Occupational Health, Safety and Environment in the Construction Sector

by Umesh Upadhyaya

Existing Scenario in general
Safe work and workplace for increased production and higher productivity is necessary and hence promotion and protection of safe work and workplace is the complementary aspect of industrial development.

However, Industrial occupations may create unsafe work and work environment because of the inherent sources of hazard present in their material, process, technologies or products. These sources of hazards may pose the risk of accidents and disease to the people within the industrial premises and the general public in the vicinity and the environment.

The ILO estimates approximately 250 million workers meet occupational accidents and 160 million people suffering from occupational diseases each year. Approximately 1.1 million people die of occupational accidents and diseases each year. Invisible is the physical and economic loss to the society and the nation in broad. Risks of accidents and diseases are higher in all kinds of production processes where men, machine and materials are involved.

OSH has not been a hot agenda in labour and industrial field in Nepal.

Because of the high illiteracy among the workers, the issue is not even taken seriously by the workers themselves. The total labour force of the nation if we divide into Industry, Services and Agriculture, we find 80.2 per cent engaged in agriculture and only 2.8 per cent in industry and 17 per cent in Services. Industrial and service sectors are new ones and hence the issues in the sectors have still not been given much importance.
There were some provisions related to OSH in the outdated Factory and Factory Workers Act 1959 just for the sake of inclusion and actually not for implementation. After 1990, when popular mass movement was successful to reinstate multiparty democracy in Nepal, New Labour Act 1992 came into existence by replacing the old FFW Act as demanded by the workers. This new Act has made many provisions on occupational safety and health. The implementation aspects rest on 10 Labour offices and a handful of factory inspectors. There is the provision of safety committee in enterprises, but in many cases, the committees are not formed and where committee is formed, it is not functioning.

Unfortunately, the provisions are not much effective in practice and still need a lot of awareness campaign. Our level of socio-economic realities has forced us to struggle hard for wages and some minimum benefits in order to solve hand to mouth problem. Thus, up to now, the OSH has not become a priority agenda for trade unions in our case.

However, the environmental deterioration has been becoming more and more serious. The problem of solid waste management and waste water treatment in urban areas, particularly the Kathmandu Metropolis, has made the city one of the most polluted cities of the region. NGOs and Human Right organizations have taken the issue of environment seriously. Government has also taken it seriously and developed a separate Ministry for Population and Environment. But achievements in this regard are almost negligible.

Factories have never taken care of the minimum OSH standards provisioned under the law. But weak labour administration and ineffective enforcement mechanism of the government have not shown any capability to control the situation. Use of safety measures is rare among the workers whether they are illiterate tea plantation workers, or educated workers of cement and chemical sectors. Negligence both from management and workers side is a common phenomenon in Nepal.

It is found that 20,000 working people being injured and 200 deaths every year because of occupational accidents within a formal sector industrial workforce of 0.4 millions and total workforce of 11.2 millions. Causes of accidents can be generally mentioned as:

- Unsafe working conditions
- Lack of supervision and training
• Use of old machinery and equipment
• Lack of sufficient maintenance
• Bad house-keeping practices
• Violation of safety rules
• Over crowded production units with very congested space

High risk for safety and health has been observed in:
• Working with machine and equipment
• Use of electricity
• Building and Construction works
• Use of chemicals in industries, various services and agriculture
• Dusty worksites
• Congested and dark workplaces

The available data-base shows the following picture in the formal sector of work in Nepal

Table 1: Factory Inspection and Accident Records: Basic Statistics

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>052/53</th>
<th>053/54</th>
<th>054/55</th>
<th>055/56</th>
<th>056/57</th>
<th>057/58</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Establishments</td>
<td>4014</td>
<td>4195</td>
<td>4292</td>
<td>4284</td>
<td>4274</td>
<td>4296</td>
</tr>
<tr>
<td>No. of Employees</td>
<td>374,860</td>
<td>382,845</td>
<td>385,960</td>
<td>387,200</td>
<td>392,421</td>
<td>394,541</td>
</tr>
<tr>
<td>No. of Est. Inspected</td>
<td>908</td>
<td>938</td>
<td>1134</td>
<td>1263</td>
<td>1127</td>
<td>1309</td>
</tr>
<tr>
<td>Total Accidents Reported</td>
<td>42</td>
<td>37</td>
<td>39</td>
<td>42</td>
<td>55</td>
<td>37</td>
</tr>
<tr>
<td>• Death</td>
<td>5</td>
<td>2</td>
<td>21</td>
<td>7</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>• Serious</td>
<td>17</td>
<td>12</td>
<td>2</td>
<td>18</td>
<td>23</td>
<td>17</td>
</tr>
<tr>
<td>• Minor</td>
<td>20</td>
<td>23</td>
<td>16</td>
<td>17</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>Total Workdays Lost</td>
<td>345</td>
<td>191</td>
<td>190</td>
<td>632</td>
<td>613</td>
<td>282</td>
</tr>
</tbody>
</table>

Barriers for sound OSH condition in Nepali industries are:
• Lack of knowledge and awareness among workers
• Lack of awareness and commitment in employers and management
• Fear of change and of cost increase (Management)
• Poor consultation system
• Majority of untrained people both in management and labour
• No safety-friendly work culture (both workers & management)
Lack of research and data-base on occupational diseases and health hazards

From 1994, the trade union confederations of Nepal, particularly GEFONT has taken the issue seriously and has started awareness campaign on OSH. We are still in the awareness phase, because the phase of awareness may become very long covering a decade or two. OSH has now become one of the component of Workers Education Program. It is to be noted that the Second and Third National Congress of GEFONT have given much emphasis to the issue of OSH basically on the following:

- Partnership with employers and government for training programs on OSH.
- Research for problem identification.
- Awareness program for safe and clean workplace and healthy life.
- Partnership with employers for sound workplace management.
- Pressurising for waste and sewage management.
- Joining hands with international Agencies and regional and sub regional organizations for works in cooperation on OSH
- Cooperation with genuine NGOs on the issue of OSH and environment.

From its Second National Congress, GEFONT has developed a separate committee - namely OSH Committee for handling the issue of Occupational Safety and Health. The committee is working under GEFONT Central Dept. of Labour Relations. On the issue of OSH, trainings have been received by the committee members from ILO, ILO Turin, DANIDA, IFBWW, ICEM, Society for Participatory Research In Asia (PRIA) and Central Labour Institute (CLI) India.

GEFONT itself has organized OSH high level training covering all 10 zones with the active participation of Zonal Chiefs and Collective bargaining experts of the union.

Basic OSH orientation training for Chemical Iron Federation leaders or conducting the survey on the industry was also organized.

Government has also been working on the issue through the Project named Occupational Safety and Health Project under Ministry of Labour
and Transport management. Some efforts have been initiated through National productivity and Economic Development Centre which is an organ of National Productivity council of Ministry of Industry. Now in cooperation with DANIDA, the Environment Sector Program Support Project has gained good momentum and OSH issues under the Project have gained more emphasis. Waste Water Treatment and Cleaner Production components are two of the major components of this Project. Three line Ministries – Ministry of Population and Environment, Ministry of Industry, Commerce and Supplies and Ministry of Labour and Transport Management – are involved in the project. All three Workers organization including GEFONT and employers' organization are also involved in the policy decision as well as implementation procedures. Also the training on OSH has been given high emphasis under ESPS

Recently in 2001, Government has developed a New organization in a tripartite form – Nepal Occupational Safety and Health Association

Cleaning service is also being expanded more and more. Because of gradual changes in the mentality and growing awareness through Human Right Organizations, NGOs and GEFONT from enterprise to confederation level. Management as well as the working community has now become more sensitive towards the issue. Recently GEFONT has developed GEFONT Cooperative Clinic, which aims to develop a technical group of OSH workers in near future to develop OSH as a significant Campaign in forthcoming days.

**Situational review of construction industry in Nepal**

Since the general scenario in OSH and environment issues is not good nor improving fast, the level of safety awareness and prevention measures and sensitiveness towards accidents is considerably low in Nepali Construction industry.

The occupational hazards are in diversity and the process to minimize those is almost non-existant. It is not only because of the poor level of awareness of workers, but also because of negligence and low awareness of employers and managers. The construction project related high level technical manpower also seems negligent in this connection. Government has not given adequate weight to the issue of safety and occupational hazards and diseases in construction sector.
Construction Sector and Industrial Relation
In Nepali context, construction work itself and employment in construction sector is mostly under informal economy. So the actual formal enterprises from the viewpoint of labour legislation are quite few and in negligible number. Thus the number of workers engaged in the formal sector enterprises of construction industry is quite low. Overwhelming majority of construction workers falls under informal sector of employment. Among them unionized workforce is very small. Therefore, the present structure of collective bargaining practices covers a small proportion of workers.

Employers of construction sector mostly the contractors in Nepal are not working as an inherent component of the mainstream of employers' organizations like manufacturers and other related entrepreneurs. Therefore, the industrial relation between construction sector association of employers and construction sector trade unions is not long in the real sense. However, the disputes and cases in construction sector and accident related compensation deals are numerous under the activities of Construction sector affiliate of GEFONT – namely Central Union of Painters, Plumbers, Electro and Construction Workers of Nepal (CUPPEC-Nepal). The relation in some sort of formal manner is being developed.

Way Ahead for Improvement
Majority of the occupational accidents and diseases can be controlled or minimized if appropriate measures are established for the promotion and protection of safety and health of the workers at workplace.

Though achieving a zero-accident situation may not become possible for construction industry, exemplary safety records can be achieved. Construction can be made better with healthy human resource, more efficient work, fewer fatalities and lower accident rates through:

- Developing training modules and Formal Training and orientation
- Formation and mobilization of safety committees in each workplace and enterprises
- Periodic Situational Survey, hazard analysis and Pre-project planning for safety
- Safety-incentive programs;
• Developing Health cooperatives for workers and provision of health insurance
• Minimum employee turnover;
• Involvement of top management in safety issues
• Sound industrial relation
• Sincere implementation of collective bargaining agreements
• Sound inspection system from labour administration

Top management should review safety reports, visit worksites and join safety meetings. Safety culture has to be developed through collective tripartite efforts.

(Presented in a seminar organized by OSHE Institute; January 2002)