

Working Conditions of Shipbuilding Workers in the Shipyards of Bangladesh: Problems and Consequences

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***Abstract:** Because of the advantage of low cost base, availability of more than two hundred shipyards in the country and huge capacity of production of passenger's vessels, Bangladesh shipbuilding industry is enjoying a boom nowadays. The analysis in this study focuses on the working conditions of shipyards in Bangladesh and the problems of this industry and their consequences. Using a sample of 187 workers from Meghnaghat and Keranigonj areas, the study conducts an evaluation of the aspects of the livelihood of shipbuilding workers, assessment of the problems of workers of the shipyards, and identification of the consequences of the problems. Simple Tabulation, Cross Tabulation, Presented Tabulation, Pearson Chi-Square Test, Multiple Regression Analysis, and ANOVA were used to analyze the data gathered from the survey. The study found that most of the workers are unable to lead a good life because they can't manage their basic needs properly and suffer from lack of supporting materials and safety measures, irresponsible behavior of the authority, and risky workplace environment. The report recommended that shipbuilding companies should ensure human rights and welfare of the workers of their shipyards by contributing to livelihood changes ensuring social security and good working conditions adhering to national and international laws and regulations.*

***Keywords:** Shipbuilding Industry, Working Conditions of Shipyards, Problems and Consequences, Social Security, National and International Laws and Regulations*

Introduction

As Bangladesh has a thousand year old history in shipbuilding through the course of time, it has gained a comprehensive experience of building fine vessels in answer to her communication and transportation needs. From wood to steel, and from single-deck to multi-deck vessels, the country's Shipbuilding Industry has developed over time and so has the labor force's mastery of the craft. As days progress, many shipbuilding companies are now being established and Bangladesh is now building world class ships.

There are more than 200 shipyards in the country. These are mainly engaged in building and repairing low quality inland vessels. It is about 15% cheaper to produce a ship in

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Bangladesh than anywhere else and the industry is expected to grow significantly. Today, there are over two thousand 500 tons to 2000 tons capacity cargo-ships and 220 tons to 1000 tons capacity passenger vessels, all made in Bangladesh cruising its rivers. The shipbuilding industry of Bangladesh comprises primarily with local customers as the rate of capturing the local areas is very high compared to that of the foreign markets. The mix of consumers in shipbuilding industry encompasses with 99% local customers along with 1% foreign customers. That means only 1% is the ocean going export market of vessels and the remaining portions are for inland vessels market.

Currently Asian countries are doing very well in shipbuilding industry. Among 100 percent 5.3 percent is produced by Brazil, Poland, Bangladesh, Singapore, Taiwan, India and other countries [Riadh and Chowdhury 2011]. Bangladesh first exported different types of ships to Denmark and Mozambique. Day by day it is increasing its footprint in different countries and now it is one of the listed names of shipbuilders in the list of shipbuilding nations. The income from export of ships is increasing day by day. In 2011-12 the export earning is \$45.95 million whereas in 2007-08 it was \$0.27 million [Export Promotion Bureau].

Although shipbuilding industry in Bangladesh faces some challenges both in domestic and international market it also creates some problems. In this study the researchers tried to focus on those problems identifying whether there is any significant impact on the working conditions of shipyards in Bangladesh and to find out the sufferer of those problems. From the findings the researchers found that 100% of the workers in shipyards are male. The study will explain conditions of working environment of shipyards in Bangladesh with identification of problems and consequences from the various dimensions by analyzing the most important group associated with this industry like the shipyards workers from Keranigonj and Meghnaghat representing the whole portions of shipyards workers in Bangladesh. The report is started with an introduction and following by an introductory section, second part points out rational and issues. Then it is developed methodology while subsequent parts provide the analysis, interpretations and findings and finally recommendation and conclusion of the study.

Research Rationale and Issues

One of the important reasons behind the comparative advantage of RMG sector of Bangladesh is low labor cost. Despite the low labor cost there are so many controversies regarding the working environment in RMG factories in Bangladesh nationally and internationally. As Bangladeshi shipbuilding industry is also competitive in terms of low labor cost, but nowadays this is also the question whether the working condition in the shipyards of Bangladesh is good or not as like as RMG sector. So this industry requires a comprehensive study to find out the real scenarios. But there have been a very few

studies on this industry which are lower than required numbers. So this study can be employed as a basis for knowing the working conditions for shipbuilding workers in Bangladeshi shipyards and for any future study.

The entire study will be undertaken to find out the answer of the following issues:

1. **Evaluation of the aspect of the livelihood of shipbuilding workers:** It is necessary to find this in terms of contribution of this sector on the life of the workers by answering positively and negatively on several criteria like income, education of children, food, accommodation, social security, medical facilities.
2. **Assessment of the problems of the workers while working in the shipyards:** The researchers will try to find out the problems faced by the workers while working in the shipyards by conducting the survey, and the sufferers of the problems deprived by the shipbuilding companies.
3. **Identification of the consequences of problems for workers:** This part will focus on satisfaction and dissatisfaction level of workers with the working environment, reasons behind such satisfaction and dissatisfaction, effects of problems on life of shipbuilding workers, workers' health, and security, reasons behind the expectation of the workers of shipyards.

Methodology

The methodology of the study comprises a step by step process of investigation into the study objectives. For example,

Assessing the contribution of the sector on the life of the workers by showing the aspect of the contribution in the livelihood change of workers and aspect of monthly income of the workers is the first part of the report.

In case of studying the evaluation of the aspect of the livelihood of shipbuilding workers, it is considered the findings from the survey conducted on the shipbuilding workers. The findings are based on several criteria. Then the criteria are divided into two parts-negative or positive.

After conducting the survey, it will identify some problems faced by the workers while working in the shipyard, which is the next stage of this report. Here the study will be based on the portion of the workers faced the problems in the shipyards, identification of problems, and finding the sufferers of the problems.

And finally analysis of the identification of the consequences of those problems for workers will be done. Here the study will be based on the identification of satisfaction and dissatisfaction level of workers with working environment, reasons behind such satisfaction and dissatisfaction, effects of problems on workers, expectations of workers of the shipyards in Bangladesh. The analysis will be in both judgmental or qualitative and quantitative form.

In case of analyzing the workers' satisfaction the statistical tool-mean is used to find out to what extent the workers are satisfied with the working environment in the shipyard of Bangladesh. A Pearson Chi-Square for hypothesis has been done. To identify the reasons behind such satisfaction or dissatisfaction the multiple regression analysis will be constructed. And the remaining study will be based on the qualitative form. Table and column chart will be used to present the data.

Here the critical analysis is made to create the analytical framework of this problem of this research. Mainly research will show here the Pearson Chi-Square Test (Pearson's chi-square test (χ^2) is a statistical test applied to sets of categorical data to evaluate how likely it is that any observed difference between the sets arose by chance) and Multiple Regression [Multiple regression analysis is a regression analysis that is concerned with describing and evaluating relationship which uses several explanatory or independent variables (x_1, x_2, \dots, x_k) to predict a numerical dependent variable Y] (Maddala, G. S. 2009) etc. The research questions, problem statement, dependent and independent variables for this section are given below:

Research Questions

The study will be also undertaken to find out the answer of following questions:

1. Are the workers satisfied with the working condition of shipyards in Bangladesh?
2. What are the factors that have impact on satisfaction or dissatisfaction of workers?

Workers' Satisfaction

To find out the satisfaction of workers', it was asked them-How are you satisfied with the working condition of shipyards in Bangladesh? The mean worker satisfaction (Area wise) is calculated as following.

$$\bar{X} = \frac{\sum_{i=1}^n X}{n}$$

Where, n = number of respondents in the sample, and $n = 15$ for Meghnaghat, 172 for Keranigonj,

Confirmation of satisfaction of workers with the working environment in the shipyards of Bangladesh will be done using Pearson Chi-Square for hypothesis is done. The above analysis will be analyzed using Chi-Square Test because it is in nominal scale and it is the test of difference or measure of association between two independent variables at a time (Bivariate Statistics).

Pearson Chi-Square Test

Hypothesis: Are the workers satisfied with the working environment in the shipyards of Bangladesh?

H_0 : Workers are satisfied with the working environment in the shipyards of Bangladesh.

H_1 : Workers are not satisfied with the working environment in the shipyards of Bangladesh.

$$\chi^2 = \sum_{i=1}^r \sum_{j=1}^c \frac{(O_{i,j} - E_{i,j})^2}{E_{i,j}}$$

Where,

r = Rows in the table

c = Columns in the table

χ^2 = Pearson's cumulative test statistic, which asymptotically approaches a χ^2 distribution.

$O_{i,j}$ = an observed frequency;

$E_{i,j}$ = an expected (theoretical) frequency, asserted by the null hypothesis;

n = the number of cells in the table

Then to identify the reasons for such satisfaction or dissatisfaction, it asked to the respondents- What the reasons for such satisfaction or dissatisfaction are?

Problems Statement

If the workers are satisfied/ dissatisfied with the working condition of shipyards in Bangladesh, then what are the reasons for such satisfaction or dissatisfaction?

Dependent Variables: Here the dependent variable is satisfaction of workers (Y)

Independent Variable: The independent variables are the factors that determine the satisfaction/dissatisfaction level of workers (X)- Attractive salary, Secured Job, Various Types of Incentive Programs of the Shipbuilding Company, Good working Environment, Proper Training System of the Company, Accommodation Benefits, Decision Making Power, No Health Hazards.

Formula of ANOVA

$$SS_{\text{total}} = \sum_{i=1}^n \sum_{j=1}^c (X_{ij} - \bar{X})^2$$

Where

X_{ij} = Individual score, i.e., the i th observation or test unit in the j th group

\bar{X} = Grand Mean

n = Number of the Observations or Test Unit in a Group

c = Number of j th group (or Columns)

Formula of Multiple Regression

$$y = \alpha + \beta_1 X_1 + \beta_2 X_2$$

Where, y = Dependent Variable

x_1, x_2 = Independent Variables

Finally the analysis on the effects of such problems on workers and expectation of workers' is done on the basis of findings from the survey conducted.

Sources of Data

The data on all the issues will be collected from secondary sources (like journal, newspaper, academic books, articles, internet, research papers etc) and some primary data generated through gathering expert opinions of Ananda Shipyards and Slipways Ltd., the Association of Export Oriented Shipbuilding Industry of Bangladesh, and government authority like-Export Promotion Bureau and Department of Shipping.

Researchers will also conduct a mini sample survey among the workers in the Meghnaghat area where the Ananda Shipyards and Slipways Ltd. is located and in the Keranigonj area. In Keranigonj area 19 shipbuilding companies' workers will be considered for conducting the survey. The sample will be selected on a probability basis (a sample in which every member of the population has a known, non zero probability of selection). And the numbers of workers of shipbuilding will be 15 and 172 from Meghnaghat and Keranigonj areas respectively. Hundred percent of the respondents will be male. And among them 100 painters, 15 welders, 65 steel fitters, 2 scaffolders, 3 CNC (Computer Numerical Cutting) operators will be interviewed.

Instruments of Survey

A structured questionnaire has been used to conduct this study. There have been combinations of Multiple Choice Questions, 5-Points Likert Scale, and Open Ended Questions. Other than this, some demographic questions have also been included.

Assumption of the Research

There are many workers are working in the different shipyards in Bangladesh. Among different shipyards it is considered only two shipyards- Ananda Shipyards and Slipways Limited at Meghnaghat and Keranigonj to conduct the survey will be assumed as the representatives of explaining the working scenarios of all the shipyards in Bangladesh. And moreover, only 187 workers will be surveyed from the two areas. In Ananda Shipyards and Slipways Limited at Meghnaghat and Keranigonj shipbuilding areas the total number of workers are 1500 and 10000 respectively. So among these workers the portion of interviewed workers will represent all the workers from the above two places as well as the whole shipbuilding workers of Bangladesh with having total 150 million of population.

Findings and Analysis

Evaluation of the Aspect of the livelihood of the shipbuilding workers

Respondents were asked to express their opinion towards whether the shipbuilding business contributes to the livelihood change in their life or not and how. About 8% of them gave the positive response whereas 86% responded negatively. The response was on the basis of several criteria. The criteria wise result is like the following:

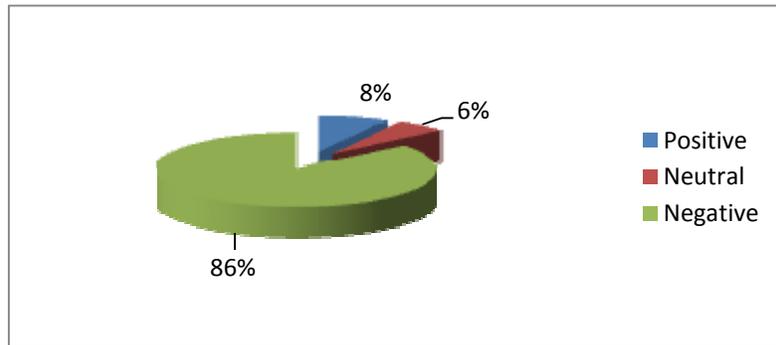


Figure 1: Portion of Contribution of This Sector in the Livelihood of Worker

Source: Shipbuilding Workers Survey by Author, 2013

Table 1: Aspect of the Contribution in the Livelihood Change of workers

Aspect of Livelihood	Percentage	Aspect of Livelihood	Percentage
Way of Earning Handsome Income	8%	Minimum Earning	86%
Educate the Children	14%	Unable to Educate the Children	86%
Eat Food Every Day	14%	Can't Eat Food Every Day	86%
Manage the Accommodation	14%	Can't Manage the Accommodation	86%
Ensure Social Security	8%	Can't Ensure Social Security	86%
Get the Medical Facilities	8%	Can't Get the Medical Facilities	86%

Source: Shipbuilding Workers Survey by Author, 2013

From the table it can be found 86% of the respondents told that they are unable to lead a good life because they can't manage the proper food for their family, proper education for the children, proper medical facilities, social security, accommodation facilities etc. After this finding, now it will be concerned about the monthly income of the workers earned from shipbuilding activities to find the real scenarios of the workers. The figure is given below.

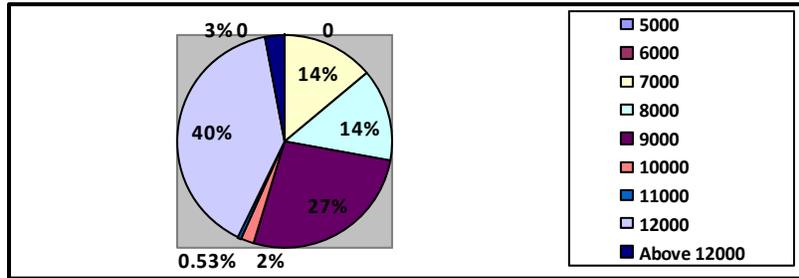


Figure 2: Monthly Income of the Workers

Source: Shipbuilding Workers Survey by Author, 2013

The findings of the above figure indicate that Tk. 12000 is the monthly income of 40% of the shipbuilding workers. It is only 3% of workers whose monthly income is above Tk. 12000.

Assessment of Problems of Workers While Working in the Shipyard

After conducting the survey, it was identified some problems faced by the workers while working in the shipyard. Among 187 workers 96% face problems, whereas only 4% said they don't face any problems. To identify the problems of those workers, it was asked them if they face any type of problems then what are those problems. Due to these problems most of them feel deprivation to work with effort. So these problems are introduced below.

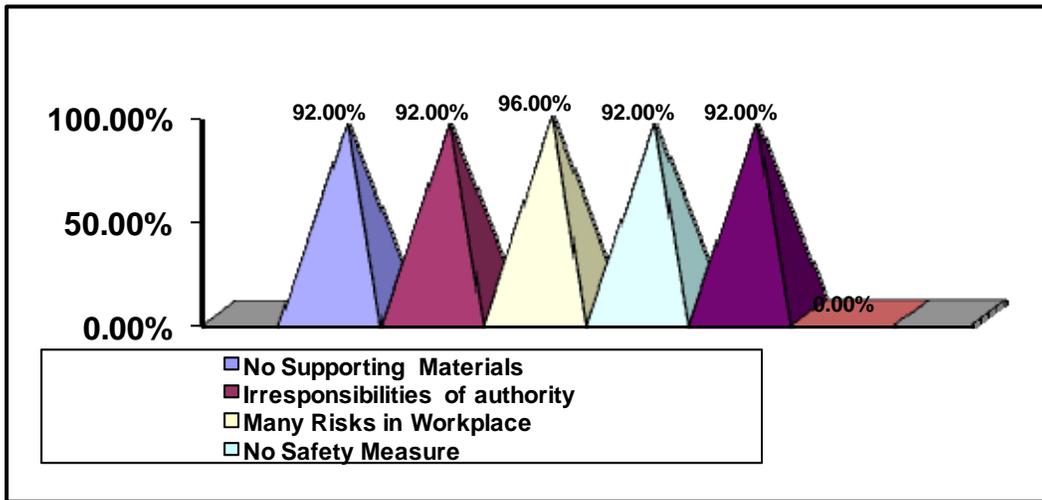


Figure 3: Problems of Workers While Working in the Shipyard

Source: Shipbuilding Workers Survey by Author, 2013

In the above figure we see that 92% of workers told lack of supporting materials and safety measures, irresponsibility of the authority, bad working environment are their problems. And among 187 workers 96% said presence of many risks in the workplace is their problem while working in the shipyard.

Sufferers of the Problems

So the above scenarios show the findings that in the shipyard most of the workers are the sufferers of the problems created by the shipbuilding companies. Most of the problems are created only due to the irresponsibility of the shipbuilding companies. As a result there are so many risks prevailing in the workplace for which it is now considered as a bad working environment in shipyards of Bangladesh.

Identification of the Consequences of Problems for Workers

Satisfaction/Dissatisfaction Level of Workers with the Working Environment of Shipyards

To find out the satisfaction/dissatisfaction level of workers, it was asked them- Are you satisfied with the working environment in the shipyard? Then 2% of workers said they are very satisfied with the working environment while 5% of them were satisfied. 27% of the workers were neither satisfied nor dissatisfied and the remaining 39% and 27% were dissatisfied and very dissatisfied respectively with the working environment of the shipyards in Bangladesh.

The mean workers satisfaction for all workers came 1.62 in a scale of 5, which means workers are highly dissatisfied with the working environment in the shipyards. The mean workers satisfaction (Area wise) is given in below table:

Table 2: Area Wise Workers Satisfaction from Workers Survey by Author, 2013

Place	Workers Satisfaction (Out of 5)
Meghnaghat	4.2
Keranigonj	2

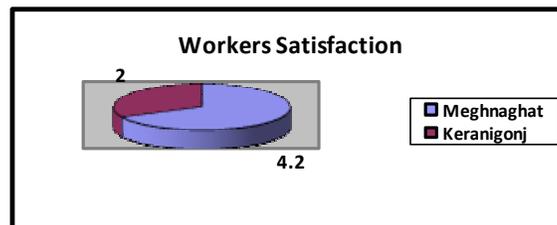


Figure 4: Area Wise Workers Satisfaction

Confirmation of Satisfaction/Dissatisfaction***Pearson Chi-Square Test***

To confirm satisfaction of workers with the working environment in the shipyards of Bangladesh has been done using Pearson Chi-Square for hypothesis.

Table 3: Contingency Table (Cross-Tabulation) for Relationship between Workers' Satisfaction and Working Environment

Satisfaction Level with Working Environment	Workers	
	Meghnaghat	Keranigonj
Very Satisfied	4	-
Satisfied	10	-
Neither Satisfied Nor Dissatisfied	1	50
Dissatisfied	-	72
Very Dissatisfied	-	50
Total	15	172

Table 4: Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Worker of Meghnaghat and Keranigonj * Satisfaction Level with Working Environment	187	100.0%	0	.0%	187	100.0%

Table 5: Cross tabulation of Worker of Meghnaghat and Keranigonj and Satisfaction Level with Working Environment

			Satisfaction Level with Working Environment					Total
			Very Dissatisfied	Dissatisfied	Neither Satisfied Nor Dissatisfied	Satisfied	Very Satisfied	
Worker of Meghnaghat and Keranigonj	Keranigonj	Count	50	72	50	0	0	172
		Expected Count	46.0	66.2	46.9	9.2	3.7	172.0
		% of Total	26.7%	38.5%	26.7%	.0%	.0%	92.0%
	Meghnaghat	Count	0	0	1	10	4	15
		Expected Count	4.0	5.8	4.1	.8	.3	15.0
		% of Total	.0%	.0%	.5%	5.3%	2.1%	8.0%
Total		Count	50	72	51	10	4	187
		Expected Count	50.0	72.0	51.0	10.0	4.0	187.0
		% of Total	26.7%	38.5%	27.3%	5.3%	2.1%	100.0%

Table 6: Chi-Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.737E2	4	.000
Likelihood Ratio	94.611	4	.000
N of Valid Cases	187		

We know that if the P-Value (Probability Value) is less than the significance level .05 (here the significance level is 5%), then null hypothesis is rejected and vice-versa. Here the P-Value (Probability Value) is .000, which is less than .05. So we can reject the null hypothesis, which means workers are not satisfied with the working environment in the shipyards of Bangladesh.

Reasons behind Such Dissatisfaction

Multiple Regression Analysis

Then to identify the reasons for such dissatisfaction, it was asked to the respondents—What are the reasons for such satisfaction/dissatisfaction? Then as per their responses Multiple Regression Analysis was done.

Table 7: Model Summary

[Model]	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.995 ^a	.990	.989	.09971

In model summary we see that R^2 (Coefficient of Multiple Determination) value of the study came .990 which is very close to 1, the independent variables explain most of the variation in dependent variables (Y).

Table 8: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	169.417	9	18.824	1.893	.000
	Residual	1.760	177	.010		
	Total	171.176	186			

Here,

H_0 : The model is not significant.

H_1 : The model is significant.

To test the performance of model we use ANOVA table. From the above table we see the F-value, which represents the overall performance of model. We know that if the P-Value

(Probability Value) is less than the significance level .05, then null hypothesis is rejected and vice-versa. Here it can be seen the p-value is less than significance level (.000 < .05). So we can say that the null hypothesis is rejected and the model is significant.

Table 9: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	.042	.251		.169	.866
	Id	.000	.001	.007	.246	.806
	Attractive salary	.240	.009	.494	27.059	.000
	Secured job	-.404	.045	-.407	-8.969	.000
	Various types of incentive program	.477	.045	.423	10.514	.000
	Good working environment	.018	.012	.025	1.479	.141
	Proper training system	-.458	.103	-.475	-4.457	.000
	Accommodation benefits	.608	.045	1.206	13.444	.000
	Decision making power	.000	.049	.000	-.009	.993
	No health hazards	.463	.061	.471	7.638	.000

Here it will be considered the unstandardized coefficients for interpretation of results. And it is important to say that, except the constant, among the covariants if any of them is significant that means less than significance level (.05) then the overall model is significant. Here we see many of the covariants are less than .05. So the overall model is significant. Then if we want to evaluate the performance of individual variables it can be considered the t-test.

Now from this table we can construct the regression model.

$$WDS = .042 + .240AS - .404SJ + .477IP + .018E - .458TS + .608AB + .000DM + .463HH$$

Here, WDS= Workers’ Dissatisfaction, AS= Attractive Salary, SJ= Secured Job, IP= Incentive program, E= Environment, TS= Training System, AB= Accommodation Benefits, DM= Decision Making Power, HH= Health Hazards

Analyzing the model it is evident that minimum salary, lack of incentive program, bad environment, lack of accommodation benefits and health hazards are important reasons for workers’ dissatisfaction, because these variables came positive. Although decision making power focuses the positive factor it has no impact on the dissatisfaction of workers. Moreover, impact of training system and job security has a high impact on the dissatisfaction of workers due to their negative figure.

Effect of Problems on Workers’ Life, Health, and Security

The real scenarios of the outcome of the problems faced by the shipbuilding worker in the workplace were found by asking the question- “What are the consequences they are facing only because of those problems in the workplace?” Then most of them indicated the problems have a great effect on their life, security, and health. The survey finding is given below.

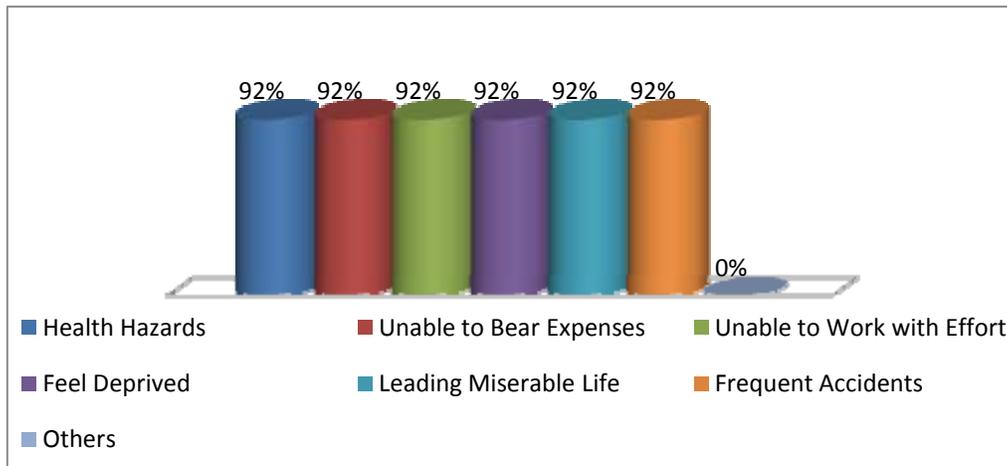


Figure 5: Consequences of Problems for Workers

Source: Shipbuilding Workers Survey by Author, 2013

From the above figure we see that among 187 workers 92% respondents face the results of problems on their life, security, health, mind etc. Then in analyzing it in detail regarding the health hazards of those workers, it was asked the questions that-“what type of health problems they are facing?” So from the below figure the finding will be come before us.

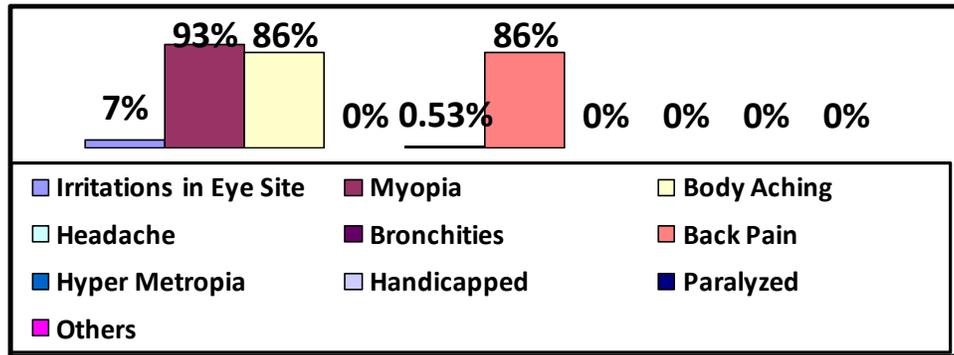


Figure 6: Types of Health Hazards Faced by the Workers of Shipyards

Source: Shipbuilding Workers Survey by Author, 2013

Here we see that 93% of workers face the problems of Myopia and most of them are painters of the shipbuilding companies. 86% of workers face the problems of Body Aching and Back Pain. And finally 7% and .53% of the workers have the problems of Irritation in Eye Site and Bronchitis respectively. Also, it can be seen from here that, the workers are not suffering from headache, Hyper Metropia, Handicapped, Paralyzed or others.

In the survey analysis it was also found that, 62% among 187 workers faced the accidents while working in the shipyard and the remaining 38% didn't face any accidents. After that to find out the reasons behind the accidents occurred for 62% of workers it was asked the respondents if any accidents occurred to you in the shipyard then what are the reasons behind that?" The following figure shows the reasons behind the accidents.

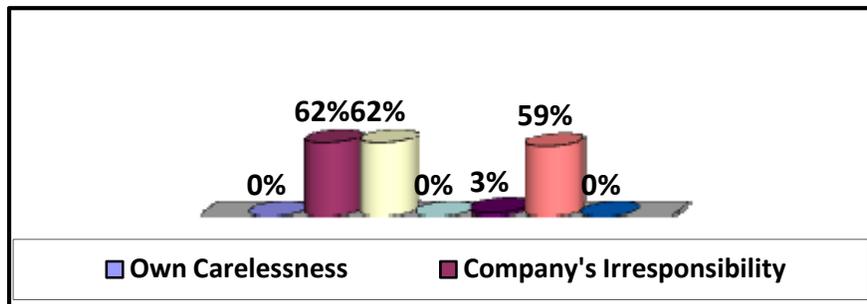


Figure 7: Reasons behind the Accidents

Source: Shipbuilding Workers Survey by Author, 2013

From the above figure we see that 62% of the workers fell in accidents for irresponsibility of the authority and lack of safety measures in the shipyards. Then 3%

and 59% of the workers face the problems of accidents due to electric shocked and falling from upstairs or ships respectively.

Expectation of Workers of the Shipyards in Bangladesh

In case of analyzing the expectations of the workers, it was asked questions to the respondents regarding their expectation. The survey finding is given below.

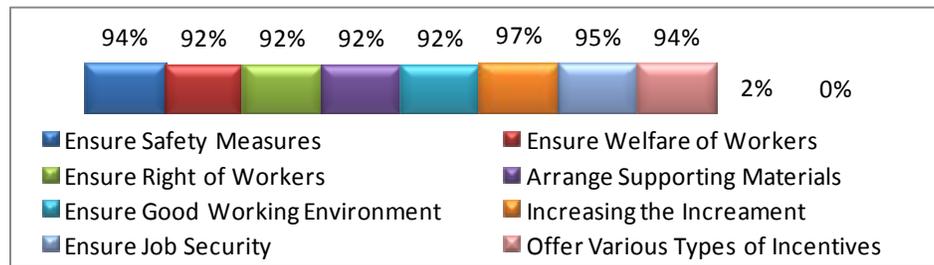


Figure 8: Expectation of the Workers of Shipyards

Source: Shipbuilding Workers Survey by Author, 2013

From the above figure it can be noticed that 92% of the workers expect the welfare of them, ensure right of workers and good working environment, and arrange supporting materials in the shipyard. Then 94% of them wait for safety measures in the workplace and different types of incentives programs. And finally 97% and 95% of the workers hope for the benefit of increasing increments and right performance evaluation respectively.

Recommendations

From the above analysis what was found from reviewing working conditions of shipyards in Bangladesh and talking with workers, and experts it is necessary that all relevant parties should consider the following recommendations.

The government of Bangladesh should take the necessary actions to ensure the proper compliance by the shipbuilding companies to the issues in accordance with the guidelines of International Labor Organization (ILO) and International Maritime Organization (IMO) to safeguards the basic human rights of employees and improve labor conditions. There should be regular inspections of all the ships operations from the government authority.

And shipbuilding companies should provide a safe and healthy working environment in which every employee is treated with dignity and respect. The welfare of the workers of their shipyards should be ascertained by contributing to livelihood changes ensuring

social security i.e. giving different types of incentives, benefits to the workers, ensuring job security, making good working environment, providing proper training facilities, accommodation facilities and ensuring right performance appraisals, giving guidance on job modifications, restrictions, or alternative jobs for injured employees.

It must be arranged the changes to equipment, work practices, and procedures that address risk factors, help control costs, proper training, and reduce employee turnover in the shipyards. And finally the workers should keep regular communication with the company authority for maintaining their proper rights.

Conclusion

The foremost intention of this study is to find out the working conditions of shipbuilding industry in Bangladesh by focusing on different issues like evaluation of the aspects of the livelihood of shipbuilding workers; assessment of the problems of workers while working in the shipyards; and identification of the consequences of problems for shipbuilding workers. From the whole analysis, it can be seen that most of the workers are unable to lead a good life because they can't manage their regular fundamental needs properly as most of them are the only earning member of their family.

Moreover they are dissatisfied with the working conditions of the shipyards due to the problems like: facing regular accidents in the workplace, suffering different types of diseases due to work there, lack of supporting materials and safety measures in the workplace, irresponsibility of the authority, bad working environment. But they still work there with the hope of minimization of such problems in the workplace by the concerned authorities and to contribute in this sector for the development of Bangladesh.

It can be suggested to many of the shipbuilding companies to ensure the welfare of the workers by ensuring the right of the workers and arranging good working environment and supporting materials in the workplace. They should think about these factors very carefully. In this case it is also suggested them to go for detail study on workers taking wider sample coverage to find out the real scenarios.

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