

CP5

Perception of Flood and Landslide Risk in Italy: a regional analysis.

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Abstract

Inundations and landslides are widespread phenomena in Italy, where they cause severe damage and pose a threat to the population. Despite the large number and wide geographical distribution of historical landslide and flood events with human consequences, the population of Italy know little regarding the type, characteristics, frequency, and severity of the harmful events. This is surprising, as an accurate perception of risk is important for the successful implementation of many risk reduction or adaptation strategies. To measure the public perception of geo-hydrological risk we have conducted in collaboration with DOXA (www.doxa.it), a leading Italian company operating in the field of statistical research and opinion polls, two national surveys. The surveys were executed in 2012 and 2013, performing for each survey approximately 3100 computer assisted telephone interviews. The samples of the interviewees were statistically representative for a national and regional scale quantitative assessment. The interviewees were asked questions designed to obtain information on their: (i) perception of natural, environmental, and technological risks, (ii) direct experience or general knowledge on the occurrence of landslides and floods in their municipality, (iii) perception of the possible threat posed by landslides and floods to their safety, (iv) general knowledge on the number of victims caused by landslides or floods, and on (v) the factors that they considered important to control landslide and flood risks in Italy. The surveys provided sufficient information to perform a preliminary evaluation of the perception that the population has towards landslide and flood risk, and the geographical variations in Italy. The surveys revealed that the population of Italy fears technological risks more than natural risks. Of the natural risks, earthquakes were considered more dangerous than floods, landslides, and volcanic eruptions. Examination of the temporal and geographical distribution of the responses revealed that the occurrence of recent damaging events influenced risk perception

locally, and that the perception persisted longer for earthquakes and decreased more rapidly for landslides and floods. The analysis of the regional distribution of severe hydrogeological events in Italy in the last decade were compared with the results of the survey. Comparison of the risk perception with actual measures of landslide and flood risk, including the number of fatal events, the number of fatalities, and the mortality rates, revealed that in most of the Italian regions the perception of the threat did not match the long-term risk posed by landslides and floods to the population.