RISK GOVERNANCE FOR NATURAL HAZARDS: NEW CONCEPT OR OLD HAT?

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CONTEXT

Risk management commonly organizes risk mitigation based on outputs from risk analysis, which is particularly based on a natural science approaches. These assessments ultimately consider past, current, and future process occurrences and respective consequences in terms of monetary losses or endangered lives. Risk mitigation may include the reduction of the event likelihood or of the consequences e.g. by developing monitoring and respective warning systems, by installing emergency and evacuation plans, by transferring risk (e.g. to insurance), or by implementing regulatory controls.
Trust, or better the lack of it, has to be understood as central how disparities between "real" and "perceived" risk might engender public discourse. Thus, consensus and acceptability of decision-making are crucial for success of any risk management strategy. Importantly, it is already the definition of risk that affects risk policy and moreover, defining risk is an exercise in power in view of existing ambiguity.
Risk Governance is a new way of analyzing, assessing and decision-making in close collaboration with relevant stakeholders and the public. It aims to build acceptance, establish practical thresholds for tolerable risks and secure the implementability of chosen measures.

AIM

Risk governance principles do assess to find a coherent way of dealing with uncertainty and ambiguity, as well as creating resilient communities facing mountain risks. In view of the given differences between cultures and socio-economic settings in addition to individual factors, good risk governance should focus on common procedural requirements for different phases of risk governance, taking into account the state-of-the-art of both the Quantitative Risk Analysis QRA and the relevant aspects of risk perception and political systems and constraints. More effective risk management measures, as well as advances in knowledge transfer are required, which must incorporate the lessons learnt from prior disasters. To adopt risk management strategies for use by affected stakeholders, the following principles will be carefully considered:
(1) using the same methodological techniques for QRA recognised as legitimate and fair by the stakeholders.
(2) empowering and involving stakeholders (the potentially affected individuals and groups) appropriately and making decision-makers more accountable to them.
(3) creating the conditions for stakeholders to consider the relevant scientific evidence to meet their needs in an atmosphere of mutual respect and trust.
(4) producing practical decisions and strategies, flexible and open to revision with time.
(5) evaluating and monitoring the consequences of decisions, taking into account the stakeholders view to readjust decisions if necessary.

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(6) evaluating the actual information needs (especially geo-information) in view of the decision-making process

Some examples provide information on risk governance principles in contrast to risk management approaches, as described and already applied in Rhineland-Palatinate (Germany) by the 6th RFP "Multidimensional Integrated Risk Governance Concept". The following table explains the main governance principles which are measured qualitatively by a five steps methodology from "not started" to "fully improved". These principles are commonly accepted as learned from a survey of 25 existing international and national strategies:

Tab. 1 Risk governance principles

Keyword	Objective
Principles	Definition of guiding principles and a consistent "target system"
Trust	Atmosphere of mutual respect and trust between stakeholders and decision makers
Objectives	Definition of a comprehensive and obligatory understanding of the damage-protection-relation
Accountability principle	Each actor knows his responsibilities and acts accordingly
Justification	Justification of action in the area of risk management
Representation	Identification of all relevant social groups and their expectations
Access to information	Access for all stakeholders to the relevant information
Tolerance process & outcome	All involved stakeholder tolerate/accept the risk governance process and its outcomes
Dialogue	Establishment of custom discourse-processes concerning risk topics
Financial Resources	Allocation of sufficient financial resources for a successful risk governance process
Stuff Resources	Allocation of adequate staff resources
Role	Role of experts within the decision-making process has to be defined

Source: own table

CASE STUDIES

It is suggested, that risk governance as followed in other fields (refer to the International Risk Governance Council for more details: www.irgc.org) would enhance the acceptance of risk management measures and therefore might support the sustainable development of regions endangered to specific, or a combination of risks. Therefore, risk governance for natural hazards is considered as a new principle, following indeed attempts which have been partially adopted in different regions, but formalizing these attempts in a coherent and transferable manner.

This approach is currently also being applied by the Marie Curie Training Network "MOUNTAIN RISKS – from prediction to management and governance" in five different case study areas in Germany, France, Switzerland, Italy and Spain.

Keywords: Risk governance, trust, acceptability, natural hazards.