

# **Vulnerability and adaptation to climate change in the Peruvian Central Andes**

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The Geophysical Institute of Peru, in coordination with the National Council for the Environment (CONAM), through the Program of National Capacities Building for Impact of Climate Change and Air Pollution Management (PROCLIM), developed the pilot study "Integrated Local Assessment of the Mantaro River Basin", located en the Peruvian Central Andes, as part of the activities related to the study of vulnerability and adaptation to climate change.

The main objective of the study was to systematize and to extend the knowledge about climate change in the Mantaro river basin, and to evaluate the climatic, physical and social aspects of its vulnerability, as well as to identify viable adaptation options for the agriculture, hydroelectric energy and health sectors, to be incorporated into local and regional developmental planning.

The study indicated that the concepts of weather, climate variability and climate change are not distinguished by the population. However, they identified the following extreme natural events as the ones with the highest risk in order of priority: droughts, freezes and land slides . This information was used to develop an strategy for formulating proposals for adaptation measures.

Water management was also considered a key factor in the formulation of policies for adaptation to climate variability and change and for incorporating the issue of climate change in the local and regional agenda.

Future climate scenarios were generated for the region and the future vulnerability of the population was analyzed. This allowed the formulation of general adaptation measures to reduce this vulnerability, which will hopefully be incorporated into the local and regional development planning.