

A Decade of Occupational Health and Safety in Bhutan

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Abstract: *Occupational Health and Safety is an emerging issue in Bhutan. The emphasis on Occupational Health and Safety began in 2007 with the enactment of Labour and Employment Act of Bhutan and in 2007, Bhutan's assurance to fair and just labour administration became enshrined in the Constitution of Bhutan. Since then the Department of Labour has been spearheading the implementation of safety and health legislation in the country and with the promulgation of Occupational Health and Safety regulations in 2012, specific standards and procedures were put in place.*

A healthy and safe workplace is ideal when it comes to maintaining a positive outcome in any stressful environment. The most vital thing that influences the employee motivation and happiness, and how productive and efficient they can be, all goes down to their working environment. A better safety associates to better health and happiness.

The rapid economic expansion and development in Bhutan imposes increasing risk to health and safety of workers on daily basis. Among the sectors, construction sector is one of the hazardous industries causing about 85.7% fatal incidence annually. Lack of public awareness on the safety culture, resistance from employer and employee, technical capacity of implementing agencies, and lack of national occupational health and safety policy guidelines and strategies are some of the major factors that contributes to poor safety standards in the country.

Lack of good occupational health and safety practice may impede the country from achieving socio-economic development and ultimately hinder achievement of Gross National Happiness. Further, the country being equipped with a small workforce makes the matter more pertinent.

Keywords: *Occupational Health and Safety, Safety Standard of Bhutan, Workplace accident and diseases,*

Introduction

A safe and healthy workplace is one where employees and manager collaborate to protect the Safety, health, and well-being of all employees in the world of work. A work place free from injuries and accidents not only attracts employees but also makes them more productive. As the workplace safety and health promotes wellness of employees and employers, this further promotes better health and happier life (Yassi & Hancock, 2005).

Occupational Health and Safety (OHS) is an emerging issue in Bhutan. The broader concept of OHS began in 2007 with the enactment of Labour and Employment Act of Bhutan.

Further in 2008, Bhutan’s assurance to fair and just labour administration became enshrined in the Constitution of Bhutan. Several Articles make specific references to the social and economic wellbeing of the working people. Article 5 Section 2 (d) specifically states that the Royal Government shall ensure a safe and healthy work environment.

Before the last decade, occupational health and safety rules and regulations relating to workplaces have been formulated by different government agencies based on their arising needs. However, they did not provide clear OHS policy framework that gives guidelines to prevent occupational injuries and illness at workplace. With the enactment of LEA 2007, the Department of Labour under Ministry of Labour and Human Resources was identified as the Department responsible for spearheading promotion of occupational health and safety and implementation of the OHS Regulations and Standards in the workplaces.

Current Situation

Industries and workforce

Despite starting off late in industrialization, there are about 13,997 legally registered establishments across the country (showed in Table 1.1), employing 74,126 of which 59,956 Bhutanese and 26,738 foreign workers. The employment by major economic sector comprises of 24.1% of workers being employed in Wholesale and retail trade; repair of motor vehicles and motorcycles followed by 18.5% in construction, 14.6% in Accommodation and food service activities, and 14.5% in manufacturing industry (NSB, 2019).

The Economic Census of Bhutan, 2018-2019 reported that about 29.2% of workers work more than 60 hours in a week. Whereas the regulation on working hours allows a person to work for only 48 hours in a week and additional of 12 hours as over time. Studies have shown that working at least 60 hours per week is associated with 23% increase risk of occupational injuries and illness (Dembe, Erickson, Delbos, & Banks, 2005).

Table 1. 1: Number and Percent of establishment by major sector

Economic Sector	Number	Percentage
Agriculture, forestry and fishing	352	2.5
Mining and quarrying	33	0.2
Manufacturing	711	5.1
Electricity, gas, steam and air-conditioning supply	3	0
Water supply; sewerage, waste management and remediation activities	5	0
Construction	168	1.2
Wholesale and retail trade; repair of motor vehicles and motorcycles	8,754	62.5
Transportation and storage	45	0.3
Accommodation and food service activities	2,946	21

Information and communication	57	0.4
Financial and insurance activities	16	0.1
Real estate activities	3	0
Professional, scientific and technical activities	71	0.5
Administrative and support service activities	173	1.2
Education	71	0.5
Human health and social work activities	30	0.2
Arts, entertainment and recreation	171	1.2
Other service activities	388	2.8
Total	13,997	100

Source: NSB

Among the types of establishments in accordance to their scale (determined by their employee size) 68.7% were cottage establishment employing between 1 to 4 people, while 24.4% were small scale establishments. Only 5.5% of the establishments were medium scale and 1.3 % large scale (DoEHR, 2017).

Out of 13,997 establishments, only 12% of them have trained people in occupational health and safety and only 7% of them have safety officers at their workplace. Similarly, only 112 establishments do have safety committee constituted of which majority of them are from manufacturing sector (71) followed by construction (17) especially from hydro power construction.

Implementing partners

Even though the MoLHR is a nodal agency for enforcement of workplace safety and health, there are other organizations and stakeholders such as National Environment Commission, Department of Geologies and Mines, Ministry of Agriculture and Forestry, Ministry of Health, Construction Development Board, Ministry of Work and Human Settlement, and Road Safety and Transport Authority plays a vital role in implementing safety and health at workplace.

The Ministry of Health is entrusted with the responsibility for all public health matters in the country and had initiated numerous occupational programs to address workplace illness and injury. Similarly, the Ministry of Work and Human Settlement had incorporated cost of OHS in the Bhutan Schedule of Rates 2020 and Construction Development Board had signed MoU with MoLHR to implement OHS in the construction industry.

Although the occupational health and safety laws are in place, the DoL is at an infant stage and incompetent to implement the legislation fully. The situation is impaired with resistant from employers and employees to comply with the OHS legislation and to adopt a safety culture (Drukpa & Dendup, 2018). Lack of awareness on occupational health and safety at workplace and financial implication to the employers could be some of the main reasons for non-compliance.

Promotion and enforcement

Department of Labour had initiated numerous programs to create awareness in the industries within its capacity through education and trainings. Programs such as industrial first aid training, annual OHS assessment, sanitization on safety and health, training of safety officers, formulation of safety committees within the enterprises, and observing world day for safety and health were some of the prominent programs initiated.

The enforcement of OHS laws were carried out through inspections emphasizing on prevention, protection and promotion. The labour officers appointed were empowered to issues improvement and prohibition notices, and sanctioning penalties to those found contravening related laws. The Table 1.2 show some of the milestones achieved in the occupational health and safety in Bhutan.

Table 1. 2: OHS milestone

Year	Activities
2007	Enactment of Labour and Employment Act of Bhutan 2007
2009	Promulgation of regulation on working conditions
2012	Promulgation of Regulation on OHS&W
2012	Promulgation of Regulation on OHS in Construction Industry
2012	Joined International community in Observing World Safety Day (continued as annual event)
2012	Initiated in providing training on OHS to all employees both in country and ex country (supported by DoL)
2015	Initiated a system of conducting OHS assessment for good safety practices at their workplace
2015	Initiated in training industrial workers on Industrial First Aids (now done by individual companies)
2016	Conducted study on workers exposure to toxic chemicals in collaboration with DoPH and WHO (report not published).
2018	Initiated in recognizing safety officers for their contribution in building safety culture in their workplace.
2020	The Ministry of Labour and Human Resources has signed an MoU with the Construction Development Board for the Collaboration of Implementation of Occupational Health and Safety Aspects in Construction Industry on January 31, 2020.
	Incorporated cost of OHS in the Bhutan Scheduled of Rates 2020

The annual report of DoL shows that about 972 industrial workers were trained on Fire Safety (342), First aids (424) and Occupational Health and Safety (2006) respectively in the year 2017-2018 compared to 1302 in 2016-2017 (DoL, 2018). In order to assess the level of safety and health standards in the country, OHS assessment were conducted. A total of 77 establishment were assessed in 2018 compared to 66 in 2017. The overall OHS assessment indicated a decline in the good safety practices in 2018 as indicated in Figure 1.

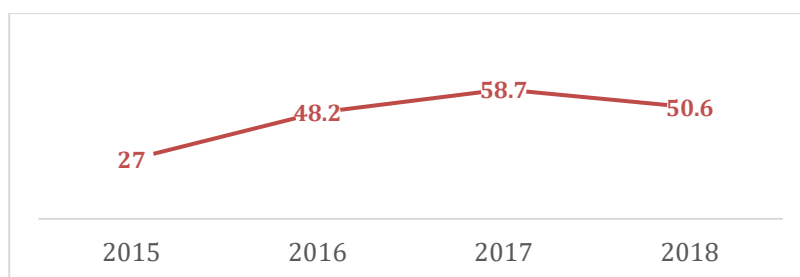


Figure 1: Percentage of establishment adopted good safety practice by year

The DoL also ensures that a regular inspection is carried out to monitor the compliance of OHS standards at workplace. Such inspection was implemented through three types of programs; routine, follow-up, and special inspection. The inspectors were entrusted with the authority to issue penalty memo, improvement notice and prohibition notice to the establishment failing to comply with the safety and health legislation. The annual report of DoL stated that a total of 2,256 establishments were inspected in 2017-2018 compared to 2146 in 2016-2017. In the year 2017-18 about 9.1% of establishments inspected were issued with improvement notices for not issuing PPE and 25% of establishments inspected were sanctioned with penalty for not complying with PPE requirement (DoL, 2018). However, actions taken were confined only to non-compliance of PPE.

Workplace accident and Occupational diseases

About 67 workplace accidents were recorded by the DoL in the year 2017-2018 (DoL, 2018). A study on workplace accidents among the ferroalloy industry showed 20% prevalence of workplace accidents or incidents in these industries (Dendup, 2017). Fall from height (16.4%), and failure in safety management and monitoring (16.4%) are the leading causes of workplace accidents followed by stuck by object (14.9%) and caught and pulled by machines and equipment (14.9%). It was estimated that lost time injury frequency at 3472.2 and lost time injury incidence rate at 2.7 for the year 2017-2018 (DoL, 2018). Among the industries, about 85.7% of fatal accidents occurred in the construction industry (DoL, 2020). The annual report of DoL indicates that what has been reported to the government is a tip of iceberg as many go unreported.

The study had found that Bhutanese industrial workers are exposed to high levels of noise (Dendup, 2019a) and about 27.9% of industrial workers were found to be suffering from Noise Induced Hearing Loss (Wangchuk & Dendup, 2020). Similarly, about 31% (small airway diseases) of the industrial workers suffer from respiratory diseases due to exposure to high concentrations of respiratory dust (Dendup, 2019b).

Challenges and shortcomings

Over the years, although there are lots of challenges the OHS situation in the country has shown a sign of improvement. Some of the challenges faced were as follows;

- There is lack of OHS policy guidance and strategies that provide overall directives and guidance at national level to improve safety and health practice in the world of work;

- Implementing a Safety and health at workplace need a cross sectorial collaboration. However, there is lack of collaboration among the agencies responsible for implementing workplace safety and health;
- Lack of competent and trained professionals to implement safety and health laws and educational programs within the regulatory authorities and enterprise;
- Lack of OHS laboratory and technical experts to evaluate the anticipated hazardous substances at the workplace and determine the level of exposure or construction (various workplace hazards including toxic chemicals, noise, dust and heat);
- Limited institutional linkages between the regulatory authority such as DoL and international agencies;
- Poor public awareness on the OHS and very limited information on occupational illness;
- No or limited initiatives from the educational institutes to conduct studies on the workplace illness and injuries (for policy recommendation and standards development);
- Lack of safety behavior in the working society (resistance from the employers and employees in adopting safety culture);
- Manually working process especially in the construction sector which are more prone to occupational illness and injury.

Way forward

The state of safety and health in Bhutan's workplaces requires a collaborative response. Even though each and every enterprise are responsible for addressing safety and health issues, a national response is required on several fronts.

Strategy on occupational health and Safety Strategy

There is lack of occupational health and safety strategy at national level. Thus, there is need for workplace safety and health strategy with the overall vision of providing a healthy, safe and productive working lives which should be implemented by all the relevant agencies such as government, industry and general public. Although the strategy is a time bound policy guidance, it is a key driving force to achieve the national and organizational targets of workplace safety and health (Nathai-Balkissoon, 2016). Thus, there is need for a strategy plan prioritizing the critical sectors or areas and implement accordingly.

Awareness movement

Bhutan suffers from a general lack of knowledge and understanding of safety and health. The implementing agencies can actively participate in creating awareness on the importance of

OHS. Initiating such activities will help to develop a safety behavior and safety culture. The awareness and educational programs can be catered through training, advocacy in media, and seminar and workshops.

Industry safety and health policies

The existence of hazards and risk levels concerning safety and health vary between industries, as well as between enterprises in the same industry. It is important that industries try to address safety and health issues within industrial level through safety and health policies and programs. Such initiative should be taken by individual industries supported by the government.

Enterprise safety and health policies

Prime responsibility for safety and health at enterprise level rests with the employer. Employees are required to cooperate with their employers in this regard but it is the employer who is legally responsible and accountable. The LEA, 2007 makes it mandatory for enterprises employing 12 or more employees to have a safety and health policy. The Act and regulation provide some guidance to assist employers to prepare such a policy. Further, this policy should be implemented through education and awareness among the workers and relevant stakeholders.

Regulatory authority

As entrusted by the Labour and Employment Act, the DoL should continue to take the leadership role in the protection of employees from the effects of workplace hazards. Lack of collaboration were one of the main factors impeding the development of Safety culture, thus the DoL should work in close collaboration with the relevant stakeholders such as National Environment Commission, Construction Development Board, and the Department of Geology and Mines which have responsibility for aspects of safety and health at the workplaces.

The Department of Labour has appointed several labour officers who are responsible for inspecting both working conditions and safety and health in the workplaces. The labour officers need to build their competency to carry out their responsibilities on prevention, protection and improvement of workplace safety and health through education, technical support and advice.

Currently there are no institution or university that provide courses both long-term or short-term course on the safety and health in the country. The department need to continue to support the industries in building the capacity of industry until such education system exists.

The department should liaise with international agencies focusing on the safety and health at workplace to share the knowledge and experiences that can help the country in adopting good safety culture.

Research and publication

Research and publication in the field of OHS in the Bhutanese context is very limited. The Department of Labour needs to work in close collaboration with the educational institute like Medical University, Department of Public Health, and other relevant agencies in conducting research in the field of occupational health and safety. This will facilitate in providing basis for preventative intervention through policy formulations and legal standard. As of now there are limited studies conducted on OHS in Bhutanese context.

Conflict for interest

“The authors declare no conflict of interest.”

Reference

- Dembe, A., Erickson, J., Delbos, R., & Banks, S. (2005). The Impact of Overtime and Long Work Hours on Occupational Injuries and Illnesses: New Evidence from the United States. *Occupational and environmental medicine*, 62, 588-597. doi:10.1136/oem.2004.016667
- Dendup, P. (2017). *Epidemiology of Workplace Accident among the Ferroalloy Industries in Bhutan* (Vol. 02).
- Dendup, P. (2019a). *Epidemiology of Occupational Noise Exposure Level in the Industries of Bhutan*.
- Dendup, P. (2019b). Exposure to Occupational Air Pollution in the Manufacturing Industries of Bhutan. *Journal of Advanced Research in Civil and Environmental Engineering*, 6, 8-13. doi:10.24321/2393.8307.201902
- DoEHR. (2017). *Establishment Survey Report*. Thimphu: Department of Employment and Human Resources
- DoL. (2018). *Annual Report 2017-2019*. Thimphu Department of Labour, MoLHR
- DoL. (2020). *Annual Report 2019-2020*. Thimphu
- Drukpa, D. P., & Dendup, P. (2018). *Occupational Health and Safety Practices and Challenges in the Construction Industry of Bhutan: A Situation analysis* (Vol. 03).
- Nathai-Balkissoon, M. (2016). Occupational Safety and Health in Organizational Strategy. In A. Farazmand (Ed.), *Global Encyclopedia of Public Administration, Public Policy, and Governance* (pp. 1-10). Cham: Springer International Publishing.
- NSB, I. I. W. (2019). *Economic Census of Bhutan, 2018–19*: National Statistic Bureau.
- Wangchuk, P., & Dendup, P. (2020). Prevalence of occupational noise induced hearing loss among industrial workers in Bhutan. *Bhutan Health Journal, Vol 6 No 1 (2020)*, 25. doi:10.47811/bhj.96
- Yassi, A., & Hancock, T. (2005). Patient safety--worker safety: building a culture of safety to improve healthcare worker and patient well-being. *Healthc Q, 8 Spec No*, 32-38. doi:10.12927/hcq..17659