

Berne, December 14, 2012 | Myriam Steinemann, Jürg Füssler

iNFRA

Climate related risk and vulnerability assessments

Overview of methodological approaches in countries

Workshop on experiences with climate related risk and vulnerability assessments in Europe

09.00-9.30	Welcome and Introduction	Paul Filliger Inke Schauser
09.30-09.45	Methodological overview	Myriam Steinemann
09.45-10.25	Session 1: Methodological challenges with risk and vulnerability assessments	
	Climate change in Germany: Vulnerability and adaptation of climate sensitive sectors	Inke Schauser
	National assessment of the cost of the impact of climate change in France	Bertrand Reysset
10.25-10.55	Coffee break	
10.55-11.35	National risk analysis on disasters and emergence in Switzerland	Markus Hohl
	Assessment of climate-related risks and opportunities in Switzerland	Pamela Köllner-Heck
11.35-12.35	Discussion1	All
12.35-13.45	Lunch	All
13.45-14.55	Session 2: Further methodological challenges and way forward	
	UK Climate Change Risk Assessment 2012	Valerie Bain
	Map-based assessment of vulnerability to climate change	Stefan Fronzek
	Economics of Climate Adaptation	Lea Müller
14.55-15-10	Coffee break	
15.10-16.00	Discussion 2	All
16.00-16.15	Feedback and next steps	Pamela Köllner-Heck Inke Schauser
16.15	End of the workshop	

Seven methodological approaches

Assessing...	Impact	Risk	Vulnerability
FIN Map-based assessment of vulnerability			X
FRA National assessment of the cost of impact of climate change	X		X
GER: Vulnerability and adaptation of climate sensitive sectors	X		X
CH National risk analysis on disasters		X	
CH Assessment of climate related risks and opportunities		X	
UK Climate Change Risk Assessment		X	
ECA Economics of Climate Adaptation		X	

Types of assessment methodologies

Sector/hazard specific climate related risk/vulnerability assessments

FRA: Assessment of cost of impacts of climate change

FIN: Map-based assessments of vulnerability

Generic climate related risk/vulnerability assessments

GER: Vulnerability and adaptation of climate sensitive sectors

UK: Climate Change Risk Assessment

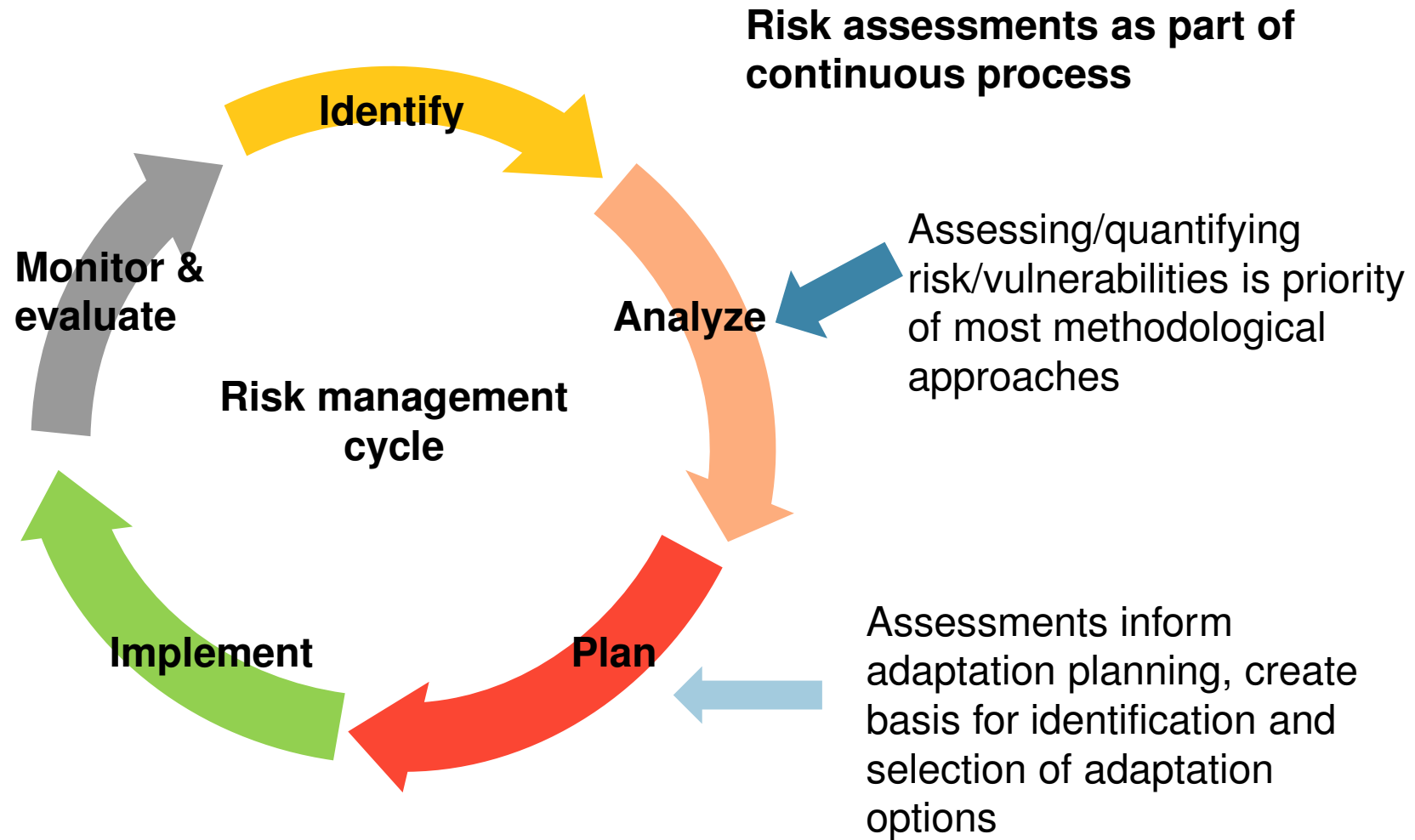
CH: Assessment of climate related risks and opportunities

ECA Economics of Climate Adaptation

Integrated risk/vulnerability assessments

CH: Risk analysis on disasters

Assessments as part of the risk management cycle



Other drivers of change

- Most approaches consider demographic changes and changes in economic development
- Other drivers of change such consumption patterns, land use changes etc. hardly considered

Adaptive capacity

- Not always considered at present stage, if so, mostly in selected sectors

Qualitative, semi-quantitative, quantitative

- Most approaches are quantitative (quantifying risks/impacts) with semi-quantitative elements
- No purely qualitative approach

Quantitative

e.g. monetary values, costs, economic losses

Semi-quantitative

Qualitatively described impacts/risks (e.g. by experts) are transformed in scores, classes (high/low/medium), monetary values etc.

Qualitative

Approaches considering non quantifiable impacts or losses (e.g. cultural values)

Methodological challenges

Methodological basis, elements

Scenario uncertainties (climate and socio-economic)

Data gaps, data inconsistencies

How to include expert judgements

Interactions between levels

Interactions between physical and socio-economic system/sectors

Consideration of vulnerability, adaptive capacity

Comparability of results between sectors

International impacts

Interface to policy level - making use of the results

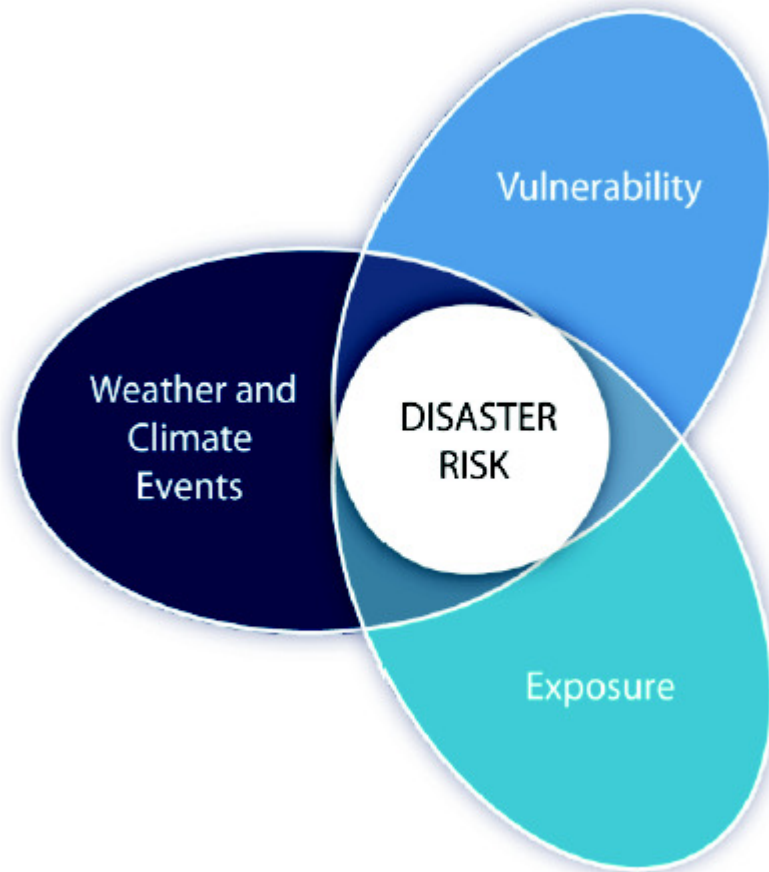
Assure understanding of method (incl. limitations) by stakeholders

Relevance, robustness of results for decision-making

Integration into policy and planning processes

Risk communication

Background IPCC SREX



Vulnerability: Propensity or predisposition to be adversely affected

Exposure: Presence of people, livelihoods, environmental services and resources, infrastructure or economic, social, or cultural assets in places that could be adversely affected

Disaster risk: Likelihood of severe alterations in the normal functioning of a community or a society due to hazardous physical events interacting with vulnerable social conditions