PREFACE

Ship breaking is an international business. It is an integral and inseparable part of the shipping business. As long as ships are built, used, serviced, the ‘ship breaking’, ‘ship scrapping’, ‘ship recycling’ also remains or co-exists. This has been the way ships end their lives if they are not lost at Sea.

The ship breaking industry is concentrated in a very limited number of countries and their level and state of economic development makes it an activity that suits their needs perfectly.

Iron is an important metal in the machine age of today. Fuel is soul and iron is the body of industrial world. There is a greater demand in the construction, industrial and transport sector. There are two major sources of raw material for the production of iron and steel (i) producing steel by using iron-ore, coal, tungsten etc. from mines and making it usable and (ii) recycling and secondly by metal scrap of old machinaries and vehicles including ships. Ship breaking is a different process of recovering scrap metal. Other machines and vehicles which are dismantled are small in size and light in weight. Therefore they can easily be broken up but the ships in floating condition are huge in size and very heavy in weight. Hence, ship breaking demands special process for dismantling. The region, which has a convenient coast to beach ships can undertake this activity. Moreover ship breaking is a labour intensive industry, therefore those countries which have cheap labour can undertake this activity economically.
Today ship breaking activity is concentrated in Asian countries. India is one of the leading countries in ship breaking activity. Ship breaking activity grew into a full fledged industry by 1979, when Government of India recognized it as a manufacturing industry. Now it has been recognized as a manufacturing process as per Central Excise and Sales Act. At various locations ship breaking activity is carried out in India with Alang being the main centre located on the west coast of the country.

The necklace shaped Alang-Sosiya ship breaking yard is the world’s largest ship breaking yard. Alang is located at 21°-18’N and 22°-18’N latitude and 71°-15’E and 72°-18’E longitude. The geographically unique feature of a high tidal range and continental shelf coupled with mud free coast allow very heavy ships to reach the coast easily during high tide period. Most favourable coastal conditions in terms of physical features and type of coast are the major reasons for development of ship breaking activity at Alang. This study is carried out to understand the favourable coastal characteristics for ship breaking activity at Alang and Sosiya.

In line with Alang-Sosiya ship breaking yard, other related industries and small industries have developed in and around Bhavnagar.

This study aims at understanding the geographical characteristics of ship breaking activity at Alang and also at evaluating its economic contribution in the production of steel in India.
First chapter provides introduction to ship breaking activity including global scenario. Second chapter explains the objectives, methodology, data base and the format of thesis. Chapter three describes locational aspects of ship breaking activity and explains locational advantages of Alang-Sosiya ship breaking yard. Chapter four emphasizes on economic recovery of re-rollable scrap and other items and the contribution of Alang-Sosiya ship breaking activity to national economy. Chapter five focuses on inter-industrial linkages and the economic impact of ship breaking activity on nearby villages. It also explains contribution of this industry to Government treasury. As ship breaking is a labour intensive industry, it attracts migrants from far-off state of the country. Chapter six provides profile of human resource engaged in the ship breaking industry. Chapter seven highlight the environment related issues and health and safety conditions of workers at Alang-Sosiya ship breaking yard. Last chapter presents summary of findings and future of ship breaking activity at Alang with recommendations.