

R&D Technical Summary W5C-020

Mitigation of Climate Induced Natural Hazards (MITCH)

Background to R&D project

Past European research has made significant advances in the understanding, monitoring and forecasting, and management of climate induced natural hazard risks. The **MITCH** Concerted Action, which ran from 2000 to 2003, sought to translate these advances in knowledge of flood, drought and landslide management into practical benefits across Europe. **MITCH** was funded by the European Union, with additional matching-fund support from the UK Environment Agency.

The project objectives were:

- To provide a forum for discussion and debate among researchers and practitioners.
- To assist hazard planning and management by disseminating start-of-the-art research.
- To match end user needs with research community capability.
- To seek implementation pathways for research results.

Results of R&D project

Four Project Workshops were held:

1ST Project Workshop, “Floods, Droughts and Landslides – Management in a Changing Climate” was held at Delft Hydraulics, The Netherlands 12-13 December 2001

The main conclusions were:

- (a) High uncertainty associated with climate change prediction is a barrier to uptake of research
- (b) The importance of recognising the latest climate change predictions in hazard management policy

2ND Project Workshop, “Advances in Flood Forecasting, Flood Warning and Emergency Management” was held at the Universitat Politecnica de Catalunya, Barcelona, Spain on 10-12 June 2003

The main conclusions were:

- (a) Advanced techniques developed and tested for specific geographic areas need to be expanded to other areas and applications
- (b) Opportunities exist for large scale flood forecasting operations, with trans-basin significance
- (c) Modelling and observations are both being given careful attention

3RD Project Workshop, “Floods Droughts and Landslides – Who Plans, Who Pays?” was held at GeoForschungs Zentrum, Potsdam, Germany 24-26 November 2002

The main conclusions were:

- (a) There are many high level technical approaches to practical issues
- (b) Floods and landslides receive much more attention than drought
- (c) There are considerable differences in national approaches to emergency planning as related to climate hazards
- (d) Costs of disaster management and recovery are mainly in ad-hoc responses

4TH Project Workshop, “Central European Flooding and the Conclusion of MITCH” was held at Rotterdam, The Netherlands on 6 March 2003

The main conclusions were:

- (a) There was little experience of floods on this scale (The Elbe floods Summer 2002)
- (b) Within the catchment, flood impacts were occurring on different scales

- (c) Contamination of rivers and flood plains was a significant issue
- (d) The Dresden Flood Research Centre has been established

The following issues were identified during the workshops:

- For end-user driven research: include end-users as part of EC project teams
- Importance of provision of education and dissemination material from project
- End users need tools, data and training
- Recognition that not all research will be end-user driven
- Communication routes between end-users and academics need improving

R&D Outputs and their Use

The papers from the workshops are available on CD ROM from HR Wallingford. A website, www.mitch-ec.net was established for this project and will be maintained in the short term. The outputs are intended to build awareness of EC and other relevant research and inform the development of future R&D programmes.

This R&D Technical Summary relates to R&D Project W5C-020 and the following outputs:

- **4 Project Workshops** – CD ROMS available from HR Wallingford

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