

*International Workshop: Governance of Climate-Related Risks in Europe:  
The Need for Policy Oriented Research; Brussels, 08-09 September 2011*

## **Social Capacity Building for Natural Hazards**

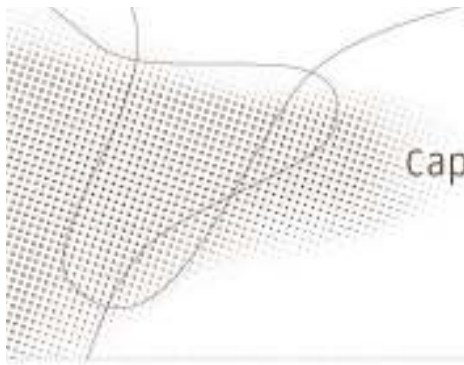
**Toward more resilient societies**

**Christian Kuhlicke (London/Leipzig) &  
Annett Steinführer (Braunschweig)**

Cap**Haz**-Net

Social Capacity Building  
for Natural Hazards  
Toward More Resilient  
Societies





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## Introduction

### Disasters are the result of lacking capacities

»Not every windstorm, earth tremor, or rush of water is a catastrophe. A catastrophe is known by its work; that is to say, by the occurrence of disaster.

So long as a ship rides out the storm, as long as the city resists the earth-shocks, so long as the levees hold, there is no disaster. It is the **collapse of the cultural protection** that constitutes the disaster proper«

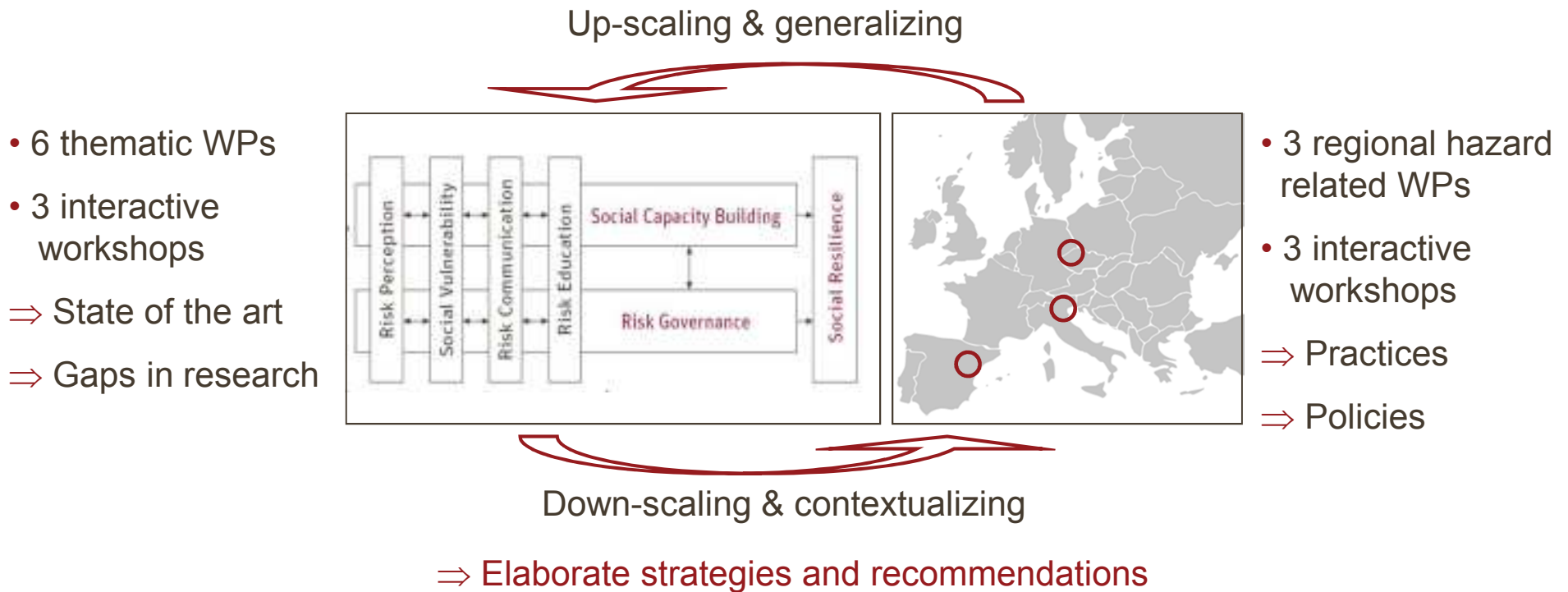
Carr 1932

## Introduction

- **‘Coordination action’** =  
Documentation of the state of the art  
of social scientific research on  
natural hazards
- 6/2009–5/2012;  
8 partners from 6 European  
countries
- National ISDR Platforms are  
Advisory Board



## Working structure of Caphaz-Net



### Different capacities need to be developed

6 Procedural Capacities

→ e.g. ability to put capacities into practice

5 Institutional Capacities

→ e.g. fair governance

4 Economic Capacities

→ e.g. availability of financial resources

3 Network Capacities

→ e.g. (re-)establish trustful relationships

2 Motivational Capacities

→ e.g. building sense of responsibility

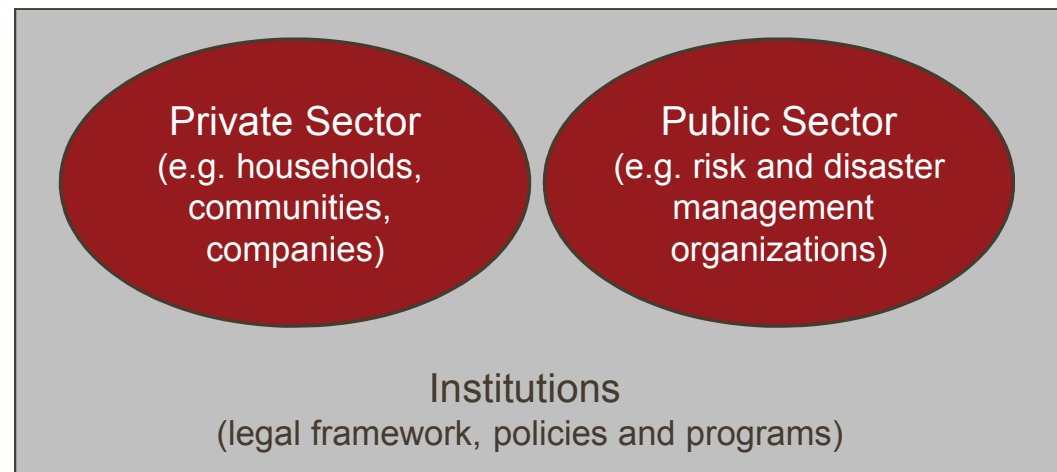
1 Knowledge Capacities

→ e.g. knowledge about hazards and risks

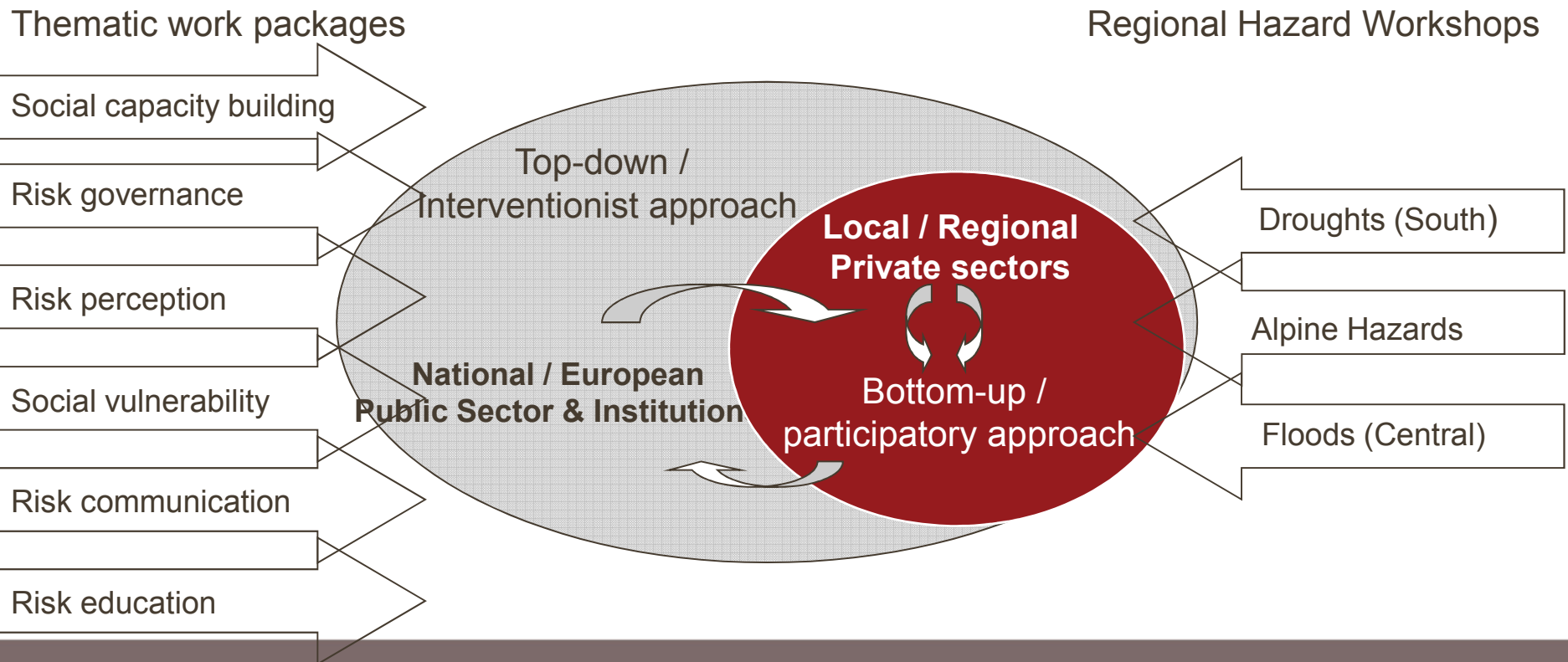
## Multi-actor process

- The example of Saxony (Germany)

- (1) Government of the Free State of Saxony (Ministries)
- (2) State Office for the Environment, Agriculture and Geology (LfULG)
- (3) State Dam Administration of the Free State of Saxony (LTV)
- (4) Regional Planning Authorities
- (5) State Directories
- (6) Districts
- (7) Municipalities (mayors and councils)
- (8) Fire brigades, THW, Red Cross (mostly volunteers)
- (9) NGOs and lobby groups
- (10) Technical/scientific organisations
- (11) Consultancy/Planning companies
- (12) Insurance
- (13) Organized citizens
- (14) **Citizens**



## Bottom-up and top-down approaches are needed





## First findings Risk perception studies

(Wachinger et al. submitted)

### Informational factors

Source and level of information, media coverage, involvement of experts in risk management, **trust in individual providing information**

### Personal factors

Age, gender, educational level, profession, personal knowledge, **personal disaster experience**, **trust in authorities**, trust in experts, **confidence in different risk reduction measures**, involvement in cleaning up after a disaster, feelings associated with previously experienced floods, world views, degree of control, and religiousness

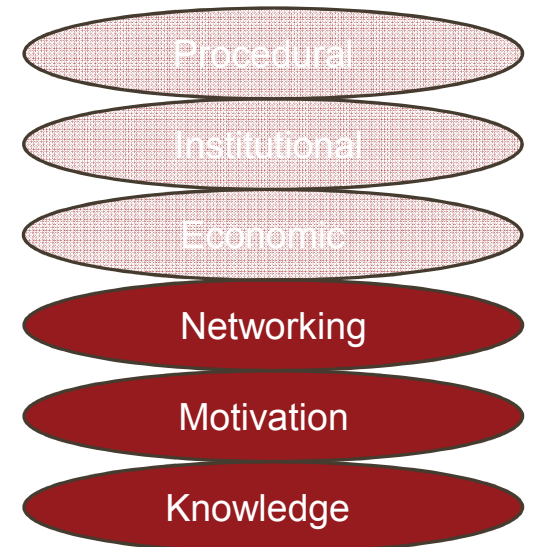
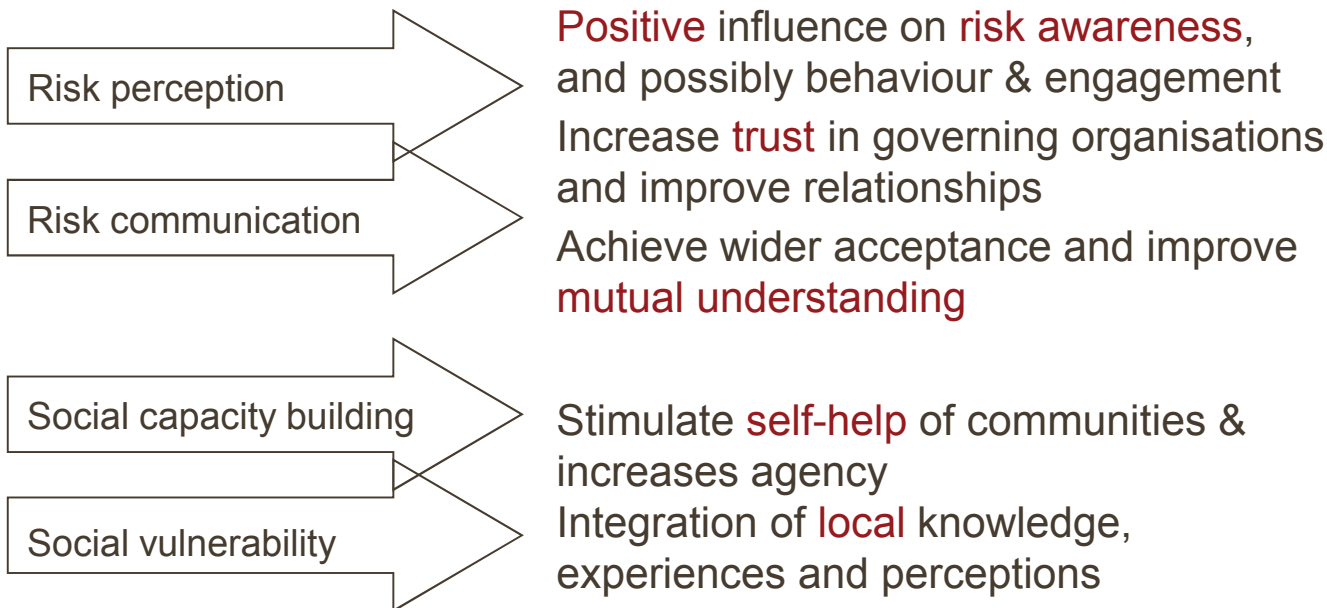
### Context factors

Economic factors, vulnerability indices, home ownership, family status, country, area of living, closeness to the waterfront, size of community, age of the youngest child



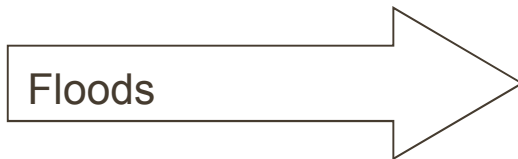
### Bottom-up / participatory capacity building

- Insights from the literature: Participatory processes have a ...



### Bottom-up / participatory capacity building

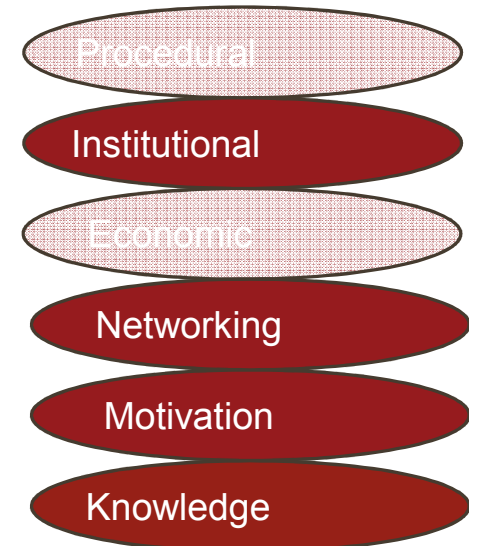
- Insights from the regional hazard workshops ...



- Participation is practice in many European countries, but mostly taking place at the **level of projects** (e.g. building a dike)

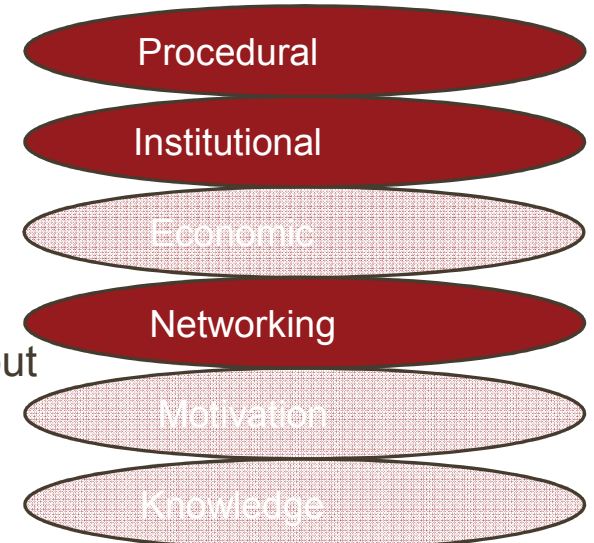
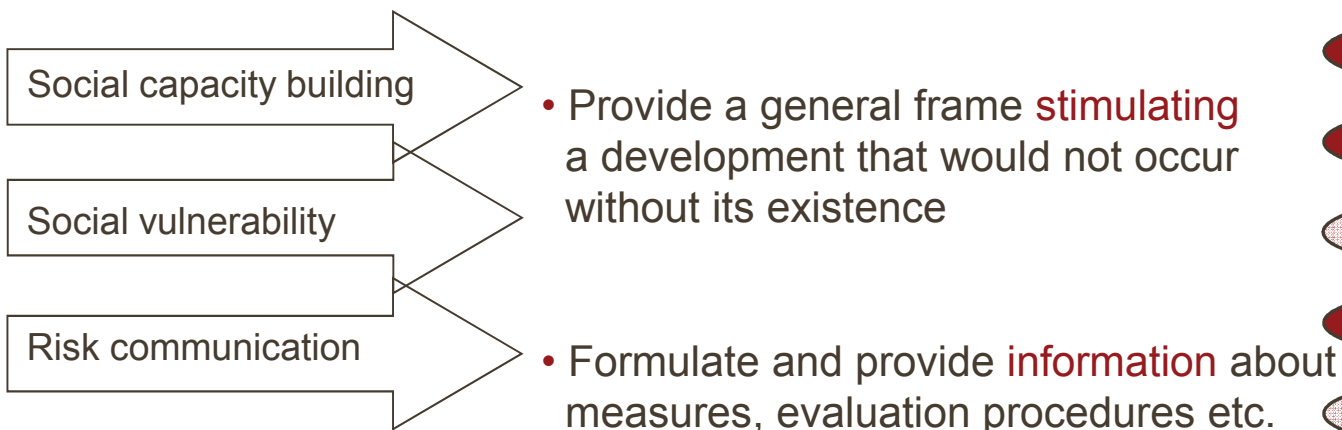


- Idea of a “**hazard facilitator**” is gaining relevance in some countries
- Importance of the **voluntary emergency sector** for building trust and networking



### Top-down / interventionist capacity building

- Insights from the literature: Interventionist approaches ...



### Recommendations:

(1) **Pros and Cons** of bottom-up and top-down approaches

(2) How to do it?

⇒ Specific **steps and good examples** from risk communication & risk education studies, from vulnerability assessments and from regional hazard experiences

(3) Utilizing existing practices and policies

⇒ Which **existing and developing** practices, instruments and policies in DRR and CCA appear as particularly relevant for social capacity building



**Want to know more?**

**[www.caphaz-net.org](http://www.caphaz-net.org)**

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## The CATALYST Project

### Capacity development for natural hazards risk reduction and adaptation

- EU FP7, coordinating action
- Project goal: **to bring risk management knowledge to bear on economic development issues and to make NH/DRR a critical component of the sustainability agenda.**
- Approach: **creation of diverse opportunities for researchers and stakeholders to identify and share knowledge about best practices related to natural hazard and disaster risk reduction.**
- Duration: **Oct 2011 – Sept 2013**
- Project Web Site: **[www.catalyst-project.eu](http://www.catalyst-project.eu) (online in Oct. 2011)**
- **seeconsult GmbH (coordinator)**
- **UNU -Institute for Environment and Human Security**
- **Helmholtz Centre for Environmental Research**
- **Alterra – Wageningen University**
- **Fondazione Eni Enrico Mattei (FEEM)**
- **National Geologic Survey of Denmark and Greenland**
- **Academy of Sciences for the Developing World**

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»Taking the Naturalness out of 'Natural' Disaster (O'Keefe et al. 1976)