

## **Chapter 7**

### **Summary and Conclusion**

The present study is based on the field work carried out in the Alang ship breaking yard during the year 2004. A selected sample of 300 migrants was interviewed and the primary data for the study was collected. The sample of 300 migrants was selected by following random sampling method. This chapter is focused on summarizing the major findings of the study.

Chapter 2 examines the ship breaking industry in the world. This chapter examines the dismantling process of a ship and also highlights the nature of the activity. This chapter also examines the growth and development of Alang ship breaking industry. Linkages of the ship breaking industry is analysed in the chapter. The formal and informal characteristics of the Alang ship breaking yard are analysed.

Ship breaking is the process of dismantling obsolete vessel's structure for scrapping. The ship breaking industry produces both the potentiality for economic growth and also dangers of negative externalities. The ship breaking industry is a dangerous and high-risk industry with the risk of injury and accidents and also health hazards. Ships built 20-30 years ago constructed using various materials, the use of some of which are banned today are dismantle at Alang. Therefore labours are exposed to hazardous substances such as heavy metals, cancer-causing chemicals like poly-chlorinated biphenyl (PCB), toxic paints, asbestos etc. Till 1970's ship breaking activities were concentrated in developed countries. But during 1980's this industry has shifted to developing countries due to strict environmental norms in developed countries.

The ship breaking process involves purchase of ships from international agencies or their agents. The ship breakers purchase ships of various types, such as war ships, oil tankers, passenger ships, cargo ships etc from both developed as well as from developing countries for dismantling. The dismantling of a ship is long drawn process. After purchase of ship, the ship breaker starts dismantling at the earliest to recover investment.

There are various processes involved in dismantling of a ship, which starts from selection of ships, cutting and transfer of scrap to various industries for processing and for reuse.

In the process of ship breaking many health hazards are associated such as exposure to dangerous chemicals, risk of accidents etc. This industry is being slowly recognized as a hazardous industry. This is the one of the reasons that ship breaking industry is relocating from developed countries to developing countries. But the industry has survived in developing countries because it is still economical to break ships.

In the last decade more than 95 percent of ships breaking activities were conducted on the beaches of Bangladesh, India, Pakistan and in China. Out of total ships dismantled in world, India ranks first in terms of percentage of vessels and tonnage, which is 58.25 percent and 45.09 percent respectively. In India 10 ship breaking yards are in operation. But the main ship breaking centre lies on the west coast at Alang in Gujarat state. Alang ship breaking yard is known as the world's largest ship breaking yard. This yard has the infrastructure to dismantle all types of ships. Alang ship breaking provides employment to skilled and unskilled workers ranging around 30,000. There are various activities and industries that depend on ship breaking yard which generate employment to the tune of 1.5 to 1.6 lakh workers in downstream as well as in upstream industries.

Alang ship breaking is the starting point of the chain of industrial link in the region. This industry has wide linkages to other industries. The industry exhibits strong backward links to various industries for procurement of raw materials and also strong forward links to various industries for the sale of output. The products of ship breaking industry are used by various small, medium and large industries as raw material to be converted into final products. The ship breaking industry in its very nature is linked to various industries in the region. The ship breaking industry even after existing for more than 25 years has retained some informal characteristics. The industry is unique in a number of ways.

In chapter 3 an attempt has been made to give a brief overview of industrial and labour laws which are important for an industrial establishment. This chapter also presents results of the analysis of various aspects of industrial and labour laws in various industries done by various scholars. These laws are considered as reference in the present study to evaluate the working and living conditions of labours at Alang ship breaking yard. The findings of the chapter are discussed below.

A large proportion of workforce in India is engaged in unorganised or informal sector (93 percent) as compared to organised sector (7 percent). The organised sector labour is protected by various labour legislations in terms of working conditions, wages and social securities as compared to labour engaged in unorganised sector. Moreover, labour rights, benefits and practices which are provided in organised sector are still lacking in unorganised sector.

Central and State Governments have formulated rules and regulations to protect the interests of working class. If when these rules and regulations are not properly implemented it leads to exploitative situation. These laws are related to over crowding, sanitation, working conditions, recreational facilities, leave facilities and exposures to fatal accidents are some of the factors which affect the labour. These factors affect labour productivity, industrial relations and growth of the industry. Therefore, labour legislation is regarded as an important instrument in the hands of state to bring out improvement in working conditions of labourers.

In India, there are various laws which fairly, progressively intended protect the labour rights. These laws are also applicable to Alang ship breaking yard. The survey of industries in India found that the conditions of workers are unsatisfactory in many industries. There are various industrial as well as labour laws which are applicable to organised industry and hence applicable to Alang ship breaking yard. These laws are used as the reference point to evaluate the condition of workers in Alang ship breaking yard.

Chapter 4 deals with the process of migration, type of migration and determinants of migration and presents various works carried out by scholars and organizations on migration and migrant labour. It also deals with the socio-economic characteristics of the respondents such as age, caste, occupational history etc. The summary and conclusions of the chapter are discussed below.

The process of migration is as old as human history. It is observed that differences are prevailing in the socio-economic development of the different states and districts within. A large proportion of labour employed at Alang ship breaking yard are migrants from various states. They are largely from backward states of Uttar Pradesh, Bihar, Orissa and Jharkhand. Only a small proportion of workers are from Gujarat state i.e. 5-10 percent. Large proportion of the workers originate from the backward or most backward districts of these states. Out of 18 districts from which respondents originate 4 are developed, 3 are industrially backward, 8 are backward and 3 are most backward as classified by planning commission.

In Alang ship breaking yard majority of respondents have low level of education or none at all. Further it is found that only around 10 percent of the respondents have higher education. Due to low educational background, labours are largely unskilled or semi-skilled. As far as the caste of the respondent's is considered, majority of them are from General caste or upper caste. The survey also found that the Scheduled caste and Scheduled tribe workers are negligible at Alang.

It is observed that the migrants are from rural areas to Alang and is largely dominated by individuals rather than family migration. This has important implications for the flow of remittances back to the place of origin. Moreover, the impact of migration on the place of migration (i.e. Alang) in terms of increased demand for housing, education and other services is likely to be much less serve as migration does not involve movement of all members of the family, than it would be otherwise.

The data in the present study divulge strong male domination. The average age of the migrants is found to be 33.82 years. About 75.33 percent of migrants are between 21-35 years of age. So it can be said that migrants at Alang are quite young. Another significant feature was that nearly 71 percent of migrants were married while 29 percent of migrants were unmarried.

The overall average family size of the migrants is found to be of 7.30 members, constituting of higher family size. In case of migrants from U.P the average family size is high (8.64 persons) as compared to migrants from other states (7 persons). However, the dependent members in migrant's family are observed relatively higher. The overall average dependent member in migrant's family is 5 persons and highest dependent members in migrants family is found to be from Bihar. About 41 percent of migrant households do not own any agricultural land. Further, about 71 percent of the cultivating migrant households owned less than 2 acres.

A study of the causes of migration is highly important in the process of migration. Among the causes of migration reported in the present study, it is observed that both 'push' and 'pull' factors have their influence on migration. Little more than 35 percent mentioned 'pull' factors are the main causes of their migration and 65 percent cited 'push' factors as the most important. So it is found that 'push' factors have been more important than 'pull' factors. As far as 'push' factors are concerned, it is observed that the leading cause of migration is unemployment in the rural areas which is the principal causes of migration. The study brings out that 58 percent migrants moved out of the rural areas because of non-availability of work at the place of origin. Another important push factor is low fixed property (5.3 percent) of the migrant at their native place. Social and family disputes are yet another push factor. The most important cause of migration for 35 percent of respondents is 'pull' factors. From the data it is observed that the important 'pull' factors which cause migration of rural labourers is relatively good wages at Alang as compared to their native place.

Important factors reported, which influences the process of migration are contacts at the place of migration and availability finance for migration. Relatives and friends living in the place of destination not only amply supply information about employment opportunities in the areas but also actually assist in getting jobs. In the present study, 93.4 percent migrants get information about potential employment opportunities at Alang through friends and relatives which reduce the role of labour contractors which is only 5.3 percent. In many cases, friends and relatives help to reduce the cost of migration by arranging migrant's initial stay at the destination.

Another important phenomenon in the process of migration is finance for migration. In the present study, 46.4 percent migrants arrange finance for migration with their own saving or family saving which explain the role of family in the process of migration. The remaining 63.4 percent of migrants arranged finance through fellow villagers, contractors and village money lenders which has important implications for remittance. It is also found that role of principal employer at Alang is indirect but the role of labour contractor is direct in labours migration.

It is concluded from the analysis that majority of the respondents have migrated from rural areas due to low income, unemployment, social problems. These labours are not economically sound at their native place and migrated to earn their livelihood at Alang ship breaking yard.

Chapter 5 deals with the conditions under which workers perform their duties at Alang ship breaking yard. The working conditions of workers are affected by various factors such as hours of work, place of work, work environment etc. This chapter analyses these aspects in detail and evaluates the conditions under which labour perform their duties.

In Alang ship breaking yard workers employed in various occupations require different types of skills and many of these workers perform work in open space. Cutters, Labour contractors, Fitters, Crane operator, Wiremen and Mistry are categorized to be

skilled as these occupations require special types of skill. Most of the skilled labours are from Uttar Pradesh and large numbers of unskilled labours are from Orissa state, who account for 66 percent. Due to the poor working conditions, workers are exposed to a variety of physical, chemical, biological and mechanical hazards thus causing them to suffer from a wide range of diseases. In Alang, the provisions of Factories Act and Occupational Safety measures are not taken into consideration. Workers in yard carry steel plates whose weight is above the limit prescribed by the Factories Act.

It is found in the present study that the average number of working hours for all categories of labours is 9.57 hours. Manual workers work for 10.67 hours per day which comes to on an average 66 hours per week. It violates the section 51 & 52 of Factories Act, 1948. Similarly, semi-skilled workers work for 10.04 hours per day counting almost sixty working hours per week. But in case of skilled and highly skilled workers they work for on an average 8.85 and 8.03 hours per day and 48 to 49 hours per week respectively. Many studies found that there is correlation between hours of work and the rate of accidents. In Alang, manual workers are facing more accidents as compared to other categories of workers.

The study also found that in Alang there is no system of paid leave to workers. Workers are getting Sunday as rest day but that is without pay, which violates the section 6 of the Weekly Holiday Act 1942. Public holidays are not operational and workers even do not get sick leave for treatment and recovery except during severe accidents.

The study shows that the economic factors dominate the decision to migrate. The decision to migrate is also influenced by the difference in income at the place of origin and place of destination. Individuals belonging to lower income have a greater propensity to migrate than others. The present study shows that the previous income of the respondents is significantly much lower as compared to present earnings at Alang, which is shown by Pair t-test. The overall average present income of the respondents is higher (i.e. Rs. 2888.88) as compared to their previous income (Rs. 843.00). The regression

analysis shows that the skill and years of experience are the important variables determining the income level of the migrants at Alang ship breaking yard.

Ship breaking industry is one of the hazardous industries and workers face severe conditions at work. The risk of accident is high and accidents are common because of hazardous nature of activities and also due to unskilled, uneducated and untrained workforce. The logit function fitted indicates that cutters face accidents 2.7 times more than other category of workers. The analysis also shows that skilled are more prone to accidents, which is 2.6 times more than unskilled labourers. The overall probability of accident is 8 per 100 workers per day and the high probability of accidents is faced by skilled workers which is 13 per 100 workers per day. The analysis found that the rates of accidents at Alang are higher than the average industrial accidents in India.

Workers in ship breaking activities have to handle a large number of chemicals and toxic substances which cause various diseases and health problems. The workers face diseases such skin problems, respiratory and breathing problems etc. It was found in the study that the rate of malaria is very high at Alang. The vast majority of respondents indicate that malaria is perennial health problem. The logit function fitted indicates that those workers handling chemicals are facing more health problems. The analysis also shows that cutters are facing more health problems as compared to other category of workers. Further, it is found that on an average 9 out of 100 workers fall sick per day which is very high for an organized industry. During sickness workers do not get paid leave or medical leave for treatment which violates various legislations such as Factories Act, Inter-state Migrant Workmen Act etc.

With regard to social security and medical treatment of workers at Alang, the situation is bad. Therefore, workers are in vulnerable condition and have to face various types of insecurities. As already mentioned ship breaking activity is high-risk and health hazardous industry. But the medical treatment at Alang is expensive and is not provided free of cost which violates the various legislation of Government, where workers are getting free medical treatment in case of occupational accidents and diseases. In Alang,

only one hospital exist i.e. Red Cross hospital run by Red Cross Society to provide medical treatment to workers. But this hospital is working with only 9 beds and 4 doctors. There are few private clinics but workers not prefer to go there for treatment because treatment charges are high.

In Alang ship breaking yard workers face high probability of occupation related accidents and health related problems. However workers are neither covered by life insurance or medical insurance. Workers report that they do not personally have any cover and many of them are not aware of such policies. It is also observed that there exists no systematic insurance and compensation scheme which covers both assets and workers.

The working conditions of workers at Alang are poor as compared to other industries. After functioning for 25 years, there is little improvement in the area of the occupational safety and health of the workers. The implementation of labour rights is only a dream for workers at Alang ship breaking yard.

Chapter 6 analyses the living conditions of the workers at Alang ship breaking yard. The analysis includes housing characteristics, availability of public services such as piped water, electricity, sewage disposal etc, at Alang ship breaking yard. In addition, migrant's linkages in terms of remittances and visit to native place are also analysed in this chapter based on the survey findings of the fieldwork. The findings of the chapter are given below.

Living conditions of the migrants at Alang are unsatisfactory. Migrant labours are found to live together in groups of 5-10 in crowded and cheap places, rooms which are minimally equipped. Migrants from the same state or sometimes from same village tend to live together. Living together in this way undoubtedly represents an act of self-denial in order to increase the income left over (saving) to send back to home at native village. This living behaviour also makes it easy to maintain social contacts and traditions of the village, at the same time this practice weakens the mechanisms through which migrants

acquire the new behavioral patterns that prevail in new environment. It is also a defense mechanism to keep their essentially rural mentality and identity and living together in kin-based and village of origin groups makes migrants feel safer than living alone.

Further, it is observed that at Alang majority of the respondents live in rented houses (39 percent) followed by self-constructed or spontaneous houses (34 percent) built in public or private land while lowest proportion (26.7 percent) of respondents live in collective dormitories. The conditions of civic amenities available in the houses of the migrant labours are poor. Water supply at Alang is a serious concern and the workers either had to purchase from nearby villagers or use contaminated water from cement water tanks built in between plots at the yards or outside. The availability of potable water is limited. The lack of water facility prevents adequate washing and cleaning of clothes, house and cooking contributing to very poor sanitation. The average expenditure on water by respondents is RS. 132.95 Per month. Due to inadequate water supply, many workers report to fall sick and face eye and ear infections, skin problems etc.

Electricity is the source of domestic fuel for lighting purpose at the shanty's in Alang ship breaking yard. It is observed that 62.3 percent respondents are using the facility. This facility is mostly used by workers who live in rented houses and dormitories. Workers living in spontaneous houses forced to purchase electricity from nearby shopkeeper for a fee of RS. 200-500 per month and some workers are using illegally. This indicates that the way in which workers have access to facility is an indication of unequal distribution of the service.

Considering the ownership pattern of durable items with the sample respondents it is observed that majority of the labour own T.V and Radio (34.7 percent). Further, 28.6 percent migrants do not own any durable items. Workers do not have any high value durable goods because the main motive of migration to Alang is to support their family living at native place.

Workers reported to be receiving wages once a month on the basis of a daily rate. The wages of the workers are higher at Alang as compared to previous occupation of the respondents. All the occupations of Alang workers are covered by the Gujarat State Government for the implementation of Minimum Wage Act. But some wage rates especially of skilled workers and for few unskilled workers are below Minimum Wages as mentioned in the Minimum Wages Act. Taking 26 days per month wages as the criteria 50, out of 300 workers receive less than minimum wage. When 30 days per month is taken as the criteria 102, out of 300 workers received less than the prescribed minimum wages. This accounts for almost 33 percent of labour employed. The data shows that 54 percent of the skilled workers are getting wages below the Minimum Wages.

The average expenditure of the total respondents in a month is Rs. 1401.03. The high concentration of respondents is observed between the expenditure levels of Rs. 1501-2000. The share of expenditure in income is 48.50 percent for all respondents. It is found from the data majority of the expenditure on food i.e. 71.09 percent and 28.91 percent expenditure on non-food items. The regression analysis indicates that income of the respondent is a significant variable explaining the variations in expenditure pattern of respondents at Alang.

The data reveal that the propensity to send remittances was high among migrants from outside the state (97 percent). This implies that distance as a variable had a favorable effect on remittances which might be due to relatively high initial cost of migration associated with distance migration. The data shows that those who remit larger amount are the uneducated migrants as compared to educated migrants. The position is some what different with respect to caste. There was higher propensity to send remittances among low caste migrants as compared to upper caste migrants. This is due to the fact that the low caste migrants are more likely to have originated from low-income and from lower socio-economic background.

Remittances of migrants back to the village are to support their family back in the areas of origin. As the remitted money can be employed for household use i.e. maintenance of family, in agricultural operation, in making house and planning a business etc. For the total migrants, money remitted on an average is Rs. 1111.19. Since the average income of the migrants is worked out to be Rs. 2888.89. When the remittances of migrants in the sample is analysed in relation to total income of the respondents, they were found to be contributing 38.46 percent of the total income. It is found that the majority of the respondents (93.7 percent) send remittances monthly which shows high monetary requirements at migrants' native place. The regression analysis indicates that income is the important variable in explaining variation in remittances. The study also found that in all age groups remittances increases with the increase in income. The channels through migrants send money to their native place are largely informal. It is found that 88.6 percent of respondents send money home through friends and relatives. Only 8.7 percent of respondents send money via post office or through other formal channels.

The study also shows that the amount of money that migrants save per month range upto Rs. 1000 at Alang. The average monthly saving of the respondents is Rs. 430.07. This average represents nearly 14.12 percent of migrant's monthly income and is observed to be lower than the monthly saving of an organised worker.

In the regression analysis it is found that income of the respondents is the important variable in explaining saving of the respondents. It is found that present income of the respondents is significant at 5 levels. In the analysis marital status of the respondents shows that married are saving less as compared to unmarried. This is due the fact that married are remitting more to their native place.

The study found that migrants have close contact with their family members in the native place. It is found that 93 percent of respondents regularly visit their place of origin and most of migrants visit half-yearly (42.3 percent) or annually (50 percent). The frequency of visit is once in a year or twice in a year due to low wages and high traveling

cost associated with visit. On average, respondents stayed for 32 days at their place of origin to attend ceremonies, marriages and during harvesting period. The study found that migrants in Alang maintain close contact with their native place.

From the foregoing analysis, it is found that Government is aware of problems of migration and migrants in the country. Fifth Five Year Plan proposed regulation of employment and conditions of service of interstate migrant labour and to provide them certain welfare amenities, the Interstate Migrant Workmen Act 1979 has been enacted. This Act provides for registration and licensing of the establishments and contactors. There are many obligations on the part of contractor related to wage and allowance, provision of amenities like suitable residential accommodation, adequate medical facilities to suit varying climatic condition and suitable conditions of working.

Further, in Sixth Five Year Plan Government planned to take effective steps for the implementation of this Act by suitable machinery at Centre and State level. For the same a Migrant Labour Board is formed and suitable machinery is set up. However, even today much of the task as proposed above is still remains unfulfilled and needs serious consideration. From the present study the following suggestions and policy recommendations are put forward.

1. Gujarat State Government and Gujarat Maritime Board (GMB) should implement various labor laws in the right earnest. Their implementation of rules and regulations, in a way, will lead to safe working and better living conditions at Alang. This can ultimately increase the productivity of labour and also the growth of the industry.
2. GMB and the State Government need to take initiative to create proper infrastructure at Alang as there is total absence of any civic amenities for workers. Better working and living conditions in the industry will lead to inflow of better skilled labor. Even local labor who keeps away from working in this industry should express preference to be employed in this industry.

3. There is a necessity for creation of labor union, which can protect the rights of the workers. With the creation of union the bargaining power of the workers would increase and the employers are likely to act more responsibly.
4. The provision of medical insurance and life insurance for workers employed at Alang is of prime importance. The provision of medical and life insurance will increase the working conditions of the workers enormously. GMB also needs to take initiative for monthly medical checkup for workers.
5. GMB should provide requisite training to the workers. The workers employed in hazardous and risk prone activities must be trained and provided with proper equipments. The training will reduce the frequency of accidents and increase the productivity of workers at Alang.