



Role of the National Scientific Institutions in Natural Disaster Prevention in Peru

J. Macharé

Instituto Geofísico del Perú, Lima, Perú (jose.machare@igp.gob.pe)

Peru is located in a very sensitive zone concerning exposure to hazardous natural phenomena. Its geodynamic situation within the Pacific Rim, in the zone where the Nazca Plate subducts beneath South America, makes that it is submitted to frequent and strong earthquakes and derived tsunamis, and to eventual volcanic eruptions. The country relief is much differentiated and includes high mountains and deep canyons leading to natural slope instability and consequent landslide risk. Extreme climate events like ENSO-related or not floods, severe droughts in the Andes and Amazonia, or frost in the Altiplano are known to affect periodically the country. As in most developing countries, Peruvian population grows without a planned soil occupation, which results in frequent settlement in zones exposed to flood, landslides, volcanic and/or earthquake hazard. It was not until the Ancash, May 1970 tragedy, related to the combined occurrence of a strong earthquake and a subsequent giant mass movement that the country realized the need for a Civil Defense system that should work before, during and after a disaster. Several scientific agencies are involved in the system and, among them, those dealing with the natural phenomena themselves: the Geophysical Institute (IGP), the Geological Survey (INGEMMET), the Meteorological and Hydrological Survey (SENAMHI), the Marine Research Institute (IMARPE), the Directorate of Hydrography and Navigation (DHNM), the Aerospace Research Commission (CONIDA), and university research centers as CISMID-UNI.

These institutions are not expected to be reactive after the inception or the occurrence of a natural event leading to a disaster. They are instead called to maximize their coordination through the National System of Risk Management within the adequate committees established by the Civil Defense Agencies (INDECI and CENEPRED) in order to anticipate scenarios contributing to the prevention activities.

Principles enounced during the 2008 International Year of the Planet Earth concerning that the main goal of scientific research should be getting a safer, healthier and prosper society are now in the mind of most scientist of the country.