



# **Best Builders, Inc.: Improving Construction Site Safety**

Johnny Cruz, an engineer at Best Builders, Inc., gazed up at the partially constructed seven-story condominium that his company was building. Best Builders had recently hired Cruz to be the company's safety officer, and there were already issues that he had to address on site. Since being hired, Cruz had witnessed minor accidents occurring at different levels of the building. He began to worry that a major accident could happen just easily.

# The Philippines Construction Industry

In major cities of the Philippines, urbanization was gaining momentum in response to economic development. The construction industry played an integral role in building the necessary infrastructure to facilitate the desired economic growth of the country. In 2006, the construction industry employed 1.78 million workers, 95% of which were project employees (1.7 million strong). Typically, construction crews were made up of the following specialties: project supervision, site preparation, rough work, finishing work, and clean-up.<sup>1</sup>

With the boom of construction projects such as buildings, roads, bridges, skyways, and elevated transport network systems, the construction workforce was vulnerable to accidents. The conditions at the



Published by WDI Publishing, a division of the William Davidson Institute at the University of Michigan.

© 2014 Dr. Ruel R. Cabahug. This case was written by Dr. Ruel R. Cabahug, Mindanao University of Science and Technology, Cagayan de Oro City. The author disguised the names of the company and protagonist as well as the company data in this case. This case was prepared to be the basis for class discussion rather than to illustrate either the effective or ineffective handling of a situation. This publication is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of Cooperative Agreement #AID-492-A-13-00011. Its contents do not necessarily reflect the views of USAID or the U.S. government.

job sites compounded the problem — extreme weather, high elevations, heavy and complicated equipment, and varying skill-sets among workers.

There were 39,000 reported accidents from 2009-2010 and 48,000 accidents from 2011-2012 as registered by the Department of Labor and Employment (DOLE). In February 2014, there had already been an accident that resulted in three fatalities and 12 injuries. Such figures proved to Cruz that construction was one of the most dangerous land-based work sectors in the country.<sup>2</sup>

# **The Safety Programs**

Recognizing the need to address accidents in the construction industry, the Philippine government formed an inter-agency agreement among DOLE, the Department of Public Works and Highways, the Department of Trade and Industry, the Department of Interior and Local Government, and the Professional Regulation Commission. The agreement's objective was to strengthen and enhance the implementation of DOLE quidelines governing the employment of workers in the construction industry.<sup>3</sup>

The guidelines would ensure that workers got the proper training in accident prevention through certification. DOLE put into place the Occupational Safety and Health Networks to ensure workers received Basic Occupational Safety and Health (BOSH) training, construction safety orientation, and construction safety training. Through the networks workers also took part in specialized training in crane and forklift safety, received assessments for scaffolding, and took part in the Zero Accident Program.

In 2014, Labor and Employment Secretary Rosalinda Baldoz said that construction accidents could generally be attributed to (a) construction firms that had not yet accessed DOLE initiatives on construction safety; (b) an absence of appropriate and/or incorrect use of personal protective equipment; (c) the use of substandard construction materials; (d) an absence of an adequate number of DOLE-accredited safety officers on-site; (e) an absence of the DOLE-approved construction Safety and Health Program; and (f) a lack of formal skills training and certification for heavy equipment workers and workers of critical construction occupations.<sup>4</sup> (See **Exhibit 1**).

Exhibit 1

Occupational Health and Safety Records (2007 Survey)

Occupational		With Workdays Lost				Without
Health and Safety				Non-Fatal		Workday
Records		Total	Total	Permanent	Temporary	Lost
	Total			Incapacity	Incapacity	Total
Cases of Injuries in Construction	2,076	837	0	16	822	1,238
Frequency Rate of Injury Cases in Construction	3.53	3.53	0	0.07	3.46	0
Incidence Rate of Injury Cases in Construction	9.25	9.25	0	0.17	9.07	0

Source: DOLE. "The Philippine Construction Industry." 2014.

#### Why Certification?

Certification in occupational safety and health ensured that workers had a basic understanding of the dangers at worksites. In the Philippines, training to attain this certification was designed for supervisors, managers, and executive level staffers who were expected to relay their learnings to their respective workforces. The certification helped to prevent common injuries experienced at construction sites including nail puncture wounds, abrasions, and cuts and bruises (see **Exhibit 2**).

Exhibit 2

The Most Common Injuries at Construction Sites

The Most Common Injuries at Construction Sites	Percentage of Occurrence		
1. Punctured by nails	79.73		
2. Abrasion	74.13		
3. Cuts from sharp objects/hand tools	72.00		
4. Bruise due to hitting hard objects	61.60		

Source: Cabahug, R.R. (2014). A Survey on the Implementation of Safety Standards of On-going Construction Projects in Cagayan de Oro City, Philippines, Mindanao Journal of Science and Technology Vol. 12, pp.12-24.

# Best Builders, Inc.

Best Builders, Inc., a small scale construction company, employed about 150 workers. As its safety officer, Cruz was charged with overseeing the health and safety of the workers on its project sites. In his first month with the company, Cruz found that about 90 percent of Best Builders' workers were not certified with health and safety training, which meant that they were at a high risk for accidents and injuries. He tried to explain the risks to his project manager, but was told that the owner was not interested in getting his workers certified because it was just another expense. The owner also felt that once workers got certified, they would seek opportunities elsewhere.

Cruz confirmed that for the 10 years that Best Builders had been in business, it did not comply with the DOLE guidelines. Three days ago, one of the company's workers fell from the second floor of a structure while moving materials at the edge of the building because he was not using harness; it was not available on site. Luckily, the worker sustained only slight bruises.

In the absence of safety training, Cruz found it difficult to require workers to wear personal protective gear because they weren't aware of its importance. Workers complained that they could not work properly when wearing hard hats. They also preferred to wear worn out shoes or sandals because they felt the footwear was more comfortable.

But Cruz knew that other companies were succeeding in creating accident-free workplaces. For example, the Hanjin Construction Davao International Airport project had posted 5 million fatal accident-free man hours from November 1999 to December 2005. Hanjin Heavy Industries and Construction Company Safety Consultant Orlando B. Anota said that occupational safety had a price, but that accidents were much more expensive in monetary and human terms.<sup>5</sup>

# **Moving Forward**

Best Builders' workers were having minor accidents every day. As the company's safety officer, Cruz was having nightmares knowing that major accidents could happen at any time. With about 200 days left on the current project's duration, Cruz wondered how he could convince the company's owner to require health and safety certification of workers to protect them from the dangers and risks at worksites.

## **Endnotes**

- 1 Occupation Health and Safety Center. "1st Mindanao OSH Summit Proceeding." 2006. Web. Accessed 19 Nov. 2014. <a href="http://www.oshc.dole.gov.ph/288/">http://www.oshc.dole.gov.ph/288/</a>.
- 2 DOLE. 2014. Press Release "Baldoz says DOLE's OHS programs contribute to fewer mining and construction accidents." Web. Accessed 20 Nov. 2014. <a href="http://www.dole.gov.ph/news/view/2483">http://www.dole.gov.ph/news/view/2483</a>.
- 3 Philippine Daily Inquirer. 8 Feb. 2013. "Dole orders review of construction safety standards." Web. Accessed 20 Nov. 2014. <a href="http://www.newsinfo.inquirer.net/354857/dole-orders-review-of-construction-safety-standards">http://www.newsinfo.inquirer.net/354857/dole-orders-review-of-construction-safety-standards</a>.
- 4 Department of Labor and Employment. "DOLE intensifies campaign for zero accidents in construction industry." OSHC. Web. Accessed 19 Nov. 2014. <a href="http://www.oshc.dole.gov.ph/397/">http://www.oshc.dole.gov.ph/397/</a>.
- 5 Occupational Health and Safety Center.