

भारत के पत्तन क्षेत्र का अद्यतन UPDATE ON INDIAN PORT SECTOR

(31.03.2012)



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

भारतीय नौका परिवहन क्षेत्र, 2012

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PREFACE

As per the decision of the Maritime State Development Council, the Transport Research Wing in the Ministry of Shipping, Road Transport and Highways has been bringing out the biannual publication "*Update on Indian Port Sector*". Present issue (upto March, 2012) is nineteenth in the series of the publication "*Update on Indian Port Sector*". The last issue contained data up to September, 2011.

The current issue of the "*Update on Indian Port Sector*" includes information on the performance of Major and Non-Major Ports for the period up to end of March, 2012. The list of private sector/captive/joint sector port projects under implementation/consideration at Major Ports and Non-Major Ports have also been included. The cooperation extended by the concerned source authorities is gratefully acknowledged.

Arvind Kumar
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UPDATE ON INDIAN PORT SECTOR

(UP TO 31.03.2011)

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I. RECENT TRENDS IN CARGO TRAFFIC AND POLICY INITIATIVES

1. International and Domestic Factors Related to Seaborne Trade

1.1 In 2010, the world economy embarked on a recovery path with world output growing at more than 5 per cent over the previous year (Table 1.1). The stimulus measures taken by governments at the onset of the crisis helped jump-start growth. However, the effect of these measures started to fade away as governments initiated a shift towards fiscal consolidation. In 2010, advanced economies recorded positive growth, with their output expanding by more than 3 per cent. Developing economies continued to drive the global recovery with the rebound being led by large emerging economies like China India and Brazil. The overall strong performance of developing countries as a group conceals differences between countries and groupings. The lead taken by developing economies in powering global growth reflects a shake-up in the world's economic order which has taken decades to unfold. UNCTAD data show that the share of developing countries in the global economic output rose from about 17 per cent in 1980 to over 28 per cent in 2010. In 2010, China overtook Japan as the world's second biggest economy (in nominal terms).Goldman Sachs is now predicting that the BRIC countries (Brazil, Russian Federation, India and China) will overtake the G–7 countries in size of their economies by 2018, i.e. much sooner than its original prediction of 2040 made a decade ago.

1.2 However, the world recovery continues to be very fragile and faltering as it grew by 3.9% in 2011 and world output is projected to grow by 3.5 per cent in 2012. While output growth in all economies is expected to decelerate, the recovery continues to be driven by emerging & developing markets which are expected to grow by more than 6 %. However, these projections are subject to many downside risks which can derail growth. These include renewed stresses in the euro area, sovereign risks, high unemployment in advanced economies, rising food and commodity prices, the risk of a rise in trade protectionism, inflationary pressures in emerging markets, and the end of the stimulus funding impact as all countries, with the exception of the United States, proceed with fiscal consolidation.

1.3 Multiple risks are currently clouding the prospects of a sustained recovery and a stable world economy. These risks are magnified by extraordinary shocks and events, as well as rising and volatile energy and other commodity prices.

1.4 Overcoming the slump in world trade in 2009 which fell by 11.7 % and in tandem with the recovery in the world economy, the volume of world merchandise trade, bounced back, and is estimated to have grown at more than 14 % in 2010 but decelerated to 6.3% in 2011. Robust growth in large emerging economies such as China and India, combined with their deeper economic integration and intensified intraregional trade, have cushioned the impact of global slowdown in world merchandise trade. The share of developing countries in global trade increased from about one third to more than 40 per cent between 2008 and 2010.

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

Table 1: Growth in Cargo handled at Indian Ports and related parameters					
Parameters	2007-08	2008-09	2009-10	2010-11	2011-12
Trends in India's Select : Macro Parameters (in per cent)					
I. Total Cargo	11.9	2.5	14.3	4.2	3.0
(a) Major Ports	12.0	2.2	5.7	1.6	-1.7
(b) Non Major Ports	11.6	3.3	35.7	9.1	11.5
II. GDP overall	9.3	6.7	8.4	8.4	6.5
(a) Agriculture	5.8	0.1	1.0	7.0	2.8
(b) Industry	9.7	4.4	8.4	7.2	3.4
(c) Services	10.3	10.0	10.5	9.3	8.9
III. Foreign Trade					
(a) Export in \$ value	29.0	13.6	-3.5	40.5	21.0
(b) Import in \$ value	35.5	20.7	-5.0	28.2	32.1
Trends in Global Select : Macro Parameters (in per cent)					
IV. World Output	5.4	2.8	-0.6	5.3	3.9
(a) Advanced Economies	2.8	0.0	-3.6	3.2	1.6
(b) Developing Economies	8.7	6.0	2.8	7.5	6.2
V. World Trade Volume #	7.2	2.4	-11.7	14.3	6.3
VI. Export Volume (Goods)					
(a) Advanced Economies	5.8	1.5	-13.3	14.0	5.7
(b) Developing Economies	9.5	4.3	-8.4	15.0	6.4
VII. Import Volume (Goods)					
(a) Advanced Economies	4.7	-0.1	-13.1	13.3	5.1
(b) Developing Economies	14.3	8.3	-9.3	16.0	9.4
VIII. World Seaborne Trade*	3.8	2.1	-5.0	7.0	
(a) Goods Loaded	4.3	2.4	-4.5	7.0	
(b) Goods Unloaded	3.3	1.8	-5.5	7.0	
<p>I. Based on data from Major Ports and Non Major Ports II. Based on gross domestic product (GDP) at Factor Cost (1999-2000 Prices), Central Statistical Organization; III. Based on Department of Commerce, DGCI&S data; IV,V,VI & VII Based on World Economic Outlook, April ,2012, IMF; VIII. Based on Review of Maritime Transport, 2011, UNCTAD Note : MT: Million Tonnes; For item Nos IV, V, VI & VII year 2007-08 refers to calendar year 2007 and so on; * growth in total goods loaded plus unloaded; #Goods</p>					

Trends and Developments in World Seaborne Trade

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 (2011) shows that world seaborne trade in 2010 bounced back from the contraction of the previous year and grew by an estimated 7 per cent, taking the total of goods loaded to 8.4 billion tons, a level surpassing the pre-crisis level reached in 2008.

Year	Oil& Products	Main Bulk#	Other Dry Cargo	Total
2000	2163	1288	2533	5984
2006	2698	1836	3166	7700
2007	2747	1957	3330	8034
2008	2742	2059	3428	8229
2009	2642	2094	3122	7858
2010	2752	2333	3323	8408

iron ore, grain, coal, bauxite/alumina and phosphate
Source:Review of Maritime Transport, 2011,UNCTAD

General Trends in Seaborne trade

1.7 Container trade and major dry bulks are driving this expansion. In 2010, world seaborne trade continued to be dominated by raw materials, with tanker trade accounting for about one third of the total tonnage and other dry cargo including containerized accounting for about 40 per cent. The remainder (about 28 per cent) is made of the five major dry bulks, namely iron ore, coal, grain, bauxite and alumina and phosphate.

1.8 In 2010, dry cargo, including major dry bulks (iron ore, grain, coal, bauxite/alumina and phosphate), minor dry bulks (manufactures, agribulks, metals and minerals), general cargo and containerized trade bounced back and expanded by 8.4 per cent over 2009. Developing countries continued to account for the main loading and unloading areas, with their shares of total goods loaded and unloaded in 2010 amounting to 60 per cent and 56 per cent, respectively. Developed economies' shares of global goods loaded and unloaded were 34 per cent and 43 per cent, respectively.

1.9 The contribution of various regions to world seaborne trade volumes underscores the dominance of large emerging developing economies and reflects the concentration of resources and raw materials, which make up the bulk of seaborne

trade. Asia is by far the most important loading and unloading area, with a share of 40 per cent of total goods loaded and 55 per cent of goods unloaded. The growth in the proportion of goods unloaded also reflects the emergence of developing countries as a major source of import demand.

Crude Oil & Petroleum Products

1.10 Demand for crude oil tankers is closely correlated with the global oil demand. In 2010, seaborne shipments of crude oil recovered and returned to pre-crisis levels. Crude oil loaded in 2010 amounted to about 1.8 billion tons, a 4.3 per cent increase over 2009. Global refinery throughputs averaged 74.8 million barrels per day, an increase of 2.4 per cent over 2009. Reflecting developments in the world economy and the influence of weather patterns of 2010, world shipments of petroleum products increased by 3.7 per cent in 2010, taking the total to 967.5 million tons.

Dry Cargo

1.11 The year 2010 was positive for dry cargo as total volumes bounced back and grew by 8.4 per cent to nearly 5.7 billion tons. Dry bulk cargo (major and minor bulks) amounted to about 3.3 billion tons of this total, up by a firm 11 per cent over 2009. The strong comeback is due in particular to the recovery in world steel production and the associated growth in import demand for iron ore and coking coal. The share of major dry bulks has been expanding over the past four decades, while that of oil trade has been losing its relative weight over the same period. Major dry bulks accounted for 17.4 per cent of total goods loaded in 1970, with their share rising between 25 per cent and 28 per cent between 2008 and 2010.

Coal Shipments

1.12 Within the major dry bulk commodities, coal accounted for 38.6 per cent of the total loaded in 2010. The share of iron ore stood at 42.3 per cent in 2010. During the years 1984–2010, coal and iron ore volumes moved in tandem, both growing at an average annual rate of over 5 per cent. This growing share of dry bulk cargo reflects in particular the fast-growing demand for raw materials such as coal and iron ore used as inputs in steel-making and industrial activity, especially in large developing regions such as China, India, and increasingly in oil-rich Western Asian countries, where important investments are poured into their infrastructure development.

1.13 In 2010, the volume of coal shipments (thermal and coking) amounted to 904 million tons, up by 14.4 per cent year on year. Thermal coal exports, where Indonesia holds a present market share of about 44 per cent, increased by 12.4 per cent in 2010 to reach 663 million tons. In 2010, Australia and Indonesia together accounted for 65.2 per cent of the world's total thermal coal shipments.

1.14 As coking coal is used in steelmaking, its trade patterns follow closely developments in the world economy as well as those in steel demand and production and the associated iron ore trade. Dominated by Australia, with a market share of 66

per cent, shipments of coking coal also increased even at a much faster rate (20 per cent) than thermal coal taking the total to 241 million tons in 2010. The main destinations of both thermal and coking coal exports are Japan and Europe, which together account for 38.4 per cent of global imports in 2010. In 2009, China became a net importer of coal for the first time and an increasing proportion of China's demand will be met by imports.

Iron Ore

1.15 Iron ore trade is correlated with growth in world steel production. A recovery in global crude steel production supported growth in global iron ore shipments which expanded by 9.0 per cent in 2010, taking the total to 982 million tons. Major iron ore exporters included Australia, Brazil, Canada, India, and South Africa. In 2010, Australia and Brazil, which together control nearly three quarters of the market, saw their export volume rise by around 11 per cent and 17.0 per cent respectively.

1.16 A new trend to observe with respect to iron ore trade is the evolution of purpose-built very large ore carriers (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 Capsize ships.

Dry Cargo: Minor bulks

1.17 In 2010, minor bulks trade also recovered from the 2009 dip and expanded by 11 per cent- taking the total volume of minor bulk shipments to 954 million tons.

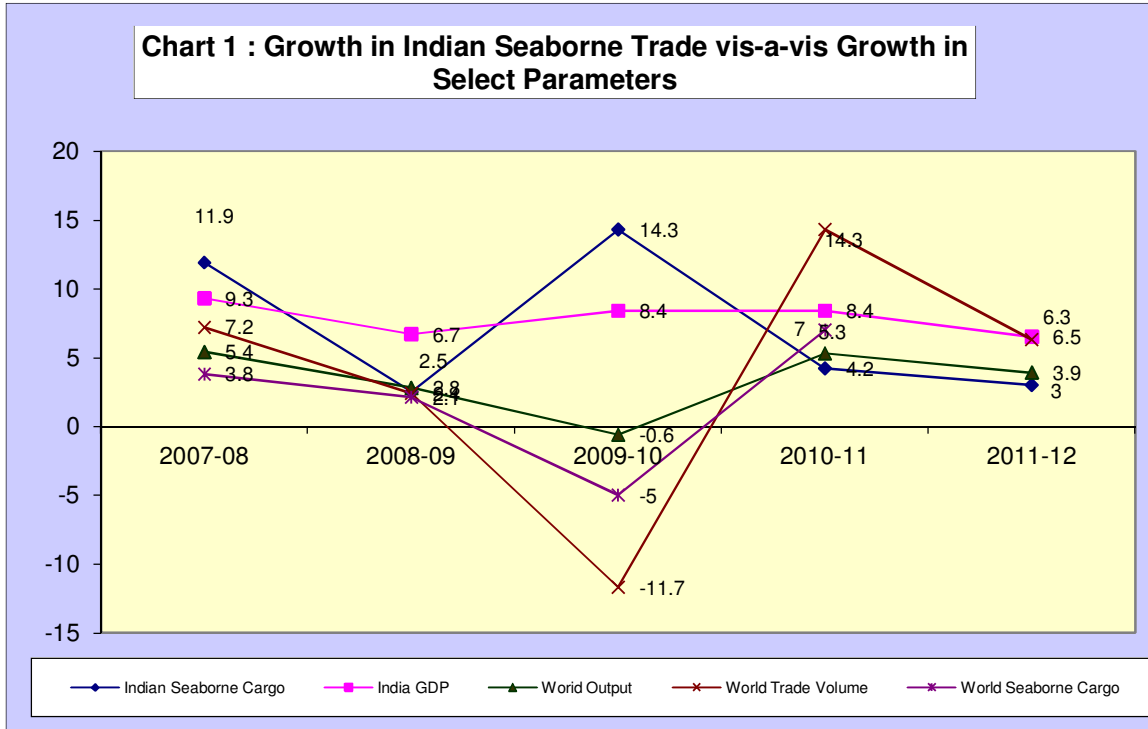
Containerized Cargo

1.18 The balance of 2.4 billion tons of dry cargoes is made up of containerized (56 per cent) and general cargoes. Driven largely by the increasing international division of labour and productivity gains within the sector, container trade, the fastest-growing cargo segment expanded at an average rate of 8.2 per cent between 1990 and 2010. In 2010, global container trade volumes bounced back at 12.9 per cent over 2009, among the strongest growth rates in the history of containerization.

1.19 According to Clarkson Research Services data, container trade volumes reached 140 million 20-foot equivalent unit (TEUs) in 2010, or over 1.3 billion tons. According to Clarkson Research Services, global container trade is projected to grow by 9.7 per cent in 2011 to reach 154 million TEUs. Growth in container trade volumes was propelled by the double-digit rates involving Asia, namely Far East-North America and Asia-Europe. Volumes on these two largest East-West trade lanes are expected to exceed 2008 levels. However, volumes on the transatlantic lane, which experienced a drop of 19 per cent in 2009, are expected to remain below the pre-downturn levels.

2. India: Seaborne Cargo Traffic

2.1 The growth in India's GDP, Port traffic and growth in World output, export volume and seaborne trade (loadings and unloading) since 2007-08 is given in chart 1.



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, World Trade Volume and World Sea-borne Trade refer to calendar years (2007-08 refers to 2007 and so on) based on World Economic Outlook, April 2012, IMF and Review of Maritime Transport, 2011, UNCTAD.

1.2 Cargo Traffic at Indian Ports

1.2.1 During 2011-12 Major and Non-major ports in India accomplished a total cargo throughput of 911.69 million tonnes reflecting a modest increase of 3.0% over 2010-11 compared to a growth of 4.2 % in 2010-11. The growth in cargo handled at Major and Non-major ports in 2011-12 were -1.7% and 11.5% respectively compared to 1.6% and 9.1% achieved in of 2010-11.

1.2.2 The year 2011-12 was a challenging year for the Major Port Sector as it was buffeted by three exogenous shocks (a) growth in major industrial countries which are a major market for Indian merchandise trade decelerated from 3.2% in 2010 to

1.6% in 2011 and is projected to grow at mere 1.4% for 2012. Similarly, growth in world merchandise trade decelerated sharply from 14.3% in 2010 to 6.3% in 2011; (b) India's GDP growth slowed down from 8.4% in 2010-11 to 6.5% in 2011-12. Slowdown and decline was pronounced in case of India's GDP pertaining to manufacturing and mining sectors: while growth in manufacturing slowed from 7.6% in 2010-11 to 2.5% in 2011-12, growth in mining sector made a complete about turn from 5% in 2010-11 to -0.9% in 2011-12; (c) series of judicial interventions leading to ban/restrictions on iron ore exports which resulted in more than 30% decline in its export. Iron ore loadings at major ports at 60.69 MT in 2011-12 were 27 MT lower compared with iron ore loadings 2010-11 leading to overall shortfall of 30.5 MT between the target and achievement for overall cargo traffic for 2011-12. These exogenous factors to a large extent reflect in sharp fall in iron ore loadings and deceleration in container traffic from 12.7% in 2010-11 to 5.4 % in 2011-12.

1.2.3 The deceleration in overall growth in India's seaborne cargo traffic in 2011-12 reflects slowdown in economic growth during the course 2011-12. The growth in India's GDP, Port traffic and growth in world output, world trade volume and world seaborne trade (loadings and unloading) since 2007-08 is given in Chart I. Trend in traffic handled at Major and non-major ports is given in Table 3.

Table 3: Traffic Handled at Indian Ports (Thousand Tonnes)								
Major / Non-Major Ports	Traffic Handled						% change 2011-12/2010-11	Annual Average Growth 11th Plan 2007-12
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12 (P)		
Major Ports	463782	519313	530804	561090	570086	560134	-1.7	4.2
	(71.5)	(71.6)	(71.3)	(66.0)	(64.4)	(61.4)		
Non-Major Ports	184922	206379	213222	288937	315358	351556	11.5	18.0
	(28.5)	(28.4)	(28.7)	(34.0)	(35.6)	(38.6)		
All Ports	648704	725692	744026	850027	885444	911690	3.0	8.1
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)		
(P): Provisional; Figures within parenthesis indicate percent share in total cargo traffic for Major and Non-Major ports respectively.								

1.3 Cargo Traffic at Major Ports

1.3.1 Cargo traffic around 560 million tonnes at India's 12 major ports accounted for 61.4% of India's total sea borne cargo (911.68 million tonnes) witnessed negative growth of 1.7% in 2011-12 from 1.6% increase in 2010-11. During 2011-12, cargo handled by Major Ports comprised of 194.1 million tonnes of cargo loaded, 341.6 million tonnes of unloaded and 24.4 million tonnes of transshipment cargo.

1.3.2 In terms of port performance, the analysis of cargo handled at 12 major ports reveals that 1.7% decrease in cargo traffic during 2011-12 reflects the fact that only two major ports were able to clock more than 10% growth namely Ennore (35.8%) and Cochin (12.4%). Growth in cargo traffic at other major ports was: Tuticorin (9.2%), New Mangalore (4.4%), Mumbai (2.9%), JNPT (2.2%) and Kandla (0.8%). Major ports which recorded negative growth were: Murmugao (22.1%), Haldia Dock Complex (-11.4%), Kolkatta Dock System (-2.4%), Chennai (-9.4%), Paradip (3.2%) and Visakhapatnam (-0.9%) (Table 4).

1.3.3 Amongst the Major Ports, Kandla Port handled the maximum Cargo of 82.5 million tonnes with a share of 14.7% in total cargo handled at major ports followed by Vishakhapatnam (12.0%), JNPT(11.7%), Mumbai (10.0%), Chennai (9.9%), Paradip (9.7%), Murmugao (7.0%), NMPT (5.9%), Haldia Dock Complex (5.5%), Tuticorin (5.0%), Cochin(3.6%), Ennore (2.7%) and Kolkata Dock System (KDS) (2.2%) during 2011-12.

1.3.4 During Eleventh Five Year Plan (2007-12), major ports achieved average annual growth of 4.2% only. Kandla Port is the only port which achieved double digit growth of 11.1% during the plan. Other ports which posted growth of more than the annual average growth during Eleventh Five Year Plan were Tutucorin (9.9%), JNPT (9.3%), Paradip (8.2%), Ennore (7.9%) and Cochin (6.3%).

Table 4 : Traffic Handled at Major Ports								
(Thousand Tonnes)								
Ports	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12 P	% change 2011-12/2010-11	Annual Average Growth 11th Plan 2007-12
1	2	3	4	5	6	7	8	9
Kolkatta	55050	57329	54220	46423	47545	43245	-9.0	-4.3
Kolkatta DS	12596	13741	12428	13045	12540	12233	-2.4	-0.6
Haldia DC	42454	43588	41792	33378	35005	31012	-11.4	-5.4
Paradip	38517	42437	46412	57011	56038	54254	-3.2	8.2
Vizag	56385	64597	63908	65501	68041	67420	-0.9	3.9
Ennore	10714	11563	11500	10703	11009	14956	35.9	7.9
Chennai	53414	57154	57491	61057	61460	55707	-9.4	0.9
Tuticorin	18801	21480	22011	23787	25727	28105	9.2	9.9
Cochin	15257	15810	15494	17429	17873	20091	12.4	6.3
New Mangalore	32042	36019	36691	35528	31550	32941	4.4	0.6
Mormugao	34241	35128	41681	48847	50060	39001	-22.1	2.8
Mumbai	52364	57038	51876	54541	54586	56186	2.9	1.5
JNPT	44815	55838	57296	60763	64317	65727	2.2	9.3
Kandla	52982	64920	72224	79500	81880	82501	0.8	11.1
All Ports	463782	519313	530804	561090	570086	560134	-1.7	4.2
(P): Provisional;								

Commodity wise Cargo Traffic at Major Ports

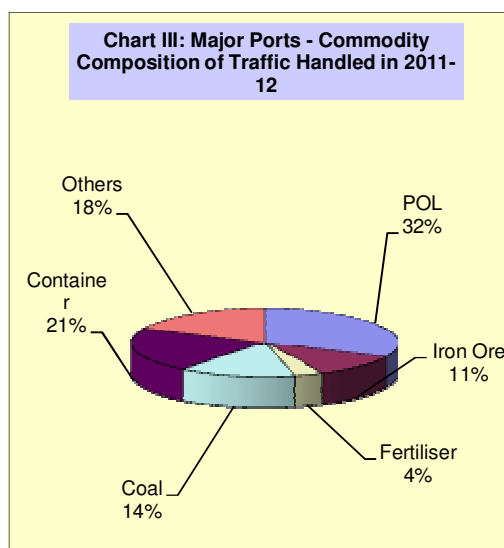
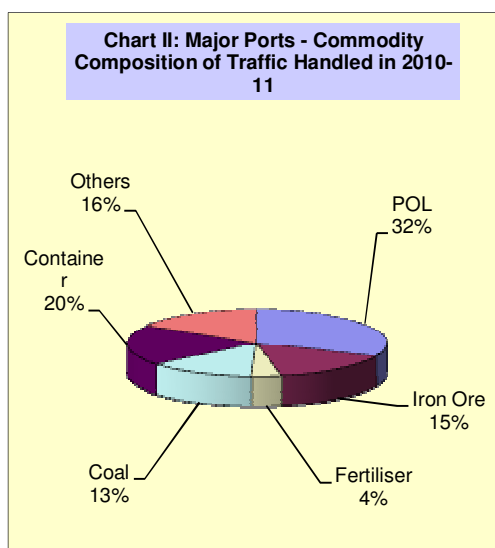
1.3.5 At a broad commodity level during 2011-12, Thermal Coal, Other Cargo and Container posted growth of 10.2%, 9.2% and 5.3% respectively, cargo traffic in Iron Ore (mainly export) in particular was adversely affected during 2011-12 and dropped by 30.8%. This to a large extent is attributed to restrictions in mining of iron ore in Karnataka & Goa. Coking Coal and Fertilizer (finished) were other commodity groups which recorded negative growth of 3.5% and 1.2% respectively.

Table 5 : Commodity wise Traffic Handled at Major Ports

Commo-dities	(Thousand Tonnes)							
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12(P)	% change 2011-12/2010-11	Annual Average Growth 11 th Plan 2007-12
1	2	3	4	5	6	7	8	10
POL	142157	167435	174203	174861	179882	179104	-0.4	5.2
Iron Ore	80584	92298	92669	100892	87686	60692	-30.8	-4.9
Fertiliser	14136	18279	18277	17731	19157	20389	6.4	8.8
1. Finished	7929	11874	12171	10941	12367	12219	-1.2	10.8
2. Raw (DRY)	6207	6405	6106	6790	6790	8170	20.3	6.3
Thermal Coal	37309	36833	44045	43340	46145	50834	10.2	7.3
Coking Coal	23042	31832	32880	28346	29001	27997	-3.5	4.3
Container (Tonnes)	73469	92247	93440	101287	114158	120202	5.3	12.7
Others	93085	80389	75290	94633	94057	100916	7.3	1.7
Total	463782	519313	530804	561090	570086	560134	-1.7	4.2

(P): Provisional; CP: Corresponding period 2010-11

1.3.6 The shares of different commodities in total cargo traffic during 2010-11 and 2011-12 are depicted in the Charts II and III respectively. Energy imports consisting of POL and Coal constituted 46 % of the total cargo traffic at India's major ports.



1.3.7 The Port-wise & commodity-wise traffic handled at major ports during 2008-09 to 2011-12 are given in **Annex 2**.

Container Traffic

1.3.8 Growth in container traffic (in million tonnes) which reflects largely trade in manufactures and components decelerated to 5.3% in 2011-12 from 12.8% in 2010-11. In terms of Twenty Foot Equivalent Units (TEU), the containers handled by Major Ports in 2011-12 increased by 2.9%. Amongst the major ports, the ports at Mumbai and Haldia Dock system witnessed fall in container traffic. Jawahar Lal Nehru Port continues to be the leading container handling port in the country with a share of 48.4% in terms of tonnage and 56% in terms of TEUs in the total container traffic at major ports (Table:6). Chennai port which handled 25% of container cargo has emerged as the second largest container handling port. The total throughput measured in terms of TEUs at all the major ports at 7.78 million TEUs in 2011-12 was a quarter of TEU throughput at the Shanghai port alone.

1.3.9 During Eleventh Five Year Plan, container traffic at major ports achieved annual average growth of 12.7% in Tonnage handled and 8.1 % in TEUs. The container port JNPT which handles maximum container traffic in the country achieved average annual growth of 8.5% & 6.2% in terms of tonnage handled and TEUs handled respectively. Chennai port which handles about 25% of the Container traffic (in tonnage) has recorded sharp average annual growth of 22.5% and 15.2 % in terms of tonnage and TEUs respectively during Eleventh Plan.

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

PORT	2006-07		2007-08		2008-09		2009-10		2010-11		2011-12(P)		% change 2011-12/2010-11		Annual Average Growth 11 th Plan 2007-12	
	Tn	TEU	Tn	TEU	Tn	TEU	Tn	TEU	Tn	TEU	Tn	TEU	Tn	TEU	Tn	TEU
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Kolkatta DS	4003	239	5139	297	5476	302	6645	378	6220	377	6818	412	9.6	9.3	14.1	14.5
Haldia DC	1918	110	2397	128	2373	127	2068	124	2835	149	2619	140	-7.6	-6.0	7.3	5.5
Paradip	34	2	58	4	34	2	52	4	69	4	109	8	58.0	100.0	44.1	60.0
Vizag	799	56	1133	71	1361	88	1678	97	2572	146	4214	234	63.8	60.3	85.5	63.6
Chennai	14166	885	18050	1122	20581	1134	23477	1208	29421	1485	30075	1558	2.2	4.9	22.5	15.2
Ennore	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0
Tuticorin	4011	377	5630	450	5482	439	6599	440	8169	468	9227	477	13.0	1.9	26.0	5.3
Cochin	2949	226	3183	254	3522	261	3929	289	4419	310	4715	337	6.7	8.7	12.0	9.8
New Mangalore	265	17	319	21	404	29	475	31	568	40	646	45	13.7	12.5	28.8	32.9
Mormugao	155	13	166	14	178	14	229	17	220	18	231	22	5.0	22.2	9.8	13.8
JNPT	40811	3298	51923	4060	50602	3953	53096	4176	56426	4332	58233	4321	3.2	-0.3	8.5	6.2
Mumbai	1580	136	1633	118	1291	92	607	58	653	72	551	58	-15.6	-19.4	-13.0	-11.5
Kandla	2778	178	2616	165	2136	137	2432	147	2586	160	2764	166	6.9	3.8	-0.1	-1.3
All Ports	73469	5537	92247	6704	93440	6578	101287	6863	114158	7561	120202	7778	5.3	2.9	12.7	8.1

Note: CP - Corresponding period of previous year; (P) - Provisional; Tn - tonnes; TEU –twenty foot equivalent unit

Source:IPA

1.4 Cargo traffic at Non-Major Ports

1.4.1 The annual average growth in cargo throughput at non major ports during Eleventh Five Year Plan was 18.0% compared to 18.7% during the Tenth Five Year Plan. Non-major ports handled nearly two-fifth of total maritime freight traffic of the country during 2011-12.

1.4.2 Table 7 presents maritime state-wise share and growth of traffic handled at Non-major ports during 2008-09 to 2011-12.

Table 7 : Traffic Handled by Non-Major Ports by Maritime States/UTs								
(000'Tonnes)								
Maritime State/UT	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12(P)	% change 2011-12/2010-11	Annual Average Growth 11th Plan 2007-12
Gujarat	131265 (71.0)	150521 (72.9)	152811 (71.7)	205583 (71.2)	230907 (73.2)	259040 (73.7)	12.2	19.5
Maharashtra	11580 (6.3)	11613 (5.6)	10416 (4.9)	12046 (4.2)	14875 (4.7)	19948 (5.7)	34.1	14.5
Andhra Pradesh	18609 (10.1)	19262 (9.3)	29720 (13.9)	43690 (15.1)	43267 (13.7)	43924 (12.5)	1.5	27.2
Goa	14306 (7.7)	12825 (6.2)	11901 (5.6)	13897 (4.8)	14581 (4.6)	14470 (4.1)	-0.8	0.2
Tamil Nadu	805 (0.4)	887 (0.4)	898 (0.4)	1174 (0.4)	1611 (0.5)	1210 (0.3)	-24.9	10.1
Karnataka	6561 (3.5)	8899 (4.3)	4968 (2.3)	8547 (3.0)	3095 (1.0)	581 (0.2)	-81.2	-18.2
OtherStates/UTs	1796 (1.0)	2372 (1.1)	2508 (1.2)	4000 (1.4)	7022 (2.2)	12383 (3.5)	76.3	117.9
All M.States/UTs	184922 100	206379 100	213222 100	288937 100	315358 100	351556 100	11.5	18.0

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

1.4.3 The growth in cargo handled by the non-major ports in 2011-12 was 11.5% compared to 9.1% recorded in 2010-11. The growth in cargo handled at non-major ports has been primarily driven by growth in non-major ports in Gujarat which account for more than 70 % share in cargo handled at non major ports. Table: 7). The growing importance of non-major ports in handling cargo traffic has helped alleviate the congestion at major ports. Table 7 provides traffic handled by non-major ports in terms of maritime states (geographic location) and Table 8 gives a glimpse of commodity profile of the cargo handled. Table:7 reflects that Gujarat accounted for

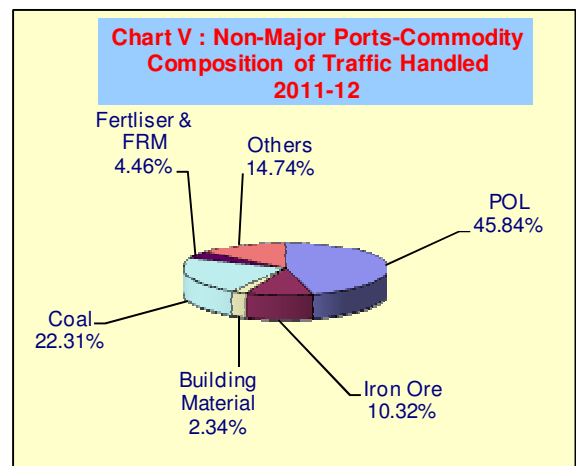
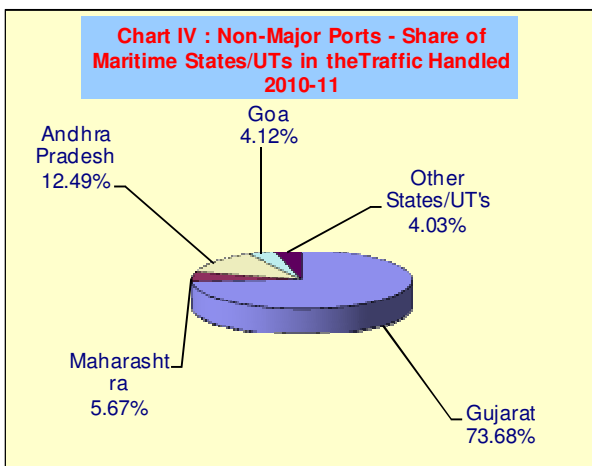
(73.7 %) of the traffic handled by the non-major ports followed by Andhra Pradesh (12.5%), Maharashtra (5.7%) and Goa (4.1%). Four maritime States, viz, Gujarat, Andhra Pradesh, Goa and Maharashtra together accounted for 96% of the total cargo traffic handled by the non-major ports in 2011-12.

1.4.3 Three commodities, viz. POL, iron ore, and coal accounted for about fourth-fifth of the total cargo handled at the non-major ports (Table :8).

Commodity Group	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	% change 2011-12/2010-11	Average Annual Growth 11 th Plan 2007-12
POL	81200 (43.9)	91035 (44.1)	97816 (45.9)	137720 (47.7)	145378 (46.1)	161133 (45.84)	10.8	7.3
Iron Ore	33973 (18.4)	34223 (16.6)	35863 (16.8)	48813 (16.9)	38266 (12.1)	36277 (10.32)	-5.2	-1.9
Building Material	14391 (7.8)	16264 (7.9)	13259 (6.2)	13142 (4.5)	12327 (3.9)	8210 (2.34)	-33.4	-3.3
Coal	14015 (7.6)	15443 (7.5)	21457 (10.1)	41276 (14.3)	58462 (18.5)	78426 (22.31)	34.1	90.5
Fertilizer & FRM	6818 (3.7)	7112 (3.4)	8855 (4.2)	9501 (3.3)	12725 (4.0)	14192 (4.46)	23.3	21.6
Others	34525 (18.7)	42302 (20.5)	35972 (16.9)	38485 (13.3)	48200 (15.3)	51804 (14.74)	7.5	41.6
All	184922 (100.0)	206379 (100.0)	213222 (100.0)	288937 (100.0)	315358 (100.0)	351545 (100)	11.5	18.0

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

1.4.5 The share of Maritime States/UTs in the total traffic and Commodity-wise composition of traffic in 2011-12 is revealed in the pie Charts IV and V.



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

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

1.5 Impact of Global Macro Developments on Maritime Trade

1.5.1 Impact of growth on India's seaborne cargo

1.5.1.1 India's Maritime Transport growth is driven by developments in the world economy viz. growth in world output & trade as well as in Indian economy. 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 growth slowed down to 6.5% from 8.4% in 2010-11. Cargo traffic at India's 12 major ports, which accounts for more than three – fifth of India's total seaborne cargo at 560 million tonnes showed a decline of 1.7% in 2011-12 compared to 1.6% increase in 2010-11. The trajectory of growth in cargo handled at India's major ports comes into sharp focus when these growth rates are viewed in terms of quarterly growth trajectories. This reveals that growth in total cargo throughput at Major Ports remained subdued in Q2 and turned negative in Q3 and Q4 of 2011-12. The manufacturing sector which is a major factor influencing seaborne container cargo traffic posted a lower GDP growth of 3.4% in 2011-12 compared to 7.2 in 2010-11. The GDP of Manufacturing sector comprising of Mining & Quarrying; manufacturing; electricity, gas and water supply and construction activities recorded quarterly growth of 5.6% in Q1, 3.7% in Q2, 2.5% in Q3 and 1.9% in Q4 during the course 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. Coal which is imported to meet the demand of power and steel sector was the only commodity posting positive growth in all four quarters of 2011-12. The impact of global demand was pronounced in case of container traffic, which reflects trade in manufactures drifted downwards from 9.6% in Q2, 5.8% in Q3 and -1.0% in Q4 of 2011-12. Iron ore cargo traffic posted sharp decline 30.8% in 2011-12 mainly due to ban of iron ore exports by the state of Karnataka & Goa. Other commodity groups recorded meager to modest growth recording positive growth in same quarters and negative growth in quarters other.

1.5.1.2 Table 9 gives Quarter wise trend in growth of cargo traffic handled at Major ports, GDP and GDP of Manufacturing sector during 2010-11 and 2011-12.

Table 9 : Quarter wise Trend in Growth of Cargo Traffic at Major Ports & GDP										
Commodities/ Year	2010-11					2011-12				
	Q1	Q2	Q3	Q4	2010-11	Q1	Q2	Q3	Q4	2011-12
POL	-0.3	3.5	6.1	0.1	2.9	9.4	-1.8	-10.1	3.5	0.4
Iron Ore	-3.9	-27.4	-13.2	-11.9	-13.1	-14.3	-9.0	-30.8	-53.5	-30.8
Coal	-9.1	10.5	0.8	5.1	4.7	20.0	3.7	2.9	7.0	4.0
Fertilizer	11.9	50.0	-3.7	-2.2	17.3	-20.5	-26.0	34.0	30.7	2.0
Container in tonnes	16.3	6.7	15.8	12.3	12.8	7.8	9.6	5.8	-1.0	5.3
TEUs	16.6	5.9	11.8	4.2	10.2	3.2	5.7	3.4	-0.1	2.5
Other cargo	3.5	-4.2	-7.4	17.1	2.1	7.1	7.3	4.1	-1.5	4.0
All Cargo	1.7	0.7	0.8	3.0	1.6	5.2	1.0	-4.7	-7.5	1.7
GDP overall	8.5	7.6	8.2	9.2	8.4	8.0	6.7	6.1	5.3	6.5
GDP - Manufacturing	8.3	5.7	7.6	7.0	7.2	5.6	3.7	2.5	1.9	3.4

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

Note: The annual growth rates are based on revised data and may not exactly tally with quarterly growth rates

1.5.2 Global Ocean Freight Rates

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

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

touched its low at 553 points on July 31, 2008. However, BDI has gained considerably but remains well below the peak attained in May 2008.

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

1.5.2.4 The Baltic Dry Index (BDI) decreased by approximately 44 per cent in 2011. The BDI bottomed out at the beginning of 2011 (February) at 1,069 points, 60 per cent below the previous year's level, and peaked in October at 2,150 points. The main reason was simply a massive oversupply of tonnage across most market segments coupled with cooling global demand conditions. In 2011 one year time charter rates for Capesizes fell below Panamax rates in January, and by April fell below Handysize rates, consequently spending the next four months just above \$10,000 per day. Overcapacity meant low rates prevailed for the majority of 2011, even though demand conditions improved for such commodities as steel. Throughout all classes the rate of decline for 2011 was significant, for Capesize (-50 per cent), Panamax (-40 per cent), Handymax (-32 per cent) and Handysize (-26 per cent). The outlook for 2012 suggests a testing period for the larger dry bulk segments, since the beginning of 2011 the Baltic Dry Index has declined by 50 per cent, averaging 703 points for February 2012.

Containership Charter Market

1.5.2.5 After one of the most remarkable comebacks in shipping history in 2010, the global container market again confronted adverse market conditions, as volumes on long haul routes stagnated and new building capacity continued to rise.

Surprisingly time charter rates continued their year -on- year rise over the first half of 2011. From January to April 2011 rates maintained their upward trend, with Handymax 6 to 12 month time charter rates experiencing the most pronounced monthly increases, 30 per cent over the period. Part of this increase can be attributed to the slow steaming strategies being pursued by operators consequently absorbing more mile/teus.

Table 10: Container 1 year Charter Rates (US \$ Daily Rate)				
Month	Feeder 350 TEU	Feedmax 725 TEU	Handysize 1000 TEU	Handymax 1700 TEU
Jan-11	4100	5500	8500	9250
Feb-11	4150	5700	8750	10700
Mar-11	4400	6250	9250	11750
Apr-11	4400	6150	9000	12000
May-11	4300	6100	9000	12100
Jun-11	4300	6050	8900	12000
Jul-11	4100	5500	8000	10750
Aug-11	4000	5350	7400	10000
Sep-11	3700	5000	7000	9500
Oct-11	3650	5000	6200	8500
Nov-11	3500	4750	5750	8300
Dec-11	3450	4400	5000	6850
Jan-12	3400	4250	5000	6250
Feb-12	3450	4250	5200	6250
Sources : Clarksons				

1.5.2.6 Slow steaming is now being reported on almost all long haul routes, with Extra Slow Steaming mode currently absorbing 750,000 teu or 4.9 per cent of the total containership fleet. In early 2011 the idle fleet reached a low of 100,000 teu but subsequently rose as freight and charter rates weakened and boxship owners and operators found it harder to deploy their vessels. It is estimated that by the end of February 2012 the idle containership fleet stood at 840,000 teu, an increase of 5.4 percent of total slot capacity. The cellular fleet grew by 7.9 per cent in 2011, with deliveries of 127 units accounting for 1.23 Mteu. The Top 20 carrier's combined share of capacity grew to 84.2 per cent from 83.1 per cent in January 2011. Their capacity has increased by 8.7 per cent over the last twelve months, with APM-Maersk leading the way in terms of fleet growth. The top three containership operators maintained their respective positions in terms of total teu in 2011. The overall cellular fleet is expected to expand by 8.3 and 11 per cent in 2012 and 2013.

Container Trades and Freight Rates

1.5.2.7 Compared to 2010 global container trade growth was weaker in 2011, at 7.9 per cent. As opposed to the evenly spread growth seen in 2010, there was a division between main-lane trade (growing by 4 per cent), non-mainline (11 per cent) and intra-regional trades 9 per cent. Weaker demand from Europe and the USA on the key head-haul routes ex Asia can be expected to have affected deep sea trade growth which was largely steadied by demand from emerging economies in 2011.

1.5.2.8 Since the beginning of 2012 carriers have succeeded to some extent in restoring freight rates and by March the Shanghai Containerized Freight Index(SCFI) eclipsed 2011 peaks. Nonetheless spot rates on key Asia-Europe routes have fallen by an average of 40 per cent during the course of 2011, reaching a level of about \$1000 according to the SCFI in December compared to highs of \$4500 in April 2010. The major events of the year occurred on the Asia-Europe tradelane. By the third quarter of 2011 net freight rates per TEU on the trade-lane had turned negative. In response Maersk reacted by announcing the “Daily Maersk” on the Asia-Europe tradelane in November 2011 which promised guaranteed transportation times. This triggered a wave of new alliances in response. Another trend emerging on the Asia-Europe tradelane is the deployment of 10,000+ TEU vessels and the subsequent cascading down to other tradelanes. It is expected that of the additional 1.47Mteu (8.2 per cent) of containership capacity to be delivered in 2012, 49 per cent will be contributed by ships of greater than 10,000 teu.

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 decelerated to 8.2% in 2011 from 13.7% in 2010. Similarly, the growth in container traffic (Million TEUs) which reflects growth in manufactured goods slowed to 7.8% in 2011 from 14.8% growth in 2010. Recent trends in Top 20 World Major Ports (in Million Tonnes) and Container Ports (in million TEUs) are given in Table 11 and Table 12 respectively.

	Port	2009	2010	2011
1.	Shanghai (PRC)	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	243.0	267.8	277.4
12	Busan (South Korea)	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 Angles (USA)	157.5	187.8	203.9
18	Antwerp (Belgium)	157.6	178.2	187.2
19	Nagoya (Japan)	151.9	170.8	171.4
20	South Louisiana (USA)	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;* Combined in 2006			

Port	2009	2010	2011
Shanghai (PRC)	25.00	29.07	31.74
Singapore	25.87	28.43	29.94
Hong Kong (PRC)	20.90	23.53	24.22
Shenzhen (PRC)	18.25	22.51	22.57
Busan (Republic Korea)	11.98	14.18	16.19
Zhoushan/Ningbo (PRC)	10.50	13.14	14.69
Guangzhou(PRC)	11.19	12.55	14.40
Qingdao(PRC)	10.26	12.01	13.02
Dubai Ports (UAE)	11.12	11.60	13.00
Rotterdam (Netherlands)	9.74	11.15	11.88
Tianjin(PRC)	8.70	10.08	11.50
Kaohsiung (Taiwan Province of PRC)	8.58	9.18	9.64
Port Klang (Malaysia)	7.31	7.97	9.60
Antwerpen (Belgium)	7.31	8.47	9.01
Hamburg (Germany)	7.01	7.90	8.66
Los Angles (USA)	6.75	7.85	7.94
Tanjung Pelepas (Malaysia)	6.00	6.53	7.50
Long Beach (USA)	5.07	6.26	6.46
Xiamen (PRC)	4.68	5.82	6.06
Bremen (Germany)	4.56	4.89	5.92
Total of Top 20 Ports	220.78	253.12	273.94
	Source: Port Statistics, Port of Rotterdam Authority; PRC: Peoples Republic of China		

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. The Eleventh Five Year Plan has envisaged an increase in the capacity of major port to 1016.55 million tonnes by the end of 2011-12. At the beginning of the Eleventh Five Year Plan the capacity of the Major Ports was 504.75 million tonnes. Thus the proposed capacity addition during Eleventh Five Year Plan at the Major Ports amounts to 511.80 million tonnes. At the end of March 2012 the cargo handling capacity of Major Ports was 696.5 million tonnes. Commodity-wise capacity of Major Ports at the end of March 2007 to 2012 is given in Annex 4.

Maritime Developments

1.6.5 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.

1.6.6 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
- **Port Policy Measure**
 - New Land Policy for Major Ports
 - New Policy on captive berths
 - 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

1.6.7 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. Maritime States have also identified projects for development of non-major ports for creation of additional capacity. Private sector is envisaged to fund most of the projects through PPP or BOT or BOOT basis. It is envisaged that private sector will mainly contribute towards the cost of development of ports in India.

1.6.8 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. During the 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 major ports comprising construction of berths and terminals, mechanization of existing berths etc. During Eleventh Five year Plan (2007-12) 27 PPP projects with an estimated cost of Rs. 17144.62 crore for capacity addition of 219.1 MT were awarded.

1.6.9 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

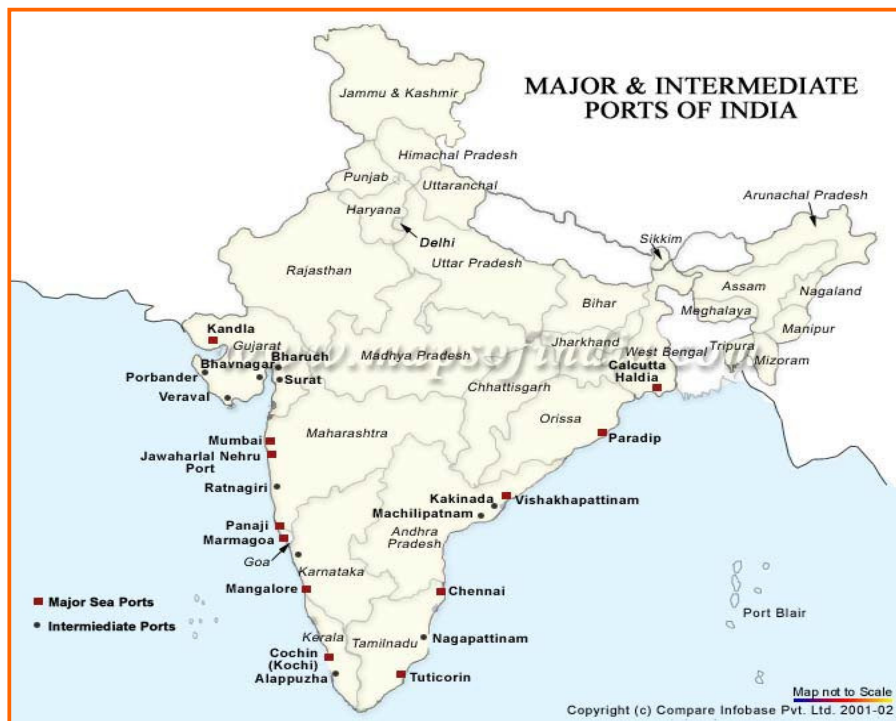
1.6.12 The following areas which are indicative in nature have been identified for participation/investment by private sector:-

- (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.
 - ❖ cranage/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 13 major ports and 176 notified non-major (minor/intermediate) ports along the coast-line and sea-islands. Chart-VI gives the geographical location of the Major and prime Non-Major Ports. The Maritime Ports operate within the statutory framework of the Indian Ports Act 1908 which applies to all the ports. However, the Major Ports Act 1963 applies only to Major Ports. Each Major Port is administered by a 'Port Trust' (except for the port of Ennore which is a corporatised entity).

Chart - VI



Source: <http://www.mapsofindia.com>

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

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

2.3 Maritime States Development Council (MSDC)

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

2.4 Port Policy in Maritime States

2.4.1 GUJARAT

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

Chart – VII: Gujarat: Major and Minor Ports



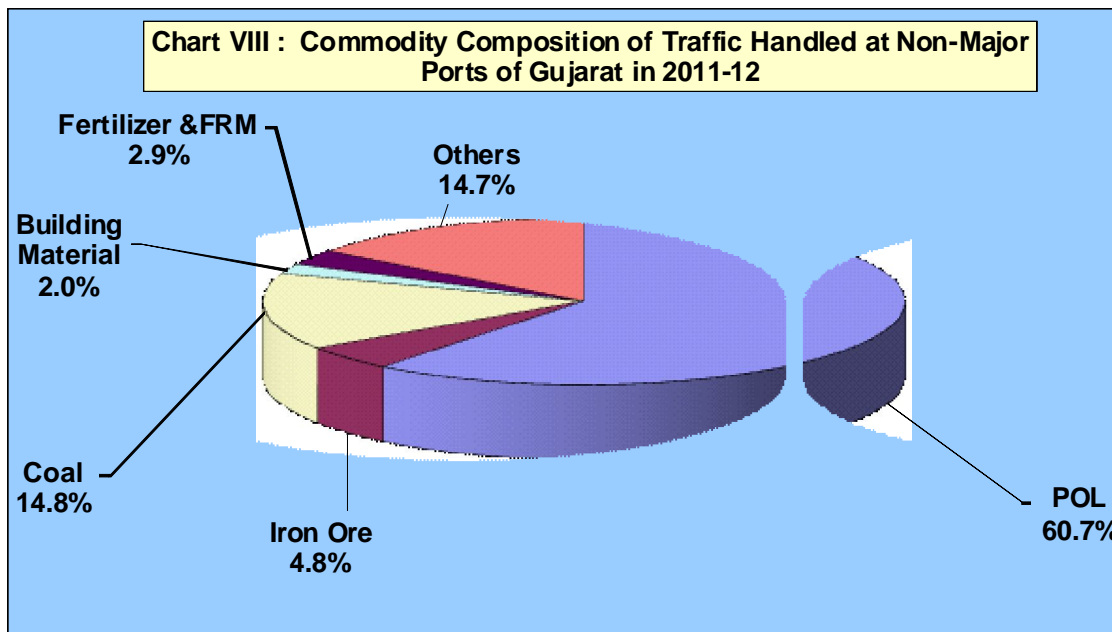
Source : http://www.gmbports.org/port_pog.htm

2.4.1.2 The trends in the cargo handled at both major and non-major ports of Gujarat State during 2007-08 to 2011-12 are given in Table: 13.

Table: 13 Gujarat: Trends in Cargo Handled at Major & Non-Major Ports (Million Tonnes)							
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12(P)	Annual Average Growth 11th Plan 2007-12
Major Ports	52.98	64.92 (22.5)	72.22 (11.2)	79.50 (10.1)	81.88 (3.0)	82.5 (0.8)	11.1
Non-Major Ports	131.26	150.52 (14.7)	152.81 (1.5)	205.58 (34.5)	230.91 (12.3)	259.03 (12.2)	19.5
All Ports	184.24	215.44 (16.9)	225.03 (4.5)	285.08 (26.7)	312.79 (9.7)	341.53 (9.2)	17.1
<small>Figures in bracket represents percentage change over the previous year/period (P) Provisional.</small>							

2.4.1.3 It is noteworthy that all ports (major and non-major) located along the coast of Gujarat handled more than 37% of the total cargo handled by Indian ports in 2011-12. In particular, non-major ports of Gujarat alone handled close to three-fourth of total cargo traffic at India's non-major ports.

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



POL: Petroleum, Oil and Lubricant FRM: Fertiliser Raw material

2.4.1.5 Amongst the Maritime States of India, Gujarat is one of the States, which has played a proactive role in the development of non major ports on its coastline. It announced an integrated Port Policy in December 1995. The salient features of the Policy are given in the Box 1:

Box 1 : 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: 14. It indicates sustained increase in cargo throughput and capacity addition. During the year 2011-12, 55.6 million tonnes of capacity was added taking the total cargo handling capacity in the non major port sector in the Gujarat to 323 million tonnes. During Eleventh Five Year Plan, the Cargo handling capacity at Gujarat ports increased at an average annual growth of 15.5% while cargo handled during this period increased by 19.1%.

Table : 14 - Gujarat: Non Major Ports - Current Capacity & Utilization (Million Tonnes)							Annual Average Growth 11th Plan 2007-12
Item	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	
Capacity*	182.00	197.00 (8.2)	235.00 (19.3)	243.64 (3.7)	267.4 (9.8)	323 (20.8)	15.5
Cargo Handled	132.44	150.52	152.81	205.58	230.91	259.04	19.1
% Utilization	72.14	74.92	64.89	84.36	86.35	80.2	
* Including Lighterage Port Capacity; Figures within parenthesis indicate capacity addition in MT during the year							

2.4.1.7 As per the port policy, Gujarat Maritime Board (GMB) has selected 10 Green Field sites for development of new ports as “All weather Deep Water Direct Berthing Ports”. Amongst 10 ports, 6 ports are to be developed through private investment and remaining 4 ports in the joint sector. The port wise trend in capacity creation are given in the Table15 below.

Table 15 : Trends in capacity creation (Million TPA)							
Ports	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	Annual Average Growth 11th Plan 2007-12
Mundra (GAPL)	36.2	36.2	36.2	36.2	41.2	75.2	21.5
Mundra (GAB)	0.24	0.24	0.24	0.24	0.24	0.24	0.0
Okha	3.96	3.96	3.96	3.96	3.96	4.96	5.1
Bedi	5.69	5.69	5.69	5.69	5.69	5.69	0.0
Pipavav (GPPL)	9.41	14.41	14.41	23.41	23.41	23.41	29.8
Magdalla	27.05	27.05	27.05	27.05	43.05	43.05	11.8
Navalakhi	3.82	4.82	4.82	4.82	4.82	4.82	5.2
Sikka	57.57	67.57	104.57	104.57	104.57	109.57	18.1
Porbander	5.26	5.26	5.26	5.26	5.26	5.26	0.0
Veraval	2.17	2.17	2.17	2.17	2.17	2.17	0.0
Muldwarka	7.72	7.72	7.72	7.72	7.72	7.72	0.0
Jafrabad	4.53	4.53	4.53	4.53	4.53	4.53	0.0
Dahej	13.19	13.19	13.19	13.19	16.19	24.19	16.7
Bhavnagar	1.18	1.18	1.18	1.18	1.18	1.18	0.0
Jakhau	3.25	3.25	3.25	3.25	3.25	3.25	0.0
Mandvi	0.32	0.32	0.32	0.32	0.32	0.32	0.0
Gogha	0.08	0.08	0.08	0.08	0.08	0.08	0.0
Bhogat	0	0	0	0	0	7	0.0
Total	182.00	198.00	235.00	243.64	267.64	323	15.5

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. 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 2:

Box: 2 : 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. These ports are expected to be ready for cargo handling in next 3-4 years. The proposed capacity of these ports is given in Table 16.

Table 16 : Maharashtra: Proposed Capacity Creation (in million tones per annum)		
Port	Initial Phase	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 2007-08 to 2011-12 are given in Table 17.

Table 17 : Maharashtra: Cargo Handled at Major & Non-Major Ports (MT)							
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12(P)	Annual Average Growth 11 th Plan 2007-12
Major Ports	97.18	112.88 (16.2)	109.17 (-3.3)	115.30 (5.6)	118.90 (3.1)	121.19 (1.9)	4.9
Non-Major Ports	11.58	11.36 (-1.9)	10.42 (-8.3)	12.05 (15.6)	14.88 (23.5)	19.95 (34.1)	14.5
All Ports	108.76	124.24 (14.2)	119.59 (-3.7)	127.35 (6.5)	133.78 (5.0)	141.14 (5.5)	6.0
Figures in bracket represents percentage change over the previous year ; (P) Provisional							

2.4.3 GOA

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

2.4.3.2 The trends in the cargo handled at both major and non-major ports of the State during 2007-08 to 2011-12 are given in Table18.

Table 18 : Goa : Trends in Cargo Handled at Major & Non-Major Ports (MT)							
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12 (P)	Annual Average Growth 11 th Plan 2007-12
Major Ports	34.24	35.13 (2.6)	41.68 (18.6)	48.85 (17.2)	50.06 (2.5)	39 (-22.1)	2.8
Non-Major Ports	14.31	12.83 (-10.3)	11.9 (-7.2)	13.9 (16.8)	14.58 (4.9)	14.47 (-0.8)	0.2
All Ports	48.55	47.96 (-1.2)	53.58 (11.7)	62.75 (17.1)	64.64 (3.0)	53.47 (-17.3)	2.0
Figures in bracket represents percentage change over the previous year /Period ; (P) Provisional; MT Million Tonnes							

2.4.4 KARNATAKA

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

2.4.4.2 The trends in the cargo handled at both major and non-major ports of the State during 2007-08 to 2011-12 are given in Table 19.

Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12 (P)	Annual Average Growth 11 th Plan 2007-12
Major Ports	32.04	36.02 (12.4)	36.69 (1.9)	35.53 -(3.2)	31.55 -(11.2)	32.94 (4.4)	0.6
Non-Major Ports	6.56	8.9 (35.7)	4.97 -(44.2)	8.55 (72.0)	3.1 -(63.7)	0.6 -(80.6)	-18.2
All Ports	38.60	44.92 (16.4)	41.66 -(7.3)	44.08 (5.8)	34.65 -(21.4)	33.54 -(3.2)	-2.6

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

2.4.5 KERALA

2.4.5.1 Kerala has a coastline of 570 kms, with one major port at Cochin and 17 other non-major ports. The Vallarpadam Container Terminal Project in Cochin has been promoted on BOT basis through public private participation.

2.4.5.2 The trends in the cargo handled at both major and non-major ports of the State during 2007-08 to 2011-12 are given in Table 20. In Kerala 3 ports, viz, Azhikkal, Bepore (handles more than 90 % of the total non major cargo traffic in the State) and Vizhinjam are handling cargo for the last few years.

Table 20: Kerala : Trends in Cargo Handled at Major & Non-Major Ports (MT)							
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	Annual Average Growth 11 th Plan 2007-12
Major Ports	15.26	15.81 (3.6)	15.49 -(2.0)	17.43 (12.5)	17.87 (2.5)	20.09 (12.4)	6.3
Non-Major Ports	0.17	0.1 -(41.2)	0.13 (30.0)	0.12 -(7.7)	0.12 (0.0)	0.12 (0.0)	-5.9
All Ports	15.43	15.91 (3.1)	15.62 -(1.8)	17.55 (12.4)	17.99 (2.5)	20.21 (12.3)	6.2
Figures in bracket represents percentage change over the previous year/period; (P) : Provisional; MT : Million Tonnes							

2.4.6 TAMIL NADU

2.4.6.1 Tamil Nadu has a coastline of about 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.

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

2.4.6.3 In order to optimize the limited resources and the ports along the east coast, permission for captive ports to handle commercial cargo have been given. Accordingly, the Kattupalli Port developers, namely, M/s L&T Shipbuilding Private Limited and the Thiruchopuram Port developers, namely M/s Nagarjuna Oil Corporation Limited, have been permitted to handle other commercial cargo as well. It is expected that these developments will pave way for the upcoming industries in this area.

Development of Cuddalore Port

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

Development of Nagapattinam Port

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

2.4.6.7 The trends in the cargo handled at both major and non-major ports of the State during 2007-08 to 2011-12 given in Table:21.

Table 21: Tamil Nadu: Trends in Cargo Handled at Major & Non-Major Ports (MT)							
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12(P)	Annual Average Growth 11 th Plan 2007-12
Major Ports	82.13	90.20 (9.8)	91.00 (0.9)	95.55 (5.0)	98.20 (2.8)	98.77 (0.6)	4.1
Non-Major Ports	0.81	0.89 (9.9)	0.9 (1.1)	1.17 (30.0)	1.61 (37.6)	1.21 (-24.8)	9.9
All Ports	82.94	91.09 (9.8)	91.90 (0.9)	96.72 (5.2)	99.81 (3.2)	99.98 (0.2)	4.1
Figures in bracket represents percentage change over the previous year /period (P) Provisional; MT Million Tonnes							

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 173 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:

2.4.7.3 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

2.4.7.4 The proposed investments in approved port projects are (i) Gangavaram Port (Rs.2000 crore); (ii) Krishnapatnam Port (Rs.850 crore); and (iii) Kakinada Deep Water Port Expansion (Rs.230 crore). The projects under pipeline are (i) Machilipatnam Port (Rs.1000 crore); and (ii) Nizampatnam Port (Rs.1000 crore).

2.4.7.5 The trends in the cargo handled at both major and non-major ports of the State during 2007-08 to 2011-12 are given in Table: 22.

Table 22: Andhra Pradesh: Trends in Cargo Handled at Major & Non-Major Ports(MT)							
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12 (P)	Annual Average Growth 11 th Plan 2007-12
Major Ports	56.39	64.6 (14.6)	63.91 (-1.1)	65.5 (2.5)	68.04 (3.9)	67.42 (-0.9)	3.9
Non-Major Ports	18.61	19.29 (3.7)	29.72 (54.1)	43.69 (47.0)	43.27 (-1.0)	43.92 (1.5)	27.2
All Ports	75.00	83.89 (11.9)	93.63 (11.6)	109.19 (16.6)	111.31 (1.9)	111.34 (0.0)	9.7
Figures in bracket represent percentage change over the previous year period. (P) Provisional; MT Million Tonnes							

2.4.8 ORISSA

2.4.8.1 Orissa has a Coast line of 480 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:-

Table 23: Potential Port Locations in Orissa	
Name of the Port Locations	District
(2)	(3)
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 in 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 Phase-II of the Port on 30th March, 2011.

Subarnarekha Mouth (Kirtania)

2.4.8.6 For development of Port on Subarnarekha Mouth (Kirtania) in Balesore 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 land are in progress.

Astaranga Port

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

Chudamani Port

2.4.8.8 Government of Orissa has signed a MoU with Aditya Birla Group represented by ESSEL Mining and Industries on 22.10.2009 for development of a Captive Port at Chudamani in 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 2007-08 to 2011-12 are given in Table 24.

Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12(P)	Annual Average Growth 11 th Plan 2007-12
Major Ports	38.52	42.44 (10.2)	46.41 (9.4)	57.01 (22.8)	56.04 (-1.7)	54.25 (-3.2)	8.2
Non-Major Ports		0.3	0.3 (0.0)	0.4 (33.3)	0.4 (0.0)	4.8 (1100.0)	
All Ports	38.52	42.74 (11.0)	46.71 (9.3)	57.41 (22.9)	56.44 (-1.7)	59.05 (4.6)	10.7

Figures in bracket represent percentage change over the previous year; (P) Provisional

2.4.9 WEST BENGAL

2.4.9.1 The State of West Bengal has a coastline of about 158 kms which has two Docks at Kolkata and Haldia under a single major port and one non- major port.

2.4.9.2 The trends in the cargo handled at both major and non-major ports of the State during 2007-08 to 2011-12 are given in Table 25.

Table 25 : West Bengal-Trends in Cargo Handled at Major & Non-Major Ports (MT)							
Major/Non-Major	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12 (P)	Annual Average Growth 11 th Plan 2007-12
Major Ports	55.05	57.33 (4.1)	54.22 -(5.4)	46.43 -(14.4)	47.54 (2.4)	43.24 -(9.0)	-4.3
Non-Major Ports	0	0	0	0	0	0	
All Ports	55.05	57.33 (4.1)	54.22 -(5.4)	46.43 -(14.4)	47.54 (2.4)	43.24 -(9.0)	-4.3
Figures in bracket represents percentage change over the previous year period (P) Provisional							

2.4.10 OTHER NON-MAJOR PORTS

2.4.10.1 The other non-major ports are spread across the Union Territories (UTs) of Daman & Diu, Puducherry, Lakshadweep, and Andaman & Nicobar Islands. These ports in the UTs are administered through their respective Departments. Andaman & Nicobar Islands administration has constituted a 'Port Management Board' for the development of ports in the Islands. The two non-major ports of Daman & Diu are not handling any cargo traffic for the last few years. The trends in the cargo handled at these ports of the State during 2007-08 to 2011-12 are given in Table 26.

2.4.10.2 The cargo handling capacity at Puducherry is estimated 200,000 tonnes of cargo per annum. In January 2006, the Government of Puducherry entered into a concession agreement with private developers for the development of deep water ports on BOT basis at Puducherry and Kariakal. The development work at Kariakal port has begun and commercial operations have started in April 2009.

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

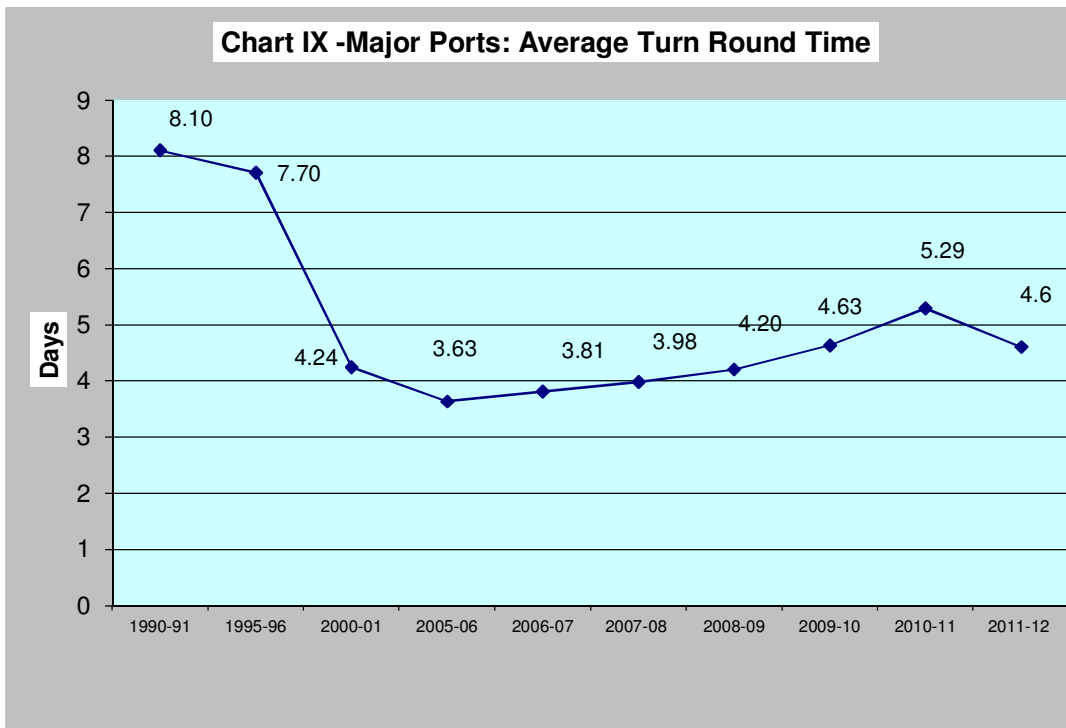
Table 26: Union Territories: Trends in Cargo Handled at Non-Major Ports(MT)							
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12(P)	Annual Average Growth 11th Plan 2007-12
Andaman & Nicobar Islands*	1.60	2.18 (36.3)	2.01 -(7.8)	2.1 (4.5)	1.7 -(19.0)	1.21 -(28.8)	-4.9
Lakshadweep	0.03	0.03	0.03	0.03	0.03	0.03	0.0
Puducherry	0.03	0.01	0.04	1.32	4.71	6.2	4113.3
(P) Provisional - negligible; * Declared Major Port with effect from June 1,2010.							

CHAPTER III: PORT EFFICIENCY

Efficiency at ports have an impact on transaction cost of shipping lines. Major Ports have improved their efficiency of operations as reflected in select physical performance indicators over the last several years. Some key operational indicators of physical performance pertaining to major ports for the years 1990-91, 1995-96, 2000-01, 2006-07 through 2011-12 are elaborated below.

Average Turn-Round Time (TRT)

3.2 This parameter has improved significantly during the past one and half decades for all the major ports. Average TRT for all major ports improved from 8.10 days in 1990-91 to 3.63 days in 2005-06. Thereafter the TRT has increased steadily to 5.29 days in 2010-11. In 2011-12, the average TRT declined to 4.6 days and the TRT varied in a range between 1.82 days at Cochin Port to 6.42 at Kandla. Amongst the 12 major ports improvement in TRT during 2011-12 in comparison to 2010-11 is discernible in all Major Ports except New Mangalore, Kandla and Tuticorin. Port-wise TRT for select years are given in Table 27. The path of turn round time at major ports for select years since 1990-91 to 2011-12 is presented in the Chart IX below.

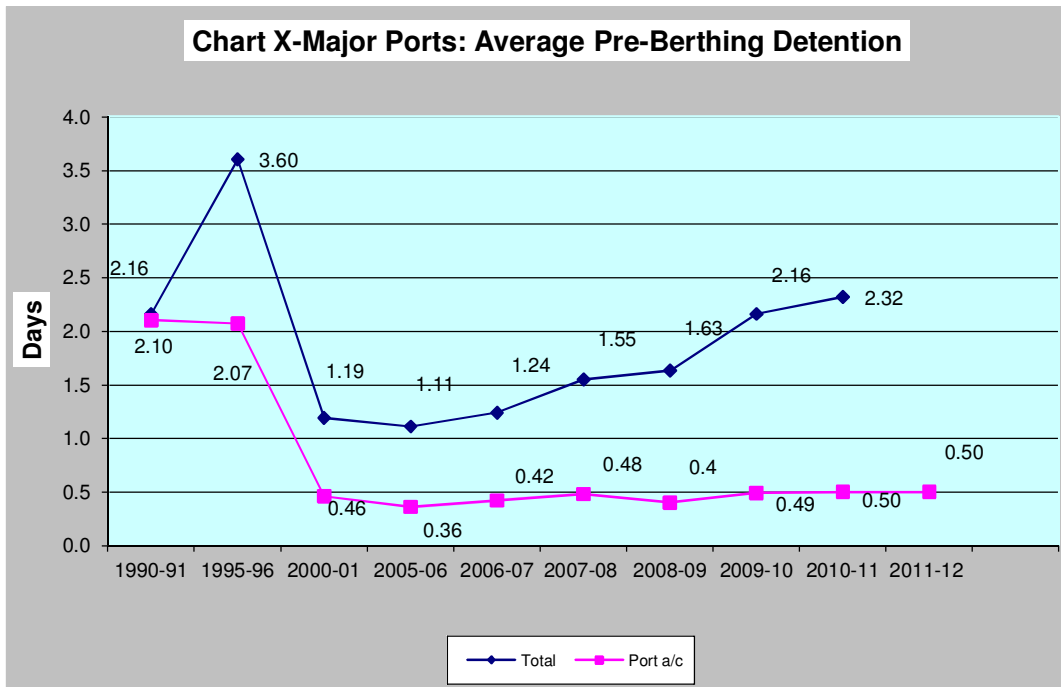


Turn-Round Time - Total time spent by a ship since its entry till its departure.

Table 27: Average Turn Round Time (days)						
Port	1990-91	2000-01	2008-09	2009-10	2010-11	2011-12 (P)
1	2	3	4	5	6	7
Kolkata D.S	11.90	5.50	5.10	6.80	6.21	4.96
Haldia D.C	6.47	3.97	4.21	5.01	4.45	3.65
Paradip	8.40	4.16	4.78	9.04	7.73	6.33
Vishakhapatnam	7.07	3.71	3.93	4.78	5.84	5.68
Ennore			2.35	2.11	2.78	2.17
Chennai	7.20	5.83	4.15	4.04	4.36	3.91
Tuticorin	4.70	4.10	3.64	3.90	4.00	4.89
Cochin	4.00	3.11	2.14	2.08	2.20	1.82
New Mangalore	4.96	2.89	3.00	3.06	2.70	2.94
Mormugoa *	6.40	4.25	5.95	8.91	10.43	4.80
J.L.Nehru		2.21	1.90	2.01	2.64	2.46
Mumbai	10.80	5.20	4.95	4.61	4.96	4.93
Kandla	10.00	4.72	7.26	5.03	5.90	6.42
All Ports	8.10	4.24	4.20	4.63	5.29	4.6
(P) Provisional						
* Relate to dry bulk cargo for MOHP(Mech.) and Berth No. 10 &11 (Conv.)						
Source: Major Ports / Indian Ports Association (IPA)						

Average Pre Berthing Detention Time (PBDT)

3.3 The average overall pre berthing detention time for all major ports has declined from 2.2 days in 1990-91 to 1.63 days in 2008-09. However, in 2009-10 and 2010-11, the average PBDT edged up to 2.16 days and 2.32 days respectively. In contrast, average PBDT on port account has seen a sharper decline from 2.10 days in 1990-91 to 0.50 day in 2010-11. Average PBDT on port account remained same at 0.50 days in 2011-12. Average PBDT on port account was more than a day (1.79) at Kandla during 2011-12. Port-wise PBD for select years is indicated in Table 28. The trajectory of weighted average of pre berthing detention time at Major ports- total and on port account -during 1990-91, 1995-96, 2000-01, 2002-03 onwards is shown in Chart X below.



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

Port	1990-91	2000-01	2008-09	2009-10	2010-11	2011-12*(P)
1	2	3	5	6	7	8
Kolkata D.S	0.9	0.61	0.66	1.31	1.23	0.02
Haldia D.C	1.66	0.91	3.38	4.39	3.73	0.54
Paradip	1.59	1.41	2.32	6.30	5.04	0.05
Vishakhapatnam	1.83	0.75	1.28	1.90	2.81	0.09
Ennore			0.27	0.37	0.65	0.00
Chennai	2.1	2.45	1.39	1.35	1.61	0.04
Tuticorin	0.9	1.4	1.09	1.36	1.29	0.79
Cochin	0.83	0.74	0.70	0.85	1.03	0.15
New Mangalore	0.79	0.77	0.65	0.81	0.59	0.04
Mormugao**	2.51	1.32	1.77	3.46	4.07	0.63
J.L.Nehru		0.67	0.95	0.98	1.51	0.35
Mumbai	3.4	1.26	1.41	1.06	1.23	0.32
Kandla	4.4	1.51	2.62	2.60	3.32	1.79
All Ports	2.16	1.19	1.63	2.16	2.32	0.50

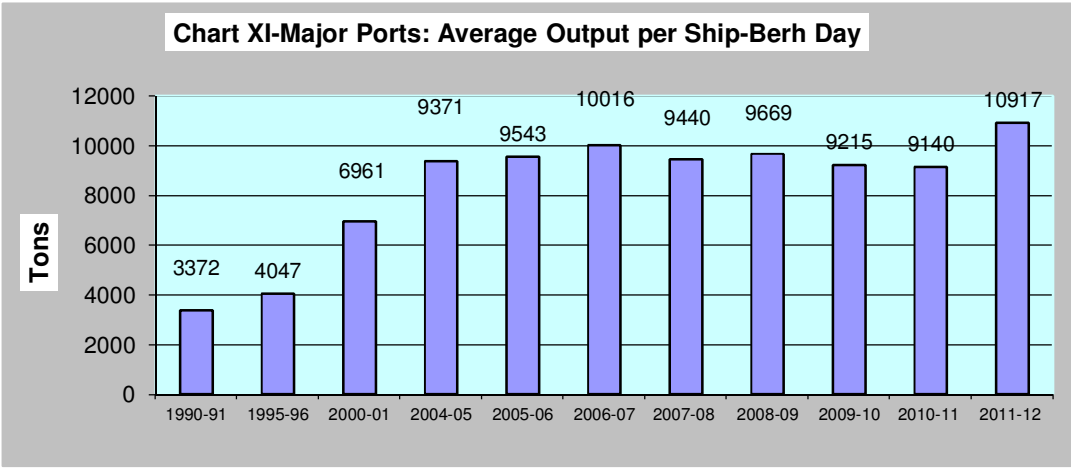
(P): Provisional. * Relates to Port Account only;
 ** Relate to dry bulk cargo for MOHP(Mech.) and Berth No. 10 &11 (Conv.)
 Source: Major Ports/ Indian Ports Association(IPA)

Average Output Per Ship Berth-day

3.4. During the last 20 years this indicator has seen a tremendous improvement. Average Output per Ship-berth day has more than trebled from 3,372 tonnes in 1990-91 to 10917 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 27466 tonnes in case of Ennore to a low of 2778 tonnes at Kolkata Dock System during 2011-12. This variation reflects the type of cargo being handled, level of mechanization and labour practices. Amongst the 12 major ports improvement in average Output Per Ship Berth-day during 2011-12 as compared to 2010-11 is discernible in Kolkata Dock System and Haldia Dock Complex, Cochin, Paradip, Visakhapatnam, Ennore, JNPT, and Mumbai. Port-wise average output per Ship-berth day for selected years and latest period are given in Table: 29.

Table 29 : Average Output per Ship-Berth-Day (Tonnes)						
Port	1990-91	2000-01	2008-09	2009-10	2010-11	2011-12(P)
1	2	3	4	5	6	7
Kolkata D.S	560	2305	3027	1917	2253	2778
Haldia D.C	5659	6384	7732	6243	6563	6701
Paradip	4082	8503	12635	13853	14243	15995
Visakhapatnam	5325	9799	11171	10484	10334	10701
Ennore			28424	21665	17669	27466
Chennai	3912	6977	10778	11428	10984	10888
Tuticorin	2130	3983	5817	6934	7035	6562
Cochin	3714	6138	10599	11089	11752	15783
New Mangalore	4412	12192	13645	13896	14211	13960
Mormugoa	10429	12438	6290	5002	4409	16537*
J.L.Nehru		6383	20344	21563	20393	25762
Mumbai	2310	4213	5717	6122	6042	7709
Kandla	4417	8230	13107	13549	14137	13886
All Ports	3372	6961	9669	9215	9140	10917
(P): Provisional. *Refers to dry bulk cargo for MOHP(Mech.) and Berth No. 10 &11 (Conv.) Source: Major Ports /Indian Ports Association (IPA).						

3.5 The average out-put per ship-berth-day for selected years since 1990-91 to 2011-12 is presented in the Chart XI below.



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

IV. PRIVATE SECTOR/CAPTIVE/JOINT SECTOR PORT PROJECTS

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

**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	Process of achieving financial closure. Expected to be completed in 2013-14
2.	Construction of two New Off-shore Container berths & Development of Container Terminal berth on BOT basis in Mumbai Harbour.	Mumbai Port	0.80 MTEUs	14610	<p>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.</p> <p>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 5921 units out of 6048 units completed. Total investment till date is 419 crore.</p> <p>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: 6.58 million cu.m. Rock dredging 3,52,000 cu.m, Filling : 11,37,000 cu.m, Anticipated date of completion is March, 2013.</p>
3.	Construction of 13 th to 16 th Cargo berth on BOT basis.	Kandla Port	8.0 MTPA	7555	<p>13th Berth - Work in Progress.</p> <p>14th Berth - RFQ afresh invited through global NIT from 19.9.2011 with bid date due on 18.11.2011.</p> <p>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.</p> <p>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.</p>

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	Revised PPPAC memo alongwith bidding documents sent to Ministry on 26/4/11. Env. Clearance is being obtained. Concession agreement will be signed with successful bidder by April 2012
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	RFQ reinvited Concession agreement will be signed with successful bidder by April 2012
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 Mormugao Port Trust on 22.9.2009. The date of award of concession is 15.5.2010. Physical progress of overall project is 48.04% and financial progress is 55.09%.
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
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 third 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	375	Berth construction commenced on 15.1.2010.
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.
16	Development of Barge handling facility	Chennai	1 MTPA	260	RFQ was invited and opened on 28.3.2012. 7 Application have been received. Applicants are being referred to the Ministry for national security clearance.
17	Development of Rajiv Gandhi Dry Port and Multi Modal Logistic hub at Mappedu, Sriperumbudur	Chennai		4150	Action is under process for invitation of RFQ.
18	Development of WQ 6 berth in Inner Harbour for handling Multi cargo on - DBFOT basis.	Visakhapatnam	2.1	1145	Concession was awarded on 7.10.2011 and the work is in progress. Expected date of completion is October, 2013.
16	Development of EQ-10 berth in Inner Harbour for handling Liquid Cargoes &	Visakhapatnam	1.85	553.8	Concession was awarded on 10.10.2011 and work is in progress. Expected date of completion is April, 2013.

	Chemicals on DBFOT Basis.				
17	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	5.2	4441	Construction work is in progress Physical progress is 80%. Expected date of completion is October, 2012.
18	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. First stage, in principle Forest clearance from MOEF has been accorded on 23.12.2011. Construction activities will commence on receipt of 2 nd stage final clearance from MoEF which is likely by May, 2012.
19.	Development of Deep Draft Iron Ore 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 on 4.1.2011. First stage, in principle Forest clearance from MOEF has been accorded on 23.12.2011. Construction activities will commence on receipt of 2 nd stage final clearance from MoEF which is likely by May, 2012.
20.	Mechanization of CQ-III Berth	Paradip Port	4.00	400.00	Ship loader installed in berth. Laying of Conveyor gallery is in progress.
<p>BOT: Build Operate and Transfer; BOO: Build Own Operate; DBFOT:Design, Build, Finance, Operate and Transfer</p> <p>Note: Information from Kolkata D.S., Haldia D.C., Ennore, Tuticorin and Kandla ports have not been received Latest available information in TRW for these ports has been included.</p> <p>Source: Major Ports.</p>					

**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. Expert Appraisal Committee has recommended Environmental & CRZ Clearance on 09.02.2012. Forest clearance is also under process and is likely to be received by December, 2012. Construction activities will commence on receipt of the clearance.
2.	Construction of LNG Terminal (Joint Venture)	Ennore	2.5 MTPA	2700	“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. Proposal/implementation schedule is awaited from IOC. IOCL is now preparing DPR.
3.	Fourth Container Terminal (DBFOT Basis).	Jawaharlal Nehru	30 MTPA Phase-I	41000 Phase -1	The JNPT has issued LOA to consortium of November M/s.PSA Mumbai Investment Pvt Ltd.And 2012 M/s ABG Ports Pvt Ltd. Vide letter of 26.09.2011.It is expected that concession agreement will be signed in May-2012.
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 RFO 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 judgement 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 from 10.04.2012 to 20.04.2012 in view of the court case filed by M/s ABG on monopoly issue. Since M/s ABG is a consortium member of M/s PSA to whom LOA for fourth terminal is issued by the Port and after receipt of reply from MoS on monopoly issue. Port has not intimated the extension of bid due date to M/s ABG Ports Pvt.

					Ltd. Even though they were technically qualified. The next hearing is scheduled on 17.04.2012.
1.	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.
2.	Barge handling facilities at Khori Creek	Kandla	4	1000	Under planning stage
3.	Construction of T shape Jetty at at Tekra (Phase-II)	Kandla	14	15000	The scheme will spill over in 13th five year plan. Under planning stage.
4.	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 Ranuka Sugars and also recommended to put up to the Board for approval.
5.	Construction of barge jetty at Tuna on BOT basis	Kandla	6.0	2553	Feasibility Report, RFQ and TAMP proposal under approval.
6.	Strengthening of oil jetty 1 & 2 to handle 13/14 m. draught vessels	Kandla	1.57	154	Detailed estimate under preparation.
7.	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.
8.	Development of Container Terminal at NMP on BOT basis.	New Mangalore	4.50(3.74 lakh TEUs)	2697.3	RFQ documents issued from 20th July, 2009 to 5th September,2009. Pre-application Conference held on 18th 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.
1.	Installation of Mechanized fertilizer handling facilities at EQ-7 In inner Harbour on DBFOT basis	Visakhapat nam	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.
2.	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.	Visakhapat nam	6.41	3231.8	Concession agreement was signed on 1.8.2011. The Concessionaire submitted the details of fulfillment of the conditions precedent and his submissions are under examination.
3.	Development of EQ-1A berth on South side of EQ-1 berth in inner harbour for handling Thermal coal & steam coal on DBFOT basis.	Visakhapat nam	7.36	3133.9	LOA issued on 19.3.2011. The concessionaire is in the process of fulfillment of conditions precedent.
4.	Installation of mechanized iron ore handling facilities at WQ-1 berth in inner harbour on DBFOT basis	Visakhapat nam	8.98	2752	PPPAC meeting held on 23.1.2012. Awaiting approval. Bid due date extended. Ministry's approval is awaited.
5.	Development of WQ-7 berth with mechanized facilities in inner harbour for handling import other dry bulk cargo	Visakhapat nam	5.11	2009.3	SFC meeting held on 18.1.2012. approval of Govt is awaited. RFQ opened on 28.4.2011. Bid due date extended due to non-receipt of approval from Ministry.
6.	Development of WQ-8 berth including mechanized facilities in inner harbour for handling export other dry/break and import general cargo.	Visakhapat nam			TEFR was entrusted to M/s. RITES
7.	Development of Iron Ore export terminal at the waterfront west of existing breakwater.	Mormugao	7.2	7210	Cabinet Committee on Infrastructure clearance is awaited.

1.	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.
2.	Multi User Liquid Terminal (MULT) at Puthuvypeen 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). RFP document issued on 22.2.2011. CoPT has requested the Ministry to drop the MULT project and accord approval for proceeding with the proposal of oil and LPG jetty at Puthuvypeen, in co-operation with IOCL and BPCL.
3.	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.
4.	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 and are under scrutiny.
5.	Development of an International Ship Repair facility at Cochin Port	Cochin	120 nos. medicum size vessesl 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.

1.	Multi User Liquid Terminal(MULT) at Puthuvypeen SEZ (International Bunkering Terminal at Cochin)	Cochin	4.1	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 and TAMP conducted the joint hearing on 23.2.2010. EIA studies report is under finalization. SFC has decided to recommend the project for clearance/approval subject to the condition that the proposal is placed for approval of Cabinet Committee on Infrastructure (CCI).. RFP document issued on 22.02.2011. Due date of submission after extensions is 23.04.2012. The port has now requested the Ministry to drop the MULT project and accord approval for proceeding with the proposal of Oil & LPG jetty at puthuvypeen, in cooperation with IOCL & BPCL.
2.	Conversion of berth No. 8 as container terminal on BOT basis.	Tuticorin	7.2 MTPA	3122	Awaiting Ministry's approval on restriction of Monopoly policy decision. Likely commission period is December 2011.
3.	Construction of One Number of Shallow Draught Berth on DBFOT Basis.	Tuticorin	2.0 MTPA	654	RFQ will be opened on 10.6.2010. Likely commission period is September 2012.
4.	Development of North Cargo Berth – II on DBFOT basis.	Tuticorin	7.0 MTPA	3322	On receipt of Ministry's approval for security clearance RFP will be issued to the short listed bidders. Likely commission period is July, 2012.
5.	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.
6.	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.
7.	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.
8.	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.

1.	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.
2.	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.
3.	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

Note: Information from Kolkata D.S., Haldia D.C., Ennore, Tuticorin and Kandla ports have not been received Latest available information in TRW for these ports has been included.

Source: Major Ports.

**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	Two berths having a total length of 650 Mtrs ready and likely to be commissioned in the 1st quarter of year 2012.

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 of 550 mtrs. In length commissioned. Detailed Project Report (Phase-II) comprising of additional 5 berths under scrutiny.
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	Capital dredging and Construction of berth is in progress. The port is expected to commission by 1 st quarter of year 2012.
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.	Establishing a captive port at Thiruchopuram in Cuddalore district by M/s. Nagarjuna oil corporation Ltd.	Thiruchopuram Tamil Nadu	9.3	3840	Construction work has commenced.
20	6 th berth at Kakinada Deep Water Port	Kakinada Deep Water Port Andhra Pardesh	2.5	600	Under progress
21	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.
22	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.

23	Development of Karaikal Port through private investment on BOT basis	Karaikal, Puducherry	Phase – 1 4.0 Phase - II 2.6	4170	Phase 1 of commercial operations commenced in June 2009 and is currently functional Phase II related works in progress. Upon completion of phase 2, the total handling capacity would be 6.6 million tons per annum.
24	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

**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.
13.	SPM at Magdalla by	Magdalla	4	3500	Environment clearance is in

Sl. No	Project	State/ Ports Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
	ONGC.	(Gujarat)			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.	Construction of jetty of length 169.5 mts. At panaji.	Panaji, Goa	This jetty will cater to low draft 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, has been entrusted to Goa State infrastructure Development Corporation Ltd. Consultant have been appointed by G.S.I.D.C. Works expected to start shortly.
23.	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.
24.	Captive port facility by M/s. NSL Power Ltd.	Vanagiri Nagapattinam Tamil Nadu	5.5	70040	Port has been notified. Detailed Project Report submitted.
25.	Captive port facility by	Manappad	6.5	18000	Port has been notified. Quarrying

Sl. No	Project	State/ Ports Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
	M/s. Indian Gas Ltd.	Thoothukudi Tamil Nadu			or rock stones required for breakwater construction is in progress.
26.	Captive port facility by M/s. NTPC Ltd.	Marakkanam Villupuram Tamil Nadu	13	100000	In principal approval accorded. Reports are awaited.
27.	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.
28.	Captive port facility by M/s. Sindya power Generting Co. Private Ltd.	SirkazhiTaluk Nagapattinam Tamil Nadu	3	50000	In principle approved accorded. Financial closure yet to be achieved.
29.	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.
30.	Captive port facility by M/s. PEL Power Ltd.	Kaveri Nagapattinam Tamil Nadu	4	50000	Port has been notified. Studied are being conducted.
31.	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.
32.	Captive port facility by M/s. Cuddalore Powergen Corporation Ltd.	Cuddalore Tamil Nadu	4	50000	Acquiring pf private lands under progress.
33.	Captive port facility by M/s.IL & FS Ltd.	Parangipettai Tamil Nadu	13	12600	Port has been notified. Consent from TNPCB received.
34.	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
35.	Captive port facility by M/s. Tridem port and Power and Infrastructure Private Ltd.	ThirukkuvalaiN agapattinamTamil Nadu	6.5	6000	Port has been notified. Clearance from Ministry of Environment and Forests awaited.
36.	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.
37.	2nd stage Development of Modern Sea Port	Karwar Karnataka	5	8000	REQ-over, RFP is pending with Government.
38.	Development of Modern Sea Port at Tadri in Karnataka coast line.	Tadri Karnataka	34.40	30000	IDD Nominated KSIIDC as nodal agency Preparation of DPR is under progress.
39.	New Haldipur Port	Haldipur Karnataka	18	19000	DPR under progress by MEL Bangalore.
40.	Development of Honnavar anchorage	Honnavar Karnataka	2	2000	Design layouts etc., prepared by M/s L&T Ramboll, Chennai have

Sl. No	Project	State/ Ports Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
	port				been sent to M/s CWPRS. Pune for opinion.
41.	Development of Manki port near Honnavar	Manki Karnataka	1	460	Manki port is newly notified.
42.	7th Berth at Kakinada	Kakinada Deep Water Port Andhra Pradesh	2.5	600	Yet to commence.
43.	Additional Rly lines into 5th berth at Kakinada Deep Water Port	Kakinada Deep Water Port Andhra Pradesh	-	80	DPR approved by SC Rly.
44.	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.
45.	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
46.	Development of Kollam port.	Kollam, Kerala		400	Tender for selecting developer will be opened 26/6/12
47.	Development of alappuzha Marina & cargo	Alappuzha Kerala		3851	The consultant has submitted the DFR and the preparation of RFP is in progress.
48.	Development of Beypore Port,	Beypore, Kerala		1635	Tender for selecting developer will be opened 03/07/2012.
49.	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.
50.	Development of Pondicherry port through private investment on BOT basis	Puducherry	Phase – 1 16.2 Phase - II 10.8	27850 N.A	Developer has applied for Environmental clearance. Work to commence upon obtaining the same.

Plan Outlay and Expenditure : Port Sector (Central Sector)

(Rs. In Crore)

Name of the Port	Annual Plan		Annual Plan		Annual Plan		Annual Plan		Annual Plan		Annual Plan		Annual Plan	
	2005-06		2006-07		2007-08		2008-09		2009-10		2010-11		2011-12	
	Oly.	Exp.	Oly.	Exp.	Oly.	Exp.	Oly.	Exp.	Oly.	Exp.	Oly.	Exp.	Oly.	Exp.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Kolkata (a)	54.04	59.66	50.04	71.99	37.37	63.05	44.97	53.64	58.00	48.85	50.88	49.76	63.73	21.29
Mumbai	74.53	19.23	59.86	14.55	50.36	26.10	150.00	37.84	192.00	146.09	179.58	116.76	176.57	142.05
JNPT	96.84	65.77	106.14	40.71	188.18	70.28	175.17	48.77	324.00	177.94	89.61	38.24	153.69	104.81
Chennai	46.71	25.11	35.00	26.07	47.81	44.41	72.95	48.98	34.00	58.37	243.00	184.46	136.00	4.44
Cochin	53.12	24.76	73.84	72.89	158.52	139.07	255.65	292.90	191.97	190.93	259.35	160.86	115.08	92.21
Visakhapatnam	27.00	17.68	27.33	43.80	83.00	36.61	39.97	31.44	65.01	75.74	151.00	121.19	190.00	113.45
Kandla	93.30	91.29	94.66	80.19	89.49	38.25	140.87	58.07	115.00	62.64	45.66	52.70	92.27	52.82
Mormugao	33.50	17.92	28.06	20.77	10.10	11.18	22.07	17.52	71.00	31.01	66.29	71.52	108.93	69.17
Paradip	116.00	44.02	83.40	23.15	100.00	42.05	288.00	101.47	276.51	128.19	166.21	81.26	70.00	74.80
New Mangalore	26.00	18.09	18.00	18.02	36.00	25.81	30.00	30.11	34.00	32.48	31.00	24.56	36.00	38.45
Tuticorin	43.67	13.56	52.31	29.11	79.46	63.16	96.87	65.12	220.50	39.03	90.94	172.08	291.97	369.65
Ennore Port Ltd.	76.00	13.40	70.00	9.57	61.00	34.53	70.00	102.43	95.01	50.52	95.00	70.12	60.00	61.92
Sethusamudram Ship Canal Project	107.00	150.00	304.00	334.66	664.22	119.47	1581.07	152.24	161.10	20.98	10.00	6.02	10.01	8.51
WEB Based EDI Port Community System	6.00	0.34	7.83	1.66	7.50	0.04	6.00	1.00	3.00	3.33	4.88	4.46	2.38	2.01
Others (b)	259.74	79.14	333.78	213.64	477.26	170.67	598.38	88.59	564.90	161.68	362.86	223.31	673.09	518.08
Survey Vessels	50.00	0.00	20.00	0.00	19.00	0.00	79.00	5.00	10.00	0.00	15.00	15.00	15.00	15.00
Total	1163.45	639.97	1364.25	1000.81	2109.27	884.68	3650.97	1135.12	2416.00	1227.78	1861.26	1392.30	2194.72	1688.66

(a) Includes Haldia & RR Schemes.
(b) Includes DCI, ALHW, R&D Studies etc., IT for Development of Shipping and Post Tsunami Works.
Source: Department of Shipping/IPA

Commodity-wise Traffic Handled at Major Ports

(000 Tonnes)

Port	Period	POL & its Products	Iron Ore	Thermal Coal	Coking Coal	Ferti.& FRM (Dry)	Food grain	Container		Others	Total
								Tonnes	TEUs		
1	2	3	4	5	6	7	8	9	10	11	12
Kolkata	2008-09	3436	482	0	8	23	31	5476	302	2972	12428
	2009-10	724	810	0	16	45	0	6646	378	4804	13045
	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
Haldia	2008-09	16250	8727	1915	5923	546	7	2373	127	6051	41792
	2009-10	9304	7678	1489	6059	295	10	2068	124	6475	33378
	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
Paradip	2008-09	3240	14272	14698	5464	3570	0	34	2	5134	46412
	2009-10	11647	16159	14817	5003	3567	0	44	4	5774	57011
	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
Visakha-patnam	2008-09	19758	17519	3440	7580	4134	527	1361	88	9589	63908
	2009-10	18291	18944	3771	7951	3684	226	1678	98	10956	65501
	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
Chennai	2008-09	13132	6846	2446	7402	783	22	20581	1134	6279	57491
	2009-10	13321	8027	1269	1790	611	0	23477	1216	12562	61057
	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
Ennore	2008-09	366	1111	9708	0	0	0	0	0	315	11500
	2009-10	395	936	9279	0	0	0	0	0	93	10703
	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
Tuticorin	2008-09	503	0	6047	0	1824	195	5482	439	7960	22011
	2009-10	514	41	5603	0	2081	150	6599	440	8799	23787
	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
Cochin	2008-09	10492	0	259	0	458	0	3522	261	763	15494
	2009-10	11938	0	148	0	346	0	3928	290	1069	17429
	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
New Mangalore	2008-09	21328	9774	0	1929	918	111	404	29	2227	36691
	2009-10	21339	7062	0	2810	833	161	475	31	2848	35528
	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
Mormugao	2008-09	1038	33809	449	4107	182	0	178	14	1918	41681
	2009-10	964	40574	953	3788	125	0	192	17	2251	48847
	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
J. L. Nehru	2008-09	4551	0	0	0	0	0	50602	3953	2143	57296
	2009-10	4916	0	0	0	0	0	53095	4061	2752	60763
	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
Mumbai	2008-09	34571	0	3676	0	346	479	1291	92	11513	51876
	2009-10	34538	0	3815	0	442	578	607	58	14561	54541
	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
Kandla	2008-09	45538	129	1407	467	5493	1029	2136	137	16025	72224
	2009-10	46970	661	2296	929	5700	632	2435	146	19877	79500
	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
All Ports	2008-09	174203	92669	44045	32880	18277	2401	93440	6578	72889	530804
	2009-10	174861	100892	43440	28346	17729	1757	101244	6863	92821	561090
	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

P : Provisional

Source: Major Ports and Indian Ports Association.

Annex-3

Commodity Composition of Traffic Handled at Non- Major Ports.

(000 Tons)

Maritime Status / UTs	Period	POL	Iron Ore	Building Material	Coal	Fertiliser & FRM	Others	Total
1	2	3	4	5	6	7	8	9
Gujarat	2008-09	87382	5900	9585	16464	5092	28388	152811
	2009-10	132817	6845	9321	21636	5021	29943	205583
	2010-11	140874	7156	8798	29731	6085	38263	230907
	2011-12	157233	12490	5195	38352	7634	38125	259029
Maharashtra	2008-09	0	4273	2352	1460	277	2054	10416
	2009-10	0	5055	2199	2880	221	1691	12046
	2010-11	0	5120	2277	4997	228	2253	14875
	2011-12	0	6544	2490	7443	0	3471	19948
Andhra pradesh	2008-09	9438	9465	155	3520	3231	3911	29720
	2009-10	3666	15263	708	15243	4174	4636	43690
	2010-11	2786	8957	484	19618	5799	5623	43267
	2011-12	2394	2873	82	23483	6879	8213	43924
Goa	2008-09	0	11901	0	0	0	0	11901
	2009-10	0	13679	0	218	0	0	13897
	2010-11	0	14581	0	0	0	0	14581
	2011-12	0	14305		165		0	14470
Tamil Nadu	2008-09	803	0	0	0	21	74	898
	2009-10	1035	0	0	0	45	94	1174
	2010-11	1503	0	7	0	58	43	1611
	2011-12	1114	0	7	0	46	43	1210
Karnataka	2008-09	17	4283	7	13	29	619	4968
	2009-10	36	7841	29	0	0	641	8547
	2010-11	31	2322	77	0	17	648	3095
	2011-12	178	0	0	0	0	403	581
Others states / Uts #	2008-09	176	41	1160	0	205	926	2508
	2009-10	166	130	885	1299	40	1480	4000
	2010-11	184	130	684	4116	538	1370	7022
	2011-12	214	65	436	8983	1136	1549	12383
All Non Major PORTS	2008-09	97816	35863	13259	21457	8855	35972	213222
	2009-10	137720	48813	13142	41276	9501	38485	288937
	2010-11	145378	38266	12327	58462	12725	48200	315358
	2011-12	161133	36277	8210	78426	15695	51804	351545
#	Includes Pondicherry, Orissa, Kerala, Andaman & Nicobar Islands and Lakshadweep Islands. (1) No traffic was handled at ports Daman & Diu.							

Table 1.6

Commodity-Wise Capacity Available at Major Ports

(In Million Tonnes)

Commodities	KDS	HDC	PPT	VPT	EPL	ChPT	V.O.C.	CoPT	NMPT	MoPT	MbPT	KPT	JNPT	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
POL														
As on 31.3.07	3.60	17.00	6.00	17.15	-	11.25	2.30	11.20	21.20	1.50	32.00	46.00	5.50	174.70
As on 31.3.08	3.96	17.00	6.00	17.65	-	11.80	2.30	18.70	22.00	1.50	32.00	46.00	5.50	184.41
As on 31.3.09	3.96	17.00	21.00	17.65	3.00	11.80	2.30	18.70	22.00	1.50	32.00	55.24	5.50	211.65
As on 31.3.10	3.96	17.00	21.00	17.65	3.00	11.80	2.30	18.70	22.00	1.50	32.00	62.83	5.50	219.24
As on 31.3.11	4.11	17.00	21.00	17.65	3.00	11.80	2.30	18.70	23.37	1.50	32.00	62.83	5.50	220.76
As on 31.3.12	4.50	17.00	21.00	17.65	3.00	15.27	2.30	19.01	23.37	1.50	32.00	66.60	5.50	228.70
Iron Ore														
As on 31.3.07	-	4.00	4.50	12.00	-	8.00	-	-	7.50	21.50	-	-	-	57.50
As on 31.3.08	-	6.00	4.50	12.50	-	8.00	-	-	7.50	24.30	-	-	-	62.80
As on 31.3.09	-	6.00	4.50	12.50	-	8.00	-	-	7.50	24.30	-	-	-	62.80
As on 31.3.10	-	6.00	4.50	12.50	-	8.00	-	-	7.50	28.30	-	-	-	66.80
As on 31.3.11	-	8.00	4.50	12.50	6.00^	8.00	-	-	7.50	33.00	-	-	-	79.50
As on 31.3.12	-	8.00	4.50	12.50	6.00	8.00	-	-	7.50	33.00	-	-	-	79.50
Coal														
As on 31.3.07	-	7.00	20.00	-	13.00	-	6.25	-	-	-	-	-	-	46.25
As on 31.3.08	-	7.00	20.00	-	13.00	-	6.25	-	-	-	-	-	-	46.25
As on 31.3.09	-	7.00	20.00	-	13.00	-	6.25	-	-	-	-	-	-	46.25
As on 31.3.10	-	7.00	20.00	-	13.00	-	6.25	-	-	-	-	-	-	46.25
As on 31.3.11	-	7.00	20.00	-	21.00	-	6.25	-	-	-	-	-	-	54.25
As on 31.3.12	-	7.00	20.00	-	21.00	-	12.55	-	5.40	-	-	-	-	65.95
Fertiliser														
As on 31.3.07	-	-	7.50	1.00	-	-	-	0.60	-	-	-	-	-	9.10
As on 31.3.08	-	-	7.50	1.00	-	-	-	0.60	-	-	-	-	-	9.10
As on 31.3.09	-	-	7.50	1.00	-	-	-	0.60	-	-	-	-	-	9.10
As on 31.3.10	-	-	7.50	1.00	-	-	-	0.60	-	-	-	-	-	9.10
As on 31.3.11	-	-	7.50	1.00	-	-	-	0.80	-	-	-	-	-	9.30
As on 31.3.12	-	-	7.50	1.00	-	-	-	0.80	-	-	-	-	-	9.30
Break-Bulk Cargo														
As on 31.3.07	5.00	11.50	18.00	26.65	-	15.55	7.00	4.27	12.60	7.00	9.15	11.70	0.70	129.12
As on 31.3.08	5.70	12.70	18.00	28.30	-	16.10	7.20	4.76	14.00	7.25	9.20	13.00	0.80	137.01
As on 31.3.09	6.30	12.70	18.00	29.38	-	16.80	9.26	4.76	14.70	7.25	9.80	14.80	0.80	144.55
As on 31.3.10	6.44	12.70	23.50	29.38	-	17.92	10.17	6.76	14.70	7.25	9.80	14.97	0.90	154.49
As on 31.3.11	6.51	14.70	23.50	31.28	1.00	17.92	13.49	8.98	14.70	7.40	11.53	16.88	0.90	168.79
As on 31.3.12	6.74	14.75	27.30	32.50	1.00	17.92	13.49	9.55	14.70	7.40	11.53	17.42	0.90	175.20
Container														
As on 31.3.07	4.80	4.00	-	1.70	-	15.20	5.00	4.08	-	-	3.50	3.60	46.20	88.08
As on 31.3.08	4.90	4.00	-	1.70	-	17.45	5.00	4.31	-	-	3.50	3.60	48.04	92.50
As on 31.3.09	5.50	4.00	-	1.70	-	19.15	5.00	4.31	-	-	1.90	7.20	51.66	100.42
As on 31.3.10	5.50	4.00	-	1.74	-	33.60	5.00	4.31	-	-	1.90	7.20	57.60@	120.85
As on 31.3.11	5.73	4.00	-	2.50	-	42.00#	5.00	12.50**	-	-	1.00*	7.20	57.60@	137.53
As on 31.3.12	5.90	4.00	-	2.68	-	42.00	5.00	12.50	-	-	1.00	7.20	57.60@	137.88
TOTAL														
As on 31.3.07	13.40	43.50	56.00	58.50	13.00	50.00	20.55	20.15	41.30	30.00	44.65	61.30	52.40	504.75
As on 31.3.08	14.56	46.70	56.00	61.15	13.00	53.35	20.75	28.37	43.50	33.05	44.70	62.60	54.34	532.07
As on 31.3.09	15.76	46.70	71.00	62.23	16.00	55.75	22.81	28.37	44.20	33.05	43.70	77.24	57.96	574.77
As on 31.3.10	15.90	46.70	76.50	62.27	16.00	71.32	23.72	30.37	44.20	37.05	43.70	85.00	64.00	616.73
As on 31.3.11	16.35	50.70	76.50	64.93	31.00	79.72	27.04	40.98	45.57	41.90	44.53	86.91	64.00	670.13
As on 31.3.12	17.14	50.75	80.30	66.33	31.00	83.19	33.34	41.86	50.97	41.90	44.53	91.22	64.00	696.53

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

@ : Capacity of JNP Container Terminal (3berths), NSICT (2berths), GTIPL (3berths) & 1 shallow water berth has been taken as 15.0 MT, 15.0 MT, 26.40 MT and 1.20 MT respectively.
Capacity of one shallow water berth at JNPT is .90 MT for dry bulk cargo.

Capacity of Iron Ore berth has been taken as 6.0MT at Ennore Poert. 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, ID are used as holding berth for MbPT crafts & no capacity has been accounted.

Source : Development Wing - Department of Shipping.