

EDITORIALE

LEADER

by

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PREVENTION: THE INCREASINGLY CRUCIAL ROLE OF CORRECT INFORMATION ABOUT KNOWLEDGE

Putting in place an effective system for prevention of natural or anthropogenic risks is difficult, both in Italy and in all advanced economies. Indeed, such a system depends on two main factors: (i) the research community's capability to build predictive models of the natural events that trigger these risks (landslides, floods, earthquakes, pollution, etc.); and (ii) the development of adequate spatial planning practices that can generate virtuous land management actions, from planning, design, and engineering of new structures and buildings to maintenance of existing ones.

The knowledge community provides highly reliable models for risk analysis. However, prevention activities have had poor success, as evidenced by the analysis of the yearly costs due to the effects of natural disasters occurring in our country. Comprehensive studies suggest the need to involve increasingly larger numbers of citizens in the prevention process and to bridge the gap between the general population and the academic and research world - a gap justified in the past by the limited availability and poor sharing of information. This aspect, which has apparently nothing to do with our topic, is of a paramount importance. Until the recent past, the research community has relied on conventional communication channels to disseminate knowledge of research and innovation to the external world. Subject-matter experts have had access to the relevant scientific data in paper format, especially publications intended for them or for libraries. Print media (dailies, and weekly or monthly periodicals) have communicated information about new findings and technological innovations to lay people. Both the development of radio and TV systems and then the boom of ICT have had a tremendous impact on the social fabric. Now, these media facilitate the task of communicating scientific knowledge and innovation to all citizens, even in the most remote areas, for example those hit by the devastating effects of natural disasters.

In its more than 18 years of existence, the CERI Research Centre (Centro di Ricerca Previsione, Prevenzione e Controllo dei Rischi Geologici) of Sapienza University of Rome has fos-

tered a culture of prevention of anthropogenic, environmental, and geological risks, by communicating the outcomes of research with all possible tools. It is, among others, with this goal in mind that CERI created its peer-reviewed Italian Journal of Engineering Geology and Environment (IJEGE), which is made available in print and digital format both to researchers and to the public at large.

Nevertheless, the ease of use and the wide dissemination offered by these forms of communication have not yet resulted into the hoped-for improvement of prevention processes. We feel that, today, building awareness of the prevention of environmental and other risks is conditional upon the quality of information communicated by the media. The advent of ICT and the Internet has had an outstanding impact on society, and both have been hailed as democratic forms of communication. However, they have generated confusion and distortion, often reporting superficial or biased information not supported by sound scientific knowledge.

In the over 45 issues of the Journal and in Special Books, we have strived not only to publish articles of high scientific value, but also to place emphasis on the above issues. Indeed, the leader articles that I have written as scientific editor-in-chief of the Journal have always drawn attention to the role of communication in correctly transmitting the progress of knowledge (Leaders, ijege.uniroma1.it).

With this issue of the journal (1/2018), I am leaving this activity to extraordinary researchers, who will be able to further develop these topics and contribute to prevention activities, which are imperative on our planet, whose population is about to reach 8 billion. Risk prevention is crucial to the safety, security, and well-being of all.

After 15 years as scientific editor-in-chief, I am indebted to all those who have made this Journal successful: teachers, researchers, research fellows, and PhD students in engineering geology at Sapienza University of Rome and, in particular, Luigi Stedile, Tania Ruspandini, and Francesco Nardoni.