



KULTURisk

Knowledge-based approach to develop a cULTUre of Risk prevention

newsletter

No. 2

June 2012

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Why KULTURisk?

The world has recently suffered a number of disasters triggered by natural hazards. The extreme consequences of these catastrophic events have highlighted the fact that risk prevention still needs to be improved to reduce the loss of life and economic damages. Hence, it is essential to investigate and disseminate the benefits of prevention measures compared to traditional post-disaster recovery. KULTURisk is a

research project conceived under the Seventh Framework Programme of the European Commission. The project officially started on the 1st of January 2011 by a consortium composed of 11 partners from 6 European countries. The main goal of KULTURisk is to develop a culture of risk prevention in Europe and demonstrate its advantages over traditional post-disaster recovery approaches.

KULTURisk will develop a culture of risk prevention and demonstrate its advantages over traditional post-disaster recovery approaches.

First policy briefs

As part of the activities carried out during the first six months of the project, the first policy briefs were issued in November 2011. A literature review was carried out to identify knowledge gaps and propose further pioneering research in the field

of risk prevention. The main findings were: (1) there is a need for more consistent terminology related to disaster risk management. In KULTURisk, the objective of risk prevention is to reduce the risk to an acceptable level by lessening the potential



"In KULTURisk, the objective of risk prevention is to reduce the risk to an acceptable level by lessening the potential adverse impacts of natural hazards through actions taken in advance"

First Policy Briefs

adverse impacts of natural hazards through actions taken in advance; (2) Risk assessment methods need further development; (3) mostly, the affected communities are involved only at the end of the risk management process; (4) the intangible costs of disasters are contentious and difficult to monetise, however, the identification remains crucial; (5) collaboration can improve the performance of early warning systems; (6) the traditional approaches to the design of flood defence structures are often arbitrary and misleading to risk perception. (7) probabilistic

flood maps are more appropriate than deterministic maps, but they are still difficult to implement and communicate; (8) risks perceived by ordinary people are more complicated than those calculated by experts; (8) different assumptions of existing risk communication approaches must be better understood; (9) flood insurance mechanisms need further development and possibly a standard structure among European countries should be setup.

More detailed information at www.kulturisk.eu/results.



In this policy briefs

- Introduction
- Initial steps: reviewing the literature and EU guidelines
- Key preliminary findings
- Further directions

Introduction

To reduce human losses and economic damages caused by disasters around the globe, risk prevention still needs to be promoted. In the European context, the KULTURisk project aims to assess and demonstrate the potential benefits of different risk prevention measures in the reduction of damages produced by water-related hazards, such as floods and landslides. This demonstration will initiate a culture of risk prevention, which can then be extended to other types of natural hazards, such as earthquakes and forest fires.

Initial steps: reviewing the literature and EU guidelines

A literature review has been carried out to identify knowledge gaps and propose further cutting-edge research in the field of risk prevention. This literature review has been divided into three main parts: assessment methodologies, prevention measures, and risk communication.

The review of assessment methodologies focused on four main topics: 1) existing EU, national and international policies in the field of prevention; 2) currently available risk assessment and management methodologies for natural hazards and in particular for those related to water-related disasters; 3) currently available methodologies to evaluate risk perception and possibilities of integration in the framework of risk assessment and management of water-related hazards; and 4) existing methodologies to assess the total cost of hydrological disasters, economic valuation methodologies and project appraisal.

The prevention review focused on three themes: 1) existing national and international operational warning systems for water-related hazards induced by severe weather conditions; 2) recent developments in hazard mapping and risk transfer practices (insurance policy) in water-threatened areas; 3) use of structural measures for water-related risks, including lessons learned from past flood defence strategies; existing structural measures in flood-prone areas and critical discussion on the use of the return period concept in the design of structural measures.

Lastly, the third part of the literature review focused on recent research on risk communication, in particular on flooding and other water-related hazards.

Involving the stakeholders of Barcelonnette

From 16th to 19th April, 2012 a team of scientists and trainees from the synergetic projects (KULTURisk and Changes) visited Barcelonnette case study, France. Changes is a FP7 project that stands for Changing Hydro-meteorological Risks as Analyzed by a New Generation of European

Scientists. During the visit, different topics under research were presented by KULTURisk scientists and PhD students of Changes project. In particular, diverse aspects of risk management (from process understanding to risk planning, mitigation measures, early

warning and risk communication) were presented to stakeholders of the Ubaye-Blanche sub-region (Mr. Christian Deymier - Director Sub-region Ubaye-Blanche, Mrs. Delphine Caubet - regional geologist, RTM, Mr. Georges Guiter - local technician, RTM, Mr. Michel Peyron - local technician, RTM, cluster of municipalities of Ubaye river (Mr. Bague - representative of municipality), the mayor of Barcelonnette Mr. Jean-Pierre Aubert, the sub-prefecture of Alpes-de-Haute Provence Department (Mrs. Sylvie Espécier - Sous-préfet de département, Mme. Gisèle Honoré - Chef de Cabinet) and the Barcelonnette fire brigade (Lieutenant Didier Hazelot- Director SDIS Barcelonnette).



(Ubaye Catchement, examined by researchers)

Participants: Leonardo Alfonso, Micah Mukolwe (UNESCO-IHE); Stefano Balbi, Paola Trevisan, Giuseppe Cirella (CORILA, University of Venice); Sebastien Norbert (Kings College London). Participants Changes: Thom Bogaard, Marie Charriere, (TUD); Kathrin Prenger- Berninghoff IRM, Poland, Teresa Sprague (TU Dortmund); Romy Schlögel ,CNRS, Strasbourg; Korbinian Breinl (PLUS) and Thea Turkington (ITC-UT)

Second KULTURisk workshop: more on Stakeholders

On May 24th 2012, the second KULTURisk workshop was carried out in Gorizia (IT), jointly with the conference: Hydraulic Risk: Offense or Defence?, held on May 25th May in Trieste (IT). The workshop was organised by Michele Ferri, from Alto Adriatico River Authority, which is one of KULTURisk partners and also a final user of the approaches developed within the project.

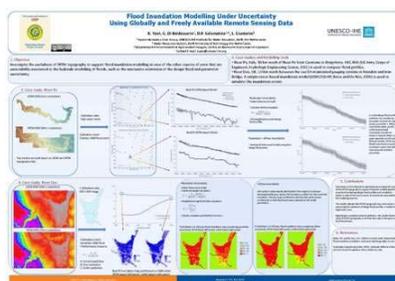


The workshop focused on the experiences obtained from the Vipacco Laboratory, a participative experiment where a group of stakeholders of the

Vipacco river basin expressed their needs and expectations and were exposed to the developed approaches in risk prevention and perception.

During the workshop in Trieste, a similar discourse was carried out with a group of experts. The data collected is being analysed by the KULTURisk team in order to find possible similarities and differences between experts and stakeholders.

KULTURisk Publications



We have recently updated our list of publications that include journal papers, conference proceedings, presentations and posters that have been produced during the project. Full list of KULTURisk publications can be found on KULTURisk website; the poster presentations are available for download.

So far the KULTURisk project has been very successful from the research output viewpoint, with 14 peer reviewed journal papers published, 2 submitted and 5 under preparation; 8 conference papers published, 15 submitted and 14 oral presentations at international conferences, as well as 7 posters presented at international conferences.

Upcoming activities and events

We have just reached the mid term of the KULTURisk project and the Periodic Report is under preparation.

Upcoming activities

- development of a risk assessment methodology
- application of the developed KULTURisk framework for each prevention measure under different scenarios
- development of a Knowledge Base where educational material and other knowledge resources shall be classified and shared

Upcoming events

The most recent reasearch outcomes from the KULTURisk project will be presented at EGU Leonardo Conference "Hydrology and Society" on 14-16 November 2012, within the cross-cutting session on "Governance of Water-Related Risks"

KULTURisk is a project funded by the European Commission. Project No 265280. Call FP7-ENV-2010. Activity code: ENV.2010.1.3.2-1 Building a culture of risk prevention in Europe.

KULTURisk partners

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