KOBE REPORT draft
Report of Session 2.5, Thematic Cluster 2

Visions of Risk and Vulnerability: Patterns, Trends, and Indicators

1. Summary of the session's presentations and discussions

Reducing Disaster Risk – a challenge for development (A. Maskrey, UNDP):
The increase in disaster losses and number of people affected compromises global development efforts. UNDP has create the global disaster risk index (DRI) in order to provide a tool for the implementation of disaster risk into development planning as a contribution to the achievement of the MDGs and the ISDR initiative. The DRI calculates the relative human vulnerability to three hazard types (floods, tropical cyclones, earthquakes) using mortality statistics as a proxy. The DRI has been developed to facilitate the prioritization of resource allocation in the context of risk reduction efforts within development. However, the DRI comes with limitations, using fatality as the main parameter that measures vulnerability. In addition the development of the DRI is only based on hazard statistics between 1980 and 2000 which is not representative for large events.

Natural Disaster Hotspots: A Global Risk Analysis (Maxx Dilley, IRI):
The HOTSPOT project also created a relative, global risk index that is based on mortality as well as economic aspects. This indicator has been determined for six hazard types (drought, earthquakes, floods, landslides, storms, volcanoes, and the aggregation thereof). The incentive for the development of this relative risk indicator is to make risk visible and to stress the need to address risk reduction rather than emergency response. At the same time the indicator shall help to prioritize resources and target risk assessment activities. Like the DRI limitations can be found in the data quality and quantity, as well as the limited number of risk components (mortality, economic only) reflected in this methodology.

Indicators of Disaster Risk and Risk (Omar Cardona, University of Colombia):
A more encompassing tool for disaster risk management at the national level is proposed that acknowledges the need to address not only physical damage but also social and institutional factors. The proposed system of indicators have been developed in order to better visualize risk and to be able to assess the effectiveness of both corrective and prospective mitigation measures. The main limitation this approach is facing lies in the scarcity and availability of data.

A Systemic Approach to the Management of Risk (Reza Lahidji, OECD):
Based on practices in developed countries the OECD emphasizes the need for a systemic approach to risk management. This initiative is applicable to all hazards and attempts to address the changing risk landscape. A systemic risk is the combination of a hazard, vulnerabilities, transmission mechanisms, and responses. The approach that has been developed is issue-oriented and based on specific case studies.

Coping Capacity: Overcoming the black hole (Peter Billing, Ulrike Madengruber, ECHO):
A Coping Capacity Index (CCI) has been developed to support tool for the assessment of global needs of a country and as a strategic planning tool for humanitarian aid. The assessment of coping capacities is fundamental to reach a thorough understanding of a country's overall vulnerability to natural disasters. Coping capacity is not directly measurable and the data availability of the proxy indicators used is limited. Further research and refinement of methodology is necessary to incorporate also the social/cultural, institutional, and operational aspects of coping capacity.

2. Primary issues

- Indicators can be a basis for disaster management but they can also be used to communicate risk and thereby create risk awareness. However, different cultural values and risk perceptions can lead to misinterpretations of indicators. The use of indicators is dependant on their inherent spatial and temporal scale as well as their targeted user.

- Uncertainty and methodological limitations of the indicators have to communicated and incorporated into the decision making process.

- The loss data used for vulnerability assessment has to be put in context with the intensity of the underlying disaster.

- There is a need to work towards a common understanding of terminologies and concepts.

3. Suggested targets and indicators to measure accomplishments
The objectives of this session were:

Session Objectives	Accomplishment	rating
To share new knowledge and information on global risk and vulnerability patterns and trends as well as existing applications (i.e. existing indicators and indexing at the global and regional level).	Key research on indicators were presented in the first part of the session. As a result, comments and questions were solicited from the floor which in turn were addressed by the panel.	high
To raise awareness of the systemic approach to risk shifting the mindset to address the changing risk landscape, to ensure that institutions are able to keep pace with changing vulnerabilities	An expert presentation informed the audience about the systemic risk approach and the changing risk landscape. This together with the questions from the floor reflect an increase of awareness.	High
To identify and discuss various ways and gaps of risk and vulnerability assessment	The lively panel discussion with active participation of the floor lead to the identification of gaps, needs, and limitations of risk and vulnerability assessment.	High

4. Name, affiliation and contacts of presenters and titles of presentations

Speaker	e-mail	Presentation Title
Andrew Maskrey, UNDP	andrew.maskrey@undp.org	UNDP/UNEP Disaster Risk Index
Maxx Dilley, IRI Colombia University	mdilley@iri.columbia.edu	ProVention/World Bank Hotspots Project
Omar Cardona, National University of Colombia	ocardona@uniandes.edu.co	Interamerican Development Bank Indicators for the Americas Project
Reza Lahidji, OECD	reza.lahidji@oecd.org	A Systemic Approach to Risk
Peter Billing, ECHO	Peter.Billing@cec.eu.int	Coping Capacity: overcoming the black hole

Name, affiliation and contact of person filling in the form:

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