

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

This chapter includes the conclusion and recommendations to improve the safety Performance in construction sites.

6.1 Conclusion

The results in the Khartoum state highlighted the bad safety situation where most of the respondents in the survey had accidents in their construction projects during the last five years.

Accidents rate mentioned by the respondents (68.2%) . This was attributed to the fact that the contractors execute projects with size and values more than the owners and consultants.

There was no detailed record for the size and number of accidents, as the data available only showed the real injuries. Management carelessness, lack of safety officer and safety culture were the main reasons contributed to the increase of rate of accidents in the construction sites.

On the existing safety procedures, regulations, policies, and accidents prevention methods related to the construction projects; there was a consensus among the respondents that implementation of safety regulation helps in reducing accidents.

professionals should play more active roles in sustaining construction safety and in improving safety culture for construction workers.

The respondents agreed that the main cause of accidents on site during the last five years all was that because the workers were lacking of safely knowledge. engineer should be responsible for the building ability and safe construction working and they should have regular site visits to ensure safe constriction as specified, while for the owners,

subject of safety should be included in the construction bid entry. The majority of respondents who were consultants and owners agreed that contractor was responsible for the cases of accident and that the contractor should be stopped when making safety violations,

There was a consensus among the respondents that special government institutions should increase their effort and participation in improving safety by organizing safety-training course for workers. All the respondents disagreed on the matters such as whether the contractors had a good knowledge of the current regulations regarding construction site, the ministry of labor should visit the construction sites to follow up safety performance, and for the insurance companies to visit the sites for the insured projects. During the last five years the respondents agreed that implementation of total Quality management could help reduce the number of accidents on the construction site.

During the last five years all the respondents agreed on the lack of methods that can help improve safety performance in the construction projects, accident reporting, contractors/owners' safety conditions relationship, penalties against contractors, and safety meeting. Regarding the tools most widely used and available in construction sites, first aid bag and hard hats came on top of the list. Regarding officials, the government should provide special programs and follow up the safety performance on the construction site and visits all construction projects to check for any violation in the construction sites.

6.2 Recommendations

Several recommendations are suggested here on the role of each party involved in construction projects, including the government, the insurance companies, the owners, the consultants, and the contractors.

6.2.1 The Government

- The government should establish the Department of Occupational Health and Safety Administration (OHSA) with the strong terms of punishment for those who make safety violation.
- The government should follow up the safety performance in the construction sites by visiting the construction site and evaluating the safety performance during the construction project.

- The government should provide safety courses on how to improve safety performance in the construction sites for officials of safety in the construction projects, which is to be held annually.

6.2.2 The Insurance companies

- The insurance companies should visit construction sites to monitor the safety performance in the construction sites.

6.2.3 The Consultants

- The consultants should visit the construction sites to make sure all the tools used in the construction site are safe.
- The consultants should determine the factors that can cause accidents in the construction site such as the bad use scaffolding and stairs and minimize them during the construction project.

6.2.4 The Owners

- The owners should control and mentor the contractors and consultants by giving safety training to workers, promoting safety culture in the construction site and by making sure that the consultants inspect the safety of the tools used in the construction sites.

6.2.5 The Contractors

- The contractors should train the workers, promote the safety culture for workers and educate them on how to avoid the risk and use the equipment properly in the construction site.
- The contractors should prepare the regular safety meeting during the work in the construction site.
- The contractor should make sure that all the workers wear the personal protection equipment and punish the workers who make safety violation.

6.3 Recommendation for further research

This study reviewed thirty safety officials in the construction projects. The next studies

may take in consideration on the number of participants so that more than sixty participants can take part to investigate more about the safety performance in the construction projects in the Khartoum.