

A CASE STUDY ON OCCUPATIONAL HEALTH AND SAFETY OF FOOTWEAR MANUFACTURING INDUSTRY

MOHAMMAD ZAKIR HOSSAIN KHAN

Bangladesh Institute of Management, Dhaka, Bangladesh

ABSTRACT

Bangladesh engaged with leather processing business since British period, and the first tannery of Bangladesh was established in 1940 by the famous entrepreneur Late Mr. RP Saha in Narayanganj (Billah, et al. 2000; Biswas and Rahman, 2013). Tanneries are one of the emerging sectors for trade and finance but it has adverse effect to the society, environment and worker (Azom et al., 2012; Human Right Watch, 2012). According to ILO (2014) occupational hazard lies as the hazardous genesis of almost all fatalities in industrialized generation, over the 2.3 million fatalities that take place annually, over 2 million fatalities are caused by work related diseases. The main objective is to assess the status of occupational health and safety of a footwear manufacturing industry with respect to the Social Compliance. Apex Footwear Limited pioneered the export of value added finished products export in the leather sector of Bangladesh and is also involved in the local footwear retail business with the second largest shoe retail network in the country. Overall occupational health and safety management practice in Apex Footwear Limited was found good. Though some deficiency found during this short visit, but commitment of top management towards occupational health and safety was impressive. It can be noted that, compliance is a continuous improvement process. The beneficial impacts on the nation as well as human beings would only be meaningful and sustainable development would only be possible if the adverse effects are minimized through strict maintenance and control measures.

KEYWORDS: Sustainability, Safety and EHS

INTRODUCTION

Bangladesh engaged with leather processing business since British period, and the first tannery of Bangladesh was established in 1940 by the famous entrepreneur Late Mr. RP Saha in Narayanganj (Billah, et al. 2000; Biswas and Rahman, 2013). Tanneries were mostly located in Narayanganj at the beginning, but Hazaribagh area of Dhaka city is now the main location of tanneries in Bangladesh (Biswas and Rahman, 2013). Considering environmental issues, now the government of Bangladesh is trying to shift the tanneries of Hazaribagh to Savar area (MOI, 2005). According to Bangladesh Tanners Association (2010), Bangladesh has more than 1750 big, small and medium size tanneries that employs approximately 0.5 million workers.

According to ILO (2014) occupational hazard lies as the hazardous genesis of almost all fatalities in industrialized generation, over the 2.3 million fatalities that take place annually, over 2 million fatalities are caused by work related diseases. Occupational health hazards usually refer to the materials and processes that have the potential to cause harm to the workers. To achieve sustained decent working conditions and strong preventive safety cultures, occupational safety and health is the key element. Therefore it has continued till today since the creation of organization in 1919 (Alli BO, 2008).

Occupational disease may also occur long after being exposed to an occupational hazardous factor. Asbestos related mesothelioma which is a cancer affecting the lungs and abdomen can be an extreme example, it may occur from about 30 to 40 years after being exposed to it while working in an industry. Exposure to asbestos alone increases the risk of lung cancer five-fold whereas long term smoking of cigarettes increases the risk of lung cancer in somewhere between 50 and 70 fold, this is one of the occupational factors which can act in combination with other non-occupational factors to produce disease (Helmkamp JC et al., 2012).

Tanneries are one of the emerging sectors for trade and finance but it has adverse effect to the society, environment and worker (Azom.et at, 2012; Human Right Watch, 2012). Health and safety crisis, as well as environmental pollution faces by tanneries in Bangladesh. Main reason for health and safety violation is Toxic exposure of chemical in tanneries of Bangladesh (Human Right Watch, 2012; ILO, 2008). Around 40 heavy metals and acids are used for processing raw hides (Azom.et al, 2012). 75 metric tons of solid waste produces from tanneries in Hazaribagh area of Dhaka city (mostly consist of salts, bones, leather shavings and trimmings) per day on average, but there is no safe and scientific disposal of those wastes (Human Right Watch, 2012). Aggregate scenario is worst in whole country. Reference to the report of Human Right Watch (2012), 58% tannery workers suffer from gastrointestinal disease, 31% from skin diseases, 12% from hypertension and 19% from jaundice. The toxic tanneries breach health and safety of both employees and residents nearby the factory as the morbidity rate is also high for both tannery workers and the neighborhoods (DoE, 2011; Economy Watch, 2010).

The main objective is to assess the status of occupational health and safety of a footwear manufacturing industry with respect to the Social Compliance.

METHODS AND MATERIALS

The study was conducted through secondary data collection of different institutional and newspaper reports. After the data collection and analysis phase is completed.

Collected information's were processed, analyzed and interpreted to find the result the study. After completion of data collection collected data were checked, verified & re-checked and analyzed keeping in view the requirement with the Bangladesh labour Act 2006, Bangladesh labour rules 2015, ECA'95, ECR'97 and other international standards.

Apex Footwear Limited (AFL) selected for the study is the leading manufacturer and exporter of leather footwear from Bangladesh to major shoe retailers in Western Europe, North America and Japan. APEX means the peak or the zenith. AFL is located at Shafipur, Kaliakoir, Gazipur (24° 2'3.96"N and 90°15'33.23"E). AFL is 500m East from POLLI BIDYUT Bus Stop. Location map of AFL is shown in figure 1. AFL pioneered the export of value added finished products export in the leather sector of Bangladesh and is also involved in the local footwear retail business with the second largest shoe retail network in the country. AFL is professionally managed, currently employs over 6,200 persons and is in full compliance with Corporate Governance Compliance Report under Section 2CC of the Securities Exchange Commission Notification Order. With over 191 own retail outlets and 380 authorized resellers, Apex ensures nationwide coverage of its diverse range of footwear for its consumers.

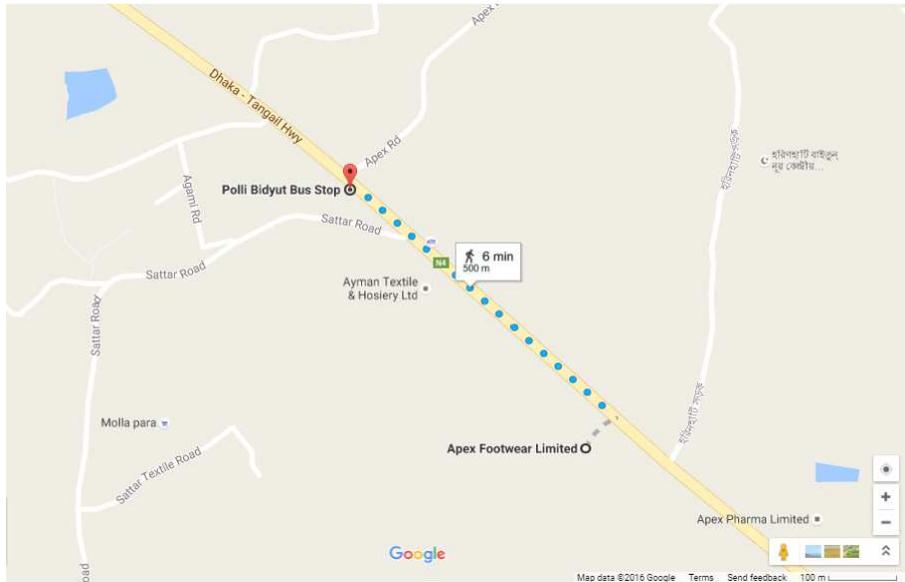


Figure 1: Location of AFL

RESULTS AND DISCUSSIONS

Production Process of AFL starts after collecting raw materials. After collecting the raw materials cutting department cuts out the leather. In every section AAFL have employed experts to look after the work of the worker and improve the efficiency. After cutting they send it to assembling department where they sew the parts by sewing machine. In lasting section they join the insole and outsole to the shoe. And in finishing department they pack the product for distribution. Lots of people engaged during this production process. About 70% of total workers are female. Daily there are two shifts for production in AFL.

Some of the encouraging approaches of AFL are Positive attitude of owner towards welfare of the workers, Dedicated workforce, Experienced and professional management team, Harmonious Relationship between management and workers, Good business relation with the international buyers, Disbursement of salary & wages to workers is on schedule, A satisfied workforce as a result productivity is high, First aid box found in all floor according to the requirements of Bangladesh labour rules, Factory has own health centre to provide primary treatment, Certified physician and nurse were available during visit, Factory has its child care centre, Factory maintain work hour and overtime policy according to Bangladesh labour rules, Conducting fire drill regularly, Measuring indoor air quality, Regular testing of drinking water, etc.

According to environmental conservation rules 1997, Bangladesh labour rules 2015 and Bangladesh national building code 2016, there has some standard and guideline on occupational health and safety. There are also international guideline on occupational health and safety from ILO, IFC, etc. Considering local and international guideline below findings observed during factory visit.

- Management should look into it and may take appropriate step for maintaining cleanliness of the area. According to Sec 51 of Bangladesh Labour Law (BLL) 2006 - Every establishment shall be kept clean and free from effluvia arising from any drain privy or other nuisance
- Management should place temperature and humidity measuring device in workplace and take necessary action to

keep safe workplace. Excessive heat & humidity are injurious for workers health. According to Sec 52 of BLL 2006 - Effective and suitable provisions shall be made in every establishment for securing and maintaining in every work-room adequate ventilation by the circulation of fresh air. According to Bangladesh Labour Rules (BLR) 52 (2), it is mandatory to keep at least one thermometer in each room.

- Management should look into the affairs and shall take steps to improve the condition of solid waste management. According to Sec 54 of BLL 2006, Establishment shall make effective waste management.
- Management should keep monitoring light intensity record and take appropriate steps for improvement. According to Sec 57 of BLL 2006, In every part of an establishment where workers are working or passing shall be provided and maintained sufficient and suitable lighting, natural or artificial or both.
- Factory should have to be careful about it and should ensure appropriate PPE for all. According to BLR (67), will have to supply PPE to workers.
- Factory should confirm risk assessment for entire workplace health and safety. Obligation (3) of Safety Policy 2013.
- Factory will have to display material safety data sheet (MSDS) at all chemical storage areas. According to Bangladesh Labour Rules (68), should have to display MSDS of chemical within visible position.

Beyond above findings, some observations were also found during factory visit. That can be a part of opportunity for improvement. Observations are as follows-

- Factory should establish and maintain a monitoring plan.
- Display of boiler certificate along with boiler operator's certificate at boiler room.
- May display evacuation plan outside of the gate of each shade and should be easily visible before entrance.
- May stop fish cultivation in effluent treatment plant (ETP) water, and that should not be use as food.
- Assembly point should be displayed properly with evacuation plan.
- May not allow keeping any chemical or oil drum without having secondary containment.
- Factory may arrange safety induction for new visitors.
- Factory should not allow visitors at workplace without PPE.
- Tough AFL has their OHS policy but it was not displayed in any of the workplace. According to Clause 4.2, OHSAS 18001: 2007, should communicate with all persons working under the organization.

CONCLUSIONS

Considering growing demand, tannery industry in Bangladesh is a potential sector. But unfortunately, this sector is not well promoted and managed. This study states occupational health and safety condition of a foot wear manufacturing factory. According to Bangladesh Labour Law (2006), factories need to be cleaned and well-ventilated for dust and fume free work place. Bangladesh Labour Law (2006) also dictates that factory should have the facility for adequate lighting, safe drinking water, separate latrines and urinals for both male and female, precaution for possible accidents to make safe

workplace for workers.

Ensuring safe and environmental friendly workplace does not always have to be costly or time consuming, but implementation of occupational health and safety measures will lead to a safe and efficient workplace, which will also increase work efficiency.

Overall occupational health and safety management practice in Apex Footwear Limited was found good. Though some deficiency found during this short visit, but commitment of top management towards occupational health and safety was impressive. During this short visit, some good practices, as well as some deficiency may have overlooked. But it can be noted that, compliance is a continuous improvement process. And every times there would be new finding for continual improvement. The beneficial impacts on the nation as well as human beings would only be meaningful and sustainable development would only be possible if the adverse effects are minimized through strict maintenance and control measures. In this circumstance, it is suggested to be more concerned about occupational health and safety issues.

REFERENCES

1. Alli BO (2008) "Fundamental Principles of Occupational Health and Safety," International Labour Office Geneva pp: 1-227.
2. Azom M, Mahmud K, Yahya, S and Himon, S (2012). Environmental Impact Assessment of Tanneries: A Case Study of Hazaribag in Bangladesh. *International Journal of Environmental Science and Development*, 3, 152-156.
3. Bangladesh Environment Conservation Act 1995
4. Bangladesh Environment conservation Rules 1997
5. Bangladesh Labour Law 2006
6. Bangladesh Labour Rules 2015
7. Bangladesh Tanners Association (BTA), (2010). Survey Report. Dhaka, Bangladesh.
8. Billah, S. M.R. et al. (2002) Health of the tannery worker. Dhaka: SHED.
9. Biswas, S and Rahman, T (2013). The Effect of Working Place on Worker's Health in a Tannery in Bangladesh. *Advances in Anthropology*. 3, 46-53.
10. Department of Environment (DoE), (2011). Survey Report, Dhaka, Bangladesh.
11. Economy Watch (2010). Labor Intensive Industry. *Economy Watch*. Retrieved on October 27, 2013, from <http://www.economywatch.com/world-industries/labor-intensive.html>
12. Helmkamp JC, Biddle E, Marsh SM, Campbell CR (2012) The economic burden of all-terrain vehicle related adult deaths in the U.S. workplace, 2003-2006. *J Agric Saf Health* 18: 233-243.
13. Human Right Watch Report (2012). Toxic Tanneries: The Health Repercussions of Bangladesh Hazaribagh Leather. Retrieved on November 22, 2013 from <http://www.hrw.org/sites/default/files/reports/bangladesh1012webwcover.pdf>
14. ILO (2014) "Creating Safe and Heathy Workplaces for All," International Labour Organization pp: 1-18.

15. International Labour Organization, ILO (2008). Decent work country program, Bangladesh. International Labour Office, Geneva.
16. Ministry of Industries (MOI), (2005). Master plan for relocation of tanneries from Hazaribagh to Savar. Dhaka, Bangladesh.