Income Pattern of Migrant Labours at Alang Ship Breaking Yard

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Abstract: Migration is the process which is as old as human history. People move from one place to another due to economic factors dominate the decision to migrate. The decision to migrate is also influenced by income differential at the place of origin and place of destination. Individuals belonging to lower income have a greater propensity to migrate than others. Alang ship breaking yard employs 90 percent of migrant labours and they are largely from backward states of U.P, Bihar, Orissa and Jharkhand. Only a small fraction around 5-10 percent originates from Gujarat state. In the study of migration income plays important role, which decide the decision to migrate. The income of the labour determined by varies factors such as skill level, experience, age, education etc. The aim of the present paper is focus on the change of income pattern among the migrants employed at Alang ship breaking yard. The results show that workers present income is three to four time higher than previous income shown by pair t-test. The regression result also shows that skill level and experience of the migrants are important factors in present income.

1 INTRODUCTION

The process of breaking ships for the extraction of steel scrap for supply to the steel rolling mills has led to the beginning of an industrial activity. Ship breaking is the process of dismantling an obsolete vessel's structure for scrap. The process includes wide range of activities from removing all gear and equipment to cutting down as well as recycling the ship's structure. On average a ship has an active life span of 25 to 30 years. After it fails to meet the safety requirement, it is sent for breaking. The ship is sold through international broker or via cash buyers. Until 1960's, ship breaking activities was highly mechanized and concentrated in industrialized countries like United States, the United Kingdom, Germany and Italy. The United Kingdom accounted for 45 percent of ship breaking industry. During 1960's and 1970's ship breaking activities shifted to semi-industrialized countries, such as Spain, Turkey and Taiwan mainly because of availability of cheaper labour and also the existence of re-rolling mills in these countries. About 79 countries were involved in ship breaking activity. Asian yards come into existence during 1980's. Despite their late establishment, at present this region account for over 95 percent of the industry. Alang ship breaking yard of India has become eminent industry holding first position in Asia and also in world market. Bangladesh holds second position after India.

At present, India has large share in ship breaking industry (OCED, 2001) and most of the activity is concentrated in Alang and Sosiya, the two villages situated in the coast of Arabian Sea in the district of Bhavnagar in Gujarat.

Alang is a small coastal village as the district of Bhavnagar in Gujarat, dominated by a small population of fishermen and farmers. Presently, it has turned out to be one of the largest ship breaking yard not only in India but in the world. The yard stretches over 15 Km and actually covers two yards (Alang and Sosiya). The Alang ship breaking yards have the capacity to break VLCCs and ULCCs vessels, a facility not available to any other ship breaking countries in the world. Furthermore, unlike other countries where the ship breaking activities is capital intensive in India it is labour intensive. Being a labour surplus country labour is available in plenty and that too at competitive rate. Alang ship breaking yard provides large number of employment opportunities to number of skilled and unskilled labours. Moreover, there are many other activities and industries which are directly and indirectly dependent on Alang ship breaking yard, and the number of such workers directly and indirectly employed is estimated to be in between 1.5 to 1.6 lakhs (International Federation of Human Rights, 2000: 56). This also includes the downstream industries generated by the ship breaking

industry such as re-rolling mills, foundries, oxygen plants, local scrap store, transportation companies and other small local businessmen and upstream activity such as brokers, service sectors etc. A survey conducted by the International Federation of Human Rights (FIDH) found that 100 re-rolling mills are functioning in the area and each generally employs between 80-120 and thus employing about 8,000-10,000 workers.

It is found that a large proportion of labours employed at Alang ship breaking yard are migrants from different 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 proposition of the workers are 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. The next section focus on the various factors affects the income of the migrants employed at Alang.

2 PAYMENTS AND WAGES

Various occupations are covered by the Central Government and the State Government for the implementation of Minimum wages Act. For the payment of Minimum wages, labours are divided into three categories as per their skill however all labours are covered under skilled or unskilled category. The minimum wages paid to the labour constitutes the basic wage and special allowance. The special allowances is linked with the cost of living index and revised twice in a year. Hence, minimum wages of labours are revised at an interval of every six months. But the wages of the labours are fixed either on the basis of time or piece rate. According to contractors that piece rate is not revised with the revision of the special allowance of minimum wages at the interval of six months. It is found that in many industries that contractors do not pay wages according to the provision of Minimum Wages Act. Contractors seem to recognize only the basic wage component of minimum wages.

There are various studies conducted by researchers on the payments and wages to the labour in Indian industries. The researchers cover wide range of industries viz, Carpet weaving, Glassware, Beedi industry, Construction, Brassware wherein labour face exploitative conditions. These industries also cover length and breadth of India. Various studies on construction industry analysed the Minimum Wages legislation. The analysis of the Minimum Wages with

respect to employment in the construction or building operation is on the basis of the recommendation of Labour Commissioner The average wage rate prevailing in construction industry in most cases far below the Minimum Wages fixed under the Act (Subrahmanian, Veena and Parikh 1982: 137-141). In Alang ship breaking yard wage rates especially for unskilled workers are found to be below the Minimum wages as mentioned in the Minimum Wages Act. According to data available on minimum wages by Gujarat Government, the minimum wage fixed in April 2002 for skilled workers at Rs.89 and for unskilled workers at Rs.79 per day. The results of the survey suggest that wages at Alang ship breaking yard are higher than those earned by workers at their native place, but labours are receiving wages less than the prescribed minimum wages. Infact, section 13 of the Inter-State Migrant Workmen Act, 1979 provides that the wage rates of the inter-state migrant workmen should be same as those applicable to such other workmen and also the inter-state migrant workmen should not be paid less than the wages fixed under the Minimum Wages Act.

At Alang ship breaking yard many workers do not know even their wage rate because they never asked the muqadams or labour contractors due to fear of being fired from the job. Some workers reported to the researcher that they would not know their exact wage rate until they get the money in their hand. This practice violates the article 7 of the Payment of Wages Act, 1936 which states that there are no deductions from the wage except in very precise circumstances. Thus, such practices are contrary to article 21 of the Contract Labour Act which states that in case the contractor fails to make payment of wages within the prescribed time period or make short payment then the principal employer is responsible to make payment of wages in full or the unpaid balance.

In Alang ship breaking yard wages of the workers are paid on the basis of a daily rate but paid monthly. Each and every worker is handed with an attendance card at the start of the each month. Everyday Workers have to get the card filled with arrival and of departure details from the plot. The payment is either on the basis of task or piece rate. For instance, loaders whose work is to load and unload gas cylinders on the truck are paid between Rs.5 to 5.50 per cylinder. The wages ranges from Rs.60 to 70 a day for helpers and Rs.150 to 170 for experienced gas cutters. As compared to other labours, muqadams are paid approximately Rs 300 per day and pay slip is given to them but not to others.

Table 1 presents the average monthly incomes of the respondents in Alang ship breaking yard. Average present income of the respondents is Rs. 2888.88 which is three times higher than the average previous income of respondents (i.e. Rs 843.00). The previous

income of the respondents in the present study refers to the income from the last occupation. In all the categories of workers wages earned are three times or higher than the previous income with the exception of skilled workers. Previous income of the workers is significantly lower than the workers present earning in Alang. To test this hypothesis the study uses paired t-test. The average present income is significantly higher than previous income of the workers and is significant at 1 percent critical level.

Table 1: Nature of Work and Income of the Respondent per month.

Nature of Work	Average Previous Income	Average Present income	Paired t-test
Manual	760.47	2866.51	24.487*
Semi-Skilled	730.41	2566.62	22.284*
Skilled	916.98	2853.11	23.105*
Highly Skilled	1066.18	3758.35	17.985*

t-test is significant at 1% level

3 PRESENT INCOME: DETERMINANTS

There can be many factors determining the income of the respondents. To understand their significance an income function would be great help. To estimate the income function regression technique is made of. Various alternative models are fitted using both qualitative and quantitative variables. The present income of the respondents is determined by diverse factors such as skill of the individual, previous experience, age, education of the respondents. The present exercise uses the relevant variables to estimate the income function. Though, many variables are included in the model but it is found that some variables do not explain variations in income function significantly. Therefore, for the analysis of the income of the respondents bivariate and multivariate regression functions have been fitted. The following income function was considered for explaining variation in income.

Present Income = f (Years of Experience, Previous Income, Skill, Work at Ship/Yard, Experience^2)
Out of the explanatory variables skill and work at ship/yard are qualitative dummy variables and other variables are quantitative in nature. To explain the relation three equations are fitted and the results are presented in table 2. The models are

Present Income = f (Years of Experience, Experience^2) --------------- (1)
Present Income = f (Years of Experience, Previous Income, Skill) --- (2)
Present Income= f (Years of Experience, Previous Income, Skill, Work at Ship/Yard, Experience^2) (3)

It was found that for the sample data the income function is best explained through the variables such as years of experience and skill. In Model-1 years of experience and years of experience square are the explanatory variable. This model explains 9 percent of variations in the dependent variable. To test a model for its explanatory R^2 is not a confirmation test. To test whether the independent variables explain the variations in the dependent variables significantly, F-test is made use of. The coefficients of years of experience and years of experience square have expected sign in the model. In view of the fact that there exists a tendency that the income of respondent increases with the increase in years of experience at a diminishing rate which is explained through negative sign of the years of experience square but the coefficient is not statistically significant. A study conducted by Banerjee on Delhi city found that the years of experience have significant positive but diminishing effect on earning (Banerjee, 1986: 198-199).

In Model-2, previous income, experience and skill, a dummy variable are the explanatory variables. From model 1 to model 2 the result improves marginally. All the three independent variables including one dummy variable show positive sign but two variables are statistically significant as indicated by their t-values. Years of experience explain variations in present income significantly and the skill of the respondent's leads to higher income and has a positive coefficient and is statistically significant. The model is a good fit as the F-ratio is statistically significant at 5 level.

A study done by Mehta found that earning function shows the importance of workers skill as income determinant (Mehta, 1990: 150-159). Therefore, it can be concluded that in the present study income is significantly higher for the respondents who have more years of experience and are skilled. In this model previous income of the respondents is not statistically significant, which show that the income of respondents are lower before opting present occupation at Alang ship breaking yard. Model 3 includes five explanatory variables and it is found that four of them have positive coefficient and experience square has a negative coefficient but it is not statistically significant. Years of experience are the most significant explanatory variable as it is significant at 1 percent level. The skill of the respondent leads to higher income on an

average and is statistically significant at 5 percent level. The respondent's work on ship leads to relatively higher income; however it is not significantly higher. The model explains the variation in present income significantly as the F-ratio is statistically significant at 5 percent level. Combining the three models it can be concluded that years of experience and skill level are the most important determinants of present income.

Table 2: Regression Result of Respondents' Income at Alang Ship Breaking Yard.

Variable	Model 1	Model 2	Model 3
Constant	2528.544	2432.513	2444.099
Years of Experience	41.8897 (5.461)**	35.0603 (4.479)**	34.7619 (4.398)***
Ship/Yard[a]			119.3687 (0.986)
Previous Income		0.03218 (0.405)	0.0357 (0.447)
Skill[b]		242.8937 (2.929)*	233.798 (2.792)**
Experience^2	-0.2194 (-0.466)		-0.2914 (-0.623)
N	300	300	300
R^2	0.091	0.119	0.122
F-Ratio	(14.917)**	(13.294)**	(8.206)**

Dependent Variable: Present Income

[*] Significant at 10%
[**] Significant at 5%
[***] Significant at 1%

Note: Figures in bracket are t-value

[a] Ship/Yard = 1 workers working inside ship otherwise 0 if workers working in yard.

[b]Skill = 1 for skilled workers otherwise 0

4 CONCLUSION

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.

The ship breaking industry after functioning for more than 20 years, workers are still getting wages less than prescribed minimum wages. Wage structure of the workers at Alang is very well known to employers as well as Government, but both the players are still silent and nobody is taking initiative to improve or revised wage system in ship breaking industry of Alang.

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