Sharing data and maps on flood and landslide hazards, vulnerability, and related risk reduction Public Works via a web platform at national scale: the case of #italiasicura

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Italy has experienced many flood and landslide disasters, during and after which the local intrinsic risk management levels have been very different. This problem can be managed, in cooperation with other policies, through improvements in risk awareness and preparedness. With this aim in mind, #italiasicura web platform has been developed, based on a geographic “non-GIS” interface (although working with an underlying database system) to show hazard maps and risk reduction Public Works in the whole of Italy, up to local level.

Such an instrument operates as an innovative “social tool”, developed to be used both by decision/makers and citizens, giving the possibility, at any stage of the user experience on the platform, of an easy information sharing via social media.

Such a kind of tool represents an opportunity of increasing the knowledge linked to flood and landslide hazards and structural defence strategies. As a matter of fact, the #italiasicura web platform is based upon three pages: one, geographic, presenting hazard, risk and physical infrastructures; the second, also geographic, focused on national emergencies; the third, text and graphics, allowing a number of simple queries and rankings of the main parameters related to the topics of the platform.

From a technical point of view, although there is a map on the screen and an underlying database system (permanently updated automatically), neither layers to be switched on and off are present nor any other typical GIS user interface function. All information is presented based upon the coordinates and the zoom level, to allow a better user experience, particularly with the responsive version toward mobiles. Both graphic pages open on the national map. A text box self customizes itself, aggregating data on the actual zoom level; the main navigation actions are performed moving the mouse and acting on the mouse wheel. A new URL is generated at any event generated by the user.

Data shown and related web analytics are an interesting source of information for refining risk management strategies and studies; at the same time, they will allow a greater involvement of the scientific community and young researchers, enabling them to elaborate bottom-up suggestions to decision makers.