Multinational Andean Project: Geoscience for Andean Communities  
(MAP:GAC): Canadian Geoscience Making a Difference

Pedro Alcantara*  
Servicio Geológico Minero de Argentina, Buenos Aires  
palcan@secind.mecon.gov.ar

Roberto Page  
Servicio Geológico Minero de Argentina, Buenos Aires, Argentina

Catherine Hickson, D. Mike Ellerbeck and Reginald Hermanns  
Geological Survey of Canada, Vancouver, BC, Canada

and

Fernando Muñoz Carmona  
Phoenix, AZ, United States

Summary

The 6 year CIDA sponsored and NRCan managed project will conclude this year. The project has been employing innovative methodologies for transforming geoscience hazard knowledge into action in Andean communities. While focusing on strengthening the national geoscience agencies in seven Andean nations (Argentina, Bolivia, Chile, Colombia, Ecuador, Peru, and Venezuela), the project aim has been to contribute to improving the quality of life of communities in the region by producing science knowledge on landslides, earthquakes, and volcanoes to promote risk reduction. To achieve this ambitious objective, work initially focused on helping the institutions ensure that they were producing high quality science that at the same time was relevant and understandable to decision makers in areas subject to natural hazards. Production of good science alone, however, is not enough to ensure its usefulness to decision makers and communities. It was apparent that the project needed to develop a methodology that would help land-use planners, emergency managers and communities appropriate geoscience knowledge and apply it to their decision making processes. Combining Canadian and Latin American experience, the project created a methodology called “Community Communications”. Case study areas in each of the seven project member countries were established to test the methodology. Based on the premise that “transforming knowledge into action” requires the engagement of all relevant parties, the project sought to involve not just generators of knowledge (geoscientists, social scientists, emergency managers, etc.), but decision makers, the general public and importantly, financiers of solutions.
The project proved the success of this approach by the adoption of risk reduction activities in the case study areas. Action covered both structural and non structural mitigation and ranged from rezoning to public education. Most heartening, was the clear acknowledgement of the need for high quality geoscience information in order to make informed decisions.