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Indian Maritime Transport Services – Global Opportunities and Challenges

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1.0 Introduction

1.1 Sustainable growth of Economy requires an efficient and reliable transport network linking the centers of production with consumptions. Maritime transport is no doubt the largest and the most efficient means of transport on the global scale. The important role of shipping in international trade is evident from the fact that about 95% of international trade by volume and about 75% by value is moved by sea (*UNCTAD Review of Maritime Transport – 2005*). India with a coastline of over 7517 kms and a geographic location athwart the major east-west international trade route gives India a strategic advantage to develop as a major maritime nation in the world.

2.0 Positive contribution to GDP

2.1 The Indian economy has decidedly 'taken off' and moved from a phase of moderate growth to a new phase of high growth. Achieving the necessary escape velocity to move from tepid growth into a sustained high-growth trajectory requires careful handling of the situation i.e. sustainability of high growth with moderate inflation, and the Indian economy is able to gallop well in the given circumstances. India witnessed a GDP growth of 9.0 % in 2005-06 and 9.2% in 2006-07, which is among one of the highest in the world today. India's overall macroeconomic fundamentals are robust, particularly with tangible progress towards fiscal consolidation and a strong balance of payments position. With an upsurge in investment, the outlook is distinctly upbeat. The robust performance of the economy has given us the confidence to target a 9% growth during the 11th Five Year Plan (2007~12) as against 8% targeted during the 10th Plan (2002~07).

2.2 A major shift in the pattern of Indian economy has been the increasing contribution of Services to our GDP. We are maturing from an agriculture based economy in the past to value added manufacturing and services economy. During the year 2006-07, it is forecast that the share of agriculture in GDP would decline to 18.5% and the share of industry and services would improve to 26.4% and 55.1%, respectively. Shipping has been making a positive contribution to the GDP by providing a vital link in trade. Gross Value Added (GVA) of shipping industry increased from about Rs.919 crores in 1990-91 to Rs.1524 crores in 2001-02. Average GVA per GT is expected to be Rs.2, 211 and a study on shipping industry by the Tata Economic & Research Institute has estimated that a 1% change in GT is likely to bring about 0.0068% change in the country's GDP.

3.0 Historical perspective

3.1 India's maritime history dates back to the days of the Indus Valley Civilization when an active trade relationship existed with Egypt and Mesopotamia. Indian shipping industry continued to play an important role in the mid nineteenth century during the trade by the East India Company. A new era in the Indian shipping industry dawned from 5th April, 1919 when the first national ship "S.S.Loyalty" sailed from Bombay to London. From the days of the first sailing till today, Indian maritime sector has evolved as a major pillar of the development of our nation. India's coastline today is dotted with 12 major ports and 187 minor and intermediary ports. India today ranks 17th in the world merchant fleet with a fleet size of 780 vessels of 8.45 million GT.

4.0 Outlook for Maritime Services

4.1 Sustainability of the growth of Indian economy would be dependent upon the availability of necessary support infrastructure. The Indian maritime industry today has challenges to meet in order to avoid bottlenecks to this growth. While the Indian economy has been galloping high, infrastructure bottlenecks are one of the major impediments to this growth. Over US\$ 320 billion investments would be required during the 11th Plan period in building infrastructure to meet the burgeoning national trade. In view of the sheer size of this requirement, the Government is encouraging private investments in most of the sectors. Innovative public - private partnerships are planned in major sectors to attract investments. Some of the major areas of investments which open up opportunities galore are detailed out hereafter.

5.0 Shipping

5.1 India with a merchant fleet of 780 vessels is ranked 17th in the world merchant fleet. The Indian fleet however caters to only about 13.7% of India's overseas trade. Indian merchant fleet which witnessed an era of stupendous growth from independence till about the eighties stagnated during the 8th and the 9th Plan period at less than 7 million GT. The 10th Plan period has however witnessed some growth in shipping and the tonnage has now reached 8.45 million GT. Nevertheless the tonnage growth has been much below the growth in trade and the share of Indian lines has been on a decline. Such high dependence on foreign lines leads to high freight outgo for the nation to overseas companies and this money could very well be absorbed within national economy. A study by UNCTAD has stated that the average freight cost as a percentage of import value is 9.1% for developing nations as against 3.9% for developed nations. Thus, there is scope to scale down the freight component for Indian trade and for this we need to develop a strong national line.

5.2 One of the major catalysts to the growth of Indian merchant fleet in the recent past has been the adoption of Tonnage Tax regime. Many major maritime nations internationally have adopted the tonnage tax regime whereby tax is paid on the basis of capacity irrespective of the earnings from that capacity. Adoption of tonnage tax regime has been very beneficial in the growth of Indian tonnage as shipowners are attracted to flag their vessels in the country and reap the benefits under the scheme. Adoption of tonnage tax made a positive impact for growth of our national tonnage.

5.3 The Indian fleet has an average age of 17.9 years, which is higher than the world average of 12 years (figures to be confirmed). However, 42.2% of the existing fleet in India is over 20 year's age and needs to be replaced in the immediate future. This replacement would entail an investment of over US\$ 5 billion and that too would mean that the fleet is maintained at existing levels only. Any growth in fleet would come only by way of additional investments. The immediate challenge before Indian maritime community is to attract massive investments in this sector. Already 100% Foreign Direct Investment is allowed in shipping and with the respect that the Indian flag draws in the international maritime community, it is not a Herculean task to attract such investment in the country. India has a well developed support facility in the country in terms of legal and banking set up and this would help in attracting the investments envisaged.

6.0 Ports

6.1 India has 12 major ports which together handled 423 million tones traffic during the year 2005-06. India also has about 187 minor and intermediary ports which handle 519 million tones of traffic. Traffic at Indian ports has been growing at a rate of over 11% during the past five years and with the continuing boom in the trade port traffic is expected to grow even further. Lack of port infrastructure has been one of the major bottlenecks for our maritime growth. It is expected that over the next decade port traffic would grow at 7.69%, which would entail and addition of 528 mmt port capacity.

6.2 Port infrastructure in India is inundated with problems of low draught and inadequate back up services. Shippers prefer shipments by large size vessels to reap the benefits of economies of scale. However, in the absence of port infrastructure India has already lost out to hub ports like Singapore, Colombo and Dubai in the container trade, from where containers are transshipped to the country. There is an immediate need of deepening the draughts at major ports in the country to accommodate large size vessels in all shipping segments. For tankers, we need to have more single buoy moorings which would handle

tankers in the VLCC and Suezmax range, thereby bringing down the unit cost of transportation of oil. Similar world class facilities are required for handling large capsized bulkers in the dry bulk range and deeper draughts with larger size gantries are required for handling modern container ships.

6.3 In addition to deeper draughts, a major challenge for ports is to build up back up services. With productivity at some of the back up facilities not supplementing port services, we have encountered problems in congestion at ports and vessels unable to discharge at ports due to lack of warehousing and transportation facilities. JNPT, which is the largest container port in India has been facing the problem of low turnaround time for containers from the port premises due to inadequate train services from the port and this has resulted into the port unable to take in additional traffic. The dedicated freight corridor for transportation of containers by rail is a major breakthrough in this regard and once commissioned, this facility would improve the throughput at Indian ports dramatically. The project is estimated to cost about Rs.22,000 crores (US\$ 4.89 billion) and is likely to change the shape of multimodal transport in our country.

7.0 Dredging

7.1 There is a worldwide trend among shipping companies to go in for bigger vessels in order to achieve economies in cost of operation. The increase in the ships' size necessitates appropriate port infrastructure, primarily the required depths available at the port to accommodate such bigger vessels. Accordingly, there would be a huge demand for dredging at the Indian ports as the channels need to be deepened to accommodate bigger vessels and almost all the major ports in India have plans to deepen their approach channels so that such bigger ships can be accommodated. Further, the maintenance dredging requirement of the Indian ports is substantial considering the siltation problem at the ports. The Sethu Samudram ship canal project connecting the Gulf of Mannar with Palk Bay through Adam's Bridge provided a major thrust to the growth in the dredging segment in India. The project entails an investment of about Rs.2,427 crore and dredging about 82 million Cubic meters along the 167 km long channel to create a draft of 12.0 meters.

7.2 According to some preliminary estimate, the estimated cost for maintenance dredging alone in the country's port sector will be about Rs 1,000 crore annually. By far the country's biggest maintenance dredging is undertaken in the Hooghly river (Rs 234 crore annually) for Kolkata port. The 11th Plan sub group of the Working Group on Ports sector envisages the maintenance dredging requirement of Major ports and Sethu Samudram ship canal to

the tune of 380.06 million cum during the Eleventh Five Year Plan period and about 33.89 million cum for the minor ports & fishing harbours.

7.3 According to the 11th Plan Sub group of the Working Group on Ports sector the capital dredging requirement of the Major Ports and the Sethusamudram ship canal during the 11th Five Year Plan period would be about 432.29 Million cum of which majority of the work will have to be undertaken by foreign dredging companies in absence of sufficient Indian capacities.

7.4 The National Maritime Development Programme envisages the capital dredging requirement of major ports and navy to the tune of Rs.6,304 crores. The Phase-I of the NMDP consists of 17 projects concerning deepening of channels/berths with a projected investment of Rs.3,118 crores and the second phase envisages further investment of Rs. 3,186 crore for 8 projects.

7.5 Dredging provides immense opportunity in India with current dredging capacity in India is unable to meet the demands of ports and harbours, which have to contract for dredging with foreign flag vessels. Hiring foreign flag vessels involves mobilisation and demobilisation costs and hence another bi challenge before the Indian maritime community is to develop dredging capacity in the country.

8.0 Shipbuilding

8.1 The international shipbuilding industry has seen a paradigm shift in the past 3 decades whereby the share of European shipbuilding has dwindled from over 40% in the seventies to less than 5% at present. Japan, Korea and China together have emerged as the shipbuilding base for the international maritime community with a total share of over 90% in the world. However, the past 3~4 years have witnessed an unprecedented boom in the shipbuilding industry and all shipyards now report full capacity. It has become very difficult for shipowners to secure early building berths in such circumstances and thus newbuilding capacity is being scouted at new locations. Many newbuilding yards have thus come up in China and some of the major international shipbuilding companies have developed capacities in Romania, Vietnam, Philippines, etc.

8.2 This has opened up opportunities for shipbuilding in India too. India presently has 23 shipyards of which 7 are under the control of the union government and 2 under state government. The remaining are in the private sector. Together Indian shipyards account for about 0.3% of the world shipbuilding capacity. There has been a recent phenomenon

whereby Indian shipyards have generated orders from international shipowners and there has been a rising trend of newbuilding orders in India for overseas market. In order to cater to the rising demand for shipbuilding, many of the private sector shipyards are increasing capacity by setting up new facilities to build larger size vessels.

8.3 However, the challenge before the shipbuilding industry is lack of support infrastructure. Steel, Main Engine and major Equipments together account for over 60% of the cost of a vessel and for vessels built in India, almost all of this has to be imported. Countries like Japan, Korea and China have an established shipbuilding steel plate manufacturing set up and if Indian shipyards have to compete successfully in the international market, such steel needs to be manufactured in the country. Similarly the challenge before the Indian maritime community is to invite main engine and other equipment manufacturers to set up manufacturing units in India, which would make the input cost of these materials for building ships competitive.

8.4 The Government has proposed setting up two international size shipyards, one each in the East coast and the West coast in India under the NMDP. These shipyards to be set up at a cost of Rs.7,200 crores are expected to build vessels upto the size of VLCCs. International co-operation is being sought from various shipyards for fructifying this concept and once established these would improve the share of Indian shipbuilding in the international market upto some extent.

Manpower

8.5 India is ranked 6th as a manpower supplier in the international maritime community with about 25,000 deck and engineering officers, 19,000 other category officers including petty officers, and 54,000 ratings. Indian seafarers are highly respected owing to their superior academic levels, analytical and problem solving skills and above all proficient command over English language. Major international shipping companies source their manpower from India, which has over 150 training institutes which produce about 11,164 seafarers (4575 officers and 6589 ratings) annually.

8.6 Shortage of seafarers is an international phenomenon and Indian maritime community is also inundated with this. With a high number of vessels on order and limited number being scrapped, there is a big demand for additional manpower for the international fleet. The problem is compounded with the fact that seafaring is no more the preferred profession for youngsters in developed nations and these countries have to depend upon seafaring supplier nations like India to man their fleet. The immediate challenge before the Indian maritime community is therefore to improve the quality of maritime education making the ship board training mandatory for training institutes and introduction of Resource

Support Centres for monitoring and improvement of the quality of teaching in the maritime training institutes.

8.7 The setting up of the Indian Maritime University would be a big step in this regard. The University is being set up in Chennai and this would be the apex institution for all maritime institutes in the country. All the existing maritime colleges of the Government would also be a part of this university and it can be expected that the Indian as well as the international maritime community would benefit tremendously from this university. Over and above the competency courses, the IMU will also take up courses of higher learning in unexplored and virgin areas of professional education leading to post-graduate and doctoral level courses in ship building, logistics, maritime law, maritime economics, marine biology, oceanography and the like. Higher qualification for the mariners in these areas would open up new avenues of professionalism adding up new vista to the maritime transport services, creating a new world of opportunities and challenges for the professionals as well as the nation itself.

9.0 Logistics

9.1 While shipping worldwide has been regarded as a valuable link in the international trade, the role played by the maritime companies is gaining increased significance in the Indian logistics chain. Purchasing power of the Indian consumer has increased dramatically and it is expected that consumer durables demand is expected to grow by over 20% per annum over the next decade i.e. from US\$ 22 billion in 2005 to US\$ 160 billion in 2015. Moreover Retailing is the new buzzword in the Indian market with major business houses making a foray into the sector. Such organized retailing would require vital logistics chain which would ensure timely delivery of goods from the production source to the various store locations at the minimal time and cost. Moreover, the sheer size of these retailers would enable them to source their products from the most optimum locations spread all over the world. This opens up opportunities for the maritime fraternity whereby they can offer the entire supply chain management to these retailers. Maritime companies can offer efficient, transportation, warehousing, and distribution facilities for all types of perishables as well as durables.

10.0 Ship Management

10.1 India today is one of the largest business process outsourcing nation in the world for many knowledge processing industry like Information Technology, Medical transcription etc. Indian companies have also been one of the largest ship managers for the international fleet. Indian shipmanagers offer efficient systems for technical management, manning and other safety related operations. With growing world fleet as against a thrive to cut down operational costs, shipping companies prefer to outsource many of these process to third

companies and concentrate on core activity of commercial operations for the vessels. The Indian maritime community should jointly work about marketing its services to the international maritime fraternity and emerge as the most preferred shipmanager to the world.

11.0 Conclusion

12.1 Indian maritime community is on the throes of progress with opportunities abound for all sectors of the trade. The Government has been putting increasing thrust on the development of the maritime community and this is leading to investments galore in the sector. With partnership in the public and private sector the industry can scale new heights and India emerge as a super power in the world major maritime nation. Indian entrepreneurs have been on the forefront these days acquiring manufacturing units and international brands in many industries. It is now the age of the maritime fraternity to look beyond the Indian shores and transform into a vital logistical chain for the trade. The Merchant Shipping Rules are being aligned in the international arena, and we have the knowledge base which would be the envy of any other nation. Thus, the maritime sector has to evolve into an important contributor to the national GDP.