



Experiences on the development of a Community Based Early Warning System for mountain risks in northern Italy

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In the framework of the European project Mountain Risks (<http://mountain-risks.eu/>), one of the projects currently developed is a methodology to integrate risk management and evacuation emergency plans, focused on prevention as a key element for disaster risk reduction, applied in the Mountain Community Valtellina of Tirano, an area recurrently affected by several mountain hazards.

Taking into account the actual state of disaster risk reduction initiatives in the study area, including the existence of a real time emergency plan based on GIS (Geographical Information Systems), DSS (Decision Support Systems), and ICT (Information & Communication Technology), but knowing the lack involvement of the general community in any of the preparation activities developed until the present and the lack of divulgation of the current emergency plan, it was decided that the methodology that could better adapt to the actual conditions of the study area would be a non structural Community Based Early Warning System (CBEWS).

A CBEWS has been recognized by institutions as the UN and the INSDR, as an effective and important strategy for disaster risk reduction. This strategy is broadly used especially in developing countries and has proved its effectiveness in many disasters crisis all over the world. In spite of that, possibly for political and social reasons, there are really few applications of CBEWS in developed countries which has made the elaboration of this research project a particularly difficult process due to the lack of previous references with similar conditions to the one in the study area.

Difficulties related to any multidisciplinary work which also involves the general community have been faced during the development of the project such as the differences in language (both the technical jargon of the different disciplines and the native language), time restrictions, the process of learning and adapting to different social structures, the process of contacting several institutions and persons looking to co-involve them in the project.

The development of the CBEWS involves several phases: hazard and risk assessment including the analysis of the legal framework and the application of an extensive social survey to evaluate the levels of risk perception, awareness, preparation and information desires of the community; the development of prevention and monitoring strategies and preparedness activities, including the development of a communication campaign developed by an interdisciplinary group to inform and educate the community and practitioner stakeholders.

Preliminary results of the survey show, among others, low levels of risk perception and preparedness, and lack of knowledge and information related to natural hazards. All the results confirm the necessity of develop the communication and education campaign.

The aim of the CBEWS is not only to increase the level of preparedness of the community and decrease its vulnerability, but also to strengthen institutional collaboration, in particular local institutions, in order to assure a continuity of the efforts.