भारत के पत्तन क्षेत्र का अदयतन

UPDATE ON INDIAN PORT SECTOR

(31.03.2013)

परिवहन अनुसंधान प्रभाग

TRANSPORT RESEARCH WING

सडक परिवहन तथा राजमार्ग मंत्रालय

MINISTRY OF ROAD TRANSPORT & HIGHWAYS

भारत सरकार

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नई दिल्ली

NEW DELHI

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PREFACE

As per the decision of the Maritime State Development Council, the Transport Research Wing in the Ministry of Shipping, Road Transport and Highways has been bringing out the biannual publication "*Update on Indian Port Sector*". Present issue (upto March, 2013) is twenty-first in the series of the publication "*Update on Indian Port Sector*". The last issue contained data up to September, 2012.

The current issue of the "*Update on Indian Port Sector*" includes the information on the performance of Major and Non-Major Ports for the period up to end of March, 2013. 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.

(P. K. Sinha)

June, 2013

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UPDATE ON INDIAN PORT SECTOR

(UP TO 31.03.2013)

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I. RECENT TRENDS IN CARGO TRAFFIC AND POLICY INITIATIVES

1.1 International and Domestic Factors Related to Seaborne Trade

1.1.1 The global economy slowed in 2012, with real GDP declining from 4.0% in 2011 to 3.2% in 2012. Both the advanced and developing economies had slowed in 2012. However, the economic activity has stabilized in advanced economies and has picked up in emerging markets and developing economies supported by policies and renewed confidence. This pick up follows the slowdown in the first half of 2012, which was manifested in industrial production and global trade.

1.1.2 In the major advanced economies, activity is expected to gradually accelerate following a weak start to 2013 with the United States in the lead. In emerging markets and developing economies, activities has already picked up. Two of the biggest threats to global recovery a breakup of the euro area and a sharp fiscal contraction in the United States caused by a plunge off the "fiscal cliff" have been averted. Global prospects though have improved with GDP growth forecasted to reach 3.3% in 2013 but road to recovery is expected to be bumpy. In the short term risks mainly relate to developments in the euro area, including uncertainty about the fall out of the events in Cyprus and politics in Italy as well as vulnerabilities in the periphery. In the medium term, the key risks relate to adjustment fatigue, insufficient institutional reform, prolonged stagnation in Euro area as well as high fiscal deficits and debts in United States and Japan.

1.1.3 The slowdown in demand and the overall weak growth in advanced economies translated into weaker imports in developed regions. In 2012, imports grew at a modest 0.6 per cent, a sharp fall from the 5.0 per cent recorded in 2011. While growth in developed economies weakened in 2011, developing countries continued to drive world economic expansion and to account increasingly for a larger share of world GDP. This share is estimated by UNCTAD to have increased from 21.6 per cent in 1980 to 32.6 per cent of world GDP (at constant prices 2005) in 2010. In 2012, growth in China remained robust, although it decelerated to 3.3 per cent. The country continues to be, however, the engine of regional growth.

1.1.4 There was a noticeable showdown in the emerging market and developing economies during 2012, a reflection of sharp deceleration in demand from key advanced economies, domestic policy tightening and the end of investment booms in some of the major emerging market economies. Consumer demand resilient, and exports reviving, most economies in Asian and many in Latin America are now seeing higher growth.

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

Table 1: Growth in Cargo handled at Indian Ports and related parameters						
Parameters	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13**
Trends in India's Select : Macro Parameters (in per cent)						
I. Total Cargo	11.9	2.5	14.3	4.2	3.2	2.2
(a) Major Ports	12.0	2.2	5.7	1.6	-1.7	-2.6
(b) Non Major Ports	11.6	3.3	35.7	9.1	12.2	9.8
II.GDP overall	9.3	6.7	8.4	8.4	6.2	5.0
(a) Agriculture	5.8	0.1	1.0	7.0	3.6	1.9
(b) Industry	9.7	4.4	8.4	7.2	3.5	2.1
(c) Services	10.3	10.0	10.5	9.3	8.2	7.1
III. Foreign Trade						
(a) Export in $ value	29.0	13.6	-3.5	40.5	21.8	-1.8
(b) Import in $ value	35.5	20.7	-5.0	28.2	32.3	0.32
Trends in Global Select : Macro Parameters (in per cent)						
IV. World Output	5.4	2.8	-0.6	5.2	4.0	3.2
(a) Advanced Economies	2.8	0.1	-3.5	3.0	1.6	1.2
(b) Developing Economies	8.8	6.1	2.7	7.6	6.4	5.1
V. World Trade Volume #	7.3	2.5	-11.7	14.0	6.3	2.4
VI.Export Volume (Goods)						
(a) Advanced Economies	6.0	1.8	-13.4	14.1	5.9	1.8
(b) Developing Economies	8.8	3.6	-8.1	13.9	6.3	4.2
VII.ImportVolume (Goods)						
(a) Advanced Economies	5.1	0.4	-13.1	13.3	5.0	0.6
(b) Developing Economies	14.1	7.8	-9.5	15.4	9.5	4.6
VIII. World Seaborne Trade*	3.8	2.1	-5.0	7.4	3.9	NA
(a) Goods Loaded	4.3	2.4	-4.5	7.0	4.0	NA
(b) Goods Unloaded	3.3	1.8	-5.5	7.8	3.9	NA

I. Based on data from Major Ports and Non Major Ports
II. Based on gross domestic product (GDP) at Factor Cost (2004-2005 Prices), Central Statistical Organization;
III. Based on Department of Commerce, DGCI&S data;
IV,V,VI & VII Based on World Economic Outlook, April, 2013, IMF;
VIII. Based on Review of Maritime Transport, 2012, UNCTAD
Note : MT: Million Tonnes; For item Nos IV, V, VI &VII year 2007-08 refers to calendar year 2007 and so on;
* growth in total goods loaded plus unloaded; #Goods

Developments affecting Seaborne trade

1.1.6 Fortunes of maritime trade move in tandem with worldwide macroeconomic conditions. Developments in the world economy and merchandise trade are primary drivers in seaborne trade. Maritime transport activity depends on developments in world trade. An analysis

of world seaborne trade (**Table :2**) based on Review of Maritime Transport (RMT), UNCTAD (2012) shows that world seaborne trade held steady in 2011 and grew by 4 per cent, with total volumes reaching a record 8.7 billion tonnes.

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

Trends and Developments in World Seaborne Trade

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

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

Crude oil and petroleum products

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

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

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

Dry cargo bulks

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

Coal

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

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

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

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

Iron ore and steel production and consumption

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

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

Dry cargo: minor bulks

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

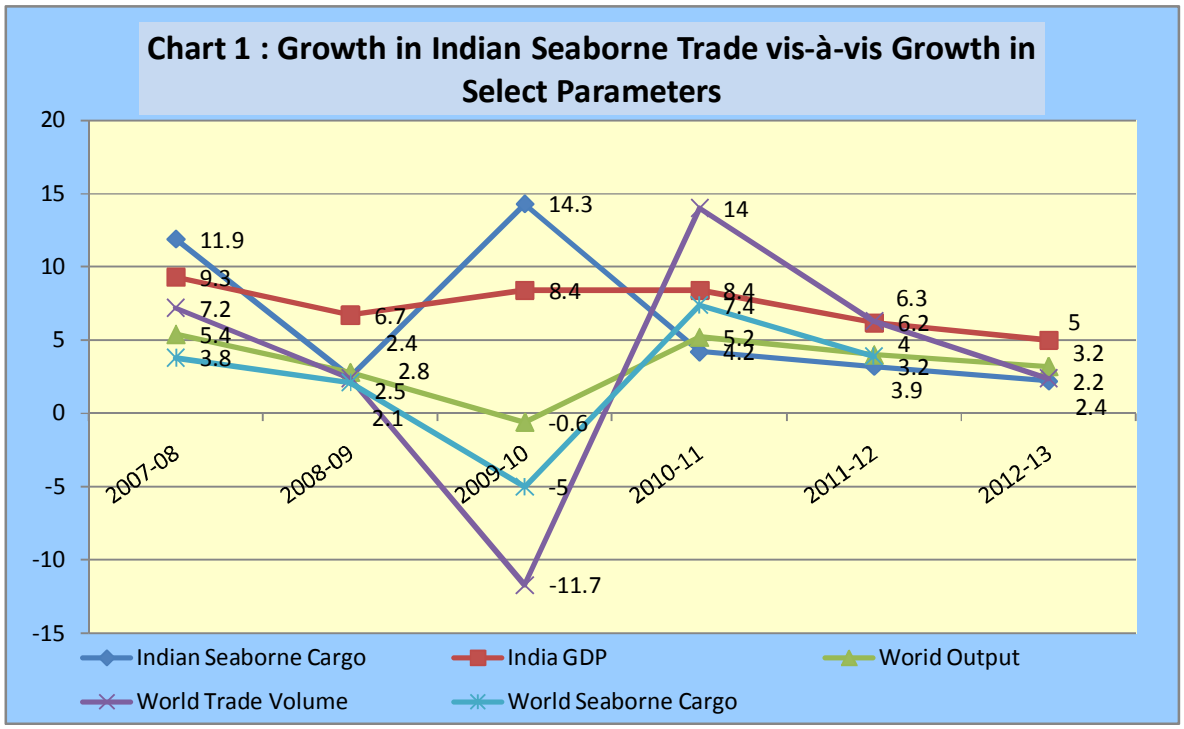
1.1.18 The balance of 2.2 billion tonnes of dry cargoes is made up of containerized (62%) and general cargoes. Driven largely by increasing international division of labour and productivity gains within the sector, container trade, the fastest growing cargo segment expounded at an average rate of 8.2%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

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

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

1.2 India: Seaborne Cargo Traffic

1.2.1 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 I**.



Source: Growth rates for India's GDP and Cargo Traffic are based on statistics released by Central Statistical Organization and data available with Transport Research Wing of M/o Shipping, Road Transport & Highways and pertain to fiscal year. Growth rates in the World Output, 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 2013, IMF and Review of Maritime Transport, 2012, UNCTAD.

1.3 Cargo Traffic at Indian Ports

1.3.1 During 2012-13, Major and Non-major Ports in India accomplished a total cargo throughput of 934.02 million tonnes reflecting a modest increase of 2.2% over 2011-12 compared to a growth of 3.2 % in 2011-12. The growth in cargo handled at Major and

Non-major ports in 2012-13 were -2.6% and 9.8% respectively compared to -1.7% and 12.2% achieved in 2011-12.

1.3.2 The year 2012-13 was a challenging year for the Major Port Sector as it was buffeted by three exogenous shocks (a) growth in advanced economies which are a major market for Indian merchandise trade, decelerated from 3.0% in 2010 to 1.6% in 2011 and further to 1.2% in 2012. Similarly, growth in world trade in Goods decelerated sharply from 14.0% in 2010 to 6.3% in 2011 and further to 2.4% in 2012; (b) India's GDP growth slowed down from 6.2% in 2011-12 to 5.0% in 2012-13. Slowdown and decline was pronounced in case of India's GDP pertaining to industrial sector: from 3.5% in 2011-12 to 2.1% in 2012-13; (c) series of judicial interventions leading to ban/restrictions on iron ore exports which resulted in about 30% decline in its export.

1.3.3 The deceleration in overall growth in India's seaborne cargo traffic in 2012-13 reflects slowdown in economic growth during the course 2012-13. 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	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13 (P)**	**% change 2012-13/2011-12**
Major Ports	463782	519313 (71.6)	530804 (71.3)	561090 (66.0)	570086 (64.4)	560187 (61.3)	545790 (58.4)	-2.6
Non-Major Ports	184922	206379 (28.4)	213222 (28.7)	288937 (34.0)	315358 (35.6)	353745 (38.7)	388225 (41.6)	9.8
All Ports	648704	725692 (100.0)	744026 (100.0)	850027 (100.0)	885444 (100.0)	913932 (100.0)	934015 (100.0)	2.2

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

1.4 Cargo Traffic at Major Ports

1.4.1 The volume of seaborne cargo traffic handled by ports is mainly shaped by the levels and changes in both the global and domestic activity. Cargo traffic at India's 12

major ports during 2012-13 at 545.79 million tonnes declined by 2.6% compared with 560.19 million tones handled in 2011-12 (**Table 4**).

1.4.2 The year 2012-13 witnessed a drop in total cargo traffic of 2.6% over the preceding year and a shortfall with respect to the target set for 2012-13 by 9.2%. The year 2012-13 was a challenging year for the Port Sector as (a) growth in European Union has been negligible in 2012 (b) India's GDP growth slowed down from 6.2% in 2011-12 to 5.0% in 2012-13. Slowdown and decline was pronounced in case of India's GDP pertaining to Industry Sector from 3.5% in 2011-12 to 2.1% in 2012-13 and (c) series of judicial interventions leading to ban/restrictions on iron ore mining resulted in decline in its export, particularly, Iron ore. In 2012-13, major ports handled 27.4 million tonnes of Iron ore cargo which was lower than the iron ore handled during 2011-12 by 33.35 million tonnes.

1.4.3 During 2012-13, Ennore port recorded highest growth in traffic 19.6% followed by Kandla (13.5%), NMPT (12.4%), Paradip (4.2%) and Mumbai (3.3%). Major ports which recorded **negative growth** in traffic during 2012-13 were: Mormugao (54.7%), Visakhapatnam (12.4%), Haldia Dock Complex (9.5%), Chennai Port (4.1%) and Kolkata Dock System (3.2%) and Cochin (1.6%). Amongst the Major Ports, Kandla Port handled the maximum Cargo of 93.62 million tonnes with a share of 17.2% in total cargo handled at major ports followed by JNPT (11.8%), Vishakhapatnam (10.8%), Mumbai (10.6%), Paradip (10.4%), Chennai (9.8%), NMPT (6.8%), Tuticorin (5.2%), Haldia Dock Complex (5.1%) during 2012-13. Cochin, Ennore, Mormugao and Kolkata Dock System (KDS) had a share of less than 5% each during the same period.

1.4.4 In terms of port performance, the analysis of 2.6% decrease in cargo traffic during 2012-13 at 12 major ports reflects the fact that only three major ports were able to clock more than 10% growth namely Ennore (19.6%) Kandla (13.5%) and New Mangalore (12.4%). Growth in cargo traffic at other major ports was either less than 5% or negative.

Table 4 : Traffic Handled at Major Ports								
								(Thousand Tonnes)
Ports	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**% change 2012-13/ 2011-12**
1	2	3	4	5	6	7	8	9
Kolkata	55050	57329	54220	46423	47545	43248	39928	-7.7
Kolkata DS	12596	13741	12428	13045	12540	12233	11844	-3.2
Haldia DC	42454	43588	41792	33378	35005	31015	28084	-9.5
Paradip	38517	42437	46412	57011	56038	54254	56552	4.2
Vizag	56385	64597	63908	65501	68041	67420	59040	-12.4
Ennore	10714	11563	11500	10703	11009	14956	17885	19.6
Chennai	53414	57154	57491	61057	61460	55707	53404	-4.1
Tuticorin	18801	21480	22011	23787	25727	28105	28260	0.6
Cochin	15257	15810	15494	17429	17873	20090	19845	-1.2
New Mangalore	32042	36019	36691	35528	31550	32941	37036	12.4
Mormugao	34241	35128	41681	48847	50060	39049	17693	-54.7
Mumbai	52364	57038	51876	54541	54586	56186	58038	3.3
JNPT	44815	55838	57296	60763	64317	65730	64490	-1.9
Kandla	52982	64920	72224	79500	81880	82501	93619	13.5
All Ports	**463782**	**519313**	**530804**	**561090**	**570086**	**560187**	**545790**	-2.6
(P): Provisional; CP: Corresponding period 2011-12								

Commodity wise Cargo Traffic at Major Ports

1.4.5 At a broad commodity level, during 2012-13, Coal and POL posted growth of 10.4% and 6.6% respectively. Cargo traffic in Iron ore and Fertilizers and FRM was adversely affected during 2012-13 and dropped by 54.9% and 27.8% respectively. The decline in Iron ore traffic is mainly attributed to restrictions in mining of iron ore in Karnataka and ban in Goa (**Table 5**).

1.4.6 Growth in Coal traffic has shown an increase of 10.4% during 2012-13 compared with growth of 4.8% during 2011-12. The growth in Container traffic slipped to -0.4% in 2012-13 from 5.4% in 2011-12.In terms of composition of cargo traffic handled at major ports the largest commodity group (with share in percent in total cargo handled) was POL (33.9%), Container traffic (22.0%), Other cargo (20.4%), Coal (15.9%), Iron ore (5.0%) and Fertilizer & FRM (2.7%).

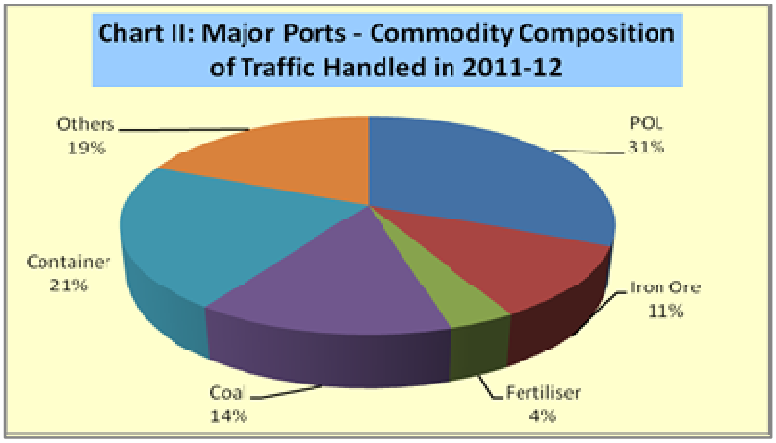
Table 5 : Commodity wise Traffic Handled at Major Ports

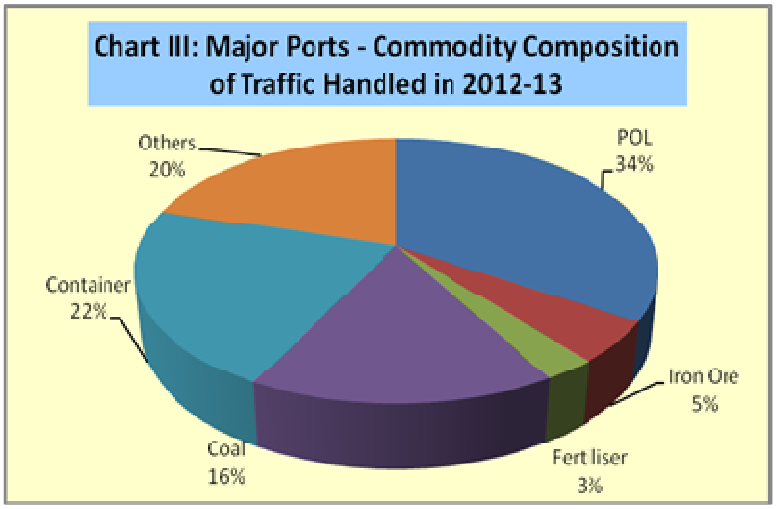
(Thousand Tonnes)

Commodities	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13(P)	% change 2012-13 /2011-12
1	2	3	4	5	6	7	8	**9**
POL	142157	167435	174203	174861	179882	173851	185270	6.6
Iron Ore	80584	92298	92669	100892	87686	60719	27370	-54.9
Fertiliser	14136	18279	18277	17731	19157	20404	14739	-27.8
1. Finished	7929	11874	12171	10941	12367	12222	7441	-39.1
2. Raw (DRY)	6207	6405	6106	6790	6790	8182	7298	-10.8
Thermal Coal	37309	36833	44045	43340	46145	51128	58653	14.7
Coking Coal	23042	31832	32880	28346	29001	27648	28325	2.4
Container (Tonnes)	73469	92247	93440	101287	114158	120276	119821	-0.4
Others	93085	80389	75290	94633	94057	106161	111612	5.1
Total	463782	519313	530804	561090	570086	560187	545790	-2.6

(P): Provisional; CP: Corresponding period 2011-12

1.4.7 The shares of different commodities in total cargo traffic during 2011-12 and 2012-13 are depicted in the **Charts II and III** respectively. Energy imports consisting of POL and Coal constituted about 50% of the total cargo traffic at India's major ports.





POL: Petroleum, Oil & Lubricants

1.4.8 The Port-wise & commodity-wise traffic handled at major ports during 2009-10 to 2012-13 are given in **Annex 2.**

Container Traffic

1.4.9 Growth in container traffic (in million tonnes) which reflects largely trade in manufactures and components declined to -0.4% in 2012-13 from 5.4% in 2011-12. In terms of Twenty Foot Equivalent Units (TEU), the growth of containers handled by Major Ports in 2012-13 declined to 0.8% from 1.2% in 2011-12. Amongst the major ports, the ports at Kandla, Mormugao, Cochin, Chennai and JNPT witnessed fall in container traffic, though, Jawahar Lal Nehru Port continues to be the leading container handling port in the country with a share of 48.3% in terms of tonnage and 55.2% in terms of TEUs in the total container traffic at major ports (**Table:6**). Chennai port which handled about 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 7.71 million TEUs in 2012-13 was a quarter of TEU throughput at the Shanghai port (2011) alone.

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

PORT	2006-07		2007-08		2008-09		2009-10		2010-11		2011-12		2012-13		% change 2012-13/2011-12	
	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	317	6960	463	2.1	46.1
Haldia DC	1918	110	2397	128	2373	127	2068	124	2835	149	2619	115	2869	137	9.5	19.1
Paradip	34	2	58	4	34	2	52	4	69	4	109	8	171	13	56.9	62.5
Vizag	799	56	1133	71	1361	88	1678	97	2572	146	4213	234	4554	247	8.1	5.6
Chennai	14166	885	18050	1122	20581	1134	23477	1208	29421	1485	30076	1555	29708	1539	-1.2	-1.0
Ennore	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	9373	476	1.6	-0.2
Cochin	2949	226	3183	254	3522	261	3929	289	4419	310	4715	337	4607	335	-2.3	-0.6
New Mangalore	265	17	319	21	404	29	475	31	568	40	645	45	692	48	7.3	6.7
Mormugao	155	13	166	14	178	14	229	17	220	18	279	22	213	20	-23.7	-9.1
JNPT	40811	3298	51923	4060	50602	3953	53096	4176	56426	4332	58233	4317	57912	4259	-0.6	-1.3
Mumbai	1580	136	1633	118	1291	92	607	58	653	72	551	56	828	58	50.3	3.6
Kandla	2778	178	2616	165	2136	137	2432	147	2586	160	2791	168	1934	118	-30.7	-29.8
All Ports	**73469**	**5537**	92247	6704	93440	6578	101287	6863	114158	7561	120276	7651	119821	7713	-0.4	0.8

1.5 Cargo traffic at Non-Major Ports

1.5.1 Non–major ports handled nearly 42% of total maritime freight traffic of the country during 2012-13.

1.5.2 **Table 7** presents maritime state-wise share and growth of traffic handled at Non-major ports during 2009-10 to 2012-13.

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

(000'Tonnes)

Maritime State/UT	2009-10	2010-11	2011-12	2012-13(P)	% change 2012-13/ 2011-12
Gujarat	205583 (71.2)	230907 (73.2)	259050 (73.2)	287817 (74.1)	11.1
Maharashtra	12046 (4.2)	14875 (4.7)	19947 (5.6)	24198 (6.2)	21.3
Andhra Pradesh	43690 (15.1)	43267 (13.7)	45633 (12.9)	51828 (13.3)	13.6
Goa	13897 (4.8)	14581 (4.6)	14470 (4.1)	3389 (0.9)	-76.6
Tamil Nadu	1174 (0.4)	1611 (0.5)	1210 (0.3)	933 (0.2)	-22.9
Karnataka	8547 (3.0)	3095 (1.0)	592 (0.2)	606 (0.2)	2.4
OtherStates/UTs	4000 (1.4)	7022 (2.2)	12843 (3.6)	19454 (5.0)	51.5
All Maritime States/UTs	288937 (100.0)	315358 (100.0)	353745 (100.0)	388225 (100.0)	9.8

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

1.5.3 The growth in cargo handled by the non-major ports in 2012-13 was 9.8% compared to 12.2% recorded in 2011-12. The growth in quantity cargo handled at non-major ports has been primarily driven by growth in non-major ports in Gujarat which account for about three-forth 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. The above table reflects that Gujarat accounted for (74.1 %) of the traffic handled by the non-major ports followed by Andhra Pradesh (13.3%),

Maharashtra (6.2%) and Goa (0.9%). Three maritime States, viz, Gujarat, Andhra Pradesh and Maharashtra together accounted for about 94% of the total cargo traffic handled by the non-major ports in 2012-13.

1.5.4 Two commodities, viz. POL and Coal accounted for about 72% of the total cargo handled at the non-major ports (**Table: 8**).

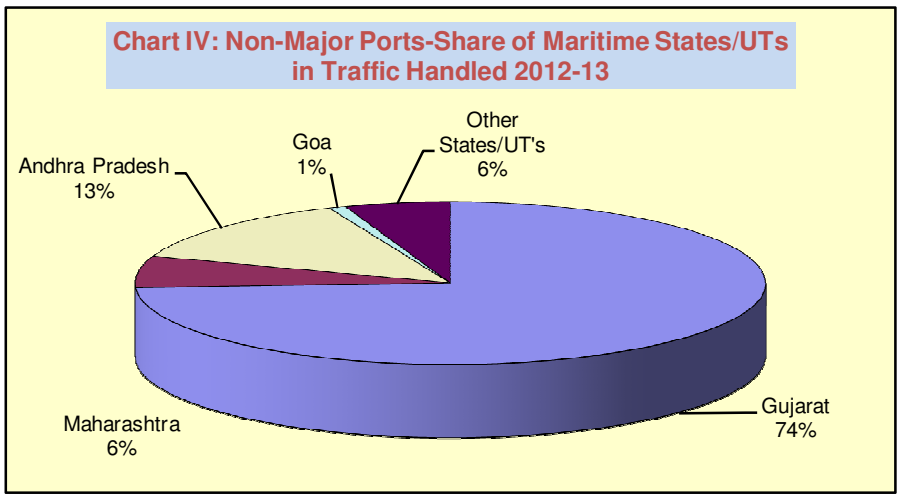
Table 8 : Commodity-wise Traffic Handled by Non-Major Ports

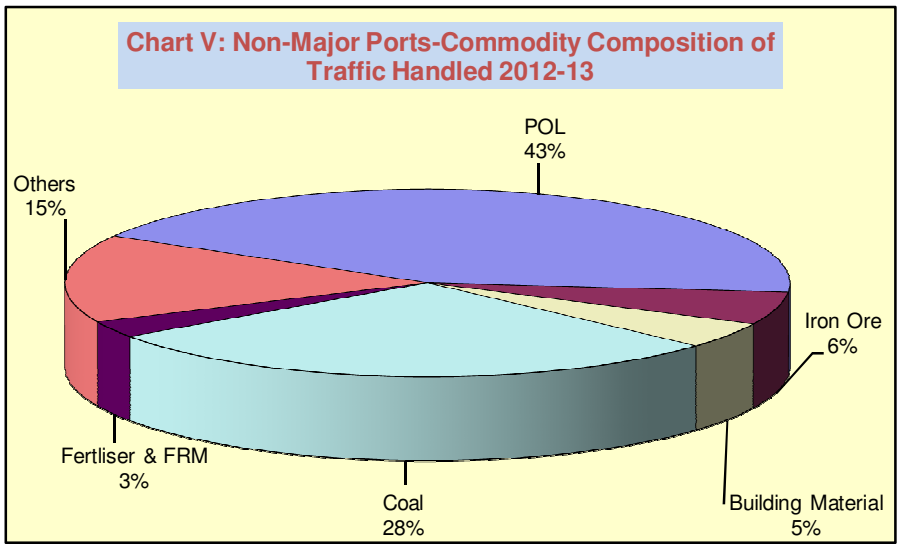
(000'Tonnes)

Commodity Group	2009-10	2010-11	2011-12	2012-13(P)	**% change 2012-13/ 2011-12**
POL	137720 (47.7)	145378 (46.1)	156322 (44.2)	167967 (43.3)	7.4
Iron Ore	48813 (16.9)	38266 (12.1)	30616 (8.7)	21937 (5.7)	-28.3
Building Material	13142 (4.5)	12327 (3.9)	12866 (3.6)	17491 (4.5)	35.9
Coal	41276 (14.3)	58462 (18.5)	79040 (22.3)	110638 (28.5)	40.0
Fertilizer & FRM	9501 (3.3)	12725 (4.0)	15742 (4.5)	11210 (2.9)	-28.8
Others	38485 (13.3)	48200 (15.3)	59159 (16.7)	58982 (15.2)	-0.3
All	288937 (100.0)	315358 (100.0)	353745 (100.0)	388225 (100.0)	9.8

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

1.5.5 The share of Maritime States/UTs in the total traffic and Commodity-wise composition of traffic in 2012-13 is depicted in the pie **Charts IV and V**.





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

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

1.6 Impact of Global Macro Developments on Maritime Trade

1.6.1 Impact of growth on India's seaborne cargo

1.6.1.1 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 2012-13, the GDP growth slowed down to 5% from 6.2% in 2011-12. Cargo traffic at India's 12 major ports, which accounts for 58% of India's total seaborne cargo at 546 million tonnes showed a

decline of 2.6% in 2012-13 compared to 1.7% decrease in 2011-12. 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 negative in all the quarters of 2012-13. The Industry sector which is a major factor influencing seaborne container cargo traffic posted a lower GDP growth of 2.1% in 2012-13 compared to 3.5% in 2011-12. The GDP of Industry sector recorded quarterly growth of 1.8% in Q1, 1.3% in Q2, 2.5% in Q3 and 2.7% in Q4 during the course of 2012-13. 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 2012-13. The impact of global demand was pronounced in case of container traffic, which reflects trade in manufactures drifted downwards from 3.1% in Q2, -7.4% in Q3 and 0.8% in Q4 of 2012-13. Iron ore cargo traffic posted sharp decline of 54.9% in 2012-13 mainly due to ban on iron ore exports by the state of Karnataka & Goa. Other commodity groups recorded meager to modest growth recording positive growth in some quarters and negative growth in other quarters.

1.6.1.2 **Table 9** gives Quarter wise trend in growth of cargo traffic handled at Major ports, GDP and GDP of Industry sector during 2011-12 and 2012-13.

Table 9 : Quarter wise Trend in Growth of Cargo Traffic at Major Ports & GDP

Commodities/ Year	2011-12					2012-13				
	Q1	Q2	Q3	Q4	**2011-12**	Q1	Q2	Q3	Q4	**2012-13**
POL	10.2	-2.6	-10.1	3.5	-3.4	-5.1	6.6	12.7	2.5	6.6
Iron Ore	-14.2	-8.8	-30.7	-53.5	-30.7	-33.4	-58.9	-76.7	-58.8	-54.9
Coal	18.0	5.7	3.3	7.0	4.8	1.0	7.0	17.6	18.3	10.4
Fertilizer	-20.5	-24.6	31.9	30.7	-1.9	-26.5	11.4	-39.8	-48.2	-27.8
Container in tonnes	8.1	9.2	5.9	-1.0	5.4	2.3	3.1	-7.4	0.8	-0.4
TEUs	3.8	5.2	3.4	-0.1	1.2	-0.6	3.0	-6.8	1.0	-0.8
Other cargo	7.2	6.7	4.0	-1.5	14.9	3.3	1.8	22.6	11.1	5.1
All Cargo	5.3	0.9	-4.7	-7.5	-1.7	-5.5	-0.8	-2.7	-1.1	-2.6
GDP overall	7.5	6.5	6.0	5.1	6.2	5.4	5.2	4.7	4.8	5.0
GDP -Industry	5.7	3.8	2.6	2.1	3.5	1.8	1.3	2.5	2.7	2.1

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

1.6.2 Global Ocean Freight Rates

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

1.6.2.2 Container Freight rates

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

1.6.2.2.2 An overstretched container cargo market on the supply side precipitated low freight rate levels in 2011. While demand is still recovering from the seaborne trade collapse during financial crisis, the growth rates of global container carrier capacity have remained relatively stable. In addition ship operators are suffering from substantial bunkering price increases. The industry is experiencing aggressive pricing policies of box ship operators competing for market share. High volume routes are experiencing an increasing competition. Shipping lines are building alliances to share costs, bundle capacity and streamline their operations. As a result, individual shipping lines with smaller vessels will find it increasingly difficult to remain competitive on the world's busiest shipping lanes. Furthermore, with a growth rate predicted at 25% for the above 8000 TEU fleet in 2012, large scale capacity is continuing to enter this market segment.

1.6.2.3. Tanker freight rates

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

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

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

1.6.2.3.4 Development in tankers freight rates will depend heavily on the willingness of oil producing and buying countries to invest in their tanker fleets. China has announced that it aims to ship more of its seaborne oil imports with domestically owned fleet. This strategic goal is reflected in the growth of VLCC fleet, which has increased from 11 Vessels in 2006 to 38 in 2011. European ship-owners have halved their market share on middle East- China lane losing capacity to their Chinese competitors. If industry policies of emerging economies increasingly focus an expanding their market shares in oil transportation, this will add more supply to the current over supply and keep freight rates at low levels. Mcquilling predicts that tanker freight rates will continue to be under pressure estimating a total delivery of 767 tankers over the next five years. Surplus increases are going to be more pronounced among longer ship sizes with a forecasted number of 62 VLCCs and 43 Suezmax entering the market in 2012.

1.6.2.4. Dry bulk freight rates

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

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

1.6.2.4.3 Capesize vessles are facing the most difficult market environment when compared to smaller bulk ships. From January 2011, daily earnings of Capesize carriers dropped over a period of

several months to levels below those of the smaller Handysize, Supramax and Panamax ships. This can be described as a post-financial crises phenomenon. According to Baltic Exchange, between 2000 and 2008, Capesize vessles have constantly reached higher daily earnings than smaller ships. On 5 June 2008, Baltic Exchange reported record earnings for Capesize vessels of $ 244,000 per day. Four years later, in May 2012, the same ships could be chartered for around $ 8,000 per day.

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

Table 10 & 11 Data on Baltic Dry Index (BDI) and Container Charter Rates respectively not given.

1.6.3 Trends in Global Top 20 Cargo/Container Ports

1.6.3.1 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 tones) at world's top 20 ports increased by more than 8.2 % in 2011 as compared to 13.7% in 2010. Similarly, the growth in container traffic (million TEUs) which reflects growth in manufactured goods increased by 7.8 % in 2011 as compared to 14.8% in 2010. Recent trends in Top 20 World Major Ports (in Million Tonnes) and Container Ports (in million TEUs) are given in **Table 12** and **Table 13** respectively.

Table 12 : Top 20 World Major Ports (in Million Tonnes)

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

Source: Port Statistics, Port of Rotterdam Authority;
PRC: Peoples Republic of China
: 1) Including domestic trade, 2) Including river trade, 3) Converted from freight ton to metric ton 4) Converted from short ton to metric ton.

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

Source: Port Statistics, Port of Rotterdam Authority;
PRC: Peoples Republic of China;
1) Including domestic trade 2) Including River trade

1.7 Policy Initiatives - Central Government

1.7.1 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.

1.7.2 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.

1.7.3 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.

1.7.4 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 2013 the cargo handling capacity of Major Ports was 744.91. million tonnes. Commodity-wise capacity of Major Ports at the end of March 2008 to 2013 is given in **Annex 4.**

Maritime Agenda 2010-20

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

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.

1.7.6 **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 Measur**e
    - 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

1.7.7 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.

1.7.8 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 2012-13, 32 Public Private Partnership (PPP) projects

were awarded at an estimated cost of Rs. 6765.63 crore for capacity addition of 136.75 MT in the major ports comprising construction of berths and terminals, mechanization of existing berths etc.

1.7.9 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

1.7.10 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 12 major ports and 200 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 Hon'ble 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 fourteen meetings of MSDC have been held.

2.4 Port Policy in Maritime States

2.4.1 GUJARAT

2.4.1.1 The state of Gujarat is endowed with 1215 km length of coastline which constitutes about one-sixth of the total Indian coastline. Out of 42 ports located along its coastline, 41 are non major ports while one port, viz. Kandla is a major port. Presently, 24 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 2012-13 are given in **Table: 13**.

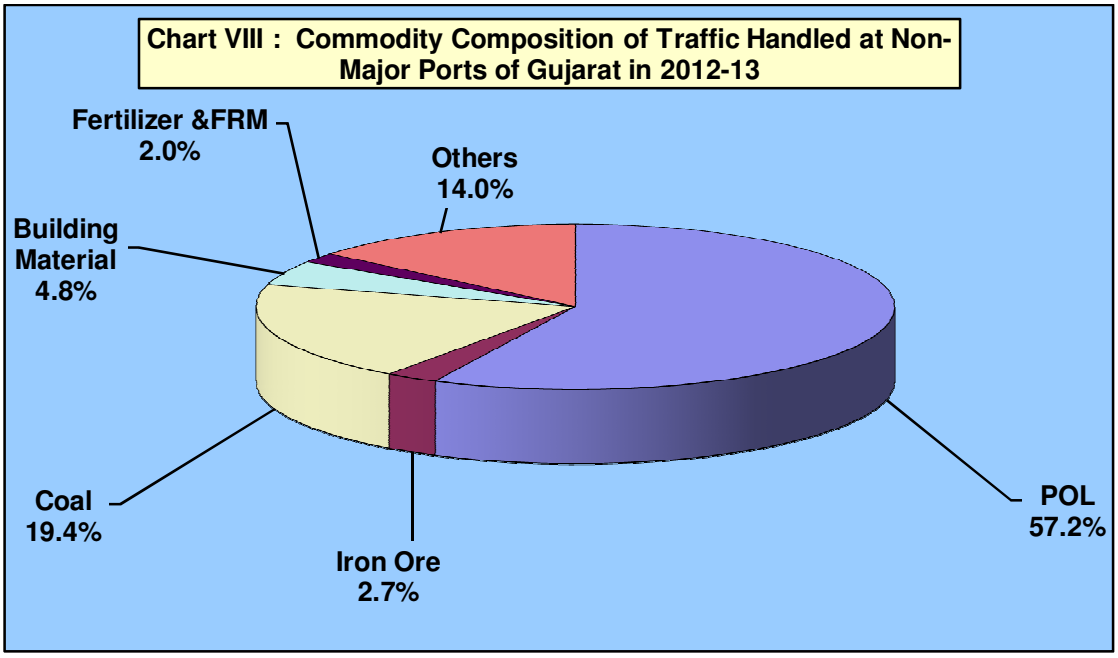
Table: 13 Gujarat: Trends in Cargo Handled at Major & Non-Major Ports (Million Tonnes)

Major/Non-Major	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13(P)
Major Ports	64.92	72.22 (11.2)	79.50 (10.1)	81.88 (3.0)	82.50 (0.8)	93.62 (13.5)
Non-Major Ports	150.52	152.81 (1.5)	205.58 (34.5)	230.91 (12.3)	259.03 (12.2)	287.82 (11.1)
All Ports	215.44	225.03 (4.5)	285.08 (26.7)	312.79 (9.7)	341.53 (9.2)	381.44 (11.7)

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

2.4.1.3 It is noteworthy that all ports (major and non-major) located along the coast of Gujarat handled more than 40% of the total cargo handled by Indian ports in 2012-13. 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: Fertliser 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 2012-13, 43 million tonnes of capacity was added taking the total cargo handling capacity in the non major port sector in the Gujarat to 366 million tonnes.

Table : 14 - Gujarat: Non Major Ports - Current Capacity & Utilization (Million Tonnes)

Item	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13(P)
Capacity*	197.00	235.00 (19.3)	243.64 (3.7)	267.4 (9.8)	323 (20.8)	366 (13.3)
Cargo Handled	150.52	152.81	205.58	230.91	259.04	287.82
% Utilization	74.92	64.89	84.36	86.35	80.2	78.6

* Including Lighterage Port Capacity;
Figures within parenthesis indicate capacity addition in % age during the year

2.4.1.7 As per the port policy, Gujarat Maritime Board (GMB) has selected 11 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 is given in the **Table15** below.

Table 15 : Trends in capacity creation (Million TPA)					
Ports	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**
Mundra (GAPL)	36.2	36.2	36.2	41.2	75.2
Mundra (GAB)	0.24	0.24	0.24	0.24	0.24
Okha	3.96	3.96	3.96	3.96	4.96
Bedi	5.69	5.69	5.69	5.69	5.69
Pipavav (GPPL)	14.41	14.41	23.41	23.41	23.41
Magdalla	27.05	27.05	27.05	43.05	43.05
Navalakhi	4.82	4.82	4.82	4.82	4.82
Sikka	67.57	104.57	104.57	104.57	109.57
Porbander	5.26	5.26	5.26	5.26	5.26
Veraval	2.17	2.17	2.17	2.17	2.17
Muldwarka	7.72	7.72	7.72	7.72	7.72
Jafrabad	4.53	4.53	4.53	4.53	4.53
Dahej	13.19	13.19	13.19	16.19	24.19
Bhavnagar	1.18	1.18	1.18	1.18	1.18
Jakhau	3.25	3.25	3.25	3.25	3.25
Mandvi	0.32	0.32	0.32	0.32	0.32
Gogha	0.08	0.08	0.08	0.08	0.08
Bhogat	0	0	0	0	7
Total	**198.00**	**235.00**	**243.64**	**267.64**	**323**

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 12 handle cargo. The capacity of non-major ports in Maharashtra is 19.95 million tonnes (as on 31.3.2012). Maharashtra Maritime Board (MMB) is the nodal agency for regulation and development of the State's maritime activities. MMB has taken many policy initiatives for development of port sector which are given in the **Box 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 tonnes 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 2012-13 are given in **Table 17.**

Table 17 : Maharashtra: Cargo Handled at Major & Non-Major Ports (MT)						
Major/Non-Major	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13(P)**
Major Ports	112.88	109.17 -(3.3)	115.30 (5.6)	118.90 (3.1)	121.92 (2.5)	122.53 (0.5)
Non-Major Ports	11.36	10.42 -(8.3)	12.05 (15.6)	14.88 (23.5)	19.95 (34.1)	24.20 (21.30)
All Ports	124.24	119.59 -(3.7)	127.35 (6.5)	133.78 (5.0)	141.87 (6.0)	146.73 (3.4)
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 2012-13 are given in **Table18**.

Table 18 : Goa : Trends in Cargo Handled at Major & Non-Major Ports (MT)						
Major/Non-Major	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13(P)**
Major Ports	35.13	41.68 (18.6)	48.85 (17.2)	50.06 (2.5)	39.05 -(22.0)	17.69 -(54.7)
Non-Major Ports	12.83	11.9 -(7.2)	13.9 (16.8)	14.6 (4.9)	14.47 -(0.8)	3.39 -(76.6)
All Ports	47.96	53.6 (11.7)	62.7 (17.1)	64.6 (3.0)	53.5 -(17.3)	21.08 -(60.6)
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 11 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 2012-13 are given in **Table 19.**

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

Major/Non-Major	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13(P)
Major Ports	36.02	36.69 (1.9)	35.53 -(3.2)	31.55 -(11.2)	32.94 (4.4)	37.04 (12.4)
Non-Major Ports	8.90	4.97 -(44.2)	8.55 (72.0)	3.1 -(63.7)	0.6 -(80.6)	0.6 (0.00)
All Ports	44.92	41.66 -(7.3)	44.08 (5.8)	34.65 -(21.4)	33.54 -(3.2)	37.64 (12.2)

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 2012-13 are given in **Table 20**. In Kerala 3 ports, viz, Azhikkal, Beypore (handles more than 90 % of the total non major cargo traffic in the State) and Vizhinjam are handling cargo for the last few years.

Table 20: Kerala : Trends in Cargo Handled at Major & Non-Major Ports (MT)						
Major/Non-Major	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13(P)
Major Ports	15.81	15.49 -(2.0)	17.43 (12.5)	17.87 (2.5)	20.09 (12.4)	19.84 -(1.2)
Non-Major Ports	0.10	0.13 (30.0)	0.12 -(7.7)	0.12 (0.0)	0.10 -(16.7)	0.09 -(10.0)
All Ports	15.91	15.62 -(1.8)	17.55 (12.4)	17.99 (2.5)	20.21 (12.3)	19.93 -(1.4)
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 6 handled cargo. A Port Policy for promoting private investment for the development of minor ports in Tamil Nadu has been formulated. Its main objectives are to provide exclusive port facilities for import of Coal/Naphtha/Oil/Natural Gas for shore based thermal power plants, promote export oriented and port based industries along the coastal districts of Tamil Nadu, encourage ship-repairing, ship-breaking and manufacture of cranes and floating cranes. In addition, leisure tourism and water sports along the coastline are also aimed. The trends in the cargo handled at both major and non-major ports of the State during 2007-08 to 2012-13 given in **Table:21**.

Table 21: Tamil Nadu: Trends in Cargo Handled at Major & Non-Major Ports (MT)						
Major/Non-Major	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13(P)
Major Ports	90.20	91.00 (0.9)	95.55 (5.0)	98.20 (2.8)	98.77 (0.6)	99.55 (0.8)
Non-Major Ports	0.89	0.9 (1.1)	1.17 (30.0)	1.61 (37.6)	1.21 -(24.8)	0.93 -(23.1)
All Ports	91.09	91.90 (0.9)	96.72 (5.2)	99.81 (3.2)	99.98 (0.2)	100.48 (0.5)
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 2012-13 are given in **Table: 22.**

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

Major/Non-Major	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13 (P)
Major Ports	64.6	63.91 -(1.1)	65.5 (2.5)	68.04 (3.9)	67.42 -(0.9)	59.04 -(12.4)
Non-Major Ports	19.29	29.72 (54.1)	43.69 (47.0)	43.27 -(1.0)	45.63 (5.4)	51.83 (13.6)
All Ports	83.89	93.63 (11.6)	109.19 (16.6)	111.31 (1.9)	113.05 (1.6)	110.87 -(1.9)

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

S. No.	Name of the Port Locations	District
(1)	(2)	(3)
1	Gopalpur	Ganjam
2	BahudaMuhan (Sonepure)	Ganjam
3	Palur	Ganjam
4	Baliharichandi	Puri
5	Astaranga	Puri
6	Jatadhar Muhan	Jagatsingpur
7	Barunei Muhan	Kendrapara
8	Dhamra	Bhadrak
9	Chudamani	Bhadrak
10	Inchuri	Balasore
11	Chandipur	Balasore
12	Bahabalpur	Balasore
13	Subarnarekha Mouth (Kirtania)	Balasore
14	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
1st to 5th year	5%
6th to 10th year	8%
11th to 15th year	10%
16th 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
1st year	NIL
2nd to 4th year	1.5%
5th to 9th year	5%
10th 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 Balsore district, Government has entered into an MOU with Creative Port Development Private Limited, Chennai on 18th December, 2006. Government of Orissa has signed the Concession Agreement with the developer on 11th January, 2008. Environment scoping application

submitted and clearance of terms of reference (TOR) obtained from MOEF, Government of India. Detailed land survey for port area (961 acre) has been made and alienation work of these 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 2012-13 are given in **Table 24**.

Table 24: Orissa : Trends in Cargo Handled at Major & Non-Major Ports (MT)

Major/Non-Major	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13(P)
Major Ports	42.44	46.41 (9.4)	57.01 (22.8)	56.04 -(1.7)	54.25 -(3.2)	56.55 (4.2)
Non-Major Ports	0.30	0.3 (0.0)	0.4 (33.3)	0.4 (0.0)	5.08 (1170.0)	11.07 (117.9)
All Ports	42.74	46.71 (9.3)	57.41 (22.9)	56.44 -(1.7)	59.33 (5.1)	67.62 (14.0)

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 2012-13 are given in **Table 25.**

Table 25 : West Bengal-Trends in Cargo Handled at Major & Non-Major Ports (MT)

Major/Non-Major	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13(P)
Major Ports	57.33	54.22 -(5.4)	46.43 -(14.4)	47.54 (2.4)	43.25 -(9.0)	39.93 -(7.7)
Non-Major Ports	0	0	0	0	0	0
All Ports	57.33	54.22 -(5.4)	46.43 -(14.4)	47.54 (2.4)	43.25 -(9.0)	39.93 -(7.7)

Figures in bracket represent 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 2012-13 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.

Table 26: Union Territories: Trends in Cargo Handled at Non-Major Ports(MT)

	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13(P)
Andaman & Nicobar Islands*	2.18	2.01 -(7.8)	2.1 (4.5)	1.7 -(19.0)	1.21 -(28.8)	1.36 (12.4)
Lakshadweep	0.03	0.03	0.03	0.03	0.03	0.03
Puducherry	0.01	0.04	1.32	4.71	6.42	6.91

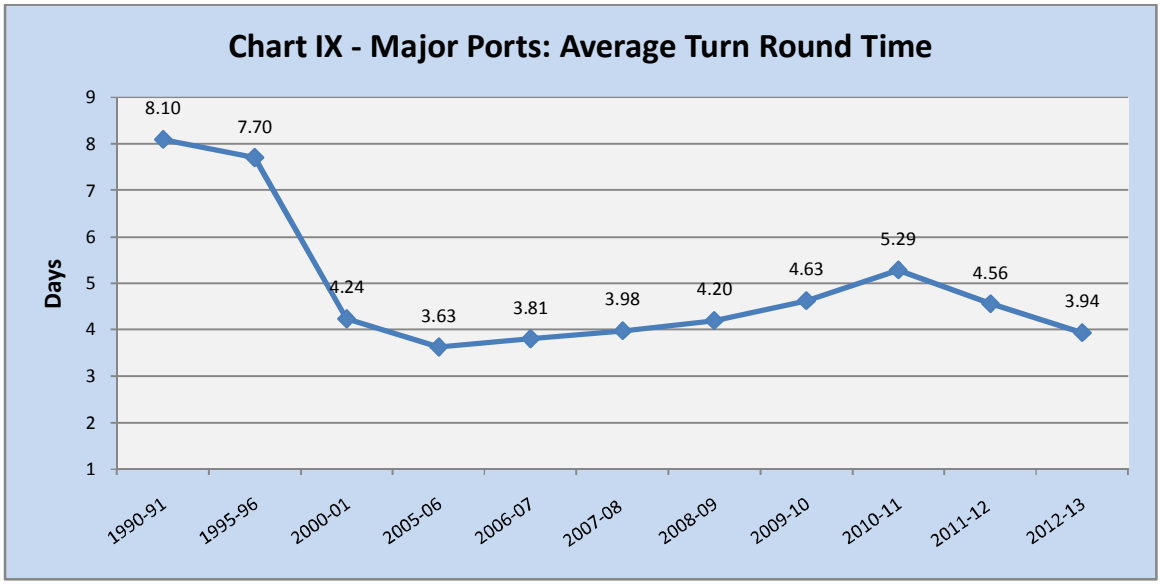
Figures in bracket represent percentage change over the previous year period. (P) Provisional

CHAPTER III: PORT EFFICIENCY

Efficiency at ports has 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 select years 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 4.56 days and further to 3.94 days in 2012-13. The TRT varied in a range between 1.64 days at Cochin Port to 6.40 at Kandla. Amongst the 12 major ports improvement in TRT during 2012-13 in comparison to 2011-12 is reflected clearly in all Major Ports except Ennore, HDC, New Mangalore and Jawahar Lal Nehru Ports. 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 2012-13 is presented in the Chart IX below.



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

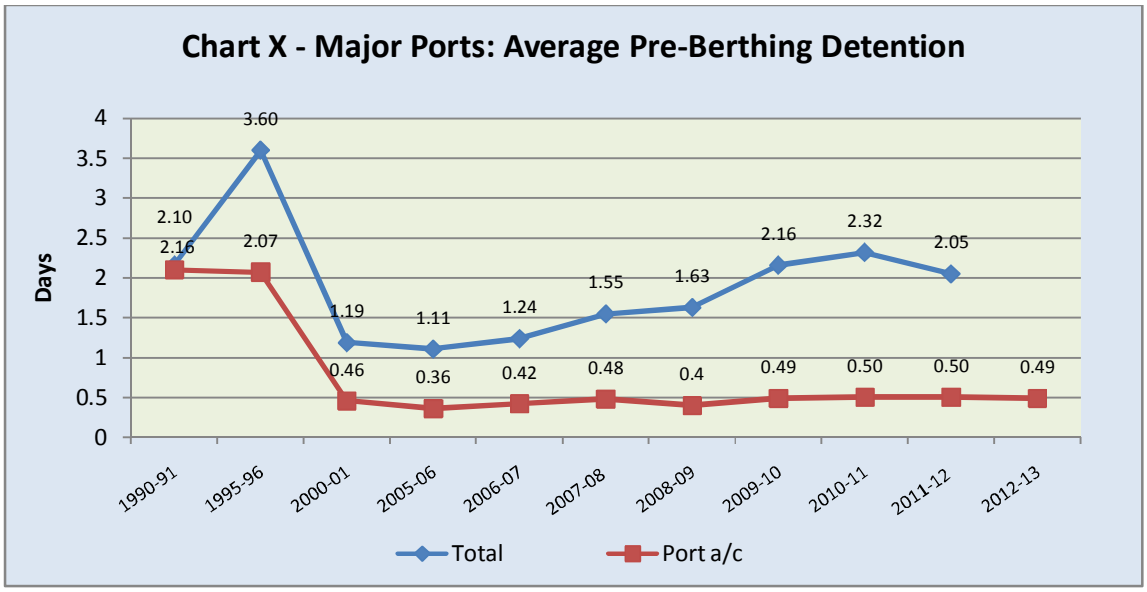
Table 27: Average Turn Round Time (days)							
Port	**1990-91**	**2000-01**	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13(P)**
1	2	3	4	5	6	7	8
Kolkata D.S	11.90	5.50	5.10	6.80	6.21	5.45	4.50
Haldia D.C	6.47	3.97	4.21	5.01	4.45	3.62	3.99
Paradip	8.40	4.16	4.78	9.04	7.73	6.33	4.39
Vishakhapatnam	7.07	3.71	3.93	4.78	5.84	5.68	5.39
Ennore			2.35	2.11	2.78	2.17	2.95
Chennai	7.20	5.83	4.15	4.04	4.36	3.91	3.24
Tuticorin	4.70	4.10	3.64	3.90	4.00	4.94	4.31
Cochin	4.00	3.11	2.14	2.08	2.20	1.82	1.64
New Mangalore	4.96	2.89	3.00	3.06	2.70	2.95	3.29
Mormugoa *	6.40	4.25	5.95	8.91	10.43	7.68	3.93
J.L.Nehru		2.21	1.90	2.01	2.64	1.94	2.54
Mumbai	10.80	5.20	4.95	4.61	4.96	5.22	5.02
Kandla	10.00	4.72	7.26	5.03	5.90	6.42	6.40
All Ports	8.10	4.24	4.20	4.63	5.29	4.56	3.94

(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 and 2012-13. Average PBDT on port account was more than a day (2.05) at Kandla during 2012-13 . 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.

Table 28 : Average Pre-Berthing Detention(Days)

Port	1990-91	2000-01	2008-09	2009-10	2010-11	2011-12	2012-13*(P)
1	2	3	4	5	6	7	8
Kolkata D.S	0.9	0.61	0.66	1.31	1.23	0.77	Neg.
Haldia D.C	1.66	0.91	3.38	4.39	3.73	2.54	0.85
Paradip	1.59	1.41	2.32	6.30	5.04	3.69	0.05
Vishakhapatnam	1.83	0.75	1.28	1.90	2.81	2.84	0.06
Ennore			0.27	0.37	0.65	0.76	Neg.
Chennai	2.1	2.45	1.39	1.35	1.61	1.16	0.04
Tuticorin	0.9	1.4	1.09	1.36	1.29	1.91	0.35
Cochin	0.83	0.74	0.70	0.85	1.03	1.05	0.06
New Mangalore	0.79	0.77	0.65	0.81	0.59	0.79	0.05
Mormugao**	2.51	1.32	1.77	3.46	4.07	2.94	0.81
J.L.Nehru		0.67	0.95	0.98	1.51	1.13	0.38
Mumbai	3.4	1.26	1.41	1.06	1.23	1.37	0.35
Kandla	4.4	1.51	2.62	2.60	3.32	3.74	2.05
All Ports	2.16	1.19	1.63	2.16	2.32	2.05	0.49

(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 increased to almost four times from 3,372 tonnes in 1990-91 to 13149 tonnes in 2012-13 for major ports. However, average output per ship berth day is marked by substantial variation across major ports ranging from a high 26308 tonnes in

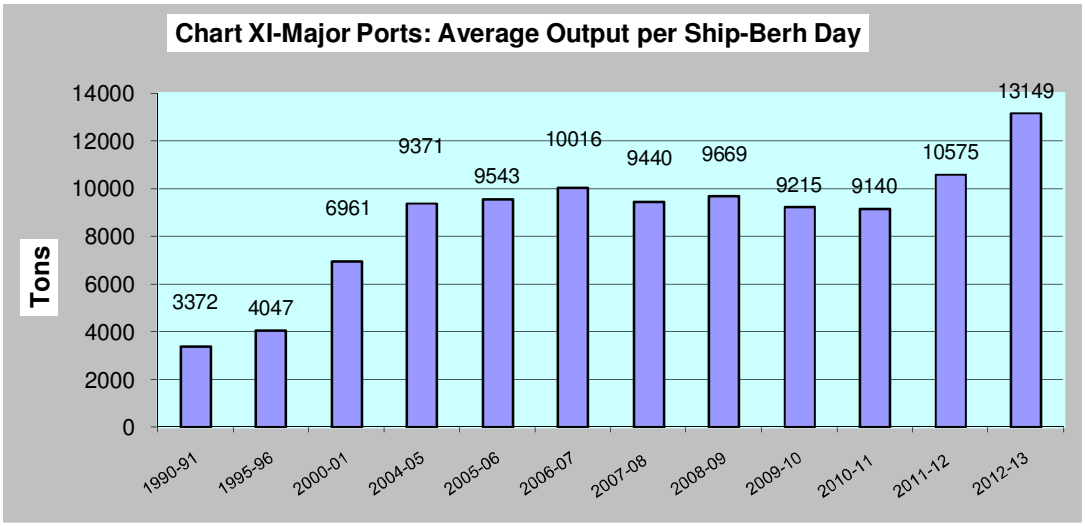
case of JLN port to a low of 2084 tonnes at Kolkata Dock System during 2012-13. This variation reflects the type of cargo being handled, level of mechanization and labour practices. Amongst the 12 major ports improvement in average Output Per Ship Berth-day during 2012-13 as compared to 2011-12 is visible in Kolkata Dock System, Cochin, Paradip, Chennai, Tuticorin, New Mangalore , Murmugao JNPT, Mumbai and Kandla Ports. Port-wise average output per Ship-berth day for select 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	2012-13(P)
1	2	3	4	5	6	7	8
Kolkata D.S	560	2305	3027	1917	2253	2503	2984
Haldia D.C	5659	6384	7732	6243	6563	6728	6072
Paradip	4082	8503	12635	13853	14243	15995	16625
Visakhapatnam	5325	9799	11171	10484	10334	10704	10645
Ennore			28424	21665	17669	27505	24498
Chennai	3912	6977	10778	11428	10984	10352	12462
Tuticorin	2130	3983	5817	6934	7035	6733	7621
Cochin	3714	6138	10599	11089	11752	15784	15878
New Mangalore	4412	12192	13645	13896	14211	13957	15917
Mormugao	10429	12438	6290	5002	4409	10530	13233
J.L.Nehru		6383	20344	21563	20393	19227	26308
Mumbai	2310	4213	5717	6122	6042	6476	8842
Kandla	4417	8230	13107	13549	14137	14272	15091
All Ports	3372	6961	9669	9215	9140	10575	13149

(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 2012-13 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 31.3.2013 are brought out in Appendix-I & Appendix-II in respect of Major Ports and in Appendix-III & Appendix-IV for Non – Major Ports.

Appendix – I

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

Sl. No	Project Name	Port Name	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
1	Construction of Container Terminal on BOT basis	Ennore	18.0 MTPA	14070	As the process of achieving financial closure not achieved, the award cancelled.
2	Acquisition of 3 Nos. new super post Panamax size Rail Mounted Quay Cranes(RMQCs) & shifting of 3 old RMQCs from Main Container Berth to Shallow Draught Berth	Jawaharlal Nehru	27.50	988	The work is expected to be completed by the last quarter of 2013-14.
3.	Construction of two New Off-shore Container berths & Development of Container Terminal berth on BOT basis in Mumbai Harbour.	Mumbai Port	1.00 MTEUs	14610	Agreement signed on 3.12.2007. Pilling in approach trestle in progress. All 259 piles completed. Pilling commenced for berth pockets. All 833 piles completed. All 6048 precast members have been erected. Entire approach jetty is ready. Berth structure completed. Total investment till date is Rs. 547.52 crores Dredging contract for MbPT component awarded to M/s. Jaisu Shipping Co. Pvt. Ltd. on 01.04.09. Filling of Victoria basin & Princess Dock commenced and is in progress . Present progress: Soil dredging: 7.20 million cu.m. Rock dredging 5,77,000 cu.m, Filling : 14,00,000 cu.m, Anticipated date of completion is March, 2014.
4	Construction of 13th to 16th Cargo berth on BOT basis.	Kandla Port	8.0 MMTPA	7555	**13th Berth**_- Work completed and operational. **14th Berth**- LOA issued on 19/10/2012. **15th Berth** - LoA issued on 7.12.10 to M/s IMC Ltd. and executed agreement with KPT on 18.2.11. Date of award has been declared on 27.9.11. Work in progress. **16th Berth** - LoA issued on 7.12.10 to M.s PSL Ltd and concession Agreement signed.
5	Setting up of SPM and allied facilities off Veera in Gulf of Kutch.	Kandla Port	12.0	6285	RFQ opened on 29.6.12. Nine bidders submitted. RFQ are under evaluation. CCI note is under sublimation. Security clearance proposal sent on 27.7.12. Scrutiny clearance issued on 5/2/13. The Board has decided to put the project

					for re-bid.
6	Construction of barge jetty at IFFCO	Kandla Port	2	277	Concession Agreement signed.
7	Development of oil jetty to handle liquid cargo & ship bunkering terminal at old Kandla on PPP ,mode	Kandla Port	3.39	2333	RFP issued on 12/2/2013.
8	Development of Berth No. 7 as second coal handling terminal on DBFOT basis	Mormugao	4.61	4060	The physical progress of the overall project is 74% & financial progress is 86.42%. The terminal is expected to be completed and ready for commercial operation by 31.12.2013.
9	Providing Mechanized Handling facilities for handling of coal at Berth No. 11	Mormugao	2.00 MMTPA	2040	Concession agreement signed with M/s Mormugao Seaport Ltd.
10	Development & Operation of International Con-tainer Transship-ment Terminal (ICTT) at Vallar-padam (BOT basis by M/s India Gate-way 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 consisting of construction of 600m berth & development of stacking area and other allied facilities has been commissioned on 11th February, 2011. Existing outer channel to be widened and inner channel leading to IC&T is also to be deepend. Four lane NH connectivity is in progress and will be completed in May, 14. Dredging work by deploying CSD completed. Clearing the area using TSHD is substantially completed. The Rail Connectivity from Edapaily to Vallarpadam is implemented by M/s RVNL with grant-in-aid from Govt. of India. The work of LOB is pending for want of completion and commissioning of parallel ROB by NHAI for diverting the traffic.
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 taken up for implementation by M/s Petronet LNG Ltd.(PLL) in 2005. Construction of Phase- I and II are substantially completed. PLL have completed the works of land development, site grading and boundary wall construction. PLL have reported that 5 MMTPA LNG Terminal is ready to receive LNG.
12	Development of an International Ship Repair Facility at Cochin Port	Cochin	12 nos. medium size vessels and 90 nos. small size vessels	7850	The project proposal is to develop ship repair facility on a parcel of about 42 acres of land with 850m of waterfront, containing dry dock, slipway and workshop buildings and facilities for establishing and opertating a ship repair facility for a period of 30 years. The letter of acceptance of Bid was issued to Cochin Shipyard Ltd. on 19.09.2012.
13	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 23rd 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. The

					Concessionaire has requested for Performance Excuse under Force Majeure clause. M/s SICAL has been given one more opportunity to commence the work.
14	Construction of North Cargo Berth – I (Captive use)	Tuticorin	7.0 MTPA	445	Berth construction commenced on 15.2.2010.All the work except fixing of tender completed.
15	Development of Outer Harbour(9 Nos. of berth including construction of Breakwater and Dredging)	Tuticorin	19.20 MTPA	71000	Port is in the process of getting Environmental Clearance for this project. The scheduled period of completion of assignment is 9 months from the date of award of work and the work is in progress.
16	Development of Mega Container Terminal	Chennai	4 MTEU (48 MTPA)	36860	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. Two bids were received; project to be awarded after security Clearance from the Ministry.
17	Development of Ro Ro cum Multi Purpose Berth and Multi Level Car park in Bharathi Dock	Chennai	1 MTPA	1050	Due to non-receipt of bids on due date, project is proposed to be restructured.
18	Development of Barge handling facility	Chennai	1.35 MTPA	260	RFP invited from the qualified RFQ Applicants. On the Bid due date of 22.1.13, one Bid received from IMC Ltd., Chennai, LOA issued to the successful Bidder on 30.1.13 and concession agreement signed with the SPV for the project on 30.3.13. Action is under process for obtaining environmental clearance for the project.
19	Development of Rajiv Gandhi Dry Port and Multi Modal Logistic hub at Mappedu, Sriperumbudur	Chennai	18.45 MTPA	4150	Chennai Port decides to develop Dry Port facility at the hinterland to Port and acquired 121.741 acres of land at Mappedu, Sriperumbudur on 99 years lease basis. Lease Deed Agreement executed on 27.06.12. RFP invited from the eligible RFQ applicants (Pending Security Clearance from the Ministry). On the Bid due date of 30.4.12, no offers were received.
20	Development of WQ 6 berth in Inner Harbour for handling Multi cargo on - DBFOT basis.	Visakhapatnam	2.08	1145	Physical progress is 56%. The work is likely to be completed by Oct. 2013.
21	Development of EQ-10 berth in Inner Harbour for handling Liquid Cargoes & Chemicals on DBFOT Basis.	Visakhapatnam	1.85	553.8	Physical progress is 88%. The work is likely to be completed by April 2013.
22	Development of Deep Draft Iron Ore Berth on BOT basis	Paradip Port	10.00	5913	Concession agreement was signed with M/s Blue water Iron Ore Terminal Pvt. Ltd. on 01.07.2009 with 36.80% revenue share to PPT. However there was delay in obtaining Environmental, CRZ and Forest Clearance. Clearance received in July, 2012. Matter is sub-Judice in Apex Court.
23	Development of Deep Draft Coal Berth on BOT basis	Paradip Port	10.00	4790	Concession agreement has been signed with M/s Essar Paradip Terminal Ltd. 10.11.2009 with 31% revenue share to PPT. Environmental clearance was obtained on 02.07.12. A no. of plot holders of iron ore traffic have gone to

					Hon'ble Supreme Court against the decision of PPT to cancel their plots. Matter is sub-Judice in SCI.
24	Setting up of Captive barge terminal for the operator's cargo manufacturing unit at HDC (Non PPP Project)	HDC under KoPT	0.80	980	Work order awarded in last Quarter of 2012-13
25	Supply, Operation & Maintenance of 2 Mobile Harbour Cranes at Berth 4B at HDC (Non PPP Project)	HDC under KoPT	3.00	600	The Memorandum & Article of association formed by the JVC is under legal and financial examination.
26	Mechanization of 5 NSD Berth at KDS (Non PPP Project)	KDS under KoPT	2.5	1420 (Indicative)	The earlier tender has been discharged and fresh composite tender would be issued for integrated ship to shore services including back up operations at berh No. 4, 5 & 8 NSD.
BOT: Build Operate and Transfer; BOO: Build Own Operate; DBFOT: Design, Build, Finance, Operate and Transfer					

Appendix – II

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

Sl. No.	Project	Port Name	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
1.	Development of Multi-Purpose berths to handle clean cargo including container on BOT basis.	Paradip	5.0 MTPA	3873	Letter of Award was issued to the H1 bidder i.e. Consortium of Sterlite – Leghton @ 23.40% revenue share to the port. Environmental and CRZ clearance have been received on 13.7.12. Forest clearance is also under process. Concession Agreement was not singed on Mutual consent pending forest clearance prior to signing of Agreement. Bidder not inclined to proceed further and matter is sub-judice.
2.	Mechanization of EQ I to EQ 3 berths on captive user basis	Paradip	22.0	10000	Exploring the possibility of getting the project executed through PSU on nomination basis. Offer & other modalities would be commercially acceptable to port.
3.	Construction of LNG Terminal (Joint Venture)	Ennore	5.00	4512	IOCL has submitted environmental clearance application to TNPCL after preparation of environmental Assessment Study. Cabinet approved for allotment of land to IOCL.
4.	Development of Container Terminal on DBFOT basis	Ennore	1.40 MTEUS	12700	RFQ issued.
5.	Multi cargo berth on DBFOT basin	Ennore	-	-	FR under preparation.
6.	Construction of 3rd coal berth for TNEB on captive basis	Ennore	9MTPA	1500	Appointment of Consultant for EIA study is under process.
7.	Development of standalone container handling facility with a quay length of 330 m. to the north of JNPT.	Jawaharlal Nehru	10.0 MTPA	4530 6000 (Revised)	Letter of Award issued on 31.10.2012 to M/s D.P. World Pvt. Ltd. Concession Agreement is yet to be signed.
8.	Development of 4th Container Terminal	Jawaharlal Nehru	60.00 MT	67000	The consultants have submitted the draft feasibility report. Physical & Mathematical model study for suggested lay out is in progress through CWPRS.
9.	Acquisition of 6 Nos. new Rubber Tyred Yard Gantry Cranes	Jawaharlal Nehru	…	690	Proposal for floating the tender is being put up to the Board.
10.	New Cruise Terminal near	Mumbai	…	18600	Consultant, M/s. zebec Marine Consultant and Services submitted DPR for location

	Gateway of India.				at Oyster Rock. However, Navy has objected for the location on security ground. Alternative location off Nariman Point is ruled out because of high cost of rock dredging. As instructed by the Ministry, consultant has examined the matter improving existing Crise Terminal at BPX and submitted report. The report is being put to the board for acceptance.
11.	Setting up of barge jetty at Tuna on captive use basis	Kandla	1.5	220	LOA issued to M/s Shree Renuka Sugars on 27/12/2012. Concession Agreement signed on 11/02/13
12.	Construction of barge jetty at Tuna on BOT basis	Kandla	6.29	2719	RFP issued on 12/2/2013.
13.	Installation of Mechanized fertilizer handling facilities at EQ-7 In inner Harbour on DBFOT basis	Visakhapatnam	5.21	2175.8	Concession agreement signed on 18.5.2012. LOA issued to independent Engineer on 4.1.2013.
14.	Development of West Quay-North berth in inner harbour for handling dry bulk cargo on DBFOT basis	Visakhapatnam	6.39	3929.90	RFP issued on 11.02.2013 for submission of bids on 23/4/2013. No response received. Approval of the Govt received. Proposal for Security clearance was sent to Ministry on 14/12/12. Awaiting security clearance.
15.	Extension of existing Container terminal in outer harbour on DBFOT basis	Visakhapatnam	0.54 MTEUs	6331.10	Applications for security clearance for all 7 applicants submitted to Ministry on 29.10.2012. RFP issued on 12.2.2013 and bids opened on 28/3/2013. Awaiting Security clearance and approval from Government.
16.	Up- gradation of the existing facility and creating new facility for handling iron ore on DBFOT basis	Visakhapatnam	23.00	8454.10	Proposal for security clearance sent to Ministry on 26.12.2012. RFP issued on 12.02.2013 and bids opened on 28.03.2013. Awaiting Security clearance and approval of the Government.
17.	Development of Iron Ore export terminal at the waterfront west of existing breakwater.	Mormugao	7.2 MMTPA	7210	Considering Iron Ore policy of Government project profile will be changed.
18.	Development of General Cargo Terminal (GCT) at Cochin Port	Cochin	9 MTPA	2500	The TAMP passed an order on 15.02.2013 fixing the tariffs for the project. An EOI for the project has been invited on 10.04.2013 so as to explore the various possibilities to make the project more investor friendly.
19.	Reconstruction of Mattanchery wharf- phase-II(Q I to Q 3 berths)	Cochin	2.00 MTPA	Not estimated	The draft feasibility report is expected to be finalized within 2 months.
20.	Development of North cargo berth- III	Tuticorin	9.15 MTPA	420	Port filed IA on 1.02.2013 for getting permission of the Hon'ble Supreme Court for issue of LOA. Clearance from Supreme Court is expected shortly.
21.	Development of Haldia Dock Dock II (North)	Haldia Dock Complex under KoPT	11.70 MTPA	8214	RFP issued on 18.12.12. Bid due date extended till 17.05.2013.

22.	Development of Haldia Dock Dock II (South)	Haldia Dock Complex under KoPT	11.70 MTPA	8861	RFP issued on 18.12.12. Bid due date extended till 17.05.2013.
23.	Construction of Outer Terminal I upstream of 3rd Oil Jetty with ancillary facilities	Haldia Dock Complex under KoPT	5.11 MTPA	2789	Legal opinion has been received. Fresh draft notification sent to Odissa Govt. for views. Reply awaited.
24.	Barge Jetty-II for M/s Tata	Haldia Dock Complex under KoPT	1.00 MTPA	300	M/s Tata Steel have been asked to furnish a detailed project report. The report is awaited. Award expected by second quarter of 2013-14.
25.	Development of Container Terminal at Diamond Harbour	KDS under KoPT	25.00 MTPA	14330	Award expected by fourth quarter of 2013-14
26.	Development of Dry Dock & Ship repair facility	KDS under KoPT	-	-	Pre- Feasibility study in process.
27.	Mechanisation of Berth No. 4,5 & 8 NSD	KDS under KoPT	13.50 MTPA	4900	The earlier tender has been discharged and fresh composite tender would be issued for integrated ship to shore services including back up operations.
28.	Development of full fledged Cargo handling Facilities at Saugor	KDS under KoPT	54 MTPA	78200	Award expected by 2016-17

BOT: Build Operate and Transfer; BOO: Build Own Operate; DBFOT: Design, Build, Finance, Operate and Transfer.

Appendix – III

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

Sl. No	Project Name	State/ Ports Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
1.	Development of Coal terminal for UMPP at Mundra port.	Mundra, (Gujarat)	15	20000	Three berths of 1120 mt is completed.
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 pert 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	35	35000	One berth has become operational.
14	Development of an all weather and Multipurpose port at Rewas-Aware, Dist. Raigad	Thal, Rewas-Aware Maharashtra	43	52000	All clearances including Environmental clearance in place. Pre-construction activities in progress. Right to way through Mumbai Port Trust waters for navigation channel of Rewas- Aware port is still awaited. Matter taken up with Ministry of Shipping, Govt of India.
15.	Development of an all weather and Multipurpose port at Dhamankhol- Jaigad Port Dist. Ratnagiri	Jaigad, (Dhamankhol Bay) Maharashtra	36	29000	Two berths in first phase have been commissioned. Detailed Project Report for second phase of the project has been approved and the Proposal for environmental clearance is under consideration of the Ministry of Environment & Forests, Govt. of India.
16	Development of an all weather and Multipurpose port at Lavgan- Jaigad Port Dist Ratnagiri (Cargo facility + Ship Repair system)	Jaigad, (Lavgan- Bay) Maharashtra	18	7000	Cargo berth facility has been commissioned and commercial operations are likely to start shortly. The Ship repair facility is likely to commission by end December 2013.
17	Development of an all weather and Multipurpose port at Redi Port, Dist Sindhudurg	Redi, Maharashtra	19	7160	Detailed Project Report has been approved. All formalities for obtaining environmental clearance have been completed and the project is awaiting environmental clearance, which is pending due to moratorium imposed upon projects in Ratnagiri and Sindhudurg districts.
18.	Development of an all weather and Multipurpose port at Vijaydurg Port Dist. Sindhudurg	Vijaydurg, Maharashtra	12	22750	Detailed Project Report is received. The Ministry of Environment & Forests, Govt. of India has yet to issue Terms of Reference (ToR) for environmental clearance due to moratorium imposed upon projects in Ratnagiri and Sindhudurg districts.
19	The demolition of old existing jetty and reconstruction of new jetty of length 184.05 mts. at panaji.	Panaji-Port Goa	*	150	The demolition of old existing jetty and re-construction of new jetty work is in progress. * The jetty will cater to low craft passenger vessel and other small crafts. No cargo will be discharged/ loaded at this jetty.

20.	Establishing a captive port at Thiruchopuram in Cuddalore district by M/s. Nagarjuna Oil Corporation Ltd.	Thiruchopuram Tamil Nadu	9.3	3840	Construction works have been temporarily suspended due to financial constrain.
21	Establishing a captive port at Kattupalli in Thiruvallur district by M/s.L & T Shipbuilding Ltd	Kattupalli Tamil Nadu	Ship building	33750	This port was inaugurated by the Hon'ble Chief Minister on 30.01.2013.
22	5th berth Railway line at Kakinada Deep Water Port	Kakinada Deep Water Port Andhra Pardesh	-	120	Likely to complete by June 13.
23	Coal Mechanisation System in 5th berth back up area at Kakinada Deep Water Port	Kakinada Deep Water Port Andhra Pardesh	6.MMT	3000	Likely to complete by June 13.
24	Expansion development and Operation of Gopalpur port.	Gopalpur, Orissa	2 MTPA to 54 MTPA	11500	i) Developmental Activities in progress ii) All Weather Direct Berthing Port declared open for Commercial Traffic with effect from 29th March 2013.
25	Expansion development of Dhamra Port (PPP Mode)	Dhamra	27 MTPA to 109 MTPA	36390	Phase – II development is in Progress
26	Development of Karaikal Port through private investment on BOT basis	Karaikal, Puducherry	Phase – 1 4.0 Phase - II 2.6	4170 21,000	Phase 1 of commercial operations commenced in June 2009 and is currently functional Phase II related works estimated at Rs 2100 Crores are in progress. Upon completion of phase 2, the total handling capacity would be 20.5 million tons per annum.
27	Development of Pondicherry Port through private investment on BOT basis	Pondicherry	Phase – 1 16.2 Phase - II 10.8	27850 N.A	Developer has issued "Notice" of intent to terminate the Concession Agreement entered for the project.

28	Captive port owned by M/s Chemplast Sanmar, Chennai.	Captive Maritime Terminal facility, Karaikal, Puducherry	0.055	300	Commercial operations commenced in September 2007 and is functioning
29	Development of Ponnani Port through private sector development	Ponnani Kerala	Phase 1-4 Phase 2-6.8 (Traffic anticapted)	Private sector investment of Rs. 7630 million in phase 1 and Rs. 4110 million in phase II	a. Concession agreement signed b. Procedures for environmental clearances are in the final stages.
30	Modern Dry Dock for Ship Repair (Malala) Yard at Malala in Diu District.	Malala Diu	-	250	The Concerned Agency has revival for Arbitrator.

Source: Maritime States/Maritime Boards

Appendix – IV

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

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

Sl. No	Project	State/ Ports Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
	DMCC.				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 ONGC.	Magdalla (Gujarat)	4	3500	Environment clearance is in process Basic engineering completed. Detailed Engineering is in progress.
14	Cement jetty by ABG Cement at Mora village, Surat.	Magdalla (Gujarat)	3	1000	Under Government approval.
15	Multipurpose jetty at Sikka by Reliance Industries Ltd.	Sikka (Gujarat)	15	20000	Environment clearance obtained. Detailed engineering underway.
16	Expansion of Coal jetty & phase 2 dredging at pipavav	Pipavav (Gujarat)	5	6500	Development envisaged in the DPR submitted for expansion of the port, However detailed implementation plan and DPR for Phase 2 is to be submitted to GMB based on requirements of thermal power plants companies.
17	Greenfield port at Mahuva	Mahuva (Gujarat)	3	4250	DPR under progress
18	Greenfield port at Nargol	Nargol (Gujarat)	10	17500	Selection of developer under approval of GOG
19	Greenfield port at Vansiborsi	Vansiborsi (Gujarat)	8	17730	Pre- Feasibility Report under way.
20	Greenfield port in lieu of Khambhat port	Khambhat (Gujarat)	3	1200	Location shifting is in process at GOG level.
21	Greenfield port in lieu of Dholera	Dholera (Gujarat)	10	10000	Location shifting is in process at GOG level.
22	Captive port facility by M/s. Udangudi Power Corporation Ltd.	Udangudi Thoothukudi Tamil	6	90830	The company is awaiting environment clearance from the Ministry of Environment and Forest.

Sl. No	Project	State/ Ports Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
		Nadu			
23	Captive port facility by M/s. NSL Power Ltd.	Vanagiri NagapattinamTamil Nadu	5.5	70040	The company is awaiting environment clearance from the Ministry of Environment and Forest.
24	Captive port facility by M/s. Indian Gas Ltd.	Manappad Thoothukudi Tamil Nadu	6.5	18000	The company is awaiting environment clearance from the Ministry of Environment and Forest.
25	Captive port facility by M/s. NTPC Ltd.	Marakkanam Villupuram Tamil Nadu	13	100000	Inprinciple approval has been accorded and further process from the company is awaited.
26	Captive port facility by M/s.Goodearth Shipbuilding Ltd.	Silambimangalam Taluk in Cuddalore Tamil Nadu	Shipbuilding	140000	The permission has been withdrawn and there is no activity on ground.
27	Captive port facility by M/s. Sindya power Generting Co. Private Ltd	SirkazhiTaluk NagapattinamTamil Nadu	3	50000	The company has submitted a Technical Feasibility Report and requested for declaration of port limits, which is under consideration of Tamil Nadu Maritime Board.
28	Captive ship repair facility by M/s. Marg Swarnabhoomi Port Private Ltd.	Mugaiyur Kancheepuram Tamil Nadu	Ship repair facility	6000	The company is awaiting environment clearance from the Ministry of Environment and Forest.
29	Captive port facility by M/s. PEL Power Ltd.	Kaveri NagapattinamTamil Nadu	4	50000	The company is awaiting environment clearance from the Ministry of Environment and Forest.
30	Captive port facility by M/s. Coastal Tamil Nadu Power Ltd.	Cheyyur Kancheepuram Tamil Nadu	13	160000	Proposals to notify the power plant are under process.
31	Captive port by M/s.IL & FS Ltd.	Parangipettai Tamil Nadu	13	12600	The company has obtained most of the statutory approvals and financial closure and will commence construction activities of the Captive Port shortly.
32	Captive port by M/s. Chettinad Power Corporation Ltd.	Tharangambadi Taluk NagapattinamTamil	3.5	75000	The company is awaiting environment clearance from the Ministry of Environment and Forest.

Sl. No	Project	State/ Ports Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
		Nadu			
33	2nd stage Development of Modern Sea Port	Karwar Karnataka	5	1500	Issue of bid documents is under progress.
34	Development of Modern Sea Port at Tadri in Karnataka coast line.	Tadri Karnataka	34	3000	IDD Nominated KSIIDC as nodal agency. Preparation of DPR is under progress.
35	New Haldipur Port	Haldipur Karnataka	18	1900	DPR under progress by Mineral Enterprises Limited, Bangalore.
36	Development of Honnavar anchorage port	Honnavar Karnataka	2	200	M/s. Honnavar Port Ltd., has submitted DPR for the approval of the Government.
37	Development of Manki port near Honnavar	Manki Karnataka	1	46	M/s. Renuka Sugar is in the process of preparing DPR for construction of captive jetty.
38	7th Berth at Kakinada	Kakinada Deep Water Port Andhra Pradesh	2.5	600	Yet to commence.
39	Fertiliser Mechanisation Plant in 6th Berth	Kakinada Deep Water Port Andhra Pradesh	5.0	3500	Initial stage
40	Gangavaram port Ltd.	Gangavaram port Ltd Visakhapatnam	16.54 MTPA	168	Commercial Operation started during 2009
41	Development of Machilipatnam port Ltd.	Machilipatnam Andhra Pardesh	31MTPA Phase – 1 200 MTPA Master Plan	50740	Construction work is scheduled to commence upon handling over of land for Port Development by GoAP.
42	VANPIC	Vadarevu Port Andhra Pradesh	24	18420	1. DPR approved by Govt. of AP 2. All clearances including Environmental clearance from MoEF. GOI, obtained 3. Port Construction is awaiting : a) Transfer of lands on lease by Govt.of AP (GoAP) to VANPIC Ports

Sl. No	Project	State/ Ports Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
					b) Approval of R&R scheme c) Provision by GoAP of External Infrastructure by GoAP
43	Development of Azhikal port through private sector development	Azhikkal, Kerala	**	Phase -1 1. 400 2. 770 3. 5000	Bidding process being undertaken ** Phase -1 1.Multi-purpose terminal-Capacity of 1.8 Million tones II. Cement terminal-Capacity of 2.25 Million tonnes III. Shipbuilding & repair yard- Capacity to build/repair atleast 5 ships upto 3000 DWT
44	Operations ,Maintenance & marketing of Kollam port through private sector.	Kollam, Kerala	Phase -1 2.70	Phase -1 917.80	Discussions with private sector in progress.
45	Development of Marina & other tourism related facilities at Alappuzha	Alappuzha Kerala	@	i) 143.41 ii)709.22 iii)3.4 iv)407.09 Total project cost 1263.12	Project DFR and RFP have been prepared by Consultant and are in the process of being approved. @ (i)Inland marina & theme park-548 (ii) Land side activities 719 (iii)Water side activities1122 (iv)Passenger terminal-236
46	Development of Port at Subarnarekha Mouth(Kirtannia) (PPP Mode)	Subarnarekha Mouth (Kirtannia) Orissa	15 MTPA to 50 MTPA	23450	Land acquisition/alienation process is in progress.
47	Development of Port at Astaranga (PPP Mode)	Astaranga Orissa	12 MTPA to 58 MTPA	73420	Land acquisition/alienation process is in progress.
48	Captive port (PPP) Mode	Chudamani	3 MTPA to 10 MTPA	N.A	MoU signed on 22.10.2009 between Government of Odisha and Aditya Birla Group (Essel Mining & Industries Limited)

Annex-I

Outlay And Expenditure - Port Sector (Central)

(Rs. In crore)

Port	Annual Plan (2006-2007)		Annual Plan (2007-2008)		Annual Plan (2008-2009)		Annual Plan (2009-2010)		Annual Plan (2010-11)		Annual Plan (2011-12)		Annual Plan (2012-13)	
	App. Outlay	Actual Exp.	App. Outlay	Actual Exp.	App. Outlay	Actual Exp.	App. Outlay	Actual Exp.	App. Outlay	Actual Exp.	App. Outlay	Actual Exp.	App. Outlay	Actual Exp.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Kolkata (a)	50.04	71.99	37.37	63.05	44.97	53.64	58.00	48.85	50.88	49.76	63.73	21.29	28.45	17.34
Mumbai	59.86	14.55	50.36	26.10	150.00	23.50	192.00	146.09	179.58	116.76	176.57	142.05	279.79	149.30
JNPT	106.14	40.71	188.18	70.28	175.17	48.77	324.00	177.94	89.61	38.24	153.69	140.52	341.18	240.21
Chennai	35.00	26.07	47.81	44.41	72.95	48.98	34.00	58.37	243.00	184.46	136.00	4.44	145.00	81.75
Cochin	73.84	72.89	158.52	139.07	255.65	246.33	191.97	190.93	259.35	160.86	115.08	92.21	93.45	78.47
Visakhapatnam	27.33	43.80	83.00	36.61	39.97	31.44	65.01	75.74	151.00	121.19	190.00	113.45	102.71	57.92
Kandla	94.66	80.19	89.49	38.25	140.87	58.07	115.00	62.64	45.66	52.70	92.27	52.82	166.89	138.44
Mormugao	28.06	20.77	10.10	11.18	22.07	17.52	71.00	31.01	66.29	71.52	108.93	69.17	71.36	46.95
Paradip	83.40	23.15	100.00	42.05	288.00	101.47	276.51	128.19	166.21	81.26	70.00	74.80	127.31	73.73
New Mangalore	18.00	18.02	36.00	25.81	30.00	30.11	34.00	32.48	31.00	24.56	36.00	38.45	36.00	45.50
Tuticorin	52.31	29.11	79.46	63.16	96.87	65.12	220.50	39.03	90.94	172.08	291.97	369.65	201.42	42.63
Ennore Port Ltd.	70.00	9.57	61.00	34.53	70.00	102.43	95.01	50.52	95.00	70.12	60.00	61.92	73.50	80.03
Sethusamudram Ship Canal Project	304.00	334.66	664.22	119.47	1581.07	152.24	161.10	20.98	10.00	6.02	10.01	8.51	4.00	2.12*
WEB Based EDI Port Community System	7.83	1.66	7.50	0.04	6.00	1.00	3.00	3.33	4.88	4.46	2.38	2.01	2.00	2.00
Others (b)	333.78	213.64	477.26	170.67	598.38	88.50	564.90	161.68	362.86	223.31	673.09	518.08	901.87	579.43
Survey Vessels	20.00	0.00	19.00	0.00	79.00	5.00	10.00	0.00	15.00	15.00	15.00	15.00	0.00	0.00##
Total	1364.25	1000.81	2109.27	884.68	3650.97	1143.10	2416.00	1227.8	1861.26	1392.30	2194.72	1724.37	2574.93	1633.70

(a) Includes Haldia and RR Schemes.

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

* The amount is received as equity from Govt. of India and other stakeholders.

App.Outlay: Approved Outlay

##- Not Available

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

Annex-II

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	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	682	450	0	8	69	0	6818	317	4206	12233
	2012-13	668	158	0	45	42	309	6960	463	3662	11844
Haldia	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	6582	3943	2346	4939	519	3	2619	115	10064	31015
	2012-13	6196	1715	1976	4502	387	0	2869	137	10439	28084
Paradip	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	15091	6556	16404	5159	4783	0	109	8	6152	54254
	2012-13	16466	1834	21394	4912	4146	0	171	13	7629	56552
Visakha-	2009-10	18291	18944	3771	7951	3684	226	1678	98	10956	65501
patnam	2010-11	19242	19347	3538	7926	4079	203	2572	146	11134	68041
	2011-12	17428	16243	3189	6874	4551	517	4213	234	14405	67420
	2012-13	15035	12568	2951	6845	2588	1122	4554	247	13377	59040
Chennai	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	13290	97	610	351	643	190	30076	1555	10450	55707
	2012-13	13424	52	0	0	422	331	29708	1539	9467	53404
Ennore	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	502	0	12646	465	0	0	0	0	1343	14956
	2012-13	1124	0	14240	685	0	0	0	0	1836	17885
Tuticorin	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	630	33	6050	0	2025	307	9227	477	9833	28105
	2012-13	792	0	6661	0	1051	128	9373	476	10255	28260
Cochin	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	14084	0	34	0	430	0	4715	337	827	20090
	2012-13	13896	0	28	0	353	0	4607	335	961	19845
New	2009-10	21339	7062	0	2810	833	161	475	31	2848	35528
Mangalore	2010-11	21551	3744	0	2856	788	116	568	40	1927	31550
	2011-12	22245	3036	0	4022	825	58	645	45	2110	32941
	2012-13	24301	2616	2553	4357	536	204	692	48	1777	37036
Mormugao	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	923	29370	1163	5669	93	0	279	22	1552	39049
	2012-13	823	7421	768	6605	78	60	213	20	1725	17693
J. L. Nehru	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	4845	0	0	0	4	19	58233	4317	2629	65730
	2012-13	4125	0	0	0	0	0	57912	4259	2453	64490
Mumbai	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	30611	0	4622	0	404	894	551	56	19104	56186
	2012-13	34065	0	4018	0	512	31	828	58	18584	58038
Kandla	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	46938	991	4064	161	6058	1291	2791	168	20207	82501
	2012-13	54355	1006	4064	374	4624	3783	1934	118	23479	93619
All Ports	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	173851	60719	51128	27648	20404	3279	120276	7651	102882	560187
	2012-13	185270	27370	58653	28325	14739	5968	119821	7713	105644	545790

P : Provisional

Source: Major Ports and Indian Ports Association.

Annex-III

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	2009-10	132817	6845	9321	21636	5021	29943	205583
	2010-11	140874	7156	8798	29731	6085	38263	230907
	2011-12	151487	6919	9022	38372	7185	46065	259050
	2012-13	164670	7635	13857	55875	5617	40163	287817
Maharashtra	2009-10	0	5055	2199	2880	221	1691	12046
	2010-11	0	5120	2277	4997	228	2253	14875
	2011-12	0	6362	2490	7589	230	3276	19947
	2012-13	0	7882	2044	10363	0	3909	24198
Andhra pradesh	2009-10	3666	15263	708	15243	4174	4636	43690
	2010-11	2786	8957	484	19618	5799	5623	43267
	2011-12	3508	2974	859	23512	7035	7745	45633
	2012-13	1757	977	1002	30740	4895	12457	51828
Goa	2009-10	0	13679	0	218	0	0	13897
	2010-11	0	14581	0	0	0	0	14581
	2011-12	0	14305	0	165	0	0	14470
	2012-13	0	3276	0	113	0	0	3389
Tamil Nadu	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
	2012-13	855	0	6	0	29	43	933
Karnataka	2009-10	36	7841	29	0	0	641	8547
	2010-11	31	2322	77	0	17	648	3095
	2011-12	0	0	19	0	29	544	592
	2012-13	65	0	54	0	58	429	606
Others states / Uts #	2009-10	166	130	885	1299	40	1480	4000
	2010-11	184	130	684	4116	538	1370	7022
	2011-12	213	56	469	9402	1217	1486	12843
	2012-13	620	2167	528	13547	611	1981	19454
All Non Major PORTS	2009-10	137720	48813	13142	41276	9501	38485	288937
	2010-11	145378	38266	12327	58462	12725	48200	315358
	2011-12	156322	30616	12866	79040	15742	59159	353745
	2012-13	167967	21937	17491	110638	11210	58982	388225

: Includes Pondicherry, Orissa, Kerala, Andaman & Nicobar Islands and Lakshadweep Islands.
(1) No traffic was handled at ports Daman & Diu.

Commodity-Wise Capacity Available at Major Ports

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 31.3.08	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
As on 31.3.13	4.50	17.00	43.00	17.65	3.00	17.67	2.30	19.01	49.17	1.50	32.00	66.60	5.50	278.90
Iron Ore														
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
As on 31.3.13	-	6.00	4.50	12.50	6.00	8.00	-	-	7.50	27.50	-	-	-	72.00
Coal														
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
As on 31.3.13	-	7.00	20.00	-	21.00	-	12.55	-	5.40	-	-	-	-	65.95
Fertiliser														
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
As on 31.3.13	-	-	7.50	1.00	-	-	-	0.80	-	-	-	-	-	9.30
Break-Bulk Cargo														
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
As on 31.3.13	6.74	12.75	27.30	33.50	1.00	17.92	13.49	12.35	14.70	7.40	11.53	19.42	0.90	179.00
Container														
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
As on 31.3.13	5.90	4.00	-	2.68	-	42.00	5.00	12.50	-	-	1.00	7.20	59.48 @	139.76
TOTAL														
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
As on 31.3.12	17.14	46.75	102.30	67.33	31.00	85.59	33.34	44.66	76.77	36.40	44.53	93.22	65.88	744.91

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

@ : Capacity of JNP Container Termnal (3berths), NSICT (2berths), GTIPL (3berths) & 1 shallow water berth has been taken as 16.88 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, 7/8 ID are ID are used as holding berth for MbPT crafts & no capacity has been accounted.

Source : Development Wing - Department of Shipping.

PROVISIONAL COMMODITY WISE CAPACITY OF MAJOR PORTS AS ON 31.3.2013

(IN MILLION TONNES)

Sl no.	Commodity	Kolkata	Haldia	Paradip	Vizag	Chennai	Ennore	Tuticorin	Cochin	New Mangalore	Mormugao	Mumbai	Kandla	J.N.P.T	Total
1.	P.O.L	4.50+4.0 (7)+A	17.00 (3+2BJ)	43.00(1+3)+SBM	17.65 (4)+SBM	17.67 (2)	3.00 (1)	2.30 (1)	19.01.70 (3)+ SBM	49.17 (5+ISPM)	1.50 (1)	32.00 (5)	66.60 +0.8 (8+3SBM) A	5.50 (2)	278.90+4.80 (43+8SBM+ 2BJ)
2.	IRON ORE		6.00 (2)	4.50 (1)	12.50 (1)	8.00 (1)	6.00(1)			7.50 (1)	27.50 (1)+3Trans				72.00 (8+3Trans)
3.	Coal (Thermal)		7.00 (2)	20.00 (2)			21.00 (3)	12.55 (3)		5.40 (1)					65.95 (11)
4.	Fertilizer			7.50 (2)	1.00 (1)				0.80 (1)						9.30 (4)
5.	Gen. Break Bulk Cargo	6.74+0.51 (22)+A	12.75 (8)	27.30 (9)	33.5 (15)	17.92 (14)	1.00 (1)	13.49 (10)	12.35 (12)	14.70 (8)	7.40 (4)	11.53+6.0(25)A	19.42 (12)	0.90 (1)	179.11+ 6.50(141)+ A
6.	Containers	5.90 (4)	4.00 (2)		2.68 (1)	42.00 (7)		5.00 (1)	12.50 (3)			1.00 (1)	7.20 (2)	59.48 @ (9)	139.76 (29)
Total		17.14+4.51 (33)+A	46.75 (17+2BJ)	102.30 (15+3SBM)	67.33 (22)	85.59 (24)	31.00 (6)	33.34 (15)	44.66 (18+1SBM)	76.77 (15+1SPM)	36.40 (6+3Trans)	44.53+6.0 (31)+A	93.22+0.8(22+3SBM) +A	65.88 (12)	744.91+11.31(236)+8SBM+Trans+2BJ)+A

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

@ Capacity of JNP container terminal (3 berths), NSICT (2 berths) GTIL (3 berths) and shallow water berth (1 no) has been taken as 16.88 MT, 15.00 MT, 26.40 MT and 1.20 MT respectively. Capacity of one shallow water berth at JNPT is 0.90 MT for dry bulk cargo.

Capacity of Chennai Container Terminal I (4 berths) and II (3 berths) has been taken as 24MT and 18MT respectively.

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

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