

IM4DC

Action Research Report

SUMMARY

Researcher:

Ghulam Mubashar Hassan – PhD Candidate

School/Centre:

School of Computer Science & Software Engineering

University/ Institutions:

The University of Western Australia

Key themes:

Operational Effectiveness

Key countries:

Pakistan

Completion:

April 2014

Research aims:

This background research, in support of a PhD project on better and safer excavation processes, involved visits to mine sites and government departments in Pakistan.

For further information on this action research:

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Full travel report available on request from:

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Visit to Mines in Pakistan

This PhD research involved visits to mines in the settled areas of Hazara and Khewara in Pakistan to develop an understanding of mining systems and protocols pertaining to mining in Pakistan, for comparison with the Australian mining culture. In addition, officials in the cities of Abbottabad and Islamabad provided an insight into the different government departments of Pakistan of relevance to mining. This report covers the Pakistani experience.

Each of the two mines and an illegal mine site provided a range of observations on mine-site management, operational issues, occupational health and safety, and community. Overall, Khwera mine was found to be the best maintained and managed mine out of all the visited mines. It was following more safety rules and procedures compared to others. It employed many engineers and geologists who were provided residence near to the mine to enable 24 hours availability. The hospital is built near the mine to provide all facilities to the miners and their families. Primary and secondary schools have also been built nearby to provide education to the children of miners and others living in the same area. The mine, hospital and school are managed by PMDC which ensures maintenance of good standards.

The experience gave good background understanding in support of the research project "Photogrammetric Method of Distant Reconstruction of Displacement fields in Deformable Solids". This research is expected to bring efficiency to excavation processes and improvement in the safety mechanisms of mines. Due to its cost efficiency, it should be of interest to developing countries.