



## Are the effects of risk mitigation measures caught by Italian flood risk maps?

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Flooding constitutes the most frequent and one of the most destructive natural disasters, and every year it affects millions of people worldwide causing loss of life, disruption of commerce and financial networks, loss of business continuity and essential services. Even in Italy, floods represent one of the most widespread extreme events, increasingly common and hazardous.

Data from recent Italian reports highlight that the amount of money spent for risk prevention are not at all comparable to 1.9 billion of euros per year for repair damage and recovery, causing 1:6 ratio between pre- and post-disasters costs.

Hence, the necessity of a deep analysis on the economic and technical criteria used to design mitigation measures for flood risk protection.

The ReNDiS database (*Repertorio Nazionale degli interventi per la Difesa del Suolo – National Database of soil protection measures*) offers the data for such an analysis and for a comparison between type of hydraulic measures and risk level area obtained from flood risk maps produced by the District Authority of Po Basin.

The results show that flood risk maps do not catch the effect of the risk mitigation measures in terms of benefit. From this, the necessity of new criteria with which maps are produced.