CHAPTER VIII

MAJOR FINDINGS AND RECOMMENDATIONS

Major findings

Ship breaking activity originated as a 'forced' activity during Second World War as a need to produce more steel in the industrialized advanced countries like U.K., U.S.A. and Germany. Gradually the shipbreaking activity shifted to less industrialized countries like Spain, Italy and Turkey during sixties and seventies. Later on during eighties and nineties the activity shifted further to East Asian countries. Ship breaking activity has flourished commercially within the narrow bank of 18 to 38 degrees north latitude which has warm winters and hot summers. The sites are naturally sheltered against wind storms and fury of sea waves and are suitable for low cost ship breaking. India was virtually a non-entity on the global map of ship breaking activity till 1980. With the development of Alang-Sosiya ship breaking yard in 1983, India attained the status of world leader in ship breaking activity. The following are some of the important observations and findings of the present study.

1. Alang – located in the Gulf of Khambhat experience the tidal height of +12 mts. Which happens to be the second highest tidal range in the world. Large vessels which require deeper draft for beaching of ship is possible at Alang due to high tidal range.
2. Non-silty sea bed at Alang facilitates maintenance of stability conditions of the metacentre of the ship at all stages of the dismantling of the ship which is again a plus point in ship breaking activity.

3. As ship is being broken it remains stranded for four to six months at a given spot on the coastline. Alang-Sosiya yard has an excellent protection against waves and winds to ensure adequate stability of ships despite shifting height of the metacentre of ship at different stages of breaking.

4. By virtue of its location in the Gulf of Khambhat, the Alang-Sosiya ship breaking yard remains protected against exposure to rough sea waves during monsoon season.

5. Annual rainfall at Alang is only 50 to 65 cm and as a result ship breaking activity gets hampered by heavy rain only for less than 20 days in a year.

6. Most of the steel scrap recovered from the ship goes to re-rolling mills which are predominantly concentrated in northern and western India including Saurashtra and Gujarat.

7. Proximity to market for plates of commercial use and tested quality steels also encourage recycling and reuse of plates recovered from ship breaking.
8. Ship breaking plays an important role in the economy of the country by contributing 15 percent of re-rollable scrap and 7 percent of total steel production of the country.

9. Apart from steel scrap, many other items are recovered from ships and they are in high demand in the market due to relatively low price and good quality.

10. Alang-Sosiya ship breaking yard has reinforced growth of many other ancillary industries such as re-rolling mills, oxygen cylinder refilling plants, LPG plants etc. in and around Bhavnagar-Sihor-Alang.

11. Nearly 600 trucks operate daily, carrying steel plates to re-rolling mills of Punjab, Haryana, Uttar Pradesh, Maharashtra, Madhya Pradesh and parts of Gujarat.

12. The nearby villages of Alang-Sosiya ship breaking yard have prospered due to the activity. Also the traditional brass industry of Jamnagar has revived due to the availability of brss scrap from the ship breaking activity at Alang.

13. Nearly 20000 workers are employed in the ancillary industries of ship breaking. Ship breaking activity at Alang-Sosiya has been potential of employment. The activity is supported by nearly 98 percent of migrant workers especially drawn from far of states of central-East India.

14. Migrants are from economically less developed and densely populated states such as Uttar Pradesh, Bihar, Jharkhand, West Bengal and Orissa.
They have come to Alang through known contact in search of work. In the process they earn much more than what they could get at their native place.

15. Alang-Sosiya ship breaking activity is slowly creating environmental pollution. Lack of safety measure result into fire accidents, free fall and physical ill-being and also due to single adult male migration, social health hazards like AIDS and STD cases are on the increase.

16. Poor living conditions and unhygienic surroundings cause many diseases among migrant workers.

17. Social isolation and cultural differences with local people gives rise to social conflicts, tension and disharmony in the yard.

Policy Recommendations

There are about 45,000 ocean going ships in the world. The container ships, general cargo ships, roll-on roll-off ships, refrigerated cargo ship, tankers, ferries, cruise liners, special ships for research and cable-laying and war ships. About 700 ships are taken out of mobility every year after an average life of 27 years on sea.

Therefore, there will be a continuous demand for ship breaking industry. Alang-Sosiya ship breaking yard needs some drastic changes in order to remain as a global leader.
The following are some of the policy recommendations to stabilize and enhance this unique recycling industry in India.

1. The present scenario is that only about half of the ship breaking plots are operative (Nagarsheth) and on the other hand there are some plots having 30 m sea front width, which is not sufficient as per the present labour safety regulations. Therefore, Gujarat Maritime Board should merge small sized plots to make them large as per the labour safety regulations to avoid accidents.

2. Gujarat Maritime Board has already established an institute to train workers at Alang. Proper functioning of the institute is the need of the hour. The workers need to be trained in the following specialized skills. They are: Gas cutting, loading, Jodiwala (helper), Kukadam (Supervisor) and Crane and Winch Operation. Separate courses need to be designed for different types of work. They may be given license in the work they specialize.

3. There is a need to specify different types of personal protective equipments for different jobs. As per the nature of risk involved in specific work, they may be provided with the necessary equipments, wares and skills. These personal protective equipments should be comfortable keeping in mind the local weather conditions.
4. A well equipped hospital is a prime requirement of the yard. The hospital facility with proper working condition should be provided to the workers.

5. The service road at Alang is intensely used road, connecting all the plots of the yard which is parallel to the coast. Because of heavy traffic on this road, it needs to be converted to 4 lane road.

6. Population on both sides of the road can be grouped into 3 areas: (i) workers and their activity space; (ii) service area with shops owned by local people and (iii) petty traders who have encroached the land and rented the ‘Kholis’ to workers and shop establishments (mainly residential space). Firstly, the petty traders should be shifted to alternative location. This will reduce pollution on roadside and nuisance value of these traders. Secondly, a small shopping centre should be developed at the place of unplanned commercial shops. Thirdly, but very importantly, housing colony project for workers of Alang-Sosiya ship breaking yard must be undertaken urgently. The housing colony will change the physical and social outlook of the yard. As observed during the survey workers are ready to stay permanently at Alang with their families. If housing colony project is completed, social problems at the Alang-Sosiya ship breaking yard may also get reduced.

7. There is a need of more programmes work safety awareness and AIDS awareness programmes at Alang-Sosiya ship breaking yard.
SHIP READY FOR BRACHING AT THE PLOT.

RECENTLY BEACHED SHIP.
PLATE-2
CLOSER VIEW OF SHIP DURING THE PROCESS OF DISMANTLING

PLATE-3
SHIP DISMANTLING PROCESS.

PLATE-4
GAS CUTTING UNDER PROCESS ON THE SHIP.

GAS CUTTING UNDER PROCESS ON THE PLOT.

PLATE-5
VARIOUS SIZES OF PLATES AND GAS CUTTING AT THE PLOT

RECOVERED MACHINERY AND SEGREGATED MATERIAL AT THE PLOT

PLATE-7
SHANTY HOUSES OF THE WORKERS.
PLATE-9
ELECTRICAL AND HOUSE HOLD ITEMS FOR SALE IN THE OPEN PLOT.
WOODEN BLOCKS FOR SALE IN THE OPEN PLOT.

FOAM SHEETS FOR SALE IN THE OPEN PLOT
PLATE-11
FURNITURE FOR SALE IN THE OPEN PLOT.

FILES AND STATIONARY FOR SALE IN THE OPEN PLOT.

PLATE-12
ELECTRICAL EQUIPMENTS FOR SALE IN THE OPEN PLOT

TINS OF PAINT FOR SALE IN THE OPEN PLOT

PLATE-13