



Geoethical implications in the L'Aquila case: scientific knowledge and communication

Giuseppe Di Capua

Istituto Nazionale di Geofisica e Vulcanologia, Rome, Italy - International Association for Promoting Geoethics (IAPG)
(giuseppe.dicapua@ingv.it)

On October 22nd 2012, three and a half years after the earthquake that destroyed the city of L'Aquila (central Italy), killing more than 300 people and wounding about 1,500, a landmark judgment for the scientific research established the condemnation of six members of the Major Risks Committee of the Italian Government and a researcher of INGV (Istituto Nazionale di Geofisica e Vulcanologia), called to provide information about the evolution of the seismic sequence.

The judge held that these Geoscientists were negligent during the meeting of 31st March 2009, convened to discuss the scientific aspects of the seismic risk of this area, affected by a long seismic sequence, also in the light of repeated warnings about the imminence of a strong earthquake, on the base of measurements of radon gas by an Italian independent technician, transmitted to the population by mass-media.

Without going into the legal aspects of the criminal proceedings, this judgment strikes for the hardness of the condemnation to be paid by the scientists (six years of imprisonment, perpetual disqualification from public office and legal disqualification during the execution of the penalty, compensation for victims up to several hundred thousands of Euros). Some of them are scientists known worldwide for their proven skills, professionalism and experience. In conclusion, these scientists were found guilty of having contributed to the death of many people, because they have not communicated in an appropriate manner all available information on the seismic hazard and vulnerability of the area of L'Aquila.

This judgment represents a watershed in the way of looking at the social role of geoscientists in the defense against natural hazards and their responsibility towards the people.

But, in what does this responsibility consist of?

It consists of the commitment to conduct an updated and reliable scientific research, which provides for a detailed analysis of the epistemic uncertainty for a more effective evaluation of the errors of the prediction models. Furthermore, it has to include a commitment increasingly qualified in scientific communication, through the use of a simplified language but still scientifically correct and suitable for different users. Finally, it consists of taking care of the redefinition of relationships with policy makers and media, so that it is possible, also through the sharing of operational protocols, to establish areas of expertise helpful to clarify roles and responsibilities.

Certainly a reflection arises from this sad affair: the unpredictability of natural hazards cannot be an excuse to acquit the science, as well as the legitimate need of citizens for reassurance has not to be used to exert pressure on those who have to make decisions in circumstances where the margins of error are still very high.

This work aims to summarize some essential passages of the L'Aquila case, since the geoethical implications of this affair are important and paradigmatic.