Adaptation of the Meuse to the Impacts of Climate Evolutions

4th workshop on water and adaptation to climate change

“Market of tools”: Communication in AMICE

UNECE – Geneva, June 25th, 26th, 2013

sarah.combalbert@epama.fr
✓ Organization of the project

- 4 years of studies and works: 2009-2013
- 4 countries involved: FR, BE, DE, NL
- Budget 8,9 M€ dont 2,8 M€ ERDF
- EPAMA lead partner
- 17 organizations
Organization of the project

2009 2010 2011 2012 2013

WP1 : Risk assessment
Assessment of damages caused by floods and low-flows events, basing on common climate scenarios

WP2 : Natural water retention
Promote the natural areas as a water retention tool

WP3 : Structural protections
Improve the existing measures according to climate scenarios

WP4 : Crisis management
Transnational flood crisis exercise

Coordination
Communication

A lot of tools!!!
✓ The communication tools

A Book…

www.amice-film.eu

Boards…

Meetings…

Leaflets…

Newsletters…

Softwares for crisis management…

HOW TO FACE THE CRISIS?
DO NOT FORGET:
KEEP YOUR SENSE OF HUMOUR DARLING…
✓ Awareness and decision-support tool

Based on the Wat-a-game concept (IRSTEA-France): use models to facilitate the collaborative water management
Awareness and decision-support tool

- 6 rounds (based on an hydrologic year) in 3 phases:
  - Land-use management
  - Flood event (more or less abundant)
  - Drought event (more or less severe)

- Individual and collaborative purposes

BUT

The winner is the richest territory after 6 rounds!!

All the players fail if the dissatisfaction threshold of Belgian people downstream is reached!!

✔ Awareness and decision-support tool

➢ Take into account climate events

- Floods
- Low-flows

➢ Manage the territory according to the capacity of water retention of facilities and the revenues of each activity

Forest | meadows | culture
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Village | City | Industry

(C) by-nc-sa Wat A Game, IRSTEA, CIRAD, 2005-2013; (CC) by-nc-sa, EPAMA, IRSTEA, 2013
- Awareness and decision-support tool

- Take into account public policies and environmental impact

- Adaptation facilities

- Laws, subsidies, local measures...

- Dykes, retention bassins, wetlands, grass strips...

- Obtain some extra-revenues from aquatic activities

Additional concepts

- Modelling: a mean to catch the World
  - Thanks to several types of models (concept, softwares, board games etc...)
  - Hypothesis organized in interaction

- Stakes of such modelling
  - Be adapted for complex systems, hard to describe with a linear approach, with a diversity of people (condition to efficiency and robustness)
  - Be comprehensive by a wide range of stakeholders
  - Improve exchanges between stakeholders through shared scenarios, common vision
  - Help to coordination through the exploration of collective rules
  - Encourage reflexivity

For more information about this tool and its adaptation on other basins, you can directly contact Mr. Nils Ferrand [nils.ferrand@irstea.fr]

Thanks for your attention...
Merçi de votre attention...

www.amice-project.eu

Climate Changing ? Meuse Adapting !
Questions??
What are the advantages??

What are the disadvantages??
Sharing of experiences...

Have participants already used this kind of tool?
✔ Share information to improve flood crisis management