COST-EFFECTIVE PRACTICES FOR STRENGTHENING THE SAFETY OF COMMUNITIES EXPOSED TO SEVERE GEOLOGIC OCCURRENCES: AN INTERNATIONAL JOINT PROJECT IN NORTH ALBANIA

Veronica Pazzi¹, Stefano Morelli², Francesco Fidolini³, Nicola Casagli⁴, Riccardo Fanti⁵

- ¹ Department of Earth Science, University of Firenze, Via La Pira 4, 50121 Italy, e-mail: veronica.pazzi@unifi.it
- ² Department of Earth Science, University of Firenze, Via La Pira 4, 50121 Italy, e-mail: stefano.morelli.geo@gmail.com
- ³ Department of Earth Science, University of Firenze, Via La Pira 4, 50121 Italy, e-mail: francesco.fidolini@gmail.com
- ⁴ Department of Earth Science, University of Firenze, Via La Pira 4, 50121 Italy, e-mail: nicola.casagli@gmail.com
- ⁵ Department of Earth Science, University of Firenze, Via La Pira 4, 50121 Italy, e-mail: riccardo.fanti@unifi.it

Abstract

In the last years, Albania underwent a rapid development, which resulted in an uncontrolled building boom and general land degradation. For these reasons, an ever-greater portion of the Albanian population is exposed to natural risks, whose major threats are represented by floods and earthquakes. Since structural interventions aimed at countering the occurrence of floods and, simultaneously, at making an area safe from earthquakes could be costly in terms of money and time for the local community, something more can be made regarding the increase of community coping capacity and emergency preparedness. The Dajç village, located 9 km SW of Shkoder, represents the ideal test area for this purpose, since it is heavily exposed to the mentioned geological events. To achieve the project aims several actions were implemented. In a first phase (June-September 2011) a field campaign was carried out by Italian academic researchers to collect new data regarding the territory and its vulnerability. During this phase Albanian Civil Defence volunteers supported the Italian technicians in performing: i) a near-river topographic and bathymetric survey and ii) a seismic-noise survey for assessing the vulnerability of some strategic buildings. In this occasion, they also learned how to project and carried out a field survey. In a second phase the Italian personnel organized a two-days training course (early January 2012) on the theme of studied natural hazards, oriented to Local Administration personnel, Civil Defence volunteers and Police forces. The course was mainly focused on: i) natural hazards and their perception by the population; ii) the role of volunteers in the civil defence activities; iii) the building of an effective emergency plan. At the end of the course, the awareness of participants was checked by means of tests regarding flood, landslide and earthquake-related risks. The trained personnel were in charge of transferring the acquired information to the population organizing meetings in the villages and in the schools. In the last third phase (late January 2012) the Local Administration was appointed to organize the first Civil Defence relief drill in Albania. The organization of the activities and the logistic plan was led by the local institutions and was supervised by the Italian personnel. A flood event was simulated, thus the following activities were organized: population alert, dikes reinforcement by means of emergency solutions, evacuation of the villages, preparation of a gathering point equipped with a refuge and a medical aid station, draining of the flooded areas.

Keywords: Natural hazards,training course, Civil Defence, relief drill, Shkoder, international cooperation