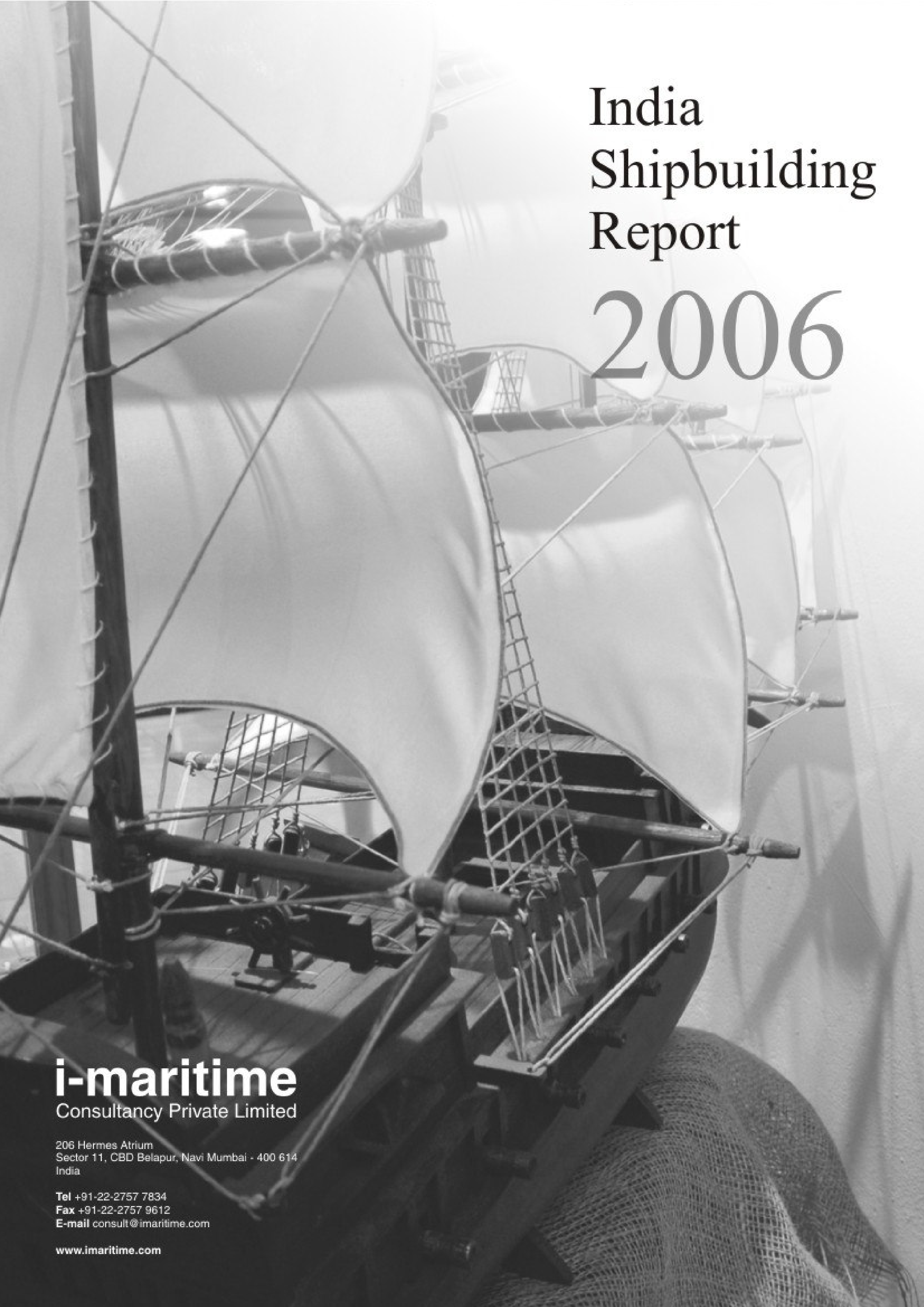

India Shipbuilding Report 2006

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Preface

On March14 , 1948, Pandit Jawaharlal Nehru, the first Prime Minister of India, launched *Jala Usha*, the first vessel to be built in independent India. However, the voyage through the next fifty years brought India to the present scenario, where India is better known internationally for ship breaking rather than shipbuilding. Yet, the very same scenario also points to the fact that India now has the know-how, scale of operations and reputation to occupy a pre-eminent position in the shipbuilding industry as a global player.

During the same period of fifty years, Japan had recovered from the ravages of the World War II and emerged as the undisputed leader in shipbuilding. South Korea was quick to follow in the footsteps of Japan. After the boom of the 1970s, shipbuilding deliveries stagnated in the 1980s. The next decade, which began with a steady increase, ended with a clear indication of accelerated growth in new building output. By 2002, the picture changed dramatically, thanks chiefly to the 'China factor'. Today, China is a major demand-driver as well as supplier of world's shipping capacity.

In respect of the global shipbuilding output, the record output of 1977 was surpassed for the first time in 2003 and then again in 2004. It will not be an exaggeration to assert that the current shipbuilding output is the highest in the world shipping history.

This unprecedented global demand for new tonnage occurs at a time when India seems poised to attain the critical mass required for positioning itself among the leading shipbuilders of the world. Obviously, this scenario would have made Pandit Nehru smile!

Developments that are conducive to the future growth of the share of Indian shipbuilding industry in the global and domestic markets include: Government's policies, India's rising overseas sea-borne trade, changing patterns in ship types and sizes, investments in the offshore sector, growth of the port sector, increasing attention to coastal shipping and inland waterways, maturation of India's manufacturing and services industries, and clustering of skills, support services and supplies and sub-contracting functions. Given these developments and the new dynamism in the markets, Indian shipping and merchant shipbuilding industry finds itself on the threshold of a sea change.

At i-maritime, we felt that a there is an urgent need to closely examine the rapidly changing face of India's shipbuilding industry and the underlying global and domestic factors contributing to these changes.

By sharing our findings with the industry and public through a report, we hope to not only present an update on the industry for the benefit of all the stakeholders, but also draw the attention of the current as well as prospective players, to various growth and investment opportunities that have opened up.

India Shipbuilding Report therefore aims at assessing the emerging international and domestic markets in the new building sector, identifying the capabilities as well as inadequacies of the Indian shipbuilding industry and exploring the focus areas for attaining global competitiveness and strategies for sustaining it.

A substantial segment of India's new building comprises of Naval construction, since the Indian Navy is one of the few navies in the world that design and build their own ships. By and large, Indian shipyards specially earmarked for the purpose and operating under the Ministry of Defence Production, build the Naval and Coastguard ships.

Since this report focuses primarily on commercial shipbuilding, the shipyards functioning under the Ministry of Defence Production have been excluded.

The commercial shipyards engaged in merchant shipbuilding in India are both under the public and private sectors. The public sector yards are under the total control of the Ministry of Shipping. The private yards are also required to function within the policy directives issued by the Ministry.

Preface

India Shipbuilding Report is the latest among a series of reports that have been prepared by i-maritime Consultancy for publication – the previous ones being *India Shipping Report* (2000), *India Port Report* (2002) and *Maritime Investment Report* (2006).

This report is organised into eight chapters. **Chapter-1** gives an overview of the macro factors influencing the shipbuilding industry. In **Chapter-2**, the factors that influence the demand for and supply of shipbuilding capacity are discussed. While **Chapter-3** addresses the current global shipbuilding scenario in terms of the functioning of each major player or region and **Chapter-4** focuses on the Indian shipbuilding scenario.

The road and the challenges ahead are discussed in **Chapter-5**. **Chapter-6** deals with the complex issue of shipbuilding productivity. Although it does not claim to be a detailed technical evaluation of Indian yards, it does examine the issues that have a direct impact on productivity in terms of key processes and sub-processes. It also develops a framework for future development and benchmarking of Indian yards against best international shipbuilding industry practices.

Chapter-7 provides the relevant information on financing in Indian shipbuilding and **Chapter-8** contains the conclusions drawn.

There are four annexures providing background information and updates on various connected issues, services and markets.

Majority of the figures and tables used in this report have been generated from i-maritime's in-house research. Information taken from other sources is gratefully acknowledged and has been duly indicated against each figure/table.

The yards considered for detailed study include most of the public sector yards, e.g., Hindustan Shipyard Limited (HSL), Cochin Shipyard Limited (CSL), Alcock Ashdown Gujarat Limited (AAGL) and some of the major yards in the private sector, such as ABG Shipyard and Bharati Shipyard.

There are, of course, a number of other yards, the total according to the Ministry of Shipping being 32; and some of them such as Dempo Shipbuilding & Engineering Limited, Chowgule's Shipbuilding Division and Tebma Shipyards Limited are of considerable size, experience and promise. We wish to point out that we have not included all the yards in the present study; the reason for this is the fact that our focus is on issues rather than yards.

We believe that the issues which this report raises and discusses are of significance for all the shipyards in India that are engaged in building merchant ships. They are also of relevance for all the stakeholders in the Indian shipbuilding industry, researchers, individuals and other interested parties to shipping and shipbuilding.

Considering the dynamic environment that the shipbuilding industry is in today, we feel that this report will generate ideas and suggestions for improvements and also serves as a basis for future studies; not only by i-maritime but by others as well.

Having made this effort, we realise that there is a tremendous scope for further refinement and future studies. We welcome suggestions and improvements from our readers and will be glad to incorporate them in our subsequent reports in the marine transport sector.

At this stage, we are sure that the industry managers would find that the information in our report to be very handy, useful and timely. As the report serves the purpose of our readers, so it fills us with a sense of achievement.

i-maritime Consultancy
September 2006

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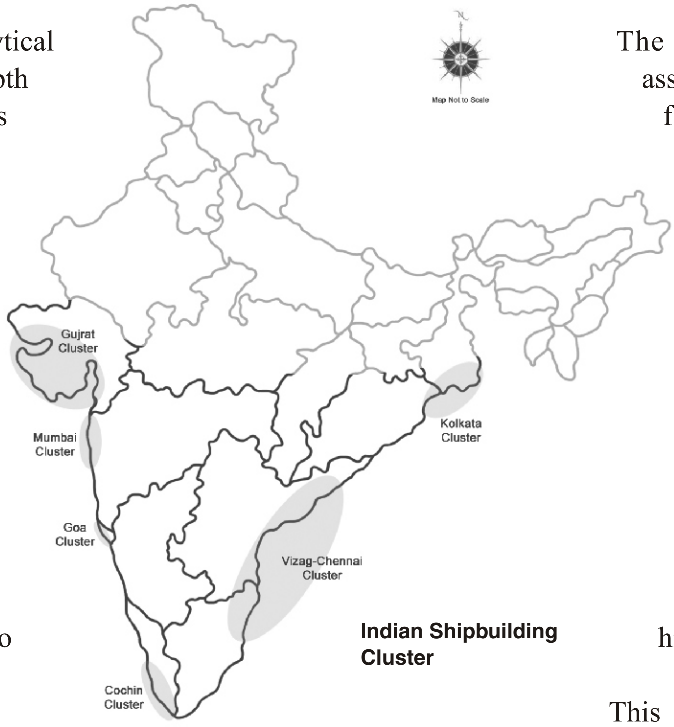
India Shipbuilding Report 2006 is the first comprehensive report on the shipbuilding industry in India. This report deals extensively with the underlying factors that impact the Indian Shipbuilding industry including the recent changes in the economic and policy environment in the context of global developments and trends.

The report provides an analytical overview and makes an in-depth assessment of the conditions required for the Indian shipbuilding industry to take off.

Global investors today are keenly observing two main destinations, China and India. While China has capitalised on its resources, India is yet to harness its potential. The report identifies the challenges that the Indian shipbuilding industry would need to overcome, in order to become a global leader.



Indian Shipbuilding Cluster

The international scenario has also been discussed so as to draw benchmarks that indicate ways in which the Indian shipbuilding industry can enhance their competitiveness in the global markets. It also indicates the differential advantages that the Indian industry has vis-à-vis shipbuilding industry of other countries.

The exercise was undertaken with extensive involvement of experienced consultants and industry leaders and various experts who have taken deep interest in the various growth aspects of the Indian Shipbuilding Industry.

About i-maritime

i-maritime Consultancy is a leading business consultancy firm in the maritime sector. Over the last 13 years, the firm has handled numerous projects related to Ports, Logistics, Containers, Shipyards & Shipping.

The firm undertakes consulting assignments such as traffic studies, feasibility studies, market surveys, syndication of funds, business plans, joint ventures, Detailed Project Reports & Human Resources Consulting.

The i-maritime research division publishes several sector-specific reports, white papers and articles. Some of these have been pioneering efforts, as reports on such topics and intensive treatment have not hitherto been available.

This includes the India Port Report, Maritime Investment Report, Shipping Equity Research Reports and India Shipping Industry Report

India Shipbuilding Report 2006 is a continuation of our interest in making the Indian maritime industry not only better informed and well researched but also more visible in India as well as internationally.