

# Resurgence of Indian Shipbuilding Industry : Time is Now

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## ABSTRACT

Over 90% of global trade is carried by the international shipping industry and the Indian ship building industry has vast potential to grow in this segment vis-à-vis Its Asian counterpart such as China, Korea and Japan. Presently, Indian shipbuilding industry's share in Global Shipbuilding Industry contributes meager 0.005 percent. Unsurprisingly, India being the 4th largest steel producer with a large pool of talented manpower, and a 7100 Km coast line can easily acquire at least 10% of world shipbuilding trade, if proper policy, design, R&D and financial support are extended by the government.

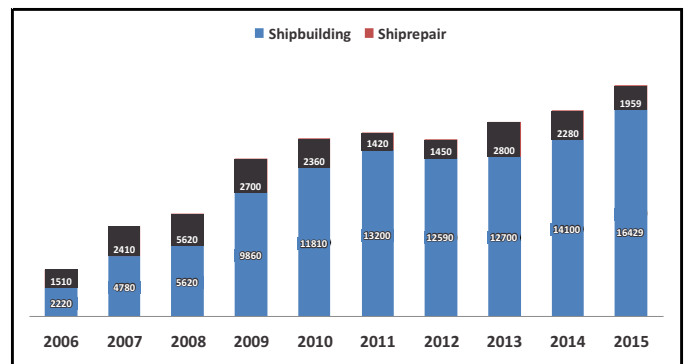
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## INTRODUCTION

India is a major maritime country with a coastline of 7515 Km, 1197 islands, and located strategically on major maritime routes. The Indian shipbuilding industry has 28 shipyards including 8 public sector and 20 private sector shipyards. Government owned Cochin Shipyard Limited and Hindustan Shipyard Limited are the only major shipyards in India that have the necessary infrastructure and graving dock to build large vessels. The Indian shipping tonnage was 10.50 million Gross Tonnage with 1213 ships in the year 2014 with Indian owned ships/vessels carried 9.1% of India's overseas trade during 2014-15. The maritime domain has an important role in persuading the nation's economic agenda that envision a high GDP growth pattern with employment generation. Furthermore, India's desired position of being the net provider of security in the Indian Ocean Region (IOR) can only be maintained by expansion in India's maritime capability. With a current capacity of 5, 00,000 DWT of all the yards, Indian Shipbuilding Industry holds a mere share

of 0.1 percent of the world. A major share of current capacity is held by the 8 public sector yards only. The worldwide Shipbuilding industry is encountering an uncommon interest for new building at any point saw in its history. This has made a window of chance for the Indian shipbuilding industry that was not accessible before.

**Figure 1: Financial status (Turnover) of Indian Shipbuilding Industry (INR Million)**



Source: nsb.nic.in

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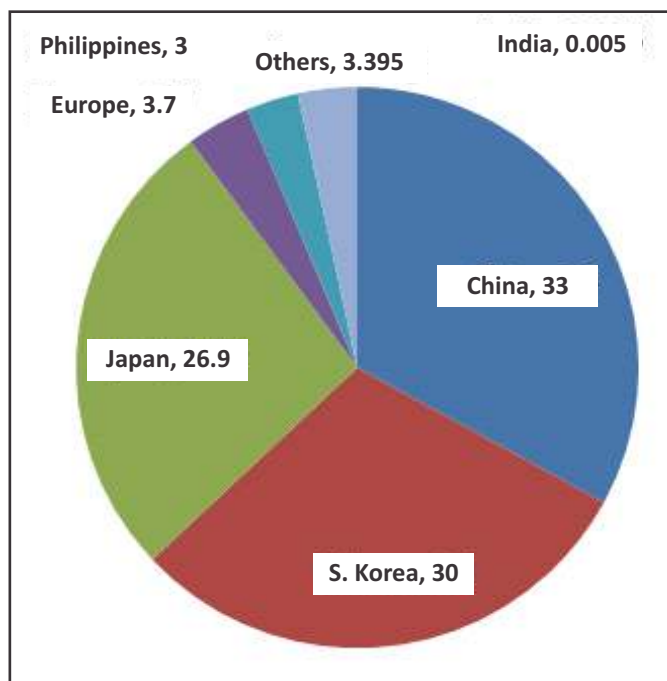
The turnover for the Indian shipbuilding business was around `16429 million whereas the turnover in ship repair was `1959 million.

## GLOBAL SHIPBUILDING SCENARIO AND INDIA'S POSITION

Over 90% of global trade is carried by the international shipping industry and the international business on such a grand scale would not be possible without shipping. Shipping is the least environmentally damaging form of commercial transport. The Global shipbuilding industry is around \$ 258.1 billion with an average growth rate of 1.1% between 2009 and 2014. The Exports accounted for 156.6 billion \$ in the total revenue. North Asia (China, Japan and South Korea) owns around 60.2 percent of the revenues of the industry whereas the second place goes to Europe, behind with 16 percent of the market. In last two decades, Asia has developed as a world's driving business shipbuilding center. From 2010 to 2014, China, Japan and Korea alone constructed 84% of new tankers, 86% of tankers, 94% of the LNG bearers and 95% of bulk carriers. Amid this period, the Chinese shipbuilding industry developed with a growth rate of 2.5%, far better than the average industry growth. However global economic recession & recent fall in oil price have adversely affected the global shipbuilding industry in the recent past. The share of major players in world shipbuilding industry reinforces the dominance of countries from North Asia i.e. China, S. Korea and Japan. These three countries together hold 90% share of the total industry whereas only Europe with 3.7% and Philippines with 3% share finding it difficult to compete in the global scenario. Indian share in global trade of shipbuilding has come down to 0.05% in year 2015 from mere 0.2% in the year 2009. South Korea, which contribute for less than 5 percent of the geographical area and population of India, and having far less than 70 percent of our GDP, today accounts for 30% of the world-shipbuilding. On the contrary, China's rise as the leading shipbuilding power is awe-inspiring. Within a decade China has become the largest shipbuilding nation leaving behind south Korea and Japan in terms of both deliveries and new orders received.

The Chinese share is 37.2% in the world shipbuilding on the basis of completions vis-à-vis 34.4% of Korea and 19.2% of Japan in the year 2015. Chinese share was 28.5% in year 2009 whereas the share of S. Korea and Japan was 37.4% and 24.6% respectively. Indian share in world shipbuilding (on the basis of completion) was 0.1% in

**Figure 2: Share of Major Players in Global Shipbuilding Industry (World New Orders)**



Source: IHS "World Shipbuilding Statistics 2016"

2009 whereas it is mere 0.05% currently. From the above statistics it can be concluded that though India is having immense potential to be the major player in the industry, but still the gap between India and other top performing countries is considerably far above the ground.

## INDIA'S COMPETITIVE ADVANTAGES

India as well enjoys numerous advantages which have propelled emerging economies such as China and Vietnam into the forefront of worldwide shipbuilding such as low labour cost, long coastline, supporting industry infrastructure for some components etc. Low labour cost is critical success factor in shipbuilding industry as it accounts for more than 10 percent of the total cost. Even after factoring the productivity of Indian labour (Which is low vis-à-vis major players) Indian labour is substantially cheaper than its competitors' such as China, Korea, Japan and Vietnam etc. The hourly labor cost in India for manufacturing averages 92¢, compared with \$3.52 in China. In addition to this, Chinese labour cost is rising at fast pace unlike India, which is a major beneficiary factor for Indian shipbuilding industry. Furthermore India has domestic industries that can produce some of the substances required in shipbuilding. Specifically, India is

the 4th largest steel producer with a large pool of talented manpower competitive steel manufacturing, mild engineering and IT/ITES industries that may offer the specified merchandise at low cost. These industries are presently not producing goods for the shipbuilding sector, specifically due to loss of sufficient scale of shipbuilding in the country. Not only this, India also enjoys a long coastline of 7500 km with quite a few deep water ports at good locations for setting up shipyards.

## **HOW TO IMPROVE GLOBAL COMPETITIVENESS?**

The shipbuilding industry in India has not been able to succeed in establishing competitiveness basically due to insufficient policy aid, lack of private participation and inefficiencies at firm level. Therefore there is a need of complete overhauling in this regard. The itemized below are the strategies for makeover of Indian shipbuilding industry.

### **SUPPORTIVE GOVERNMENT POLICIES**

Most of the countries by providing regular support to the shipbuilding industry in one or other way have helped their domestic industry to be cost competitive in attracting global business. In this regard India should learn from China. China has provided nearly a 20% subsidy along with providing fund to the firms at discriminatory interest rates, encouraging banks to finance construction through supplying U.S. dollar bonds so as to reduce cancellations and to help the two largest shipyards, China State Shipbuilding Co. Ltd. and China Shipbuilding Industry Corp and Loss reimbursement to domestic shipbuilders such as Dalian Shipyard to preserve sustainability. Not only China but Korea under HCI policy and Japan by providing easy loans and subsidizing local industry helped domestic players to emerge as top players in the world.

Indian share in the world shipbuilding was 0.1 percent in 2002 with the help of small budgetary support extended to ship building in the 10th five year plan (2002-07) from the government raised India's share from 0.1 to 1.4% by 2009. But, the support was soon discontinued in 11th plan, so it has now receded to 0.005% just on account of discontinuance of that support in 11th plan. Although recently in its new guidelines for India's shipbuilding industry, the government of India has offered financial assistance to shipbuilders – both state-owned and private for 10 years period, starting with 20% during the first three

years, 17% for the next three years, 14% for the next three years and 11% in the 10th year. Working capital also plays a vital role in shipbuilding industry hence 4-5% interest subvention for working capital will boost Indian industry to a larger extent. In addition to this, there is a need of Long term Shipping development fund or special purpose vehicle to inject capital in Indian shipbuilding industry. Government assistance is vital till the Indian shipbuilding industry remove its scale related disadvantages and remove its dependence on imports for procuring raw-materials.

### **FOCUS ON RESEARCH & DEVELOPMENT**

Overall, the South Korea has been spending 4.295% of its GDP on R&D while India spends less than 1 percent of its GDP on R&D, this makes the huge difference. India has the potential to attain self sufficiency in Basic ship design if more funds are allocated on R&D along with University-Industry R&D activities, which could help in kick starting several collaborative initiatives. Along the lines, a proper policy needed to train, develop and retain talent and skilled labour force.

### **DEVELOPMENT OF ANCILLARY INDUSTRY**

Currently, 40- 70% of ancillary components and materials used in shipbuilding are imported from China, Korea, Japan, Norway etc. In this regard, rather than waiting Indian shipyards should enter into joint ventures/strategic alliances with prominent foreign players. It will help not only in development of ancillary sector but also will facilitate technology development and employment generation at the same time.

### **DEVELOPMENT OF MARITIME CLUSTERS**

Maritime clusters are to be one of focal points for economic development along India's coastline. In this regard, Gujarat and Tamil Nadu can emerge as major maritime clusters for India with scope of developing various components of the maritime cluster like ship building & ancillary services, maritime services, promoting maritime tourism and marine products. An expected GDP of USD 6 trillion in India by 2025, and a services share of 50 per cent, the maritime services industry is expected to be worth around USD 6 billion by 2025. Even the INR 5,000 Crore worth ancillaries market for maritime cluster can prove to be a huge opportunity for the Indian economy with engineering, fabrication and machining offering the greatest potential by 2025.

## CONCLUSION

Unsurprisingly, shipbuilding is nation building. Being labour intensive industry, no other industry can match the monstrous job opportunities created by this sector. Shipbuilding is a surprising industry as 65 percent of value addition comes from other ancillary industries. As an estimate, around 750 laborers laboring for a year are required to construct a 30,000 DWT vessel in India. It is clear that, the employment creation capability of shipbuilding is more than other industries, as on per million turnover shipbuilding industry require 97 labour vis-s-vis Auto-Commercial Vehicles (12 labour), Heavy building (33 labour) and development Civil (18 labour). Shipbuilding has the potential to become a significant contributor to India's GDP. Now is the right time for Indian shipyards to conquer their limitations and challenges by making utmost use of the opportunities from 'Make in India' initiative by Government of India. The Indian Shipbuilding Industry aspires to acquire a 5 percent share in global shipbuilding by 2020, and this would require Indian shipbuilders to invest around INR 200 Bn in new yard capacity. This INR 200 bn investment in shipbuilding can generate additional investment of INR 2200 bn in allied sectors such as steel and engineering goods manufacturing, IT / ITES and consumables. Similarly, shipbuilding is likely to generate revenue of INR 800 bn and overall revenue of INR 3300 bn including allied sectors. This revenue could provide around INR 250 bn in taxes for the government. A healthy shipbuilding industry is also likely to attract ship-repair business also. Ship repair is even more labor intensive than shipbuilding. India, with its labor advantage and its ideal position on international trade route, is well placed to squeeze this business from competitors, once the shipbuilding industry is developed. This can create additional revenue and employment opportunities with marginal increase in investment. Lastly, a booming domestic shipbuilding industry would also provide the much needed domestic capability which can be accessed for future needs of the Navy and Coast Guard and help realize the goal of indigenization in defense production. Unsurprisingly, India being the 4th largest steel producer with a large pool of talented manpower, and a 7100 Km coast line can easily acquire at least 10% of world shipbuilding trade, if proper policy, design, R&D and financial support are extended by the government.

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