



Citizens' perception and risks management evaluation in Natural Disasters

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Italy, as well as other numerous regions of the earth, is unfortunately, familiar with natural disaster phenomena which resulted, in the period between 1996 and 2016, approximately one thousands of deaths and over 50 Billion of Euro of damage (ANIA). The problem of reducing the risk associated with this kind of events is a topic addressed by many international politicians, scientists and technicians. Seldom, the perception and the preparedness of citizens to implement risk reduction solutions is studied as a key element of differentiation among phases of natural catastrophic events.

The aim of this work is to provide a risk management system based on sociologist study on perception and communication and on the other side an economic risk evaluation to promote programme based on preparedness and resilience but also to minimize economic losses.

In an attempt to address this solution a survey was conducted in the area of Tevere river basin, Central Italy. The survey submitted assesses the perception of citizens with respect to natural and anthropogenic risks like earthquake, flood, landslide, fire, volcanic eruption, attack, crowd management and pollution.

The survey was designed with the Social Responsibility Scale (SR Scale) thanks to this, it is possible to measure the relation between entity and community. The interviewees were asked questions designed to obtain information on their perception of natural, environmental and technological risks, direct experience or general knowledge of the occurrence of this phenomena in their municipality, perception of the possible threat to their safety. Moreover, this result was compared with the answer of the tests conducted in 2012 and in 2013 in Italy (Salvati).

The work is divided in three parts; the first one explains how the natural risk is managed in Italy, in Europe and in other significant countries. The scientific literature is presented as a list of researches with survey conducted in other countries. The second part describes risk management models used above all in insurance markets, while the last part is about the evaluation of surveys conducted in Italy and in Perugia area.

The results of the social analysis are compared with engineering and economic models to evaluate the degree of human perception in the natural risk management and the tangible effects when an event occurs. Furthermore, the study underlines the need for renewed action to foster knowledge and improve the understanding that the population of Italy and Europe has about the geo-hydrological hazards and their risks. Future researches in this field are suggested with a particular focus on quantification of human impact to achieve a reduction of the effects of natural disasters.