

Risky Ship Breaking Practice in Bangladesh: An Analysis on Present Socio-economic Status of Victim Workers

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Abstract

Shipbreaking is the recycling mechanism that is reprocessed or scrapped or disposed of almost obsolete cargo vessels. As the breakdown process of these vessels takes place within a multifarious framework, the workforce is confronting many environmental and health barriers throughout the recycling sector. Bangladesh is well known for earning a good deal of profit from such a precarious and caustic industry on the South-eastern offshore in the country but on the flip side, the masters of this insecure business are actively contravening the employees on the top of that human rights here are completely missing. The current situation in the Chittagong ship-breaking area is getting worse day by day, while current workers are deprived of basic rights, victim workers are completely ignored. The concentration of this research paper is to evaluate the socio-economic status of victims' workers and to explore the system of rehabilitation of victims' workers in shipbreaking divisions. This study found that, after the fatal accidents, the condition of victim workers had become more miserable due to deprivation of compensation and other rehabilitation support from the authorities and the government.

Index terms— shipbreaking, victim workers, compensation, rehabilitation, chittagong, bangladesh.

1 I. Introduction

The breaking of the ship is the process of dismantling the large cargo tank, cut into pieces that can be sold and processed for further use. Modern ships have a lifecycle of 20 to 30 years before breaking, metal fatigue and absence of components lessen their unforeseen performance. In the ship breaking activities south East Asia contributes more than ninety percent of global ship recycling activities [1]. In the world map Bangladesh, India, Pakistan, and China are prominent centres for scrapping ships Besides Turkey in Asia ship recycling activities are reported from the isolated locations of Europe including the UK. Bangladesh's domestic steel production is insufficient to meet national demand which is measured at 5 million tons a year [2]. Most importantly, this scraping sector has a significant contribution to spinning on the economic wheel as it has no metal resources. Though shipbreaking is the most hazardous and risky industry, it is one of the most socially and economically important growing industries in Bangladesh's seaside regions. There are also two prominent reasons behind this first being that workers are very cheap here and the last being the lack of enforcement of environmental law.

In Bangladesh, the Shipbreaking industry has become a major occupational and environmental issue. Shipbreaking is an extremely labour-intensive and risky industry. From the beginning of the shipbreaking yard, working conditions have been very difficult in Bangladesh due to partial or no use of particular protective equipment. Due to hazardous working conditions in the Chittagong yards, 1,200 workers died over the past 30 years [3].

All works are done manually in shipbreaking yards and employees are sometimes forced to work more than their ability within a short span of time. Not only the accidents but also the risk of developing fatal workplace diseases at yards including cancer and asbestosis is high because of not using personal protective equipment from toxic fumes and materials. In Bangladesh, accident rates in this industry are increasing every year and the

working condition getting worse but there is no sign of caring victims and of rehabilitating or compensating them for the damages.

2 II. Methodology

The shipbreaking yard of Chittagong is placed in Fauzdarhat, SitakundaUpazila, Bangladesh. It is a seashore area along with the 18 kilometres in coastal strip and 20 kilometres North West of Chittagong. The geographical location of "The shipbreaking zone" is between latitude 22.252 and 22.282 N and longitude 91.422 E and 91 452 E.

This research is made on the mixed research method. For collecting data, the survey method and observation method are used. The survey is conducted by snowball sampling. A survey is carried out on victim workers who used to work in different yards in different sections, such as cutter group employees, wire group workers, and helpers. Data are analysed through descriptive statistics using bar diagrams, line graphs, and tables.

3 III. Literature Review

Shipbreaking industry has massive potential because it provides thousands of people with economic opportunities also contributes to the economic growth of areas in need of private sector investment. The demand for iron is growing each year because of urban planning, while over the year the number of yards is also increasing.

Ahsan & Khan [4] in their article 'Health Risk Assessment of the Workers of Shipbreaking Industry: A Case Study from Chittagong' present the current scenario of the ship breaking industry that the health hazards faced by the thousands of low wages, unskilled workers in this industry are indescribable. Their thesis is mainly based on 235 respondents including workers & related personnel. The main focus of the study is to find out worker's awareness of their rights. They examine worker's habitant, safety, and health hazard on certain risk parameters. Authors declare that 24,41,000 workers with additional 8,00,000 daily wage laborers are employed in the total industry. They argue that the majority of workers have felt that they are vulnerable to various health risks as a result of their work in an unhealthy and nauseous environment. They advocate that for sustainable development local initiatives have to be promoted and particularly those aiming to improve the working conditions in the breaking yards by training the workers.

Hossain & Islam [5] in Ship Breaking Activities and its Impact on the Coastal Zone of Chittagong, Bangladesh: Towards Sustainable Management conduct an in-depth study on worker's activities in ship breaking industry & its impact on aquatic biodiversity, human health & other resources in Chittagong seashore. The study also reveals that this industry is a death trap where a worker dies every week and several accidents occur every day, & these accidents are not reported or recorded. They also claim that fishermen leave fishing and take other occupations for livelihood as fish species are not available in catch. Furthermore, authors advocate many of the ship breaking components are highly toxic, persistent & carcinogenic in nature they prove fatal for aquatic food chain & human health. They recommend International Maritime Organization (IMO), International Labor Organization (ILO) & Basel convention guidelines yet not mandatory to continue ship-breaking activities in Bangladesh but for sustainable practice, laws should be based on these conventions.

From another point, Rousmaniere & Raj [6] in their article "Shipbreaking in the Developing World: Problems and Prospects" present ship breaking in the developing world mainly India & Bangladesh. They mainly focus on Occupational & Environmental Health (OEH) risks associated with the dismantling of beached ships. The study also reveals that in Chittagong, 88% of the workers are suffering from some form of accidental injury from foot injury to larger accidents. Authors identify the problem as advanced countries have shut down ship-breaking operations in their country in order to prevent environmental degradation, but then again, these countries are sending ships for recycling to developing countries. They also recommend making the compensation laws & labor laws more clear, specific & strict.

4 IV. Result and Discussion

The final action of the life cycle of a ship is shipbreaking. A prolonged procedure takes place for the dismantling of a ship. In order to promote the goals of disassembling and recycling, some important industrial and engineering practices are to be carried out well in advance. In Bangladesh, the most common method of ship disposal is the beaching method which have been deemed by the ILO most unsafe and perilous work in the world.

Workers are all involved in hazardous physical labor, but they do not have safety equipment, such as masks, gloves, shoes and work suits, medical facilities, or financial security. In2017 and 2016 Bangladesh, at least 50 workers were killed and 100 severely injured in this industry [7] [8]. There have no exact statistics or data available about accidents. But accidents frequently happen here.

5 a) Accident Criteria and Causes

Due to its dangerous working nature, a lot of worker face accidents and fatal injuries in the sector this sector and many news stories keep the shipping industry in the lime light for employees being hurt or killed.

6 . Accident and Diseases

In the shipbreaking yards, all the works are done manually. 96.75% of workers face superficial injury after working here like loss of organ (hand, leg, finger, etc) is a very common phenomenon for the cutter man. 53.85% of workerfaces different types of skin diseases from chemical poisoning and infection after scald. Because of lifting heavy parts of ship 65.38% of workers face internal sprain in the body. They all experienced various accidents in the yard and witnessed a lot of men killed and wounded. Besides working tension in the yard, they also face multiple work-related stress including chronic pain in the body, migraine, etc. After facing a severe accident in the yard, the majority of the injured worker experiences several psychological dysfunctions such as-depression, post-traumatic stress disorder, insomnia, etc.

7 ii. Causes of Accidents

Most workers are not postulated with basic equipment while working in the yard. It is filled with containers, channels, and tanks containing coal, oil and toxic gas while transporting a vessel from shipowners. All safety equipment should be provided by the recruiter and the yard authority in compliance with ILO regulations. But it is found that in Bangladesh yard authorities only provide onlyoperational equipment. Gas explosions are a common phenomenon. It also reveals that cutter group workers are mostly killed and injured by gasexplosions. Besides, it regularly happens that through tumbling or collapsing steel parts form broken vessels, plate group employees are crushed. Often workers fall from the high sides of ships without a safety harness on which they work.

8 b) Socio-economic Conditions of Victim Workers

The shipbreaking industry has enormous possibilities because it offers economic opportunities for thousands of people, but the socio-economic conditions of the victims are unfortunately fragile enough to feed their families.

9 i. Age of severely injured victims

The figure-1 below shows that the majority of victim workers (85%) are in the age group 15-25. 50% of the workers are children. Though child labor is forbidden in Bangladesh according to Labour Act-2006, child labor is frequently happened in here. Most of the child labor working as a helper of cutter men. Young labor is the majority portion that works here because of unemployment. Due to the severe form of injury at young age, young respondents cannot able to work in other occupations. Along with after working 10-15 years in the yard, workers getting sick and weak. iii.

10 Livelihood and Accommodation

The economic condition of the victim respondent is beyond description. It is turned into a curse for the victim's family while the main earnable person is reliant on others due to accidents. It is also noticeable that a significant portion of the victim respondent's family members again involves with this risky job to support their family.

11 Fig.2: Present income sources of victim respondents

That means that after accidents they choose some easy access occupations to take care of their families where capital is used hardly. Many severely injured employees indulge in begging (63.06%) and crime world, such as drug trafficking (19%), which demonstrates the lack of recovery of victims in this sector. But some NGOs are working to support victim workers with microfinance loans that they can use as capital for retail businesses such as tea stalls, hawkers, etc.

12 c) Rehabilitation and Compensation

The entire recruiting process in this industry is conducted by the so-called contractor who played a third-party role in supplying staff in the yard. There is no job history, contract paper or ID card found in yard office. That contractor often took the chance and provides employment through false assurance. This is a loophole that the contractor always snatched the opportunity as well as stripped them of their basic rights and compensation. The yard authorities also have the opportunity to conceal the actual number of accidents or death.

There is a significant disparity between local workers and other district staff. Although no compensation is given by the yard authorities, most of the time local residents receive it. Table-2 shows that 25% of Victims receive compensation from the district of Chittagong, while other district workers receive just 5%. No work no pay is the most common system in yard zone and that is why, if a worker gets hurt, he can't get any medical costs or financial support from yard authority.

Under the prevailing laws of the Government of Bangladesh, there is no proper direction for the process of rehabilitation of victim workers in this sector. In this case, they do not get compensated, their lives are becoming more difficult due to the lack of government concern. Many Non-government Organizations (NGOs) seek to recognize and address physical, psychological and workplace obstacles that impact shipbreaking employees' lives after losing their body parts in an accident. However, this is insufficient to meet the needs and, since their

operations are confined to a few specific areas, the majority of injured workers remain out of sight. In most cases, injured workers become involved for racketeering and begging and becoming isolated from society.

13 VI. Conclusion

Accidents are a frequent occurrence in this hazardous sector, for that reason the shipbreaking industry appears to be risky practices and victim workers are like complementing each other. The yard authority and the Government have no concern for the rehabilitation of victim workers and their treatment or compensation because of irregularities, corruption, lack of honest intention. However, it is important to take care of this sector because it creates hundreds and thousands of job opportunities directly and indirectly for disadvantaged people. But if the government takes the right steps and makes specific administrative arrangements to take care of this sector, it can be successful and the number of victim employees can also be reduced. ¹

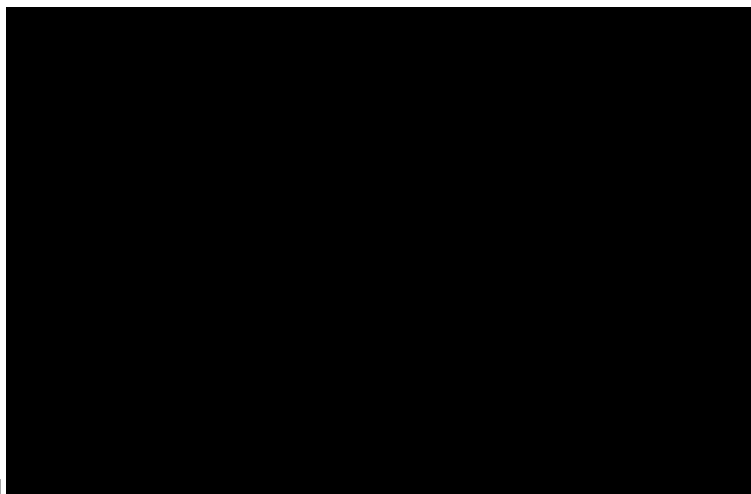


Figure 1: Fig. 1 :

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Severe Accident Type	%	Diseases Type	%
Superficial Injury (loss of organ)	96.75	Infection After Scald	50
Burn	57.7	Skin disease	53.85
Fracture	23.07	Pain	95
hemical Poisoning	34.6	Cancer	23.05
Internal Injury	34.6	Asbestosis	65
Sprain	65.38	Gastric	96.5

Figure 2: Table 1 :

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Medical Cost and Compensation	Percentage
Medical treatment (it includes all sorts of medical facilities)	2.5%
Medical treatment (only medicine)	3%
Leave with salary	0.5%%
Leave without salary	94%
Compensation (Chittagong district)	25%
Compensation (Other districts)	3%
V. Recommendation	

Figure 3: Table 2 :

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