

Workshop Output WS 2.4.E

Title of workshop: Natural hazards' risk governance under changing framework conditions

Prepared by

Moderators	<p><i>Session Chair: Stefan Schneiderbauer</i> <i>Moderator: Lydia Pedoth</i> <i>Moderator: Doris Damyanovic</i></p>
Participants*	<p>Alcántara-Ayala, Irasema; Tucker, Catherine May; Gunya, Alexey; Jiménez-Zamora, Elizabeth; Klein, Julia; Mwangi, Esther; Xu, Jun7</p> <p>Schindelegger, Arthur;</p> <p>Nordbeck, Ralf; Löschner, Lukas</p> <p>Rauter, Magdalena; Fuchs, Sven</p> <p>Accastello, Cristian; Poratelli, Francesca; Renner, Kathrin; Steger, Stefan; Cocuccioni, Silvia; Zebisch, Marc; Schneiderbauer, Stefan; Brun, Filippo</p> <p>Hartmann, Sönke; Pedoth, Lydia; Schneiderbauer, Stefan; Rudloff, Anna; Gallmetzer, Willigis; Macconi, Pierpaolo; Kobltschnig, Gernot</p> <p>Attems, Marie-Sophie; Fuchs, Sven</p> <p>Fosson, Jean Pierre; Benati, Alessandro</p> <p>Rudloff, Anna; Pedoth, Lydia</p> <p>Mondino, Elena; Mård, Johanna; Albrecht, Frederike; Borga, Marco; Scolobig, Anna; Di Baldassarre, Giuliano</p> <p>Weber, Karin Maria; Wernhart, Susanna; Fuchs, Britta; stickler, Therese; Balas, Maria; Damyanovic, Doris</p> <p>Höferl, Karl Michael; Posch, Eva; Steiger, Robert; Bell, Rainer</p> <p>Shrestha, Milan; Thompson, Ian; Byers, Alton</p> <p>Frey, Holger; Huggel, Christian; Jurt, Christine; Vicuña, Luis; Allen, Simon; Emmer, Adam</p>

* Workshop participants that have submitted contributions to the workshop

General questions to please be answered in the workshop reporting

- 1) What was the focus of the workshop? Methodological issues and advancements or thematic issues (systems knowledge, transformation knowledge, target knowledge). Please check and fill in the matrix in the output section.

Methodological issues and advancements	Thematic issues		
	System knowledge	Transformation knowledge	Target Knowledge
x	x		

- 1) Which key points were discussed in the workshop as a whole? (This should be more a synthesis and not simply a summary of the key points in each presentation)

Holistic approach

- _Need for integrated approach
- _Need for systemic approaches
- _Need for transdisciplinary approach and collaboration between scientists and policy makers and stakeholders and residents

Community involvement

- _Importance of community involvement (in research and its application/policy)
- _Importance of local contexts, particularly regarding trust between communities and authorities
- _Importance of giving local communities agency in risk management strategies (inclusion in research and implementation)
- _Using existing networks and initiatives

Communication

- _Importance of communication and dissemination of knowledge
- _Type of knowledge, how it is transferred and by whom
- _Importance of peer-to-peer knowledge transfer
- _Using 'local heroes' and independent experts
- _Face-to-face interactions
- _Learning from personal and local experience
- _Education of young people
- _Creating new formats to open/foster discussion – tailoring communication to local contexts

- 2) What is your opinion on the current state of knowledge concerning your topic(s) (focusing on mountain regions)? *Please check and fill in the matrix on the following page.*

Overall assessment of the state of:

What is your personal opinion on the current state of knowledge concerning the topic(s) addressed in your workshop. Please tick the appropriate field. Brief explanations are appreciated.

State of knowledge	Very good	Good	Poor	Very poor	Not appropriate	Comments
Global			X			No presentation addressed global level
Regional		x				<i>Which region?</i> Alpine (predominantly Italy and Austria); Himalaya; Andes
Scattered case study-based knowledge		x				Lots of case studies with diverse methodologies but with similar issues becoming apparent
Knowledge about past states/trends			X			Past was not addressed during the session as it was not the topic of discussion
Knowledge about current situation		x				Knowledge is good but limited to case studies presented; lack of regional or global approaches
Knowledge about future states/trends/thresholds			x			Collection of case studies gives hints of direction of change, or changes needed
Knowledge about the system		x				Participants demonstrated understanding of all actors involved
Knowledge about shaping pathways to more sustainable development (transformation knowledge)			x			Not dealt with specifically but there seems to be an awareness among participants of pathways
Knowledge about envisaged goals (target knowledge)		x				Practical solutions to reach these goals were not discussed (lack of time)

Ideas for questions to potentially be answered by the moderators after the workshop in the reporting (please delete what is not useful):

- 1) Were there any new insights and/or findings presented? If yes, which ones?
 - Importance of local cultural contexts in success/failure of RM strategies
- 2) What was the main message/consensus of your workshop?
 - Importance of community involvement – ongoing discussion for many decades
 - Need to define and communicate responsibilities between public and private institutions
- 3) Were major uncertainty issues identified and discussed? If yes, which ones?
- 4) Was there any significant controversy (if so, what?) that requires new data (or further exploration of existing data) to resolve the issue? (explain)
 - No
- 5) Were new research questions raised? If yes, would working on these questions need to involve other disciplines (which ones)?
 - A lot of research is done on the ability to adopt to risk management strategies, but not what influences *willingness* to adopt these strategies
 - Assessment of effectiveness of new technologies for communication (e.g. Facebook, apps)
- 6) Did the workshop identify research topics (e.g. environmental drivers other than climate) that are, in your opinion, currently greatly underrepresented in mountain research, but should urgently be addressed?

Further Comments

- Risk governance and integrated risk management based on holistic perspectives of the social-ecological systems at stake are of uttermost importance for the security and sustainable development of mountain communities worldwide.
- At local level, the benefitting communities should be in the centre of risk governance
- A successful and sustainable risk management is very much related to the implementation of an appropriate risk communication strategy.
- Activities (studies, projects, programmes etc) tackling the improvement of risk governance and aiming at identifying and implementing measures and activities to reduce Disaster Risk MUST consider the specificities of the local socio-economic and cultural context.
- Stakeholders, actors and decision makers represent a variety of capacities, knowledge levels and interests. Any activities (studies, projects, programmes etc) aiming at implementing measures and activities on the ground need to consider this heterogeneity of the actors' landscape.
- In general, the tools and instruments for a holistic risk governance exist, though (1) there are certain data / knowledge gaps with respect to any system that might be at stake and though (2) many well-known rules and requirement (such as involving relevant stakeholders already in the planning phase of projects) are not always respected. What prevents an improvement in risk governance are factors that influence the willingness to invest to implement measures for disaster risk. The interlinkages of these factors with risk perception and awareness is not yet understood.