

## Resilience assessment through Natural Hazard Risk Perception studies: case study in Campania Region, Southern Italy

Gala Avvisati (1), Orazio Colucci (2), Barbara Marfè (2), Rosella Nave (1), Rosario Peluso (1), Tullio Ricci (1), and Mario Tomasone (2)

(1) INGV, Osservatorio Vesuviano, Napoli, Italy (gala.avvisati@ingv.it), (2) Freelance practitioner

Increasing the capabilities of resilience in a certain area requires a multi-disciplinary approach which should take into adequate consideration sociological and economical aspects, combined with a deep knowledge of the environment and hazards.

Residents of Campania Region are potentially exposed to a combination of natural hazards such as hydrogeological events, seismic and volcanic activity. At present, for some of these hazards, particularly volcanic eruptions, there are no recent experiences to properly assess potential consequences on population, infrastructures and environment.

In order to improve the effectiveness of communication strategies, a study of risk perception has been carried out in 21 municipalities of Campania Region. Three areas have been examined, each potentially suffering from a prevalent specific risk: seismic (Irpinia area), volcanic (Mt. Vesuvio belt area) and hydrogeological (Sorrento peninsula area) risk.

The study of best practices helping to improve the resilience and reaction of areas exposed to different natural hazards and having different socio-cultural layers is hence crucial. A model to be considered is based upon directly involving the residents into controlling the environment (participated monitoring) and improving/detailing the mapping of risks and emergency areas (community based emergency planning). When the population is directly involved in such activities, it becomes naturally more aware of both risks and mitigation measures, with a correspondent increase in resilience as well as in general in lower vulnerability to disaster.