4116	538	1370	7022	
	April - Sept	2011-12	214	65		436	8983	1136	1549	12383
		2011-12	90	0		275	3776	557	711	5409
		2012-13	294	612		424	6863	274	759	9226
All Major Ports	2010-11	145378	38266		12327	58462	12725	48200	315358	
	April - Sept	2011-12	161133	36277		8210	78426	15695	51804	351545
		2011-12	77646	13815		9975	37341	8458	20734	167969
		2012-13	92074	11731		2892	48578	6189	23742	185206
Note : All figures of 2011-12 are provisional.										
# : Consists of Pondicherry, Orissa, Kerala, Andaman & Nicobar Islands and Lakshadweep Islands.										
No traffic was handled at ports of Daman & Diu.										

Annexure - IV

COMMODITY WISE CAPACITY OF MAJOR PORTS AS ON 31.3.2012 (Taking into account the Reassessment of Port Capacities)

(IN MILLION TONNES)

Sl no	Commodity	Kolkata	Haldia	Paradip	Vizag	Chennai	Ennore	Tuticorin	Cochin	New Mangalore	Mormugao	Mumbai	Kandla	J.N.P.T	Total
1.	P.O.L	4.50+ 4.0 (7)+A	17.00 (3+2BJ)	21.00+SP M(1)	17.65 (4)	15.27 (2)	3.00 (1)	2.30 (1)	19.01 (3)+SPM	23.37 (4)	1.50 (1)	32.00 (5)	66.60 +0.8 (8+3SBM)+ A	5.50 (2)	228.76+4.80(4 2+SBM+2BJ+A)
2.	IRON ORE		8.00 (2)	4.50 (1)	12.50 (1)	8.00 (1)	6.00(1)			7.50 (1)	33.00 (1+Trans)				79.50 (8+Trans)
3.	Coal (Thermal)		7.00 (2)	20.00 (2)			21.00 (3)	12.55 (3)		5.40 (1)					65.95 (11)
4.	Fertilizer			7.50 (2)	1.00 (1)				0.80 (1)						9.30 (4)
5.	Gen. Break Bulk Cargo	6.74+ 0.51 (22)+A	14.75 (8)	27.30 (9)	32.50 (15)	17.92 (14)	1.00 (1)	13.49 (10)	9.55 (12)	14.70 (8)	7.40 (4)	11.53+6.0 (25)+A	17.42 (11)	0.90 (1)	175.20+ 6.50(140)+A
6.	Containers	5.90 (4)	4.00 (2)		2.68 (1)	42.00 (7)		5.00 (1)	12.50 (2)			1.00 (1)	7.20 (2)	57.60 @ (9)	137.88 (29)
	Total	17.14+ 4.51 (33)+A	50.75 (17+2BJ)	80.30 (15) +SPM	66.33 (22)	83.19 (24)	31.00 (6)	33.34 (15)	41.86 (18) +SPM	50.97 (14)	41.90 (6+Trans)	44.53+ 6.0 (31)+A	91.22+0.8 (21+3SBM) +A	64.00 (12)	696.53+11.31 (234)+5SBM+ Trans+2BJ)+ A

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

@ Capacity of JNP container terminal (3 berths), NSICT (2 berths) GTIL (3 berths) and shallow water berth (1 no) has been taken as 15.0 MT, 15.00 MT, 26.40 MT and 1.20 MT respectively. Capacity of one shallow water berth at JNPT is 0.90 MT for dry bulk cargo.

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

Only BPS berth of Mumbai Port is considered as dedicated container berth. Assessed capacity of BPS (Dedicated) container berth of Mumbai Port is 1.0MT. Berth No. 6, 7/8 ID are used as holding berths for MbPT crafts and no capacity has been accounted.