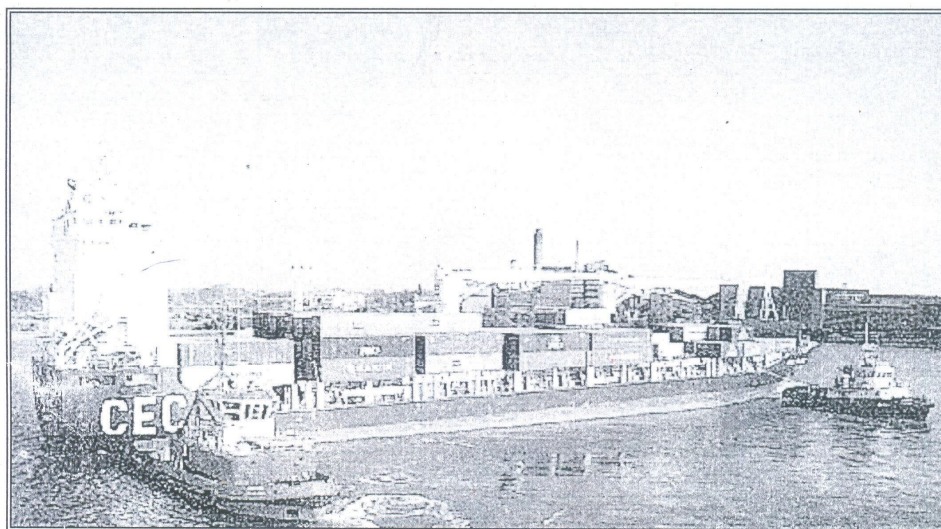


# भारत के पत्तन क्षेत्र का अद्यतन

## UPDATE ON INDIAN PORT SECTOR

(31.03.2014)



सत्यमेव जयते

परिवहन अनुसंधान प्रभाग  
TRANSPORT RESEARCH WING  
पोत परिवहन मंत्रालय  
MINISTRY OF SHIPPING  
भारत सरकार  
GOVERNMENT OF INDIA  
नई दिल्ली  
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## PREFACE

As per the decision of the Maritime State Development Council, the Transport Research Wing in the Ministry of Shipping has been bringing out the biannual publication "*Update on Indian Port Sector*". Present issue (upto March, 2014) is twenty-third in the series of the publication "*Update on Indian Port Sector*". The last issue contained data up to September, 2013.

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, 2014. 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.

June, 2014

  
( Dr.Vishwapati Trivedi )

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# UPDATE ON INDIAN PORT SECTOR

(UP TO 31.03.2014 )

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# **1. RECENT TRENDS IN CARGO TRAFFIC AND POLICY INITIATIVES**

## **1.1 International and Domestic Factors Related to Seaborne Trade**

1.1.1 Global activity has broadly strengthened and is expected to improve further in 2014–15, with much of the impetus coming from advanced economies. Inflation in these economies, however, has undershot projections, reflecting still-large output gaps and recent commodity price declines. Activity in many emerging market economies in a less favorable external financial environment is below expectations, although they continue to contribute more than two-thirds of global growth. Their output growth is expected to be lifted by stronger exports to advanced economies. However, there are risks to activity from lower-than-expected inflation in advanced economies, and also geopolitical risks which have resurfaced.

1.1.2 The renewed increase in financial volatility in late January of this year highlights the challenges for emerging market economies posed by the changing external environment. Some emerging market economies have tightened macroeconomic policies to shore up confidence and strengthen their commitment to policy objectives. Looking ahead, global growth is projected to strengthen from 3 percent in 2013 to 3.6 percent in 2014 and 3.9 percent in 2015. In advanced economies, growth is expected to increase to about 2.3 percent in 2014–15, an improvement of about 1 percentage point compared with 2013. Key drivers are a reduction in fiscal tightening, except in Japan, and still highly accommodative monetary conditions. Growth in the United States at 2.8 percent is expected to be strongest.

1.1.3 In emerging market and developing economies, growth is projected to pick up gradually from 4.7 percent in 2013 to about 5 percent in 2014 and 5.3 percent in 2015. Growth may be helped by stronger external demand from advanced economies. However, tighter financial conditions may dampen domestic demand growth. In China, growth is projected to remain at about 7.5 percent in 2014 as the

authorities seek to rein in credit and advance reforms while ensuring a gradual transition to a more balanced and sustainable growth path.

1.1.4 The global recovery remains fragile despite improved prospects. The risks related to emerging market economies due to the changing external environment i.e. rapid normalization of U.S. monetary policy or renewed bouts of high risk aversion on the part of investors could result in further financial turmoil. This could lead to difficult adjustments in some emerging market economies, with a risk of contagion and broad-based financial stress, and thus lower growth.

1.1.5 The global economy slowed in 2013, with real GDP declining from 3.2% in 2012 to 3.0% in 2013. Both the advanced and developing economies had slowed in 2013. Global activity strengthened in the second half of 2013, as did world trade, but the pickup was uneven: broad based in advanced economies, but mixed in emerging market economies. Although export growth improved, domestic demand growth remained mostly unchanged. Global growth picked up in the second half of 2013, averaging 3.6 percent—a marked uptick from the 2.6 percent recorded during the previous six months. Advanced economies accounted for much of the pickup, whereas growth in emerging markets increased only modestly. The strengthening in activity was mirrored in global trade and industrial production.

1.1.6 Growth in advanced economies is projected to strengthen moderately in 2014–15, building up momentum from the gains in 2013. Growth in the United States will remain above trend, and growth in Japan is expected to moderate, mostly as the result of a modest fiscal drag. Among emerging market economies, growth is projected to remain robust in emerging and developing Asia and to recover somewhat in Latin America and the Caribbean.

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

<b>Table 1- Growth in Cargo handled at Indian Ports and related parameters (in %)</b>					
<b>Parameters</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Trends in India's Select : Macro Parameters					
<b>I. Total Cargo</b>	14.3	4.2	3.1	2.2	4.6
(a) Major Ports	5.8	1.6	-1.7	-2.6	1.8
(b) Non Major Ports	35.7	9.1	12.2	9.7	8.3
<b>II. GDP overall</b>	8.4	9.3	6.3	4.5	4.7
(a) Agriculture	1.0	7.9	5.7	1.4	4.7
(b) Industry	8.4	9.2	6.2	1.0	0.4
(c) Services	10.5	9.8	6.5	7.0	6.8
<b>III. Foreign Trade</b>					
(a) Export in \$ value	-3.5	40.5	21.8	-1.8	4.1P
(b) Import in \$ value	-5.0	28.2	32.3	0.3	-8.3P
Trends in Select : Global Indicators					
<b>IV. World Output</b>	-0.4	5.2	3.9	3.2	3.0
(a) Advanced Economies	-3.4	3.0	1.7	1.4	1.3
(b) Developing Economies	3.1	7.5	6.3	5.0	4.7
<b>V. World Economic Growth</b>	-2.2	4.1	2.8	2.2	2.1F
(a) Advanced Economies	-3.8	2.6	1.5	1.2	1.0F
(b) Developing Economies	2.4	7.9	5.9	4.6	4.7F
(c) Transition Economies	-6.6	4.5	4.5	3.0	2.7F
<b>VI. World Trade Volume (Goods)</b>	-11.7	14.0	6.6	2.6	2.7
<b>VII. Export Volume growth (Goods)</b>					
(a) Advanced Economies	-13.4	14.3	6.0	1.8	1.8
(b) Developing Economies	-8.1	13.8	6.9	4.8	4.0
<b>VIII. Import Volume (Goods)</b>					
(a) Advanced Economies	-13.1	13.5	5.2	0.5	1.2
(b) Developing Economies	-9.6	14.9	10.0	5.4	5.3
<b>IX. World Seaborne Trade*</b>	-5.0	7.4	4.3	4.4	NA
(a) Goods Loaded	-4.5	7.0	4.5	4.3	NA
(b) Goods Unloaded	-5.5	7.8	4.2	4.4	NA
I. Based on data from Major Ports and Non Major Ports II. Based on gross domestic product (GDP) at Factor Cost (2004-05 Prices), Central Statistical Organization; III. Based on Department of Commerce, DGCI&S and RBI Bulletin IV, VI, VII & VIII Based on World Economic Outlook, April ,2014, IMF; V & IX. Based on Review of Maritime Transport, 2013, UNCTAD Note : MT: Million Tonnes; For item Nos. IV, VI, VII & VIII year 2009-10 refers to calendar year 2009 and so on; F refers to forecast. P-Provisional * growth in total goods loaded plus unloaded; NA ; Not Available					

## Selected Emerging Trends Affecting Seaborne Trade

1.1.8 Despite the positive growth in 2012, international seaborne trade remains vulnerable to many downside risks and exposed to some potentially game-changing trends that could redefine the maritime transport operating landscape. International shipping is facing a new and complex environment that involves both challenges and opportunities, including the demand and supply mismatch, continued global economic uncertainty and geopolitical tensions. Of all the prevailing challenges however, the interconnected issues of energy security and costs, climate change and environmental sustainability are perhaps the most unsettling. Climate change in particular continues to rank high on the international policy agenda, including of shipping and port business. With climate change effects already being



felt globally and in the absence of adequate climate change mitigation and adaption action, shipping and ports and therefore international seaborne trade are likely to be severely affected by the potentially devastating impacts of this change (for example, extreme weather events and rising sea levels).

## General Trends in Seaborne Trade

<b>Table 2 - Developments in International Seaborne Trade (Million Tonnes)</b>				
<b>Year</b>	<b>Oil and gas</b>	<b>Main Bulk#</b>	<b>Other Dry Cargo</b>	<b>Total</b>
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	2794	2486	3505	8784
2012	2836	2665	3664	9165
# 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, 2013, UNCTAD				

1.1.9 Driven in particular by a rise in China's domestic demand as well as increased intra-Asian and South– South trade, international seaborne trade performed better than the world economy, with volumes increasing at an estimated 4.3 per cent in 2012, nearly the same rate as 2011. About 9.2 billion tonnes of goods were loaded in ports worldwide, with tanker trade (crude oil, petroleum products and gas) accounting for less than one third of the total and dry cargo being responsible for the remaining lion's share. Strong growth (5.7 per cent) in dry-cargo shipments remained the mainstay of the expansion in 2012, driven in particular by continued rapid growth in dry bulk volumes. Fuelled by growing Asian demand for iron ore and coal and in line with the long-term trend, major dry-bulk shipments expanded at the rate of 7.2 per cent. China, which has contributed significantly to the growth of seaborne trade in recent years, continues to generate impressive import volumes. Although iron-ore import growth has moderated compared with high previous levels, coal has stepped in to fill the gap.

1.1.10 Reflecting to a large extent their increased participation in the world trading system, developing countries continued to contribute larger shares to international seaborne trade. In 2012, they accounted for 60 per cent of global goods loaded and 58 per cent of goods unloaded in 2012. However, while the group's share has been on the rise, contributions by individual countries have been uneven,

reflecting their respective varying levels of integration into global trading networks and supply chains.

1.1.11 While, in line with previous trends, cargo volumes loaded in the ports of developing countries exceeded the volumes of goods unloaded, their shares have nevertheless evolved over the past four decades to reach near parity in 2012. Driven by the fast-growing import demand in developing regions – fuelled by their industrialization process and rapidly rising consumer demand – for the first time ever the share of goods unloaded in developing countries is likely soon to surpass their share of goods loaded

### **Crude Oil and Petroleum products**

1.1.12 Volumes of crude oil and refined petroleum products grew marginally at 1.5 per cent in 2012. Though the economic slowdown, high oil price levels and new technologies have dampened demand for crude oil, petroleum-product trade fared better in comparison.

1.1.13 Reflecting oil supply and demand dynamics, global crude-oil shipments grew by 1.3 per cent in 2012 with total volumes reaching 55.3 million bpd. Crude oil carried on board tankers accounted for two thirds of this total and increased by an estimated 1.5 per cent taking the total volume to 1.78 billion tonnes. Growth was particularly boosted by increased global production and inventory-building ahead of the embargo involving oil trade with the Islamic Republic of Iran.

1.1.14 In 2012, crude oil import volumes increased by 7.4 per cent in China and over 4.0 per cent in India (British Petroleum, 2013). As these countries continue to build local refineries, their crude oil imports will also increase, including from sources in West Africa and Latin America. This trend is likely to alter the direction of cargo flows, raise demand for tankers and increase tonne–miles. However, a potentially offsetting pattern is that a growing proportion of imports into China are likely to be delivered through pipelines from Kazakhstan, the Russian Federation and Myanmar. New trading lanes both for refined petroleum products and crude oil are emerging in tandem with changes in production, volume and structure of demand as well as the location of global refineries.

## **Dry-cargo Bulks:**

1.1.15 Despite the weakness of the global economy, dry cargo trade volumes continued to grow at a healthy rate of 5.7 per cent in 2012, taking total volumes above the 6 billion tonnes mark. The volume of dry-bulk cargo including the five major bulk commodities (iron ore, coal, grain, bauxite/alumina and phosphate rock) and minor bulks( agri bulks, fertilizers, metals, minerals, steel and forest products) increased by 6.7 per cent in 2012 (Clarkson Research Services, 2013). A breakdown of this total indicates that much of the growth was generated by the expansion in the five major bulk commodities (7.2 per cent) and to a lesser extent by growth in the minor bulks (4.6 per cent), which in volume terms have added nearly 500 million tonnes to world seaborne trade between 2002 and 2012 (Clarkson Research Services, 2013). During the year the five major bulk commodities totalled about 2.7 billion Tonnes while the volume of minor dry bulks reached 1.4 billion tonnes. Together, major and minor dry bulks accounted for nearly two thirds of global dry-cargo volumes. The main caution, however, to growth in dry-bulk trade is the continued high dependence on the Asian demand and on only two key commodities, namely iron ore and coal.

## **Coal**

1.1.16 Coal is the fastest-growing fossil fuel, accounting for 30 per cent of global primary energy consumption in 2012. Driven by non-OECD countries, global consumption expanded by 2.5 per cent in 2012 while production increased by 2 per cent (British Petroleum, 2013). During the year, the total volume of coal shipments (thermal and coking) increased at an annual rate of 12.3 per cent and surpassed the 1.06 billion tonnes mark for the first time. Thermal-coal trade, which accounted for 78 per cent of the total, increased at a strong rate of 14.2 per cent in 2012.

1.1.17 Coking-coal trade grew 5.4 per cent in 2012 driven by increases in import volumes of 43.7 per cent and 8 per cent in China and India, respectively. Elsewhere, imports into Europe and the Republic of Korea were constrained by limited growth in steel production.

1.1.18 Coal trade is set to grow in tandem with growing import demand from China and as Indian installations of coal-fired power stations expand. However, growing environmental regulation, including in Europe, together with the upside potential of China given its large domestic coal resources, may have an offsetting effect and result in a much moderated growth.

1.1.19 In a separate development, it should be noted that new coal power plants are expected to come on stream between 2012 and 2020 in Europe. These plants should reach a capacity nearly double the existing capacity during the preceding eight-year period and result in approximately 80 power plant units being newly built or replaced (Research and Markets, 2012). These developments are likely to affect demand for coal and further shape the flows and patterns of coal trade.

### **Iron ore shipments and steel production and consumption**

1.1.20 As iron ore is a key ingredient used in steel production, its trade is largely determined by developments in the steel sector. According to data from the World Steel Association, global apparent steel use and steel production each increased by 1.2 per cent during 2012 (World Steel Association, 2013). China continued to increase its production with its market share rising from 45.4 per cent in 2011 to 46.3 per cent in 2012. Against this background, iron-ore trade expanded by 5.4 per cent in 2012, taking the total volumes to 1.11 billion tonnes. Major iron-ore exporters were Australia, Brazil, Canada, India, South Africa and Sweden. Together, Australia and Brazil account for 73.5 per cent of global exports. Australia, the largest world exporter (44.5 per cent share), increased its shipments by 12.8 per cent. Similarly, other exporters such as Canada, South Africa and Sweden have also increased their shipments, while in India, mining bans and taxes on iron-ore exports have significantly constrained the country's export volumes (–52.8 per cent). As a result, India's market share declined and a structural shift unfolded, whereby India has moved from being a major exporter to a net importer and its import demand is likely to increase over the next few years.

### **Dry cargo: Minor bulks**

1.1.21 In 2012, minor-bulks trade increased at a slower annual rate than in the previous year, growing by 4.6 per cent and taking the total volumes to 1.4 billion tonnes. Metals and minerals accounted for 45.6 per cent of this total followed by manufactures (33.0 per cent) and agribulks (21.3 per cent). The largest growth was recorded in the metals and minerals segment (for example, cement, nickel ore, anthracite) with volumes growing by 6.0 per cent year-on-year. The next largest contributor to growth was the manufactures sector (for example, steel and forest

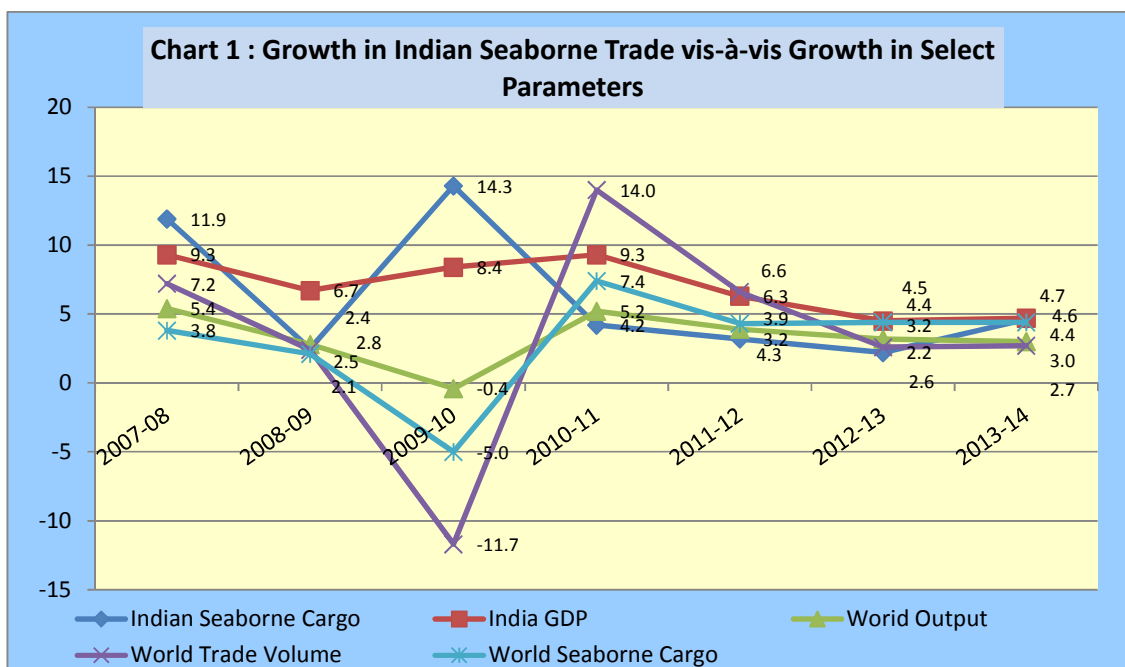
products) with 3.6 per cent annual growth. Recently, trade patterns have been shifting in the manufactures sector owing to the surge in Chinese exports with flows destined mainly for other Asian countries, Africa and developing America. Ample supply of the more affordable Chinese steel, supported by a strong global demand, has boosted trade in steel products. Finally, agribulks (soymeal, oilseed/meal and rice) also expanded at 3.5 per cent, despite a drop in sugar and potash volume.

### **Other dry cargo: Containerized trade**

1.1.22 For many decades, containerized trade has been the fastest-growing market segment accounting for over 16 per cent of global seaborne trade by volume in 2012 and more than half by value (in 2007). Containerized trade, which accounted for 65 per cent of “other dry cargo” in 2012 (that is, nearly two thirds of the 2.28 billion tonnes of dry cargo that remain after removing dry-bulk commodities), increased by 3.2 per cent in 2012, down from 13.1 per cent in 2010 and 7.1 per cent in 2011. The sharp deceleration resulted from the depressed volumes on the main lane East–West trade, in particular, the Asia–Europe trade route.

## **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** on next page.



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 2014, IMF and Review of Maritime Transport, 2013, UNCTAD.

### 1.3 Cargo Traffic at Indian Ports

1.3.1 During 2013-14, Major and Non-major Ports in India have accomplished a total cargo throughput of 975.73 million tonnes reflecting a modest increase of 4.6% over 2012-13 compared to a growth of 2.2 % in the previous year. The growth in cargo handled at Major and Non-major ports in 2013-14 were 1.8% and 8.3% respectively compared to -2.6% and 9.7% achieved in 2012-13.

1.3.2 The year 2013-14 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 1.5% in 2011 to 1.2% in 2012 and further to 1.0% in 2013. (b) India's GDP growth slowed down from 6.3% in 2011-12 to 4.7% in 2013-14. Slowdown and decline was pronounced in case of India's GDP pertaining to industrial sector: from 6.2% in 2011-12 to 0.4% in 2013-14; (c) series of judicial interventions leading to ban/restrictions on iron ore exports which resulted in about 30% decline in its export.

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** above. Trend in traffic handled at Major and Non-major ports is given in **Table 3**.

<b>Table 3- Traffic Handled at Indian Ports</b>							
	<b>(Million Tonnes)</b>						
Major/Non-Major	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14(P)
Major Ports	519.31	530.80 (2.2)	561.09 (5.7)	570.09 (1.6)	560.19 (-1.7)	545.83 (-2.6)	555.49 (1.8)
Non-Major Ports	206.38	213.22 (3.3)	288.94 (35.5)	315.36 (9.1)	353.74 (12.2)	387.92 (9.7)	420.24 (8.3)
All Ports	725.69	744.02 (2.5)	850.03 (14.3)	885.45 (4.2)	913.93 (3.1)	933.75 (2.2)	975.73 (4.6)

(P)- Provisional

Note: Figures in parenthesis indicate growth over the previous year.

## 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 2013-14 at 555.49 million tonnes increased by 1.8% compared with 545.83 million tonnes handled in 2012-13.

1.4.2 The year 2013-14 witnessed an increase in total cargo traffic of 1.8% over the preceding year and a shortfall with respect to the target set for 2013-14 by 8.8% (**Table-4**). The year 2013-14 was a challenging year for the Port Sector as (a) growth in European Union has been negligible in 2013 (b) India's GDP growth slightly improved from 4.5% in 2012-13 to 4.7% in 2013-14. Growth was pronounced in case of India's GDP pertaining to Agriculture Sector from 1.4% in 2012-13 to 4.7% in 2013-14 and (c) series of judicial interventions leading to ban/restrictions on iron ore mining resulted in decline in its export, particularly, Iron ore. In 2013-14, major ports handled 24.8 million tonnes of Iron ore cargo which was lower than the iron ore handled during 2012-13 by 2.5 million tonnes.

<b>Table 4 - Annual Cargo Traffic Targets and Actual Cargo traffic handled during 2013-14</b>				
S.No.	Name of Ports	Cargo Traffic		Shortfall in Target Achievement (%)
		Target 2013-14	Actual 2013-14	
1	Kolkata Port System	13.00	12.87	-1.01
2	Haldia Dock Complex	34.50	28.51	-21.01
3	Paradip Port	68.00	68.00	0.00
4	Visakhapatnam Port	67.00	58.50	-14.53
5	Ennore Ports Limited	28.00	27.34	-2.41
6	Chennai Port	55.00	51.11	-7.61
7	Tuticorin (new VOC Port )	32.00	28.64	-11.73
8	Cochin Port	23.60	20.89	-12.97
9	New Mangalore Port	42.00	39.37	-6.68
10	Mormugao Port	13.35	11.74	-13.71
11	Mumbai Port	63.00	59.18	-6.45
12	Jawaharlal Nehru Port	65.00	62.33	-4.28
13	Kandla Port	100.00	87.01	-14.93
	<b>Total</b>	<b>604.45</b>	<b>555.5</b>	<b>-8.81</b>

1.4.3 During 2013-14, Ennore port recorded highest growth in traffic 52.8% followed by Paradip (20.2%), Kolkata Dock System (8.7%), NMPT (6.3%) and Cochin (5.3%). Major ports which recorded **negative growth** in traffic during 2013-14 were: Mormugao (33.8%), Kandla (7.1%), Chennai Port (4.3%) and JNPT (3.3%). Amongst the Major Ports, Kandla Port handled the maximum Cargo of 87.00 million tonnes with a share of 15.7% in total cargo handled at major ports followed by Paradip (12.2%), JNPT (11.2%), Mumbai (10.7%), Vishakhapatnam (10.5%), Chennai (9.2%), NMPT (7.1%), Tuticorin (5.2%), Haldia Dock Complex ( 5.1%) during 2013-14. 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 1.8% increase in cargo traffic during 2013-14 at 12 major ports reflects the fact that only two major ports were able to clock more than 10% growth namely Ennore (52.8%) and Paradip (20.2%) (**Table 5**).

<b>Table 5 - Traffic Handled at Major Ports</b>						
<b>(Thousand Tonnes)</b>						
<b>Ports</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14 (P)</b>	<b>% change 2013-14 / 2012-13</b>
1	2	3	4	5	6	7
Kolkata	46423	47545	43248	39928	41385	3.6
Kolkata DS	13045	12540	12233	11844	12874	8.7
Haldia DC	33378	35005	31015	28084	28511	1.5
Paradip	57011	56038	54254	56552	68003	20.2
Vizag	65501	68041	67420	59038	58503	-0.9
Ennore	10703	11009	14956	17885	27337	52.8
Chennai	61057	61460	55707	53404	51105	-4.3
Tuticorin	23787	25727	28105	28260	28642	1.4
Cochin	17429	17873	20090	19845	20887	5.3
New Mangalore	35528	31550	32941	37036	39365	6.3
Mormugao	48847	50060	39049	17738	11739	-33.8
Mumbai	54541	54586	56186	58038	59184	2.0
JNPT	60763	64317	65730	64488	62333	-3.3
Kandla	79500	81880	82501	93619	87005	-7.1
<b>All Ports</b>	<b>561090</b>	<b>570086</b>	<b>560187</b>	<b>545831</b>	<b>555488</b>	<b>1.8</b>

### **Commodity wise Cargo Traffic at Major Ports**

1.4.5 At a broad commodity level, during 2013-14, Coal and POL posted growth of 20.4% and 3.6% respectively. Cargo traffic in Iron ore and Fertilizers and FRM was adversely affected during 2013-14 and dropped by 9.2% and 7.4%



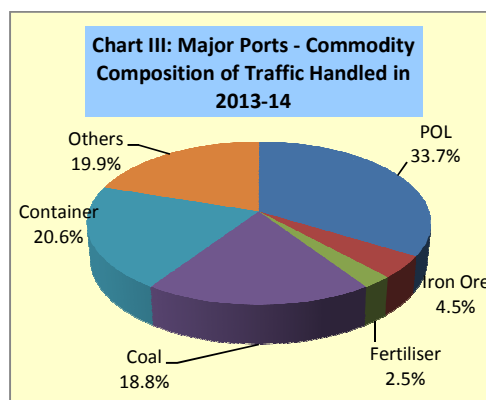
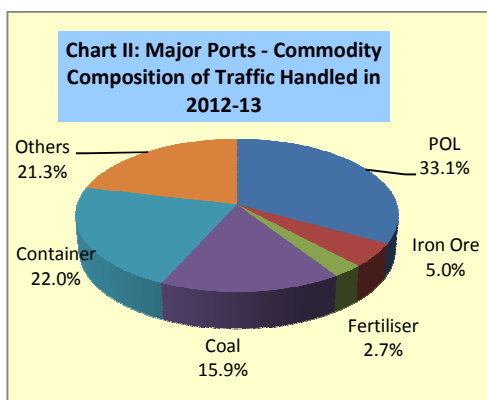
respectively. The decline in Iron ore traffic is mainly attributed to restrictions in mining of iron ore in Karnataka and ban in Goa (**Table 6**).

1.4.6 Growth in Coal traffic has accelerated to 20.4% during 2013-14 compared with 10.4% during 2012-13. The growth in Container traffic further slipped to -4.4% in 2013-14 from -0.4% in 2012-13.

1.4.7 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 (33.7%), Container traffic (20.6%), Other cargo (19.9%), Coal (18.8%), Iron ore (4.5%) and Fertilizer & FRM (2.5%).

<b>Table 6 - Commodity wise Traffic Handled at Major Ports</b>						
(Thousand Tonnes)						
<b>Commodities</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14(P)</b>	<b>% change 2013-14 / 2012-13</b>
1	2	3	4	5	6	7
POL	174861	179882	173851	180725	187162	3.6
Iron Ore	100892	87686	60719	27289	24766	-9.2
Fertiliser	17731	20798	20404	14797	13703	-7.4
1. Finished	10941	12367	12218	7469	6103	-18.3
2. Raw (DRY)	6790	8431	8186	7328	7600	3.7
Thermal Coal	43440	46145	51128	58772	71369	21.4
Coking Coal	28346	29001	27648	28032	33146	18.2
Container (Tonnes)	101244	114158	120276	119866	114641	-4.4
Others	94576	92416	106161	116350	110701	-4.9
<b>Total</b>	<b>561090</b>	<b>570086</b>	<b>560187</b>	<b>545831</b>	<b>555488</b>	<b>1.8</b>
(P): Provisional						

1.4.8 The shares of different commodities in total cargo traffic during 2012-13 and 2013-14 are depicted in the **Charts II and III** respectively (on next page). Energy imports consisting of POL and Coal constituted about 53% of the total cargo traffic at India's major ports.



POL: Petroleum, Oil & Lubricants

1.4.9 The Port-wise & commodity-wise traffic handled at major ports during 2009-10 to 2013-14 are given in **Annex 2**.

### Container Traffic

Table 7- Container Traffic at Major Ports (in thousand tonnes/TEUs)										
PORT	2010-11		2011-12		2012-13		2013-14(P)		% change 2013-14/ 2012-13	
	Tn	TEU	Tn	TEU	Tn	TEU	Tn	TEU	Tn	TEU
Kolkata DS	6220	377	6818	317	6960	463	7062	449	1.5	-3.0
Haldia DC	2835	149	2619	115	2869	137	2202	114	-23.2	-16.8
Paradip	69	4	109	8	171	13	99	9	-42.1	-30.8
Vizag	2572	146	4213	234	4554	247	4916	262	7.9	6.1
Chennai	29421	1485	30076	1555	29708	1539	28330	1468	-4.6	-4.6
Ennore	0	0	0	0	0	0	0	0	0	0
Tuticorin	8169	468	9227	477	9372	476	10129	508	8.1	6.7
Cochin	4419	310	4715	337	4607	335	4785	346	3.9	3.3
New Mangalore	568	40	645	45	692	48	747	50	7.9	4.2
Mormugao	220	18	279	22	258	20	235	19	-8.9	-5.0
JNPT	56426	4332	58233	4317	57911	4259	55234	4162	-4.6	-2.3
Mumbai	653	72	551	56	829	58	450	40	-45.7	-31.0
Kandla	2586	160	2791	168	1935	118	452	29	-76.6	-75.4
All Ports	114158	7561	120276	7651	119866	7714	114641	7456	-4.4	-3.3

1.4.10 Growth in container traffic (in million tonnes) which reflects largely trade in manufactures and components continued to decline. Container traffic in 2013-14 further declined by 4.4%. In terms of Twenty Foot Equivalent Units (TEUs), containers handled by Major Ports in 2013-14 decreased by 3.3% compared to 0.8% growth in 2012-13. Amongst the major ports, the ports at Kandla, Mumbai, Paradip, HDC, Mormugao, Chennai and JNPT witnessed fall in container traffic. Jawahar Lal Nehru Port continues to be the leading container handling port in the country with a share of 48.2% in terms of tonnage and 55.8% in terms of TEUs in the total container traffic at major ports (**Table 7**). Chennai port which handled about 25% of

container cargo is the second largest container handling port. The total throughput measured in terms of TEUs at all the major ports at 7.46 million TEUs in 2013-14 was less than a quarter of TEU throughput at the Shanghai port (2012) alone. Efficiency in container handling operations at some of the select container terminals in India is given in **Table 8**.

<b>Table 8- Performance Indicators of Select Container Terminals</b>							
<b>Terminal</b>	<b>Year</b>	<b>Moves / Crane</b>	<b>Moves / Berth</b>	<b>TEU /Mtr. Quay</b>	<b>TEU / Employee</b>	<b>Dwell Time(Day</b>	<b>TRT (Days)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
<b>Tuticorin</b>	2011-12	22	43	606	1544	2.7	1.2
	2012-13	23	45	1284	3446	1.3	1.1
	2013-14	22	41	1371	3613	1.1	1.1
<b>Chennai- CCTPL</b>	2011-12	21	38	620	1382	3.4	1.7
	2012-13	23.8	50.8	996.6	2151	2.4	2.6
	2013-14	26.5	59.9	830.6	1793	2.3	2.2
<b>Chennai - CITPL</b>	2011-12	30	42	294	1254	3.5	0.04
	2012-13	30	60.3	787.5	3360	3.5	0.04
	2013-14	30	66.7	878.0	3305	3.5	0.04
<b>JNPT - JNPCT</b>	2011-12	14.8	36.2	12.6	0	4.8	1.9
	2012-13	16.9	51.9	17.0	1291	3.8	1.9
	2013-14	17.5	62.1	18.5	1402	3.3	1.6
<b>JNPT - NSICT</b>	2011-12	21.9	74.0	1223	NA	3	NA
	2012-13	21.2	69.8	1740.1	NA	2.4	NA
	2013-14	20.8	67.8	1615.8	NA	1.6	NA
<b>JNPT - GTICT</b>	2011-12	31.83	96.8	1329	1775	2.9	NA
	2012-13	30.5	107.7	2818.9	3974	3.1	NA
	2013-14	29.2	105.2	2639.8	3774	3.0	NA
<b>Cochin</b>	2011-12	26.5	54.1	304	118	11.0	13.8
	2012-13	26.4	48.2	46.1	96	7.0	12.8
	2013-14	27.1	40.1	47.7	101	6.0	14.8
<b>Visakhapatnam</b>	2011-12	NA	NA	NA	NA	NA	NA
	2012-13	22.5	34.4	549.2	1030	3.7	NA
	2013-14	23.9	46.1	582.4	1092	3.2	NA
Moves /Crane Hour(Hr): Total container vessel moves/sum of gross craned Hours Moves/Berth Hr: Total container vessel moves/sum of gross vessel working hours TEU/Mtr. Quay: Total TEUs handled per annum / total quay length in meter Dwell time: Total No. of container storage days/total no. containers JNPCT: Jawaharlal Nehru Port Container Terminal    NSICT: Nhava Sheva International Container Terminal GTICT: Gateway Terminals India Container Terminal;    TRT: Turn Around Time CCTPL: Chennai Container Terminal Pvt. Ltd.    CITPL: Chennai International Terminal Private Limited.							

## 1.5 Cargo traffic at Non-Major Ports

1.5.1 Non-major ports handled 43% of total maritime freight traffic of the country during 2013-14.

1.5.2 **Table 9** presents maritime state-wise share and growth of traffic handled at Non-major ports during 2009-10 to 2013-14.

<b>Table 9 - Traffic Handled by Non-Major Ports by Maritime States/UTs</b> (000'Tonnes)						
<b>Maritime State/UT</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14(P)</b>	<b>% change 2013-</b>
Gujarat	205583 (71.2)	230907 (73.2)	259050 (73.2)	287817 (74.2)	309946 (73.7)	7.7
Maharashtra	12046 (4.2)	14875 (4.7)	19947 (5.6)	24198 (6.2)	24664 (5.9)	1.9
Andhra Pradesh	43690 (15.1)	43267 (13.7)	45633 (12.9)	51811 (13.36)	58699 (14.0)	13.3
Goa	13897 (4.8)	14581 (4.6)	14470 (4.1)	3389 (0.9)	3615 (0.9)	6.7
Tamil Nadu	1174 (0.4)	1611 (0.5)	1210 (0.3)	933 (0.2)	866 (0.2)	-7.2
Karnataka	8547 (3.0)	3095 (1.0)	592 (0.2)	610 (0.2)	509 (0.1)	-16.6
Other States/UTs	4000 (1.4)	7022 (2.2)	12843 (3.6)	19165 (4.9)	21940 (5.2)	14.5
All Maritime States/UTs	288937 (100.0)	315358 (100.0)	353745 (100.0)	387923 (100.0)	420239 (100.0)	8.3
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						

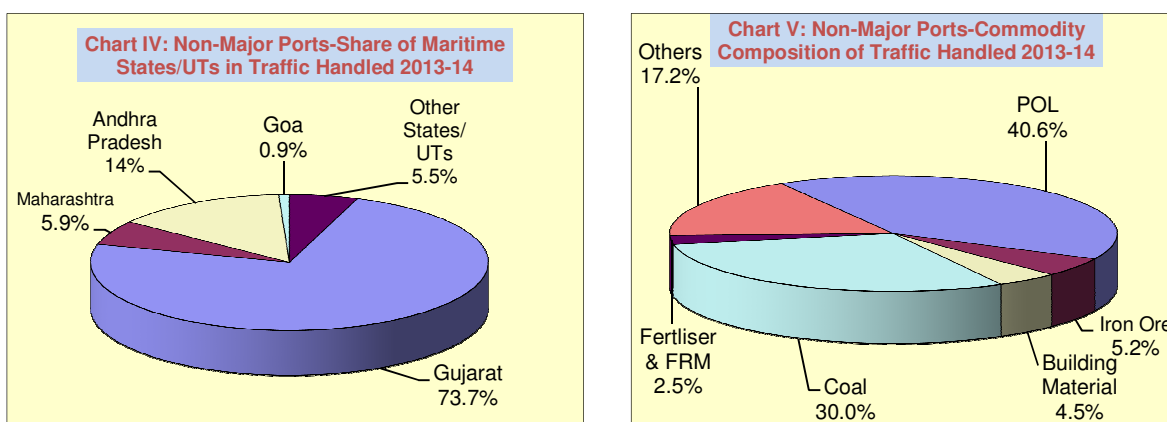
1.5.3 The growth in cargo handled by the non-major ports in 2013-14 was 8.3% compared to 9.7% recorded in 2012-13. The growth in quantity of cargo handled at non-major ports has been primarily driven by growth in non-major ports in Gujarat and Andhra Pradesh. (**Table 9**). The growing importance of non-major ports in handling cargo traffic has helped alleviate the congestion at major ports. **Table 9** provides traffic handled by non-major ports in terms of maritime states (geographic location) and **Table 10** gives a glimpse of commodity profile of the cargo handled. The above table reflects that Gujarat accounted for (73.7%) of the traffic handled by the non-major ports followed by Andhra Pradesh (14.0%), Maharashtra (5.9%) 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 2013-14.

1.5.4 Two commodities, viz. POL and Coal accounted for more than 70% of the total cargo handled at the non-major ports (**Table 10**).

Table 10 - Commodity-wise Traffic Handled by Non-Major Ports						
(000'Tonnes)						
Commodity	2009-10	2010-11	2011-12	2012-13	2013-14(P)	% change 2013-14/ 2012-13
POL	137720 (47.7)	145378 (46.1)	156322 (44.2)	168565 (43.5)	170453 (40.6)	1.1
Iron Ore	48813 (16.9)	38266 (12.1)	30616 (8.7)	21855 (5.6)	22246 (5.2)	1.8
Building Material	13142 (4.5)	12327 (3.9)	12866 (3.6)	11953 (3.1)	18864 (4.5)	57.8
Coal	41276 (14.3)	58462 (18.5)	79040 (22.3)	109264 (28.2)	125886 (30.0)	15.2
Fertilizer & FRM	9501 (3.3)	12725 (4.0)	15742 (4.5)	12548 (3.2)	10564 (2.5)	-15.8
Others	38485 (13.3)	48200 (15.3)	59159 (16.7)	63738 (16.4)	72226 (17.2)	13.3
All	288937 (100.0)	315358 (100.0)	353745 (100.0)	387923 (100.0)	420239 (100.0)	8.3

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 2013-14 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 2013-14, the GDP growth increased marginally to 4.7% from 4.5% in 2012-13. Cargo traffic at India's 12 major ports, which accounts for 58% of India's total seaborne cargo at 555.49 million tonnes showed an increase of 1.8% in 2013-14. 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 which remained negative in all the quarters of 2012-13, and first quarter of 2013-14 picked-up thereafter from second quarter of 2013-14. The Industry sector which is a major factor influencing seaborne container cargo traffic posted a lower GDP growth of 0.4% in 2013-14 as compared to 1.0% in 2012-13. The GDP of Industry sector recorded quarterly growth of -0.4% in Q1, 2.6% in Q2, -0.4% in Q3 and -0.2% in Q4 during the course of 2013-14. 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 2013-14. The impact of global demand was pronounced in case of container traffic, which reflects negative growths in trade in manufactures in all the quarters of 2013-14. Iron ore cargo traffic picked-up in second and third quarter of 2013-14 resulting in over all negative growth of 9.2% in 2013-14 as compared to negative growth of 55.1% 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 11** gives Quarter wise trend in growth of cargo traffic handled at Major ports, GDP and GDP of Industry sector during 2012-13 and 2013-14.

<b>Table 11 -Quarter wise Trend in Growth of Cargo Traffic at Major Ports &amp; GDP</b>										
Commodities/ Year	2012-13					2013-14				
	Q1	Q2	Q3	Q4	2012-13	Q1	Q2	Q3	Q4	2013-14
POL	-5.1	6.6	8.7	19.3	4.0	5.1	2.7	-2.3	-2.3	3.6
Iron Ore	-33.4	-59.0	-76.4	-48.1	-55.1	-61.5	37.2	56.9	2.2	-9.2
Coal	1.0	7.0	16.0	-40.2	10.2	33.1	24.6	19.8	7.9	20.4
Fertilizer	-26.8	11.5	-40.2	-48.8	-27.5	15.4	-26.2	-13.7	25.1	-7.4
Container in tonnes	2.3	3.1	-7.6	0.9	-0.3	-6.6	-3.5	-2.9	-4.2	-4.4
TEUs	-0.2	2.7	-6.2	6.9	0.8	-4.4	-4.7	-3.2	-0.1	-3.3
Other cargo	3.3	1.8	31.6	-14.6	9.6	-3.4	9.0	-9.0	6.3	-4.9
All Cargo	-5.5	-0.8	-2.7	-1.1	-2.6	-1.0	6.0	1.0	1.3	1.8
GDP overall	4.5	4.6	4.4	4.4	4.5	4.7	5.2	4.6	4.6	4.7
GDP -Industry	0.3	-0.4	1.7	2.1	1.0	-0.4	2.6	-0.4	-0.2	0.4
GDP: Gross Domestic Product at factor cost at 2004-05 prices.										

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

## 1.6.2 Global Ocean Freight Rates

### Freight Rates

**1.6.2.1** There are countless factors affecting supply and demand of maritime transport services and thus freight rates. Factors such as a slowdown in international trade, sanctions, natural disasters and weather events, regulatory measures and changes in fuel prices have an impact on the world economy and global demand for seaborne transport. In 2012, the maritime sector continued to experience low and volatile freight rates in its various segments because of surplus capacity in the global fleet generated by the severe downturn in trade in the wake of the 2008 economic and financial crisis. The steady delivery of new build vessels into an already oversupplied market, coupled with a weak economy, has kept rates under heavy pressure.

### Container freight rates

**1.6.2.2** In 2012, shrinking cargo volumes, mainly on the main East–West containerized trade routes, combined with an oversupply of tonnage, in particular of large container ships, inevitably led to volatile container freight rates and a weaker market in general, while charter rates remained on the decline.

**1.6.2.3** The overall low freight rates observed in 2012 reduced carriers' earnings close to, and even below operating costs, especially when bunker oil prices remained both high and volatile. In 2013, global container trade is projected to grow by 5 per cent, and global container supply, by 6 per cent. (Clarkson Research Services, 2013). During the first half of 2013, several attempts by carriers to increase rates were again applied to several trade lines as a result of General Rate Increases (GRIs). While GRIs are only temporary solutions to support comparative returns, achieving long-term market stability would enable shipping lines to deal with core market fundamentals and adjust capacity to demand. Another important action launched by the carriers in 2013 in the face of difficult circumstances is the operational alliance called the P3 Network, agreed by the world's three largest container shipping lines: Maersk Line, Mediterranean Shipping Company (MSC), and CMA CGM. The agreement, which will go into effect in the second quarter of 2014, would allow liners to control overcapacity and reduce rates volatility. It would call for the three liners to pool vessels equivalent to 15 per cent of global capacity on three main lane trade routes (Asia–Europe, trans-Pacific and transatlantic), with an initial capacity of 255 vessels (or 2.6 million TEUs). The P3 East–West service network initiative is considered by some analysts as a positive development for the liner industry as a whole in the drive to reduce costs and stabilize the market.

**1.6.2.4** In the near future, with world economies still under pressure, the sector is expected to continue facing the same weak demand volumes, especially in Europe, which would continue to have an impact on container freight rates, at least in 2013. In the medium term, however, supply growth is likely to slow down, owing to the fewer vessel orders placed and the difficulty associated with financing new vessel builds. These variations may reduce the gap of new surplus and low demand, which would lead to improved container freight rates (Clarkson Research Services, 2013).

### **Tanker freight rates**

**1.6.2.5** The tanker market, which encompasses the transportation of crude oil, refined petroleum products (clean and dirty products) and chemicals, witnessed an equally difficult market environment in 2012, perhaps slightly less volatile. The year saw ups and downs for the tanker industry; this volatility was felt across the board in many ship sizes and as a whole but perhaps slightly less so than in 2011. The average Baltic Exchange Dirty Tanker Index for the full year 2012 dropped to 719 (8



per cent less than the annual average of 2011), whereas the average Baltic Exchange Clean Tanker Index was below 700 (11 per cent less than the annual average of 2011). These trends are reflected in **Table 12**.

<b>Table 12 - Baltic Exchange Rate Index</b>							
	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>%age Change (2012/ 2011)</b>	<b>2013 (Estimate)</b>
Dirty Tanker Index	1 510	581	896	782	719	-8	638
Clean Tanker Index	1155	485	732	721	641	-11	649

The sector was affected by a combination of factors leading to overall low freight rates: weak demand, slow imports growth, a change in the structure of tanker demand, new discoveries (e.g. the shale revolution in the United States), high oil prices, and high idle and tonnage capacity.

**1.6.2.6** The overall decline in tanker freight rates has encouraged ship owners to reduce their operating costs considerably and in particular, bunker consumption. The trend of maximizing fleet efficiency, slow steaming, scrapping and idling some ships observed in 2011 also increased in 2012. In 2014 and 2015, tanker freight rates are expected to see some improvement as cargo demand and fleet supply become more balanced. However, in the long run, several factors, mainly relating to oil demand, production and industry developments, may influence the tanker market.

### **Dry bulk freight rates**

**1.6.2.7** Like other shipping markets, the dry bulk market, generally categorized either as major bulk (iron ore, coal, grain, bauxite/alumina and phosphate rock) or minor bulk (agricultural products, mineral cargoes, cement, forest products and steel products), has also suffered from the severe overcapacity and slow economy growth that have sustained low freight and charter rates (Clarkson Research Services, 2013; Barry Rogliano Salles, 2013; Danish Ship Finance, 2013). As a result, earnings in all fleet segments continued to fall.

### 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 tonnes) at world's top 20 ports increased by more than 5.4 % in 2012 as compared to 9.1% in 2011. Similarly, the growth in container traffic (million TEUs) which reflects growth in manufactured goods increased by 3.7 % in 2012 as compared to 8.0% in 2011.

Recent trends in Top 20 World Major Ports (in Million Tonnes) and Container Ports (in million TEUs) are given in **Table 13** and **Table 14** respectively.

<b>Table 13 - Top 20 World Major Ports (in Million Tonnes)</b>				
<b>S.No.</b>	<b>Port</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
1	Ningbo & Zhoushan (PRC)1)	627.0	691.0	744.0
2	Shanghai (PRC) 2)	653.0	727.6	736.0
3	Singapore	503.3	531.2	538.0
4	Tianjin (PRC)	408.0	451.0	476.0
5	Rotterdam (Netherlands)	430.2	434.6	441.5
6	Guangzhou (PRC)	400.0	429.0	434.0
7	Qingdao (PRC)	350.1	375.0	402.0
8	Dalian(PRC)	300.8	338.0	373.0
9	Tangshan (PRC)	250.6	308.0	364.6
10	Yingkou(PRC)	225.0	261.0	301.1
11	Busan (South Korea)3	241.1	269.9	298.7
12	Rizhao (PRC)	221.0	252.6	281.0
13	Qinhuangdao (PRC)	257.0	287.0	271.5
14	Hong Kong 4)	267.8	277.4	269.3
15	Port Hedland (Australia)	177.5	197.7	260.1
16	Shenzen (PRC)	221.0	223.0	228.1
17	Port Klang( Maleisie)	171.0	194.2	197.9
18	Los Angles (USA)	204.8	203.9	193.1
19	Antwerp (Belgium)	178.2	187.2	184.1
20	Xiamen(China)	139.3	156.5	172.0
	<b>Total of Top 20 Ports</b>	<b>6226.7</b>	<b>6795.8</b>	<b>7166.0</b>
Source: Port Statistics, Port of Rotterdam Authority; PRC: Peoples Republic of China; : 1) Port combined in 2006, 2) Including domestic trade and river trade: 3) Converted from freight ton to metric ton; l, 4) Including river trade; China ports figures for 2012 are provisional				

<b>Table 14 - Top 20 World Container Ports (in Million TEUs)</b>				
<b>S.No.</b>	<b>Port</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
1	Shanghai (PRC)1)	29.07	31.74	32.53
2	Singapore	28.43	29.94	31.65
3	Hong Kong (PRC)2)	23.70	24.22	23.12
4	Shenzhen (PRC)	22.51	22.57	22.94
5	Busan (Republic Korea)	14.19	16.19	17.04
6	Zhoushan/Ningbo 3)(PRC)	13.14	14.69	16.83
7	Guangzhou(PRC)	12.55	14.40	14.74
8	Qingdao(PRC)	12.01	13.02	14.50
9	Dubai Ports (UAE)	11.60	13.00	13.28
11	Tianjin(PRC)	10.08	11.50	12.30
10	Rotterdam (Netherlands)	11.15	11.89	11.87
13	Port Klang (Malaysia)	8.87	9.60	10.00
12	Kaohsiung (Taiwan Province of PRC)	9.18	9.64	9.78
14	Hamburg (Germany)	7.90	9.01	8.86
15	Antwerpen (Belgium)	8.47	8.66	8.64
16	Los Angles (USA)	7.83	7.94	8.08
17	Dalian(PRC)	5.24	6.40	8.06
18	Tanjung Pelepas (Malaysia)	6.53	7.50	7.70
19	Bremerhaven(Germany)	4.89	5.92	6.12
20	Long Beach (USA)	6.26	6.06	6.05
	<b>Total of Top 20 Ports</b>	<b>253.60</b>	<b>273.89</b>	<b>284.09</b>
Source: Port Statistics, Port of Rotterdam Authority; PRC: Peoples Republic of China;				

## 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 Measure**
  - New Land Policy for Major Ports
  - New Policy on captive berths
  - New Policy on dredging
  - Shifting of transshipment of Indian containers from foreign ports to Indian ports.
  - Policy on co-operation and competition amongst Indian Ports
  - Establishing 'Indian Ports Global' for overseas investments by Indian Ports.

### **Private Sector Participation**

1.7.7 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 2013-14, 21 Public Private Partnership (PPP) projects were awarded at an estimated cost of Rs. 19477.35 crore for capacity addition of 212 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.
  - ❖ cranes/handling equipment.
  - ❖ setting up of captive power plants.
  - ❖ dry docking and ship repair facilities.
- (c) Leasing of equipment for port handling and leasing of floating crafts from the private sector.
- (d) Pilotage.
- (e) Captive facilities for port based industries.

### **National Transport Development Policy Committee (NTDPC)**

1.7.11 The Government of India had constituted National Transport Development Policy Committee (NTDPC) in 2010 under the Chairmanship of Dr. Rakesh Mohan to formulate a long term Transport Policy. The Committee has inter-alia made several recommendations for Port Sector with the intent to provide a long term direction to the future development and governance of Indian ports and to incentivise and integrate water based transport for it to play an increasing role in the national transport network. Key recommendations of the Committee are:

## **a) Strategic view on port investment**

### **(i) Mega ports**

A key government priority should be to invest in 4 to 6 Mega ports over the next 20 years, with 2 to 3 on each coast to substantially cater to our foreign trade and the estimated requirement of raw material imports and exports by 2030. These mega ports can be established either by transforming some of the existing major (or non-major) ports into mega ports, if feasible, by combining some major and minor ports, or by setting up totally new mega ports. The location of the proposed mega ports should be harmonised with plans for the NHDP as well as with the upcoming and future DFCs.

An expert group needs to be expeditiously set up to study and identify potential locations for development of these mega ports.

### **(ii) Drafts**

In order for major ports to accommodate larger mother vessels going forward, the draft at major ports needs to be increased to at least 17 meters, by the first half of XIII Plan. The associated incremental capital dredging at most of the ports would require continued Govt. support.

## **b) Strategic Institutional shift – Landlord model of port governance**

- The ports in India, essentially the major-ports, widely follow a hybrid format of the long obsolete service port model and the preferred landlord model. The hybrid approach has resulted in a conflict of interest between the port trusts and the private sector.
- There is immediate need to make appropriate legislative and policy changes to expedite the move to the landlord model and to transform the port trusts to statutory landlord port authorities through specific legislation. All the terminal operations of port trusts would need to be corporatized as public sector corporations. Then, both private- and corporatized public-sector terminal operators would compete under the aegis of the landlord port authority. The corporatized public sector terminal operators could potentially be disinvested, listed, and possibly privatised at a later stage. The landlord port authority would

carry out all public sector services and operations such as the award of bids for containers and other terminals, dredging etc.

- Any progressive regulatory shift should attempt to bring in the cooperation and participation of maritime states.

### **(c) Role of TAMP**

Based on the assessed levels of competition between ports and between similar cargo handling terminals in a region, tariff determination should be left to market forces. Only in cases of inadequate competition, or serious market imperfections, may some pricing control be required. Accordingly, TAMP should be restructured under a new Major Ports Authority Act and allowed to regulate tariff setting on a normative basis till such time that it is found essential for lack of competition. TAMP could also act as the Appellate Tribunal for all tariff-related matters where tariff is determined by service providers. TAMP should naturally cease to exist with time as port operations become competitive and tariff regulation is no more required.

A new regulatory authority, Maritime Authority for Ports (MAP), should be constituted under a modernised Indian Ports Act, suitable empowered to regulate competition and port conservancy across all the major and non-major ports in the country.



## 2. 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. These 200 Non-major ports are located in Gujarat (41), Maharashtra (48), Goa (5), Daman & Diu (2), Karnataka (11), Kerala (17), Lakshdweep (10), Tamilnadu (15), Puducherry (2), Andhra Pradesh (12), Orissa (13), West Bengal (1) and Andaman & Nicobar Island (23). Out of these 200 Non-major ports, only some ports are well developed and provide all-weather berthing facilities for cargo handling. In 2013-14, only 61 Non-major Ports were reported to have handled cargo traffic. **Chart-VI** gives the geographical location of the Major and prime Non-Major Ports. The Maritime Ports operate within the statutory framework of the Indian Ports Act 1908 which applies to all the ports. However, the Major Ports Act 1963 applies only to Major Ports. Each Major Port is administered by a 'Port Trust' except for the port of Ennore which is a corporatised entity.

**Chart - VI**



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.

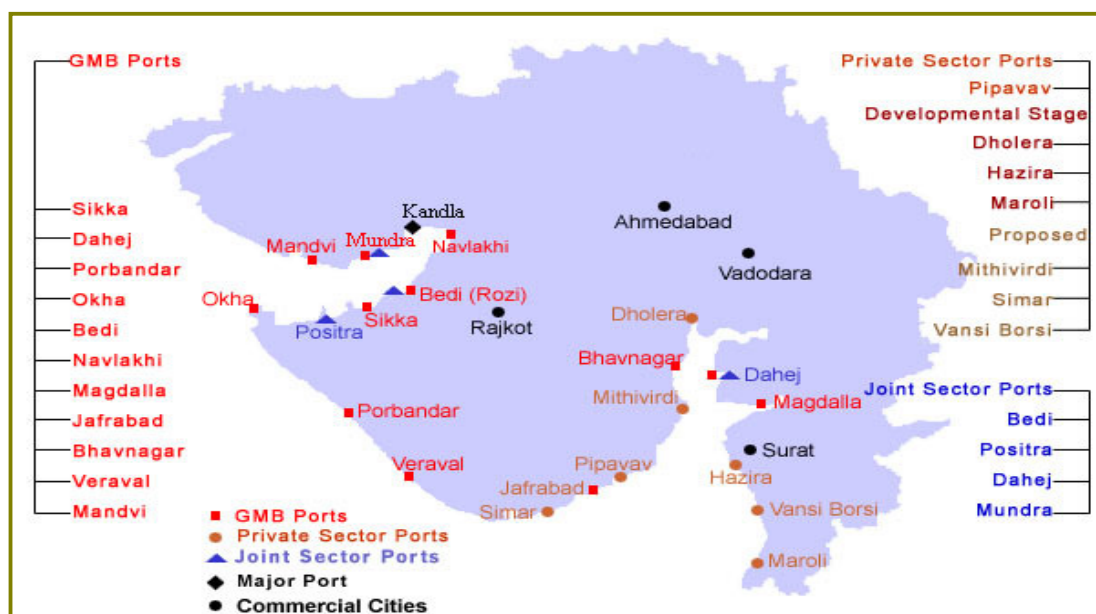
### **2.4 Maritime States – Non-Major Ports**

Non-major ports in India collectively handled 420.24 million tonnes of traffic during the year 2013-14 as compared to 387.92 million tonnes of cargo handled in 2012-13.

#### **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. Out of 41 non-major ports, 17 non-major ports in the State are handling cargo. The remaining 24 non-major ports are used for fishing activities and have traffic only of small volume. 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](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 2009-10 to 2013-14 are given in **Table 15**.

<b>Table 15 - Gujarat: Trends in Cargo Handled at Major &amp; Non-Major Ports (MillionTonnes)</b>					
Major/Non-Major	2009-10	2010-11	2011-12	2012-13	2013-14(P)
Major Ports	79.50 (10.1)	81.88 (3.0)	82.50 (0.8)	93.62 (13.5)	87.01 -(7.1)
Non-Major Ports	205.58 (34.5)	230.91 (12.3)	259.05 (12.2)	287.82 (11.1)	309.95 (7.7)
All Ports	285.08 (26.7)	312.79 (9.7)	341.53 (9.2)	381.437 (11.7)	396.96 (4.1)
Figures in bracket represent 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 2013-14. 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 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. The total cargo traffic handled at the non-major ports of Gujarat during 2013-14 was of the order of 309.95 million tonnes as against 287.82 million tonnes in 2012-13, reflecting an increase of 7.7%.

2.4.1.5 Recent trends in cargo handled and capacity creation in non major ports of Gujarat are captured in the **Table 16**. It indicates sustained increase in cargo throughput and capacity addition. During the year 2013-14, 21 million tonnes of capacity was added taking the total cargo handling capacity in the non major port sector in the Gujarat to 387 million tonnes. Gujarat Maritime Board (GMB) is the nodal agency for regulation and development of the State's maritime activities.

<b>Table 16 - Gujarat: Non Major Ports - Current Capacity &amp; Utilization (Million Tonnes)</b>							
<b>Item</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14(P)</b>
Capacity*	197	235 (19.3)	244 (3.7)	267 (9.8)	323 (20.8)	366 (13.3)	387 (5.7)
Cargo Handled	150.52	152.81	205.58	230.91	259.04	287.82	309.95
% Utilization	74.92	64.89	84.36	86.35	80.2	78.6	80.1
* Including Lighter age Port Capacity; Figures within parenthesis indicate capacity addition in % age during the year							

2.4.1.6 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.

## **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. Maharashtra Maritime Board (MMB) is the nodal agency for regulation and development of the State's maritime activities.

2.4.2.2 The total cargo traffic handled at the non-major ports of Maharashtra during 2013-14 was 24.66 million tonnes compared with 24.20 million tonnes in 2012-13. The trends in the cargo handled at both major and non-major ports of the State during 2009-10 to 2013-14 are given in **Table 17**.

<b>Table 17 - Maharashtra: Cargo Handled at Major &amp; Non-Major Ports (Million Tonnes)</b>					
Major/Non-Major	2009-10	2010-11	2011-12	2012-13	2013-14(P)
Major Ports	115.30 (5.6)	118.90 (3.1)	121.92 (2.5)	122.53 (0.5)	121.51 -(0.8)
Non-Major Ports	12.05 (15.6)	14.88 (23.5)	19.95 (34.1)	24.20 (21.3)	24.66 (1.9)
All Ports	127.35 (6.5)	133.78 (5.0)	141.87 (6.0)	146.73 (3.4)	146.17 -(0.4)
Figures in bracket represent percentage change over the previous year/period. P- Provisional					

### 2.4.3 GOA

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

The trends in the cargo handled at both major and non-major ports of the State during 2009-10 to 2013-14 are given in **Table 18**.

<b>Table 18- Goa : Trends in Cargo Handled at Major &amp; Non-Major Ports (Million Tonnes)</b>					
Major/Non-Major	2009-10	2010-11	2011-12	2012-13	2013-14(P)
Major Ports	48.85 (17.2)	50.06 (2.5)	39.05 -(22.0)	17.74 -(54.6)	11.74 -(33.8)
Non-Major Ports	13.90 (16.8)	14.58 (4.9)	14.47 -(0.8)	3.39 -(76.6)	3.61 (6.5)
All Ports	62.75 (17.1)	64.64 (3.0)	53.52 -(17.2)	21.13 -(60.5)	15.35 -(27.4)
Figures in bracket represents percentage change over the previous year/period. (P) Provisional.					

### 2.4.4 KARNATAKA

2.4.4.1 Karnataka has a coastline of about 280 kms. At present, there is one major sea port, the New Mangalore Port 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. During 2013-14, non-major ports in the State handled 0.51 million tonnes of cargo traffic as compared to 0.61 million tonnes in 2012-13 reflecting a decrease of 16.4% over the previous year.

2.4.4.2 The trends in the cargo handled at both major and non-major ports of the State during 2009-10 to 2013-14 are given in **Table 19**.

<b>Table 19 - Karnataka: Trends in Cargo Handled at Major &amp; Non-Major Ports</b> (Million Tonnes)					
Major/Non-Major	2009-10	2010-11	2011-12	2012-13	2013-14(P)
Major Ports	35.53 (-3.2)	31.55 (-11.2)	32.94 (4.4)	37.04 (12.4)	39.37 (6.3)
Non-Major Ports	8.55 (72.0)	3.10 (-63.7)	0.59 (-81.0)	0.61 (3.4)	0.51 (-16.4)
All Ports	44.08 (5.8)	34.65 (-21.4)	33.53 (-3.2)	37.65 (12.3)	39.88 (5.9)
Figures in bracket represent percentage change over the previous year/period. (P) Provisional.					

## 2.4.5 KERALA

2.4.5.1 Kerala has a coastline of 570 kms, with one major port at Cochin and 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 2009-10 to 2013-14 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.

<b>Table 20 - Kerala : Trends in Cargo Handled at Major &amp; Non-Major Ports</b> (Million Tonnes)					
Major/Non-Major	2009-10	2010-11	2011-12	2012-13	2013-14(P)
Major Ports	17.43 (12.5)	17.87 (2.5)	20.09 (12.4)	19.84 (-1.2)	20.89 (5.3)
Non-Major Ports	0.12 (-7.7)	0.12 (0.0)	0.10 (-16.7)	0.10 (-10.0)	0.10 (11.1)
All Ports	17.55 (12.3)	17.99 (2.5)	20.19 (12.2)	19.94 (-1.3)	20.99 (5.3)
Figures in bracket represent percentage change over the previous year/period. (P) Provisional.					

## 2.4.6 TAMIL NADU

2.4.6.1 Tamil Nadu has a coastline of about 906 km, with 3 major ports at Chennai, Ennore and Tuticorin and 15 non-major ports. Out of 15 non-major ports only 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.

2.4.6.2 During 2013-14 the non-major ports in Tamil Nadu collectively handled 0.87 million tonnes of cargo traffic as compared to 0.93 million tonnes in the previous year. The trends in the cargo handled at both major and non-major ports of the State during 2009-10 to 2013-14 given in **Table 21**.

<b>Table 21 - Tamil Nadu: Trends in Cargo Handled at Major &amp; Non-Major Ports</b>					
<b>(Million Tonnes)</b>					
Major/Non-Major	2009-10	2010-11	2011-12	2012-13	2013-14(P)
Major Ports	95.55 (5.0)	98.2 (2.8)	98.77 (0.6)	99.55 (0.8)	107.09 (7.6)
Non-Major Ports	1.17 (30.0)	1.61 (37.6)	1.21 (-24.8)	0.93 (-23.1)	0.87 (-29.2)
All Ports	96.72 (5.2)	99.81 (3.2)	99.98 (0.2)	100.48 (0.5)	107.95 (7.2)
Figures in bracket represent percentage change over the previous year/period. (P) Provisional.					

## 2.4.7 ANDHRA PRADESH

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

2.4.7.2 The State had prepared a perspective developmental plan, in its *VISION 2020 Document* for development of its ports with a view to enhance cargo handling capacity at its Non-Major Ports to around 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.

2.4.7.3 Non-major ports in Andhra Pradesh collectively handled 58.70 million tonnes of cargo during 2013-14 compared with 51.81 million tonnes in 2012-13 thus registering an increase of 13.3% in traffic. The trends in the cargo handled at both major and non-major ports of the State during 2009-10 to 2013-14 are given in **Table- 22**.

<b>Table 22 - Andhra Pradesh: Trends in Cargo Handled at Major &amp; Non-Major Ports (Million Tonnes)</b>					
Major/Non-Major	2009-10	2010-11	2011-12	2012-13	2013-14(P)
Major Ports	65.5 (2.5)	68.04 (3.9)	67.42 (-0.9)	59.04 (-12.4)	58.50 (-0.9)
Non-Major Ports	43.69 (47.0)	43.27 (-1.0)	45.63 (5.5)	51.81 (13.5)	58.70 (13.3)
All Ports	109.19 (16.6)	111.31 (1.9)	113.05 (1.6)	110.85 (-1.9)	117.20 (5.7)
Figures in bracket represent percentage change over the previous year/period. (P) Provisional.					

## 2.4.8 ORISSA

2.4.8.1 Orissa has a Coast line of 480 Kms. 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.

2.4.8.3 Non-major ports in Orissa collectively handled 14.38 million tonnes of cargo during 2013-14 compared with 11.07 million tonnes in 2012-13 thus registering an increase of 29.9% in traffic. The trends in the cargo handled at both major and non-major ports of the State during 2009-10 to 2013-14 are given in **Table 23**.



<b>Table 23- Orissa : Trends in Cargo Handled at Major &amp; Non-Major Ports (Million Tonnes)</b>					
Major/Non-Major	2009-10	2010-11	2011-12	2012-13	2013-14(P)
Major Ports	57.01 (22.8)	56.03 -(01.7)	54.25 -(03.2)	56.55 (04.2)	68.00 (20.2)
Non-Major Ports	0.42 (40.0)	0.4 -(04.8)	5.08 (1170.0)	11.07 (117.9)	14.38 (29.9)
All Ports	57.43 (23.0)	56.43 -(01.7)	59.33 (05.1)	67.62 (14.0)	82.38 (21.8)
Figures in bracket represent percentage change over the previous year/period. (P) Provisional. *: Dhamra Port has started operations in May 2011.					

## 2.4.9 WEST BENGAL

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

2.4.9.2 The trends in the cargo handled at both major and non-major ports of the State during 2007-08 to 2013-14 are given in **Table 24**.

<b>Table 24 - West Bengal :Trends in Cargo Handled at Major &amp; Non-Major Ports (Million Tonnes)</b>					
Major/Non-Major	2009-10	2010-11	2011-12	2012-13	2013-14(P)
Major Ports	46.43 -(14.4)	47.55 (2.4)	43.25 -(9.0)	39.93 -(7.7)	41.38 (3.6)
Non-Major Ports	0	0	0	0	0
All Ports	46.43 -(14.4)	47.55 (2.4)	43.25 -(9.0)	39.93 -(7.7)	41.38 (3.6)
Figures in bracket represent percentage change over the previous year/period. P- Provisional					

## 2.4.10 OTHER NON-MAJOR PORTS

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 2009-10 to 2013-14 are given in **Table 25**.

<b>Table 25 - Union Territory: Trends in Cargo Handled at A &amp; N Islands Port</b> <b>(Million Tonnes)</b>					
Major/Non-Major	2009-10	2010-11	2011-12	2012-13	2013-14(P)
Andaman & Nicobar Islands	2.07 (3.0)	1.68 -(18.8)	1.21 -(28.0)	1.07 -(11.6)	1.15 (7.5)
Figures in bracket represent percentage change over the previous year/period. P- Provisional					

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.

<b>Table 26 - Union Territories: Trends in Cargo Handled at Non-Major Ports</b> <b>(Million Tonnes )</b>					
Major/Non-Major	2009-10	2010-11	2011-12	2012-13	2013-14(P)
Lakshadweep	0.03	0.03	0.03	0.03	0.03
Puducherry	1.32	4.71	6.42	6.91	6.28

### 3: PERFORMANCE INDICATORS

#### 3.1 Capacity Utilization

Over the years, cargo handling capacity of major ports has steadily increased to cater to the growing volume of internal and external trade. The capacity of the ports which was 172.59 million tonnes at the end of 1993-94 increased to a level of 800.52 tonnes at the end of 2013-14. The port-wise capacity and traffic for 2013-14 is brought out in **Table 27**.

<b>Table 27 - Major Port-wise Capacity Utilization During 2013-14 (Million Tonnes)</b>			
<b>Name of the Port</b>	<b>Capacity</b>	<b>Traffic</b>	<b>Capacity Utilisation(%)</b>
Kolkata Dock System	17.14	12.87	75.09
Haldia Dock Complex	49.75	28.51	57.31
Paradip	108.8	68.0	62.50
Visakhapatnam	88.92	58.50	65.79
Ennore	31.0	27.34	88.19
Chennai	86.04	51.11	59.40
Tuticorin	42.06	28.64	68.09
Cochin	49.66	20.89	42.07
New Mangalore	77.77	39.37	50.62
Mormugao	36.65	11.74	32.03
J. L. Nehru	65.88	62.33	94.61
Mumbai	44.53	59.18	132.90
Kandla	102.32	87.01	85.04
<b>ALL PORTS</b>	<b>800.52</b>	<b>555.5</b>	<b>69.39</b>

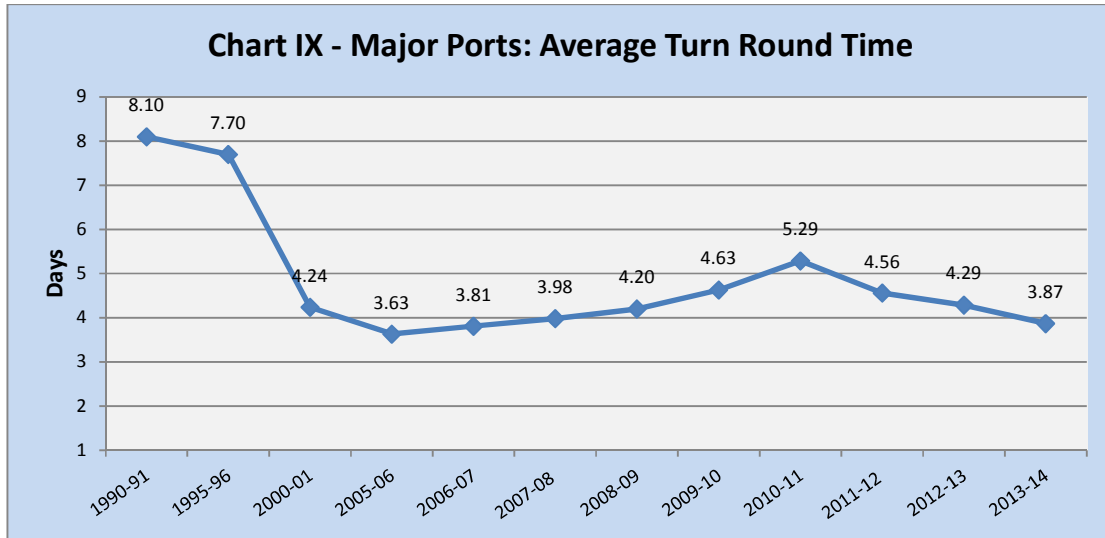
#### 3.2 Port Efficiency

3.2.1 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)**

3.2.2 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 3.87 days in 2013-14. The TRT varied in a range between 1.80 days at Cochin Port to 5.66 at Kandla. Amongst the 12 major ports improvement in TRT during 2013-14 in comparison to 2012-13 is reflected clearly in all Major Ports except Ennore, Paradip and Cochin Ports. Port-wise TRT for select years are given in **Table 28**. The path of turn round time at major ports for select years since 1990-91 to 2013-14 is presented in the **Chart IX** below.

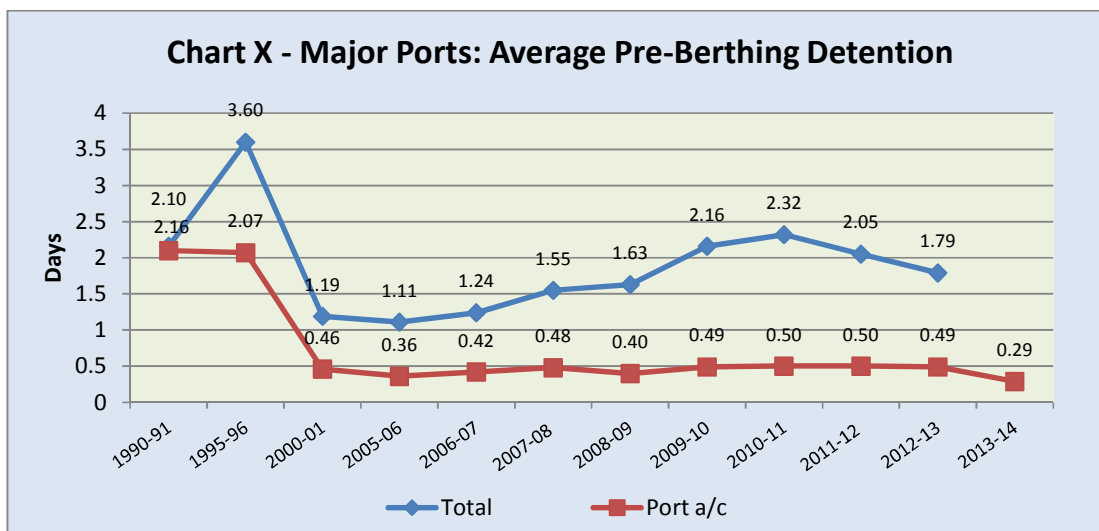


Turn-Round Time - Total time spent by a ship since its entry till its departure.

Table 28- Average Turn Round Time (days)								
Port	1990-91	2000-01	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14(P)
1	2	3	4	5	6	7	8	9
Kolkata D.S	11.90	5.50	5.10	6.80	6.21	5.45	4.72	4.22
Haldia D.C	6.47	3.97	4.21	5.01	4.45	3.62	3.95	3.80
Paradip	8.40	4.16	4.78	9.04	7.73	6.33	4.39	4.62
Vishakhapatnam	7.07	3.71	3.93	4.78	5.84	5.68	5.39	4.73
Ennore			2.35	2.11	2.78	2.17	2.95	4.24
Chennai	7.20	5.83	4.15	4.04	4.36	3.91	3.24	2.46
Tuticorin	4.70	4.10	3.64	3.90	4.00	4.94	4.31	3.92
Cochin	4.00	3.11	2.14	2.08	2.20	1.82	1.58	1.80
New Mangalore	4.96	2.89	3.00	3.06	2.70	2.95	3.29	3.18
Mormugao	6.40	4.25	5.95	8.91	10.43	7.68	5.06	4.34
J.L.Nehru		2.21	1.90	2.01	2.64	1.94	2.48	2.44
Mumbai	10.80	5.20	4.95	4.61	4.96	5.22	5.58	4.76
Kandla	10.00	4.72	7.26	5.03	5.90	6.42	6.33	5.66
All Ports	8.10	4.24	4.20	4.63	5.29	4.56	4.29	3.87
Source: Major Ports / Indian Ports Association (IPA) P: Provisional								

### Average Pre Berthing Detention Time (PBDT)

3.2.3 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 which remained same at 0.50 days in 2011-12 and 2012-13 declined to 0.29 days in 2013-14. Port-wise PBD for select years is indicated in **Table 29**. The trajectory of weighted average of pre berthing detention time at Major ports- total and on port account - during 1990-91, 1995-96, 2000-01, 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 29 - Average Pre-Berthing Detention(Days)								
Port	1990-91	2000-01	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14(P) *
1	2	3	4	5	6	7	8	9
Kolkata D.S	0.90	0.61	0.66	1.31	1.23	0.77	0.61	0.00
Haldia D.C	1.66	0.91	3.38	4.39	3.73	2.54	2.29	0.78
Paradip	1.59	1.41	2.32	6.30	5.04	3.69	1.65	0.05
Vishakhapatnam	1.83	0.75	1.28	1.90	2.81	2.84	2.50	0.06
Ennore			0.27	0.37	0.65	0.76	1.33	0.00
Chennai	2.10	2.45	1.39	1.35	1.61	1.16	0.80	0.04
Tuticorin	0.90	1.40	1.09	1.36	1.29	1.91	1.31	0.21
Cochin	0.83	0.74	0.70	0.85	1.03	1.05	1.09	0.04
New Mangalore	0.79	0.77	0.65	0.81	0.59	0.79	1.04	0.01
Mormugao	2.51	1.32	1.77	3.46	4.07	2.94	1.62	0.35
J.L.Nehru		0.67	0.95	0.98	1.51	1.13	1.31	0.47
Mumbai	3.40	1.26	1.41	1.06	1.23	1.37	1.62	0.52
Kandla	4.40	1.51	2.62	2.60	3.32	3.74	3.58	0.59
All Ports	2.16	1.19	1.63	2.16	2.32	2.05	1.79	0.29

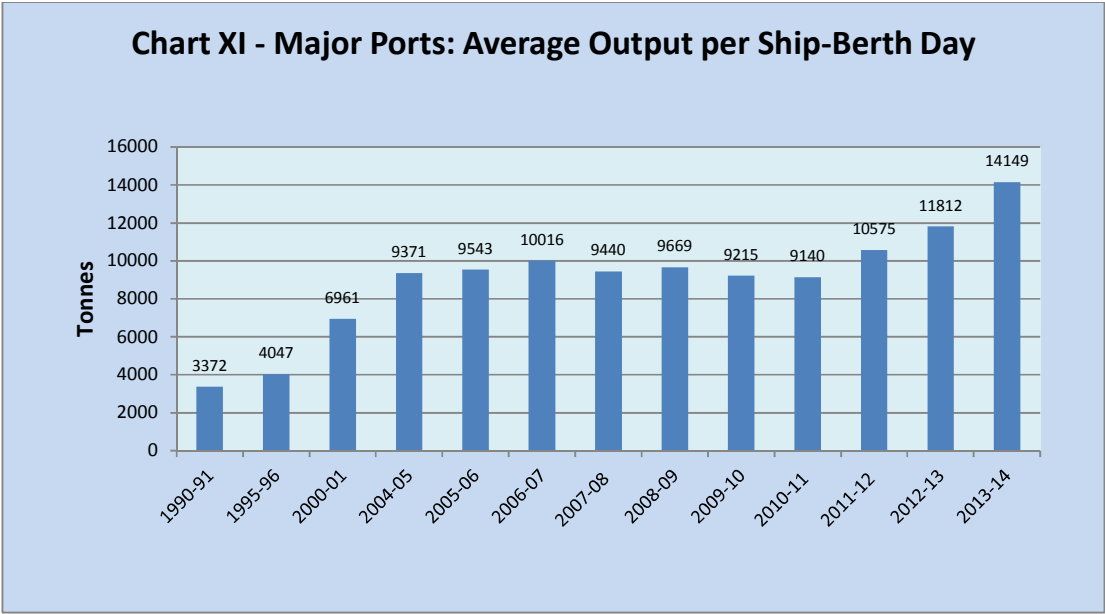
Source: Major Ports/ Indian Ports Association(IPA) \* : Relates to Port a/c only P: Provisional

## Average Output Per Ship Berth-day

3.2.4 During the last 20 years this indicator has seen a tremendous improvement. Average Output per Ship-berth day has increased more than four times from 3,372 tonnes in 1990-91 to 14149 tonnes in 2013-14 for major ports. However, average output per ship berth day is marked by substantial variation across major ports ranging from a high 25522 tonnes in case of JLN port to a low of 3315 tonnes at Kolkata Dock System during 2013-14. 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 2013-14 as compared to 2012-13 is visible in almost all the ports except Ennore, Mormugao and Kandla Ports. Port-wise average output per Ship-berth day for select years and latest period are given in **Table 30**.

Table 30- Average Output per Ship Berth-day (Tonnes)								
Port	1990-91	2000-01	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14(P)
1	2	3	4	5	6	7	8	9
Kolkata D.S	560	2305	3027	1917	2253	2503	2762	3315
Haladia D.C	5659	6384	7732	6243	6563	6728	6078	6130
Paradip	4082	8503	12635	13853	14243	15995	16625	18179
Visakhapatnam	5325	9799	11171	10484	10334	10704	10641	10928
Ennore			28424	21665	17669	27505	27741	22336
Chennai	3912	6977	10778	11428	10984	10352	12046	14957
Tuticorin	2130	3983	5817	6934	7035	6733	7452	9633
Cochin	3714	6138	10599	11089	11752	15784	15878	15881
New Mangalore	4412	12192	13645	13896	14211	13957	15921	16304
Mormugao	10429	12438	6290	5002	4409	10530	11484	10525
J.L.Nehru		6383	20344	21563	20393	19227	23319	25522
Mumbai	2310	4213	5717	6122	6042	6476	8709	9639
Kandla	4417	8230	13107	13549	14137	14272	15728	15131
All Ports	3372	6961	9669	9215	9140	10575	11812	14149
Source: Major Ports /Indian Ports Association (IPA) P: Provisional								

3.2.5            The average out-put per ship-berth-day for selected years since 1990-91 to 2013-14 is   presented in the **Chart XI** below.



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

#### **4. PRIVATE SECTOR/CAPTIVE/JOINT SECTOR PORT PROJECTS**

Brief details of the ongoing Private Sector/Captive/Joint Sector Port Projects and a list of these projects under consideration as on 31.3.2014 are brought out in Appendix-I & Appendix-II in respect of Major Ports and in Appendix-III & Appendix-IV for Non – Major Ports.



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

Sl. No	Project Name	Port Name	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
1	Installation of 2 Nos. shore based unloaders in Coal Berth-2 (Captive user berth of Tamil Nadu Electricity Board)	Ennore	4	70	2 Nos. of unloader erection work is in progress. The tentative completion of first unloader installation by May 2014 and Second unloader by November, 2014.
2.	Construction of two New Off-shore Container berths & Development of Container Terminal berth on BOT basis in Mumbai Harbour.	Mumbai Port	9.60MTPA (1.00 Mn TEUs)	146.10	BOT Component- Entire Approach jetty is ready. Berth structure completed. Total investment till date is Rs. 608.96 crores. Ministry on 12.08.2013 had denied security clearance for procuring equipments from Chinese suppliers. M/s. ICPTL have forwarded names of four firms from whom they intend to procure the equipments. The same has been forwarded to the Ministry on 16.09.2013. The clearance from Ministry of Home Affairs is awaited. Development of container yard in Princess Dock Commenced. MbPT component- The dredging contract was terminated on 24.7.2013 and fresh tenders were invited for the balance work. Award of work is in progress. Present progress; Soil dredging; 7.20 Million Qubic Metres, Rock Dredging; 5.77000 Cub Metres, Filling 1.4 Million Cubic Metres, The RCD work is in progress.
3.	Development & Operation of International Container Transshipment Terminal (ICTT) at Vallar-padam	Cochin Port	12.5 to 40 MMT in phases	21180	Phase I of the ICTT Project with an investment of Rs. 1,262 crores partly commissioned on 11 <sup>th</sup> February, 2011.
4.	Setting up of LNG Port & Re-Gasification Terminal at Puthuvypeen by Cochin. / Cochin Port Trust	Cochin Port	5 MMPTA	41500	The project is being implemented by M/s Petronet LNG Ltd. (PLL). 33.40 Hectares of land at Puthuvypeen handed over to M/s PLL on lease for setting up Re-gasification facilities.  The concession Agreement between Cochin Port Trust and M/s PLL has been executed on 12.3.2009. The project facilities have

					<p>been commissioned and first LNG ship berthed on 20/08/2013.</p> <p>The Gas pipeline network is being implemented by GAIL.</p> <p>LNG Terminal dedicated to the Nation on 04/01/2014.</p>
5.	Multi-User Liquid Terminal (MULT) at Puthuvypeen SEZ (International Bunkering Terminal at Cochin)	Cochin Port	4.10 MMTPA	2063.0	<p>The project was assigned to IOCL subject to certain conditions.</p> <p>The signing of the Agreement is scheduled on 04/04/2014.</p> <p>M/s IOCL have entrusted with CoPT, execution of construction of jetty and its associated facilities through EPC contractor.</p> <p>M/s L&amp;T Ramboll Consultin Engineers Ltd. Chennai was entrusted with preparation of FEED Document and Bid document for the Development of MULT. In response of RFQ invited for Pre Qualification of bidders for construction of MULT on EPC Contract, three firms have submitted their bids on 20/03/2014, which are under scrutiny.</p>
6.	Setting up of Mechanized Iron Ore handling facilities at berth No. 14 by M/s. SICAL Logistics Limited on BOT basis.	New Mangalore Port Trust	3.62 MTPA (Capacity of Jetty)	2960	<p>The concession was awarded to M/s SICAL on 03.06.2010. The Concessionaire has not commenced the work due to ban on export &amp; movement of iron ore imposed b Karnataka Govt. The Concessionaire has requested to excuse for performance under Force Majeure clause. M/s. SICAL was given one more opportunity to commence the work before 8.4.2014 and give milestone accordingly, failing which necessary action may be taken to terminate the contract as per the provisions of Concession Agreement. As resolved by the Port Trust Board a letter to M/s. SICAL is issued on 08.10.2013. &amp; reminder letter sent on 09.01.2013 reply is awaited. Programme is not yet submitted by M/s. SICAL. M/s. SICAL has filed writ petition against the board of Trustees NMP under article 226 &amp; 227 of constitution of India. Hon'ble High Court has given interim order date 20 February 2014 in the said W.P. disposal of writ petition. 1. Stay any further action that may be taken in relation to termination of the concession agreement between the Board of Trustees of the NMPT &amp; M/s. SICAL. 2. Stay of the enforcement of any of the terms of the invoking / encashing the Bank Guarantee issued on behalf of M/s.</p>

					SICAL in terms of the Concession Agreement and from receiving any monies under band guarantee. Port in process of vacating the stay.
7.	Development of Barge handling facility at Bharathi Dock	Chennai	1.35 MTPA	272.9	Concession agreement signed with Chennai Bunkering Ltd., Due to non-receipt of environmental clearance and has requested by the concessionaire the date for fulfilling conditions precedent extended up 31.7.2014
8.	Development of Rajiv Gandhi Dry Port and Multi Modal Logistic hub at Mappedu, Sriperumbudur	Chennai		1430	Tender were invited for 3 parcels of land with 72.61 acres, 34.17 acres and 14.96 acres. Only 2 bids received for 14.96 acres and action is being taken to issue letter of interest to the successful bidder. Tenders have been invited to allot the remaining two parcels of land on tender-cum- auction basis.
9.	Development of WQ 6 berth in Inner Harbour for handling Multipurpose cargo at IH.	Visakhapatnam	2.08	1145	Physical progress 79.97%. Likely date of completion June, 2014.
10.	Development of EQ-10 berth in Inner Harbour for handling Liquid Cargoes at IH.	Visakhapatnam	1.85	553.8	Physical progress 96.60%. Likely date of completion June, 2014.
11.	Development of EQ-1 berth for handling steam coal by replacing the existing EQ-1 berth and part of EQ-2 berth at IH	Visakhapatnam	6.41	3231.8	Physical Progress is 99.95%. Likely date of completion June, 2014.
12.	Development of EQ-1A berth on south side of EQ-1 berth in Inner Harbour for handling Thermal coal and Steam coal at IH.	Visakhapatnam	7.36	3133.9	Physical progress is 52%. Expected completion by October, 2014.
13.	Installation of mechanized Fertilizer handling facilities at EQ-7 at IH.	Visakhapatnam	5.21	2175.8	Concession agreement signed on 18.05.2012. Letter of award given on 18.04.2013. Concessionaire has to submit 5 yrs. License fee as refundable security deposit. Termination notice issued on 05.04.2014.
14.	Up-gradation of the existing facility (OHC) and creating new facility (WQ-1) for iron ore handling.	Visakhapatnam	23	8454.1	LOA issued on 31.05.2013 to M/s Vadinar Oil Terminal Ltd. Concessionaire agreement signed on 13.12.2013 and compliance of conditions precedent on either side is under progress.
15.	Extension of existing Container terminal in outer harbor.	Visakhapatnam	0.54 MTEUs	6331.1	LOA issued to M/s VCTPL on 31.12.2013. Concession agreement is to be signed.
16.	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. on 10.11.2009 with 31% revenue share to PPT. Environment clearance and CRZ clearance were obtained on

					04.01.2011. Now, Apex Court has pronounced their verdict on 17.12.2013 upholding PPT's decision to terminate the licensees and dismissed the appeal of the parties. Port has now initiated action to vacate the plots so that the project site can handed over to selected concessionaire. In the meantime, the concessionaire has been requested to submit the required documentation including financial closure documents and begin mobilization activities at the site.
17.	Conversion of berth No. 8 as container terminal on.	Tuticorin	7.2 MTPA	3122.3	LOA issued to M/s Dhakshin Bharath Gate way Terminals Pvt. Ltd. 7.8.12 with a gross revenue share of 55.19%. Concession Agreement signed on 4.9.12. Work is in progress. Two number of reach stackers arrived and firm has taken action to purchase shore crane. M/s STUP Consultant, Chennai is appointed as Independent Engineer for the project.
18.	Construction of North Cargo Berth – I (Captive use)	Tuticorin	6.30 MTPA	494 for berth construction and 60000 for power plant.	Berth construction completed on 25.7.2012. Berth handed over to NTPL for installation of their conveyers and shore unloaders. The berth may commence the commercial operation from July 2014.
19.	Construction of One Number of Shallow Draught Berth on DBFOT Basis.	Tuticorin	2.67 MTPA	841	LOA issued to M/s Transstroy – OJSC consortium on 31.12.12 with a Gross revenue share of 22%. Concession Agreement signed on 17.4.13. Revalidation of Environmental Clearance received from MOEF vide letter dated 31.03.2014. Consent to establish obtained by the concessionaire from TNPCB vide letter dated 21.02.2014. Further action in being taken to handover the project to the PPP operator.
20.	Development of North Cargo Berth – II on DBFOT basis.	Tuticorin	7.2 MTPA	3321.6	The Concession agreement signed with M/s ABG-LDA Bulk Handling Pvt. Ltd. on 11.9.10. About 80% of work completed at site physically. Tender is in process for carry out dredging work in front of the Berth by the Port after getting environment clearance from MOEF and security clearance from Government.
21.	Development of North Cargo berth –III	Tuticorin	9.15	4200	V.O.CPT accorded approval to issue LOA in favour of the H1 Bidder M/s. Transstroy OJSC Consortium at a Gross Revenue Share of 30%. The concession Agreement signed on 07.02.2014. Capacity Addition of 9.15 MTPA. For the appointment on Independent Engineer for the project, draft tender document is

					under approval.
22.	Development of North Cargo berth –IV	Tuticorin	9.15	3550	LOA was issued to M/s Transstroy OJSC Consortium on 30.01.2013 at Gross Revenue share of 30% concession Agreement signed on 17.04.2013 for the appointment of Independent Engineer for the project. On evaluation, all the five firms were pre-qualified and the details of the short-listed firms were informed to the Concessionaire for their consent.
23.	Upgradation of Mechanical Handling infrastructure at V.O. Chidambaranar Port Trust (Berth I to VI & IX)	Tuticorin	8.72 MTPA	492	LOA issued to M/s IMC – PSTS Consortium on 25.3.13 with a gross revenue share of 26.55%. Concession Agreement signed on 24.5.13. Condition precedent was fulfilled on 31.08.2013. Cranes received from Germany on 27.02.2014 and commercial operation commenced from 24.03.2014.
24.	Development of Coal handling terminal at Berth No.7 of Mormugao Port on Design, Build, Finance, Operate and Transfer (DBFOT) basis	Mormugao Port Trust	4.61	4060	The terminal is being developed by M/s Adani Mormugao Port Terminal Pvt. Ltd. Ahmadabad (AMPTPL). As on 31.03.14 the physical progress is 96.41% and financial progress 94.33%. The terminal is expected to be completed and ready for commercial operation by June, 2014.
25.	Providing Mechanized Handling facilities for handling of coal at Berth No. 11 at Port of Mormugao Port, Goa on DBFOT basis	Mormugao Port Trust	2.00 MTPA	2040.00	1. Concession agreement terminated. 2. Bank Guarantee of Rs. 2.00 crores has been encashed by the Port. 3. Tender for Independent Engineer (IE) discharged.
26.	Enhancement of Cargo Handling capacity by installing rapid in motion wagon loading facility by SWPL	Mormugao Port Trust	2.50 MTPA	450.00	1. Concessionaire M/s. SWPL of Berth No. 5A & 6A has been granted permission by Board vide resolution No. 124 on 15.03.2013 for construction of Silo and Conveyer System on way leave basis. 2. Work commenced from 01.04.2013 and likely to be completed in June'2014. 3. Physical & Financial progress of work is 87% & 90% respectively.
27.	Leasing of Berth No. 4 and 3 acres of land for 20 years on Annual Lease Basis for setting up Facility for Handling Bulk / Break Cargo	Mormugao Port Trust	0.20 MTPA	450.00	1. Letter of award issued to M/s JSW Jaigarh Port Ltd. Mumbai on 29.10.2013. 2. Proposal for Ministry's approval sent vide letter No. CE/P&C-47/5316 dated 30.02.2014. Reply awaited.
BOT: Build Operate and Transfer; BOO: Build Own Operate; DBFOT: Design, Build, Finance, Operate and Transfer.					

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

Sl. No	Project	Port Name	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
1.	Development of Multi-Purpose berths to handle clean cargo including container on BOT basis at Paradip Port.	Paradip Port	5.0 MTPA	4307.80	By the bid closing date i.e. 26.03.2014, only one bid offer (RFP) was received from ULA which was not opened, being single bid and also because the security clearance letter from MoS may require clarifications. Details of the case have been put up to the Board on the further course of action including appointment of an Independent Agency like IPA to determine a reasonable figure of the revenue share so as to take final decision.
2.	Mechanization of EQ 1 to EQ 3 berths at Paradip Port on BOT basis.	Paradip Port	30	16510.90	By the bid closing date i.e. 27.03.2014, 04 nos. of RFQ application from (1) Essar, (2) Adani Ports, (3) Gangavaram Port and (4) Sterlite have been received. The RFQ applications are under evaluation by the Transaction Adviser. Security clearance documents in respect of above bidders have been sent to Ministry on 08.04.2014.
3.	Development of Deep Draught Iron Ore Berth on BOT basis at Paradip Pot.	Paradip Port	10	6819.40	All the eight applicants in the RFQ stage were qualified for participating in the Request for Proposal (RFQ) stage and submitting their financial offers. The bid due date for receipt of Financial Proposal was 15.04.2014. In the meantime, one of the bidders, ESSAR submitted representation that the CQ-3 terminal (which has been allotted to them for mechanization and subsequent operations) should be allowed to continue operation during the exclusively period of the Iron Ore terminal. This matter was re-examined, legal opinion obtained and all the details submitted to ministry for decision. MOS vide their letter dated. 27.02.2014 gave communicated to carry out bidding after preparing bidding document afresh. Based on Ministry's advice, present tender is discharged and fresh bids will be invited from RFQ stage after updating the traffic studies and preparing a supplementary report to the Detailed Project report. RFQ is likely to be floated in June, 2014.

4.	Development of LNG Terminal	Ennore	5.00	4512	Approval for setting up of LNG Terminal by IOCL on its own or through a Joint Venture Company subject to Govt. approval. Allotment of land to the JV let by M/s IOCL for development of LNG Terminal. Signing of MoU with IOCL under process. Various meetings held for finalization of commercial terms of the Concession Agreement.
	Coal Berth-III	Ennore	9	269.1	Detailed design & drawing for inviting tender for construction of Coal Berth-III is under process.
5.	Development of Container Terminal on DBFOT basis	Ennore	18	1270	Board of Directors have granted approval for rebidding. Request for qualification issued and 11 applicants have responded. PPP AC memo along with required document forward to Ministry for approval. Evaluation process for short listing in progress.
6.	Development of Multi Cargo Berth on DBFOT basis	Ennore	2	151	Board of Directors have granted approval for the project. Request for qualification issued, 9 applicants submitted RFQ and evaluation under progress.
7.	Development of fourth Container Terminal	Jawaharlal Nehru Port Trust	4.8 MTEUs	79150	The concession Agreement will be signed in May, 2014.
8.	Extension of container berth by 330 M and other facilities:- (Now known as Development of standalone container handling facility with a quay length of 330 m North on JN Port	Jawaharlal Nehru Port Trust	0.8 MTEUs	6000	Construction Phase
9.	Dredging & Infrastructure development for handling bigger ships at 18 to 22 ID Harbour Wall Berths.	Mumbai		6130	The project is earmarked for implementation through PPP mode. M/s. RITES Ltd. appointed as Transaction Adviser and letter of award issued on 07.05.2013. The Board in its meeting held on 28.06.2013 accepted the review of DPR and the revised cost estimate of Rs. 613 crores. Validity of Environmental Clearance extends for 5 years. Tariff fixation proposal notified in the Gazette by TAMP.
10.	Development of off-shore multipurpose cargo berth	Mumbai	4 MT	6960	Project approved by CCEA. Tariff fixation proposal sent to TAMP and TAMP notified the tariff in Gazette on 26.12.2013. EIA/RA study awarded to M/s. Terracon Ecotech Pvt. for Rs. 11.49 lakhs on 27.1.2014.
11.	Development of Container Freight Station	Mumbai		800	Work order placed to M/s KPMG on 3.9.13 for preparation of DFR. M/s KPMG has submitted preliminary report on 16.12.2013 and

					comments of concerned department handed over to KPMG to finalise the report.
12.	Development of facilities for handling & storage of bulk cement	Mumbai	1.25 MT	950	Tender for leasing of land for setting up facilities for handling bulk cement and bagging plant floated on 8.5.13 and again on 3.7.2013 with revised upfront fee. As per directives of Ministry the matter is referred to TAMP for approval of rates considered for working out Reserve Price. Approval is awaited. Tender discharged on 28.03.2014.
13.	Development of Coal handling facilities at Mumbai Port Trust	Mumbai	3 MT	500	Invitation of offers for appointment of consultant for preparation of DFR through PPP mode. Work order placed to M/s Tata Consulting Engineers Ltd. On 3.8.2013. Draft Inception report submitted. DFR presented by the consultant who has been advised to finalise the same with certain minor changes.
14.	Development of Bunkering Facilities Terminals at Mumbai Port Trust	Mumbai			Tender for consulting services for preparation of DPR through PPP on tender-cum auction basis invited. Work order issued on 19.11.2013. Feasibility report received and forwarded to TC members for comments. Draft detailed project report received on 1.4.2014.
15.	Barge handling facilities at Khori Creek	Kandla	4	1000	Under planning stage
16.	Construction of T shape Jetty at at Tekra (Phase-II)	Kandla	14	15000	The scheme will spill over in 13 <sup>th</sup> five year plan. Under planning stage.
17.	Setting up of barge jetty at Tuna on captive use basis	Kandla	1.5	220	EOI invited. Only M/s Shree Renuka Sugars has submitted application till due date. Committee recommended the proposal submitted by M/s Shree Ranuka Sugars and also recommended to put up to the Board for approval.
18.	Construction of barge jetty at Tuna on BOT basis	Kandla	5.49	2553	Feasibility Report, RFQ and TAMP proposal under approval.
19.	Strengthening of oil jetty 1 & 2 to handle 13/14 m. draught vessels	Kandla	1.57	154	Detailed estimate under preparation.
20.	Development of Port based multi product SEZ	Kandla	-	10950	In-principle approval from MoS for formation of SPV is awaited. Concurrence of GoG is still awaited. KPT has appointed NIO, Mumbai for carrying out EIA studies.
21.	Development of General Cargo Terminal at Q8-Q9 berths	Cochin Port	4.23 MTPA of	1980	The Port had recast the project as an exclusive Coal Terminal M/s iDeCK had been retained as the Transaction Advisor for the



	(Modernization of Coal Handling at Cochin Port)		Coal		<p>project.</p> <p>TAMP has approved the References Tariff for the project and passed an order on 21/10/2013 and also issued an Addendum to that order on 20/12/2013.</p> <p>The consultant M/s i-maritime, Navi Mumbai have prepared the Feasibility Report for “Modernisation of Coal Handling at Cochin Port”.</p> <p>MoS on 31/01/2014, conveyed the approval of the GoI for implementation of the project subject to certain conditions including the one stating that the port should explore the possibility of improving MGT. However, it was decided to retain the specified MGC, without any change.</p> <p>MoS vide letter dt. 13/11/2013 had informed that informed that approval of the Cabinet has been obtained for licensing of 19.38 hectares of land to the concessionaire for implementing the project for “Development of Q8 &amp; Q9 as General Cargo Terminal” at Cochin Port through PPP on DBFOT basis at an estimated project cost of Rs. 221.30 Crores.</p> <p>MoS, as per letter dated 15/05/2013, had directed the Port to comply with certain conditions such as restricting height of structures, equipments on berth to 29m, obtaining NTRO clearance etc. CoPT, as per letters dated 08/07/2013 and 10/07/2013, had taken up the matter with JS (Ports) and JS (Navy) respectively for withdrawing those conditions. CoPT addressed NTRO on 22/10/2013 their consent to CoPT to go ahead with the project. Subsequently, CoPT on 31/10/2013, has again requested the Ministry of Shipping and Ministry of Defence to withdraw the condition imposed.</p>
22.	Construction of 1 No. shallow water berth for handling construction materials	Tuticorin	2.00 MTPA	654	Court case filed by M/s Indian Port Terminal, Tuticorin. The matter is at Hon’ble Madras High Court, Chennai. Hearing completed and awaiting for judgment. Port filed implead petition as per Ministry

					instruction on 20.03.2014.
23.	Development of Outer Harbour (9 Nos. of berth including constructions of Breakwater and Dredging)	Tuticorin	19.20 MTPA (16,00,000 TEUs)	209533	During the review meeting dated on 03.08.2012, a decision was taken to go for preparation of fresh DPR since the existing one was prepared in 2007 and there was much variation in the traffic profile. Accordingly Global NIT was published. After evaluation, work order for the preparation of Detailed Project Report was issued to M/s. i-Maritime, Mumbai on 26.02.2013 with a contract period of 9 months from the date of award of work order. The firm has presented the draft DPR in the final DPR on 29.10.2013. As per the final DPR channel is (-) 18m. The total cost of the project is Rs.23431.92 Crores in four phases. The first phase is Rs. 11,63 5.60 Crores which consists of Dredging, breakwater and road of Rs. 7241.89 Crores including interest during construction and the balance to be borne by the PPP operators. Total traffic for phase – I is 85.8 Million Tonnes per annum. On completion of four phases port will have a capacity addition of 290 MTPA. Investment by Port for Phase 2, 3, & 4 developments is nominal and main investment will be made by the PPP operators. Since the earlier environmental clearance was 2008, port sent proposal for seeking fresh Terms of Reference for approval of MoEF.
24.	Development of Mega Container Terminal	Chennai	(48 MTPA)	36860	The mega container terminal project is being restructured and port has appointed M/s. Ernst & Young as consultant for preparing feasibility study and TA.
25.	Development and management of Exim Automobile terminal for Ro Ro Vessels for a period of 10 years at BD-2 in Chennai Port	Chennai	3 MTPA	65	The tender for Ro Ro/ Exim automobile terminal issued on 13.1.2014. No bid received. FR consultant requested to suggest other alternative cargo. As regards liquid cargo, action is being taken to invite tender under land lease model.
26.	Development of Dry Dock and Timber pond/ Boat Basin	Chennai		315	Tender invited based on land lease model. No bids received. Board approved award of work on nomination basis to Cochin Shipyard Ltd. CSL has commissioned a Techno Commercial study. Draft MOU forwarded to CSL
27.	Development of JD East berth at Container terminal on DBFOT basis under PPP mode	Chennai	5 MTPA	475	No bids were received. ChPT Board resolved to close down the present proposal and invite fresh RFQ application for the projects. Technical Adviser and FC, M/s PWC were asked to explore the possibility of re-inviting RFQ and furnished their report considering the traffic analysis report of Ernst & Young. PWC will furnish the report by end of May, 2014.

28.	Construction of a riverine jetty south of 2 <sup>nd</sup> Oil Jetty through DBFOT Basis.	Haldia Dock Complex under KoPT	1.5 MTPA	471	Feasibility Study being undertaken, following which RFQ document would be issued.
29.	Construction of a riverine jetty south of 2 <sup>nd</sup> Oil Jetty through DBFOT Basis.	Haldia Dock Complex under KoPT	1.5 MTPA	471	Feasibility Study being undertaken, following which RFQ document would be issued.
30.	Construction of a riverine jetty south of 2 <sup>nd</sup> Oil Jetty through DBFOT Basis.	Haldia Dock Complex under KoPT	1.5 MTPA	471	Feasibility Study being undertaken, following which RFQ document would be issued.
31.	Construction of a riverine jetty south of 2 <sup>nd</sup> Oil Jetty through DBFOT Basis.	Haldia Dock Complex under KoPT	1.5 MTPA	471	Feasibility Study being undertaken, following which RFQ document would be issued.
32.	Construction of a riverine jetty south of 2 <sup>nd</sup> Oil Jetty through DBFOT Basis.	Haldia Dock Complex under KoPT	1.5 MTPA	471	Feasibility Study being undertaken, following which RFQ document would be issued.
33.	Development for Multipurpose Cargo Terminal at the Port of Mormugao, Goa	Murmugao	6.40 MMPTA	13660.00	Feasibility Report has been prepared by the Mormugao Port.

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

**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	Mundra, (Gujarat)	31	3490	Completion of construction of the following: 1) 4 berths 2) Reclamation 3) Back up area 4) Conveyor system on three berths.
2.	Development of South Basin at Mundra	Mundra (Gujarat)	32	1511	Completion of construction of the following: 1) 810 m container berths 2) T III Multipurpose berths 3) Reclamation 4) Backup area as per the requirement for the developed facility. Total capacity planned is 55 MT.
3.	Hazira Port Pvt. Ltd (HPPL)	Hazira, (Gujarat)	2.50 (MMTPA)	11,804	Phase 1 A (LNG Terminal) completed and operational.
4.	Development of BGCT under phase IB at Hazira.	Hazira, (Gujarat)	24.6	2676	Completion of construction of the following: 1) 2 container berths and 3 general cargo berths 2) breakwater 3) backup facility for handling the cargo.
5.	Development of Solid Cargo Port Terminal	Dahej, (Gujarat)	15	840	Two solid cargo berths with cranes completed 1) Backup area constructed 2) Conveyor system for berths no. 1 completed as per DPR.
6.	M/s Essar Bulk Terminal Limited	Salaya Gujarat)	5	208	Construction activity initiated
7.	M/s ABG Cement Ltd	Mora Surat Gujarat)	3	104	Construction activity initiated
8.	M/s Ultra Tech Cement Ltd ( Expansion)	Kovaya Pipavav Gujarat)	5	171	Construction activity initiated
9.	Development of an all weather and Multipurpose port at Rewas-Aware, Dist.	Thal, Rewas-Aware Maharashtra	43	52000	All clearances including Environmental clearance in place. Pre- construction activities in progress. Right of way through Mumbai Port Trust waters for navigation channel of Rewas-

	Raigad				Aware port is still awaited. Matter taken up with Ministry of Shipping, Govt of India.
10.	Development of an all weather and Multipurpose port at Dighi, Dist. Raigad	Rajpuri (Dighi ) Maharashtra	35	35000	One berth has become operational.
11.	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.
12.	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.
13.	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.
14.	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 from ministry of Environment & Forest, which is pending due to moratorium imposed upon projects in Ratnagiri and Sindhudurg districts.
15.	The demolition of old existing jetty and reconstruction of new jetty of length 184.05 mts. at panaji.	Panaji-Port Goa	*	150	90% of the work is completed.  * The jetty will cater to low craft passenger vessel and other small crafts. No cargo will be discharged/ loaded at this jetty.
16.	Establishing a captive port at Parangipettai by M/s IL &FS Limited	Parangipettai Tamil Nadu	13 MMTPA	1349	Construction yet to be commenced.
17.	6 <sup>th</sup> berth fertilizer Mechanisation for unloading	Kakinada Deep Water Port Andhra	4.5 million Metric Tons	3000	Work in progress, Expected to be ready by 3 <sup>rd</sup> quarter 2014.

		Pardesh			
18.	Gangavaram Port Limited	M/s Gangavaram Port Limited Visakhapatnm	24.41 MMTPA ( For Expansion)	13200	Under Progress
19.	Phase -II Development of Krishnapatnam Port	Krishnapatnm Port	44.30 *	66000	Under Construction *(Bulk & General Cargo) 3.30 MTEU (Container)
20.	Expansion, development and Operation of Gopalpur port. (PPP Mode)	Gopalpur, Orissa	0.55 MTPA to 54 MTPA	14110	i) Developmental Activities are in progress ii) All Weather Direct Berthing Port declared open for Commercial Traffic with effect from 29 <sup>th</sup> March 2013. iii) Port operation suspended with effect from 12 <sup>th</sup> October, 2013 due to the effect of very severe cyclone " PHAILIN".
21.	Development of Karaikal Port through private investment on BOT basis	Karaikal, Puducherry	Phase – I 4.0 Phase - II 10.5	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 nearing completion. The total cargo handling capacity presently is 14.5 million tons per annum.
22.	Development of Pondicherry Port through private investment on BOT basis	Pondicherry	Phase – I 16.2 Phase - II 10.8	27850 N.A	Developer has issued "Notice"of intent to terminate the Concession Agreement entered for the project. Arbitration in progress.
23.	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 are functioning.

Source: Maritime States/Maritime Boards

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

Sl. No	Project	State/ Ports Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
1.	GCPTL Proposed 2nd liquid jetty & allied infrastructure.	Dahej (Gujarat)	2.5-3.5 (estimated)	25000 (estimated)	Techno- Commercial Feasibility study is under progress.
2.	Sterling Port Limited	Dahej (Gujarat)	21 ( Phase -I)	25018	Under Construction.
3.	Petronet LNG Ltd. 2nd jetty	Dahej (Gujarat)	10	9000	Under Construction
4.	Petronet LNG Ltd. 2 nd Tank & Regassification facility.	Dahej (Gujarat)	15	31250	Construction starting from September 2013.
5.	Development of Greenfield port.	Chhara (Gujarat)	8	Option -1 12,166 Option-11 10,798	Env Clearance Underway. Concession agreement discussion going on
6.	Development of Greenfield port.	Modhawa (Gujarat)	Developer Under selection at GoG Level		
7.	Development of Greenfield port.	Bedi (Gujarat)	Developer Under selection at GoG Level		
8.	Development of Greenfield port by M/s. IL & FS	Khambhat (Gujarat)	Keep on hold		
9.	Development of Greenfield port by Ms. JK Cement Group	Dholera (Gujarat)	Keep on hold		
10.	M/s Reliance Ports and Terminal Ltd- multipurpose jetty	Sikka (Gujarat)	15	2048	Construction approval has been granted
11.	M/s Essar Bulk Terminal limited ( 3 <sup>rd</sup> Expansion )	Hazira (Gujarat)	20	1546	Inprinciple approval has been granted

Sl. No	Project	State/ Ports Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
12.	M/s Reliance Industries Limited Second SPM	Hazira (Gujarat)	4	350	GMB granted final permission of Construction
13.	M/s Sanghi Industries Ltd Captive jetty ( Expansion )	Jakhau Gujarat)	8	455	Environmental clearance has been completed
14.	M/s ABG Cement Ltd	Jakhau Gujarat)	4	61	Inprinciple approval has been granted
15.	M/s Universal Success Enterprise Ltd	Gojiness ( Bhogat ) Gujarat)	5	1260	Environmental clearance has been completed
16.	Captive port facility by M/s. Udangudi Power Corporation Ltd.	Udangudi Thoothukudi Tamil Nadu	6	90830	Port has been notified. Development under process.
17.	Captive port facility by M/s. Coastal Tamil Nadu Power Ltd.	Cheyyur Kancheepuram Tamil Nadu	13	160000	The Port limits are yet to be assessed.
18.	Captive port by M/s. Chettinad Power Corporation Ltd.	Tharangambadi Taluk Nagapattinam Tamil Nadu	3.5	75000	Port has been notified. Development under process.
19.	Captive port permitted to handled other commercial cargo by M/s. Nagarjuna Oil Corporation Ltd.	Thiruchopuram in Cuddalore Tamil Nadu	9.3	3840 ( Captive facility only )	Port has been notified. Development under process.
20.	2nd stage Development of Karwar Port	Karwar Karnataka	5	1500	Issue of bid documents is under progress.
21.	Development of Modern Sea Port at Tadri.	Tadri Karnataka	34	3000	IDD Nominated KSIIDC as nodal agency. Preparation of DPR is under progress.
22.	Development of Deep Draft Green field Port at Haldipur Port	Haldipur Karnataka ( Proposed )	18	1900	DPR under progress by Mineral Enterprises Limited, Bangalore.



Sl. No	Project	State/ Ports Maritime Board	Capacity (Million Tonnes)	Project Cost (Rs. Million)	Project Status
1	2	3	4	5	6
23.	Development of Honnavar Port	Honnavar Karnataka	2	200	M/s. Honnavar Port Ltd., has submitted DPR for the approval of the Government.
24.	Captive Port at Manki Port	Manki Karnataka	1	46	M/s. Renuka Sugar is in the process of preparing DPR for construction of captive jetty.
25.	7th Berth at Kakinada	Kakinada Deep Water Port Andhra Pradesh	2.5	900	Yet to commence.
26.	East Coast Energy Pvt. Ltd.	Meghwaram Andhra Pradesh	Captive Port	23700	To commence by last quarter of 2017.
27.	-	Bhavanapadu, Andhra Pradesh	6.45	23620	DPR under process.
28.	Development of Port at Subarnarekha Mouth( Kirtannia) (PPP Mode)	Subarnarekha Mouth (Kirtannia) Orissa	25 MTPA to 55 MTPA	23450	Land acquisition/alienation process is in progress.
29.	Development of Port at Astaranga (PPP Mode)	Astaranga Orissa	17.70 MTPA to 71.30 MTPA	73420	Land acquisition/alienation process is in progress.
30.	Captive port (PPP) Mode	Chudamani Orissa	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 )

**Outlay And Expenditure - Port Sector (Central)**

(Rs. In crore)

Port	Annual Plan (2007-08)		Annual Plan (2008-09)		Annual Plan (2009-10)		Annual Plan (2010-11)		Annual Plan (2011-12)		Annual Plan (2012-13)		Annual Plan (2013-14)	
	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)	37.37	63.05	44.97	53.64	58.00	48.85	50.88	49.76	63.73	21.29	28.45	17.34	27.49	16.27
Mumbai	50.36	26.10	150.00	23.50	192.00	146.09	179.58	116.76	176.57	142.05	279.79	149.30	237.52	109.00
JNPT	188.18	70.28	175.17	48.77	324.00	177.94	89.61	38.24	153.69	140.52	341.18	240.21	1399.43	1031.39
Chennai	47.81	44.41	72.95	48.98	34.00	58.37	243.00	184.46	136.00	4.44	145.00	81.75	72.70	19.29
Cochin	158.52	139.07	255.65	246.33	191.97	190.93	259.35	160.86	115.08	92.21	93.45	78.47	49.05	35.44
Visakhapatnam	83.00	36.61	39.97	31.44	65.01	75.74	151.00	121.19	190.00	113.45	102.71	57.92	245.99	264.06
Kandla	89.49	38.25	140.87	58.07	115.00	62.64	45.66	52.70	92.27	52.82	166.89	138.44	195.34	147.26
Mormugao	10.10	11.18	22.07	17.52	71.00	31.01	66.29	71.52	108.93	69.17	71.36	46.95	150.28	66.49
Paradip	100.00	42.05	288.00	101.47	276.51	128.19	166.21	81.26	70.00	74.80	127.31	73.73	94.32	90.01
New Mangalore	36.00	25.81	30.00	30.11	34.00	32.48	31.00	24.56	36.00	38.45	36.00	45.50	40.00	48.73
Tuticorin	79.46	63.16	96.87	65.12	220.50	39.03	90.94	172.08	291.97	369.65	201.42	42.63	140.05	43.89
Ennore Port Ltd.	61.00	34.53	70.00	102.43	95.01	50.52	95.00	70.12	60.00	61.92	73.50	80.03	380.00	586.77
Sethusamudram Ship Canal Project	664.22	119.47	1581.07	152.24	161.10	20.98	10.00	6.02	10.01	8.51	4.00	2.12*	1.00	3.14*
WEB Based EDI Port Community System	7.50	0.04	6.00	1.00	3.00	3.33	4.88	4.46	2.38	2.01	2.00	2.00	1.00	1.00
Others (b)	477.26	170.67	598.38	88.50	564.90	161.68	362.86	223.31	673.09	518.08	901.87	579.43	728.20	823.52
Survey Vessels	19.00	0.00	79.00	5.00	10.00	0.00	15.00	15.00	15.00	15.00	0.00	0.00##	0.00	0.00
Total	2109.27	884.68	3650.97	1143.10	2416.00	1227.78	1861.26	1392.30	2194.72	1724.37	2574.93	1633.70	3762.37	3283.12

(a) Includes Haldia and RR Schemes.

(b) Includes DCI, ALHW, R&amp;D Studies, Post Tsunami 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

## 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	47	0	6646	378	4802	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	708	158	0	9	94	107	6960	463	3808	11844
	2013-14	717	147	0	263	4	398	7062	449	4283	12874
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	4796	1715	1976	4503	386	0	2869	137	11839	28084
	2013-14	6105	2170	1598	5350	559	0	2202	114	10527	28511
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	16467	1833	21403	4702	4146	0	171	13	7830	56552
	2013-14	17703	5593	25027	7042	4054	0	99	9	8485	68003
Visakhapatnam	2009-10	18291	18944	3771	7951	3684	226	1678	98	10956	65501
	2010-11	19242	19347	3538	7926	4079	203	2572	146	11134	68041
	2011-12	17428	16243	3189	6874	4551	517	4213	234	14405	67420
	2012-13	13501	12569	2951	6795	2588	1121	4554	247	14959	59038
	2013-14	14008	13032	2744	6928	2566	834	4916	262	13475	58503
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	13376	52	0	0	421	314	29708	1539	9533	53404
	2013-14	12784	71	0	0	415	286	28330	1468	9219	51105
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	521	0	14240	685	0	0	0	0	2439	17885
	2013-14	2340	0	22127	355	0	0	0	0	2515	27337
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	547	0	6689	0	1059	128	9372	476	10465	28260
	2013-14	479	0	6644	0	1178	49	10129	508	10163	28642
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	14027	0	28	0	353	0	4607	335	830	19845
	2013-14	14321	0	0	0	307	0	4785	346	1474	20887
New Mangalore	2009-10	21339	7062	0	2810	833	161	475	31	2848	35528
	2010-11	21551	3744	0	2856	788	116	568	40	1927	31550
	2011-12	22245	3036	0	4022	825	58	645	45	2110	32941
	2012-13	22538	2616	2553	4358	536	204	692	48	3539	37036
	2013-14	24647	3123	2928	5420	504	33	747	50	1963	39365
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	6606	78	60	258	20	1724	17738
	2013-14	527	44	0	7518	179	44	235	19	3192	11739
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	4126	0	0	0	0	0	57911	4259	2451	64488
	2013-14	4414	0	0	0	0	12	55234	4162	2673	62333
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	34751	0	4100	0	512	880	829	58	16966	58038
	2013-14	35980	0	4221	0	302	0	450	40	18231	59184
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	54544	925	4064	374	4624	3783	1935	118	23370	93619
	2013-14	53137	586	6080	270	3635	2732	452	29	20113	87005
All Ports	2009-10	174861	100892	43440	28346	17731	1757	101244	6863	92819	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	180725	27289	58772	28032	14797	6597	119866	7714	109753	545831
	2013-14	187162	24766	71369	33146	13703	4388	114641	7456	106313	555488

P : Provisional

Source: BPS and Major Ports and Indian Ports Association.

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	165137	7636	8408	54337	6418	45881	287817
	2013-14	167318	5590	15122	65657	4769	51490	309946
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	397	7818	2042	10396	84	3461	24198
	2013-14	0	7825	1998	9715	0	5126	24664
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	1762	977	1111	30854	5135	11972	51811
	2013-14	1766	1475	980	35568	5325	13585	58699
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
	2013-14	0	3276		339	0	0	3615
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	631	0	6	0	252	44	933
	2013-14	788	0	27	0	41	10	866
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	38	0	0	5	52	515	610
	2013-14	38	0	17	6	75	373	509
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	600	2148	386	13559	607	1865	19165
	2013-14	543	4080	720	14601	354	1642	21940
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	168565	21855	11953	109264	12548	63738	387923
	2013-14	170453	22246	18864	125886	10564	72226	420239

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

## Annexure-IV

## Commodity-Wise Capacity Available at Major Ports

(In Million Tonnes)

Commodities	KDS	HDC	PPT	VPT	EPL	ChPT	V.O.C.	CoPT	NMPT	MoPT	MbPT	KPT	JNPT	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>POL</b>														
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
As on 31.3.14	4.50	17.00	43.00	25.65	3.00	17.67	2.30	24.01	49.17	1.50	32.00	66.60	5.50	291.90
<b>Iron Ore</b>														
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
As on 31.3.14	-	6.00	4.50	12.50	6.00	8.00	-	-	7.50	27.50	-	-	-	72.00
<b>Coal</b>														
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
As on 31.3.14	-	7.00	20.00	-	21.00	-	12.55	-	5.40	-	-	-	-	65.95
<b>Fertiliser</b>														
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
As on 31.3.14	-	-	7.50	1.00	-	-	-	0.80	-	-	-	2.00	-	11.30
<b>Break-Bulk Cargo</b>														
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
As on 31.3.14	6.74	15.75	33.80	47.09	1.00	17.92	22.21	12.35	15.70	7.65	11.53	26.52 *	0.90	219.16
<b>Container</b>														
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
As on 31.3.14	5.90	4.00	-	2.68	-	42.45	5.00	12.50	-	-	1.00	7.20	59.48 @	140.21
<b>TOTAL</b>														
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	44.70	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	40.96	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 31.3.13	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
As on 31.3.14	17.14	49.75	108.80	88.92	31.00	86.04	42.06	49.66	77.77	36.65	44.53	102.32	65.88	800.52

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

@ : Capacity of JNP Container Terminal (3berths), NSICT (2berths), GTIPL (3berths) 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 Iron Ore berth has been taken as 6.0MT at Ennore Poert. After full fledged commissioning, balance capacity of 6.0 MT 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 of MbPT crafts and no capacity has been accounted

\* After accounting the capacity due to productivity, addition of berth No. 13 &amp; 15,MHC, Floating cranes

Source : Development Wing - Department of Shipping.