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TRAFFIC PERFORMANCE AND EFFICIENCY OF MAJOR PORTS IN INDIA

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ABSTRACT

Ports play a vital role in India's overall economic development.Byvolume,90%of the country's international trade relies on maritime transport (70%byvalue). India's port network comprises 13 major and 187 non-major ports. Over financial year India's GDP recordeda7.6 percent CAGR, while cargo handled by its ports posted 8.6 percent CAGR. During the same period, India's export-import(EXIM) trade rose from 4.3 trnto38.1trn, a 21 percent CAGR. The Government of India plans to increase India's share of global trade from the current from1.5 percentto5 percent, with a corresponding increase in cargo traffic from 912 mtonsin financial year 2012 to 2,484 m tons by financial year 2020. Towards this, it has planned investing `2.7 trn in the ports sector to enhance capacity of major ports from 697mtonsin financial year 2012to1,460m tons by financial year 2020.A delay in expanding major ports spells opportunities for private port operators with strong promoters and appropriate infrastructure.

Key words: Major ports, Coastal trade, Vessels

INTRODUCTION

Ports in India are classified as major and non-major. This is based on controlling authority, not size of operations. The Major ports fall under the Ministry of Shipping. Those operated under concessions from state maritime boards or state governments are non-major. Those under the Ministry are governed by the Tariff Authority for Major Ports(TAMP), which regulates tariffs for vessels and cargo, and decides rates for lease of properties of major port trusts. Non-major ports are relatively free to set their own tariffs and hence have the advantage of attracting more cargo. India has a coast line of~7,517km(on the western and eastern sides of the main land and the islands), with 13 major ports (only one at

Andaman & Nicobar Islands is nonoperational) and187non-majorports(only 48 operational).

NEED OF THE STUDY

A country cannot stand alone on the basis of self-sufficiency and there must be an exchange between the countries at the world. In this process ports serve as an efficient and modern nodal point of exchange of cargo between nations. Hence government of India has introduced and implementing many schemes for the development of ports in modernization of port facilities and use the update technology in order to improve the efficiency of port operations. The growth in traffic has exceed he growth in traffic has exceed the growth in capacity leading to congestion and low productivity. Low level productivity and inefficient process and procedures make the Indian maritime sector unattractive in the eyes of global players.

OBJECTIVES OF THE STUDY

The main objectives this articles includes

1. To measure the operational efficiency and performance of major ports in India
2. To offer suggestion based on the findings of the study

METHODOLOY

a. Sources of Data

This study is entirely based on secondary data which wasc ollected from the reports of port authorities, CMIE data bases and India State websites.

B.Frame Work of Analysis

The data were analyses with the help of compound annual growth rate. The Compound Annual Growth Rate (CAGR) is frequently used in business presentations.

The formula for Compound Annual Growth Rate is

CAGR = {End value/ Start value} ^ (1% No-of-years)-1

C.Period of the Study

The present study covers the period of five years from 2010-2011 to 2014-2015.

ANALYSIS AND INTERPRETATION OF DATA

Traffic Handled at Major and Non Major Ports in India

It refers to the traffic handled as overseas loaded/unloaded, coastal loaded loaded/unloaded at major and non major ports. Major ports and Non-major Ports are the ports which are administered by Central, State/UT Governments. There are12 major ports and 200notified non-major ports situated along with coastline and Sea Islands.

TABLE – 1Traffic Handled at Major and Non Major Ports in India

Year	Major Ports	Non Major Ports	Total (Million Tonnes)	% Share of Major Ports	% Share of Non-Major Ports	CAGR (%)
2010-2011	570.3	314.5	884.88	64.42	35.58	4.4
2011-2012	560.13	353.02	913.15	61.34	38.66	
2012-2013	545.79	387.87	933.66	58.45	41.54	
2013-2014	555.5	417.13	972.63	57.11	42.89	
2014-2015	581.34	470.67	1052.01	55.26	44.74	

Source:IndianPortsAssociation

The above Table 1explains the traffic performance of major and non major ports in India. The traffic handled by non major ports has increased from 35.58 percent in the year 2010-2011 to 44.74 percent in the year 2014-2015.Whereas the traffic handled by major ports fluctuating from 58.45 percent in the year 2012-2013 to 64.42 percent in the year 2010-2011.

Commodity Wise Cargo Traffic Handled at Major Ports

It refers to Principal Commodity wise Traffic Handled at Major Ports. Various Principal commodities are POL and POL Products, Fertilizers and Fertilizer product, Iron Ore, Coal, Food Grain, Container and the like. There are 12 Major Ports in the country. These are - Kolkata (including Dock complex at Haldia), Paradip, Visakhapatnam, Kamrajar (Ennore), Chennai, V.O. Chidambaranar on the East Coast and Cochin, New Mangalore, Mormugao, Jawaharlal Nehru, Mumbai and Kandla on the West Coast. All Major Ports except Kamrajar are administered by the respective Port Trusts, which are autonomous bodies. The details of Commodity wise cargo traffic handled at major ports are presented in Table 2.**Table – 2 Commodity Wise Cargo Traffic Handled at Major Ports (in Million Tonnes)**

Year	POL (Crude & Products)	Fertilizer	Fertilizer Raw Material Dry	Iron Ore	Coal	Food Grains	Others	Total	CAGR (%)
2010-2011	179.88	1237	8.43	87.69	75.15	1.92	204.65	570.09	1.6
2011-2012	173.85	12.22	8.18	60.72	78.78	3.28	223.16	560.19	-1.74
2012-2013	180.73	7.47	7.33	27.29	86.8	6.6	229.61	545.83	-2.56
2013-2014	181.06	6.15	7.64	24.62	104.27	4.79	226.96	555.49	1.77
2014-2015	181.02	7.93	8.36	18	119.47	3.09	243.46	581.33	4.65

Source: Indian Ports Association

From the Table 2, the commodity wise cargo traffic handled at major ports shown 570.06 million tons in the year 2010-2011. As compare with year 2010-2011, it decreases to 560.19 million tones and 545.83 million tons in the year 2011-2012 and 2012-2013. Further, it increased to 555.49 million tons and 581.33 million tons during the year 2013-2014 and 2014-2015 respectively.

Average Pre – Berthing Detention

This is the time taken by a ship from its arrival at the anchorage and reported to the reporting station till it arrives at the operational berth excluding time taken for inward movement. It contains Average Pre-Berthing Detention (APBDT) of Major Ports in India. The average pre-berthing waiting time can be obtained by dividing the total pre-berthing waiting time of all cargo vessels sailed from the port during a period by the number of cargo vessels sailed during that period. The pre-berthing waiting time on port account and non-port account shall be maintained separately. Table 3 explains the average Pre-Berthing Detention of major ports in India.

Table – 3 Average Pre – Berthing Detention (Days)

Port	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	CAGR
Kolkata D.S	1.23	0.77	0.61	0.56	0.71	12.84
Haldia D.C	3.73	2.54	2.29	2.21	1.43	21.31
Paradip	5.04	3.69	1.65	1.94	4.11	4.97
Vishakhapatnam	2.81	2.84	2.5	1.84	2.59	2.01
Kamarajar	0.65	0.76	1.33	2.38	2.51	-40.18
Chennai	1.61	1.16	0.8	0.41	0.41	28.96
Chidambaranar	1.29	1.91	1.31	1.19	1.07	4.56
Cohin	1.03	1.05	1.09	0.97	0.84	4.97
New Mangalore	0.59	0.79	1.04	0.81	0.6	0.42
Morugo	4.07	2.94	1.62	1.47	1.61	20.69
J.L Nehru	1.51	1.13	1.31	1.08	0.8	14.68
Mumbai	1.23	1.37	1.62	1.18	1.69	8.26
Kandla	3.32	3.74	3.58	2.72	2.52	6.66
All Ports	2.32	2.05	1.79	1.48	1.61	8.72

Source**:** Indian Ports Association

Table 3, shows the average Pre-Berthing detention of all the major ports in India. Chennai port shows highest CAGR (28.96) and kamarajar port shows lowest CAGR (-40.18) during the year 2010-2011 to 2014-2015.

Average Turnaround Time

The average turnaround time—the duration taken to load or unload a vessel—of major Indian ports have seen a gradual decline over the years. However, it still remains above the average time taken by some of the top ports globally. The average turnaround time days presented in Table 4

Table – 4 Average Turnaround Time (Days)

Port	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	CAGR
kolkata D.S	6.21	5.45	4.72	4.51	4.97	5.41
Haldia D.C	4.45	3.62	3.95	3.77	3.36	6.78
Paradip	7.73	6.33	4.39	4.62	7.01	2.41
Vishakhapatnam	5.84	5.68	5.39	4.73	5.67	0.73
Kamarajar	2.78	2.17	2.95	4.24	4.32	(-11.65)
Chennai	4.36	3.91	3.24	2.46	2.54	12.63
Chidambaranar	4	4.94	4.31	3.92	3.37	4.19
Cohin	2.2	1.82	1.58	1.76	1.69	6.38
New Mangalore	2.7	2.95	3.29	3.18	2.46	2.3
Morugo	10.43	7.68	5.06	4.5	3.97	21.43
J.L Nehru	2.64	1.94	2.48	2.26	2.24	4.02
Mumbai	4.96	5.22	5.58	4.25	4.09	4.7
Kandla	5.9	6.42	6.33	5.66	4.9	4.53
All Ports	5.29	4.56	4.29	3.84	3.89	7.39

Source: Indian Ports Association

Table 4 deals that, the average turnaround time was highest mourgo port (CAGR 21. 43) and it was lowest in kamarajar port (CAGR – 11.65)

CONCLUSION

The major ports in India are plagued with high level of in efficiency. Internally also they are facing severe competitions from non major ports and are losing their market share to them year

after year. Given the increasing global competition in the port sector, it is imperative for these port store-invent themselves to keep ahead of competition. For this purpose the port management should be completely professionalized and truly autonomous. Operating as Government owned trusts limit their abilities to meet the challenges of the market and severely restrict their responsiveness to market demands. Under such circumstances corporatization can certainly give a thrust to these ports and help them become more vibrant.

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