

Public knowledge and perception of geo-hydrological risk in Calabria (southern Italy): preliminary results

Loredana Antronico (1), Roberto Coscarelli (1), and Francesco De Pascale (2)

(1) Research Institute for Geo-Hydrological Protection, National Research Council, Rende, CS, Italy (antronico@irpi.cnr.it),

(2) Department of Languages and Educational Sciences, University of Calabria, Cosenza, Italy

The analysis of risk perception is a fundamental tool to strengthen public awareness and knowledge that are directly linked to the way people perceive disaster risk. By means of a quantitative research method (structured interviews), a survey to acquire information on knowledge, communication and perception of natural hazard by the population was led with main reference to landslides and floods. With these aims, a questionnaire including about 50 queries was elaborated with the following main objectives: i) the state of knowledge about landslides and flood phenomena of the people living or working in the survey area; ii) the ability of the population in responding to emergency situations related to such phenomena and the background coming from past events; iii) the trust of the population towards administrators. Moreover, the communication between citizens and Local Authorities when a catastrophic event occurs was evaluated. The survey was carried out on an area of Tyrrhenian seacoast of Calabria (southern Italy) where a set of mountain front alluvial fans develops along the narrow coastal plain. In the study area, a series of rainfall events in the years 2009, 2010, and 2011 have induced several debris flows, hyperconcentrated flows and inundations that threatened the population and mainly caused damage to private buildings and infrastructures located on the alluvial fans. Three municipalities were selected in the study area, where the proposed questionnaire was submitted face-to-face to 300 residents using a judgment sampling procedure. The preliminary results of the survey are alarming: citizens don't have a good communication with local institutions. In addition, the majority of respondents think that landslides and floods are caused by "man-made actions". They indicated "illegal building", "poor land-management practices" and "lack of interest of local administrators" as the main factors that have the most influence in the occurrence of landslides and inundations. Also some respondents indicated "the lack of adequate defence measures for geo-hydrological phenomena". These first results evidenced that the difficulty in the communications with the local administrations and the low trust in their technicians are the main problems for the citizens in the study area. Therefore, it would be useful an effort by Local Authorities to implement a greater and more effective communication with the population. In this way, a better knowledge of the risk by the population as well as a greater empowerment of the individuals can be reached, enhancing also the trust between institutions and citizens.