

# IM4DC

## Action Research Report

### SUMMARY

**Researchers:**

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**School/Centre:**

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**University/Institutions:**

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**Key themes:**

Governance and Regulation

Operational Effectiveness

**Key countries:**

Ecuador, Peru, Argentina

**Completion:**

June 2015

**Research aims:**

The aim of this follow-up research was to:

- develop a more refined measurement of individual safety beliefs, to allow an improved understanding of how safety beliefs influence safety related outcomes in the mining sector in South America
- complement the existing data for Asia-Pacific and African countries collected through the 'International Safety Benchmark' survey, with new data from South American countries

**For further information on this action research:**

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## The Role of Safety Beliefs in Influencing Safety Outcomes in the Mining Sector in South American Countries

The economic losses associated with incidents, illnesses and accidents in the workplace are considerable and developing countries in particular are shown to experience increasingly higher rates of workplace accidents.

Previous IM4DC-funded Action Research gathered information about the risks, practices and beliefs in companies across seven developing countries in the Asia-Pacific and Africa engaged in mining or associated activities. This research was used to identify areas of safety that require targeted training interventions as well as providing initial benchmarks that can be used by regulators and training agencies.

Through collaborations in Peru and Ecuador, in this follow-up Action Research a new safety beliefs scale was developed and the pre-existing 'International Safety Benchmarking' survey was adapted and translated in Spanish to facilitate data collection in Peru, Ecuador and Argentina. The new scale is anchored in rich qualitative data obtained from employees in the mining industry in Peru that has greater potential to capture significant differences in safety beliefs at different hierarchical levels and in different countries.

Surveys were completed by 403 respondents from Ecuador, with 92% of the respondents working in operational roles, and 8% working in non-operational roles (e.g. supervisory roles). Further data collection is ongoing in Peru and Argentina. Three main types of safety beliefs were identified:

- safety controllability (that safety is something that people themselves can control and influence)
- internalised responsibility (that people are themselves responsible for their safety and the safety of others)
- attitudes towards safety procedures and professionals (that safety procedures/professionals negatively interfere with one's work)

Extending the work to South American countries succeeded in generating a high level of interest and focus on safety issues, particularly on safety beliefs and safety culture, and their role in supporting desired safety outcomes.