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# Making Disaster Reduction an Adaptation Policy

*Reid Basher, ISDR Secretariat, Geneva*

- ❑ Disasters, climate and development
- ❑ Hyogo Framework for Action 2005-2015
- ❑ Early warning systems example
- ❑ Linking the disaster reduction and adaptation fields
- ❑ Issues and steps for the future



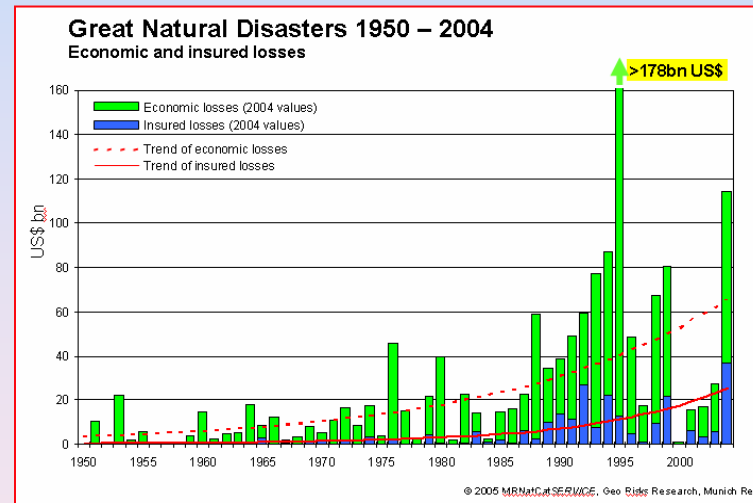
# Disaster characteristics



Over last decade: 900,000 dead, US\$ 570B losses, 2,600 million people affected, Most disasters are weather or climate related

**Disasters on the rise;  
1990s versus 1960s**

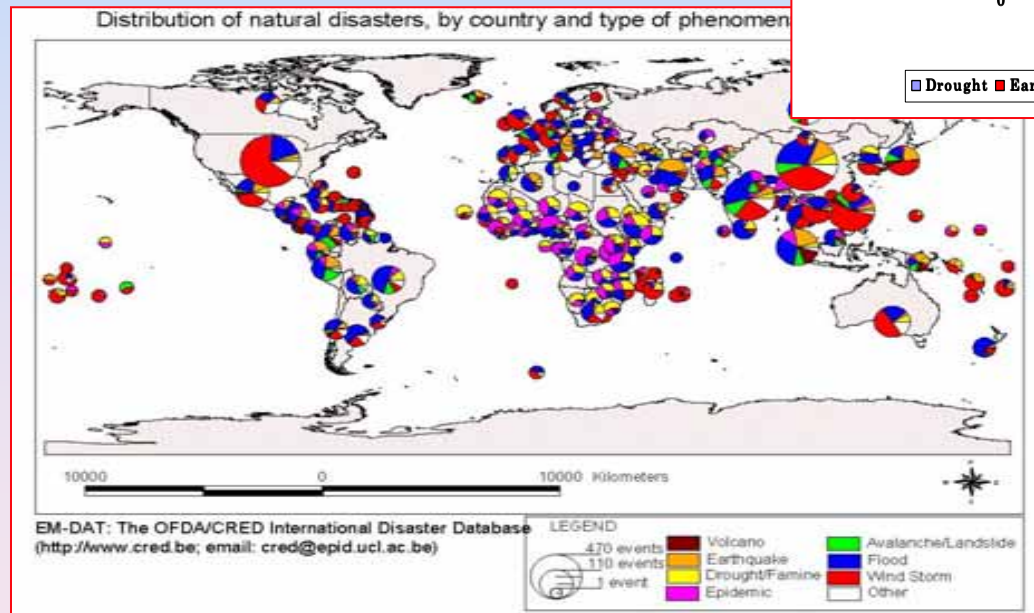
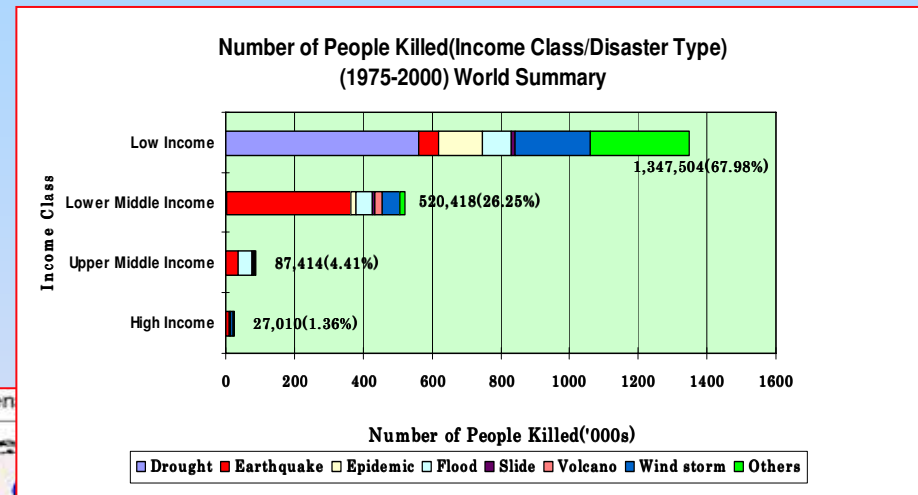
<b>Number of events</b>	<b>2.3</b>
<b>Economic losses</b>	<b>7.0</b>
<b>Insured losses</b>	<b>15.7</b>



# Disaster risk and development

The poor are the most vulnerable to natural hazards ....

Low income  
Lower-middle income  
Upper-middle income  
High income

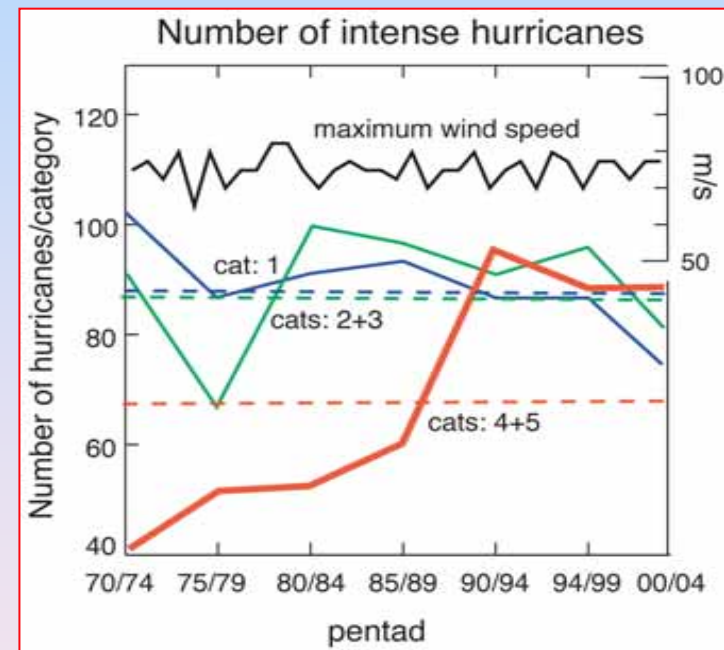


.... but the rich also face enormous potential economic losses

# Role of climate change in disasters?

(Where “climate change” is as defined by the UNFCCC - caused by humans.)

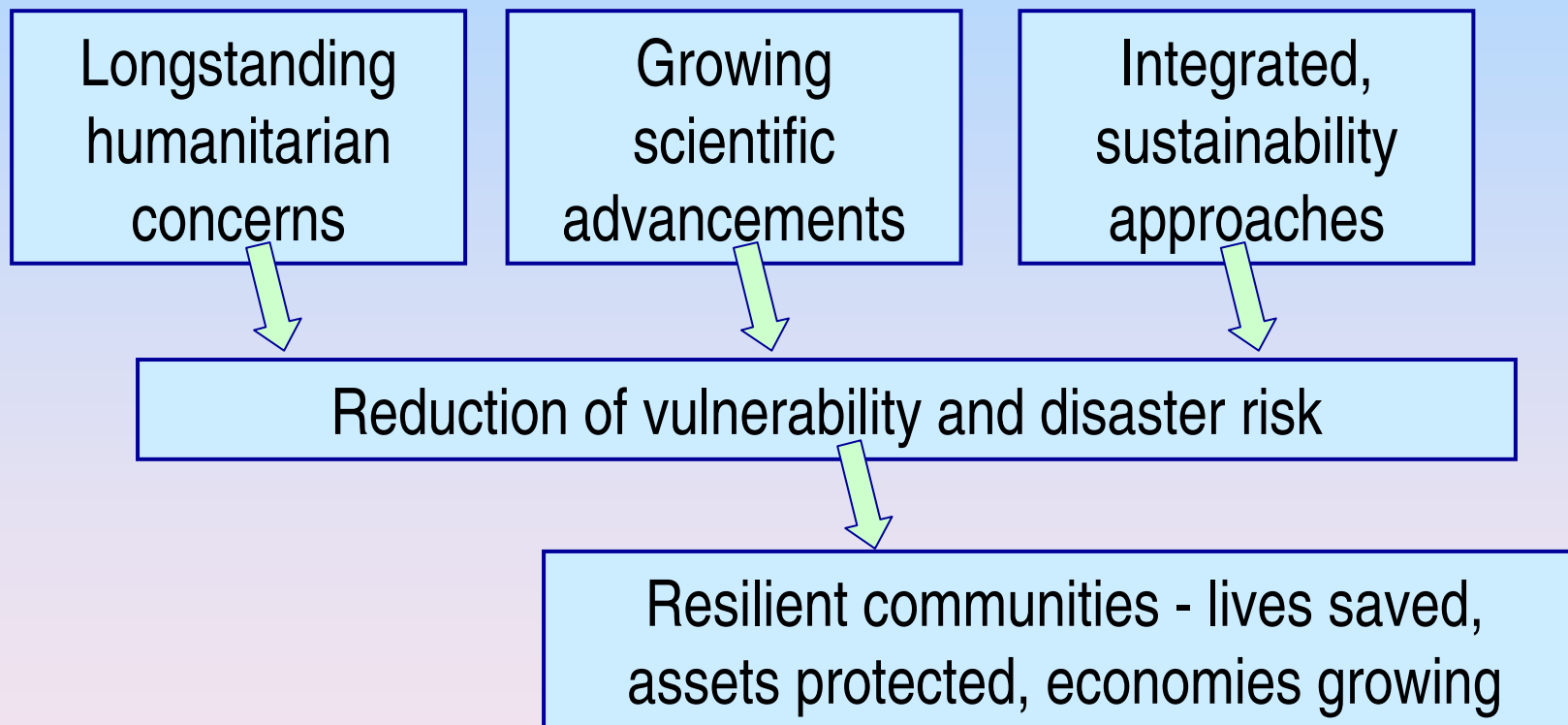
- ❑ Not the main source of the disaster rise, but...
- ❑ IPCC projections for warmer and more extreme weather
- ❑ Observed rises in temperatures, sea levels and rainfall intensities - likely to be playing a role in some disasters (e.g. 2003 heatwaves, hurricane Katrina)



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# Disaster Reduction

Major thematic shift in approach - from relief to sustainable development



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# Disaster reduction - practical actions to reduce vulnerabilities to natural hazards



- ❑ Map and avoid high risk zones
- ❑ Build hazard-resistant structures and houses
- ❑ Protect and develop hazard buffers (forests, reefs, etc)
- ❑ Develop culture of prevention and resilience
- ❑ Improve early warning and response
- ❑ Ensure that development policies and plans actively contribute to these goals

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# Disaster reduction as adaptation tool

- ❑ Similar policy goals, sectors, stakeholders, tools
- ❑ More-extreme events - disproportionate changes in impacts and risks of disaster (non-linearities) – especially if no risk management in place
- ❑ No-regrets: capacity needs for future weather risks are similar to those for today's risks
- ❑ Disaster reduction and risk management provide vehicles for mainstreaming adaptation into development



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# Hyogo Framework for Action 2005-2015

## *Building the resilience of nations and communities to disasters*

Agreed through an open ended inter-governmental process concluded at the World Conference on Disaster Reduction, Kobe, Hyogo, Japan, 18 – 22 January, 2005

### Strategic goals

- Disaster reduction as part of sustainable development
- Strengthen institutions (especially in communities) to build resilience
- Build risk reduction into emergency management and recovery



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# Hyogo Framework for Action 2005-2015

*Building the resilience of nations and communities to disasters*

## Priorities for action

- 1) Disaster risk reduction as a priority with strong institutional basis for action
- 2) Identify, assess and monitor disaster risks and enhance early warning
- 3) Knowledge, innovation, education for culture of safety and resilience
- 4) Reduce the underlying risk factors
- 5) Strengthen disaster preparedness for effective response

## Implementation and follow-up

- ❑ Primary role of the state; supporting roles for international and regional organisations, ISDR secretariat
- ❑ Monitoring and reporting, and indicators of progress in risk reduction
- ❑ Resources needs



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# Climate change in the Hyogo Framework

- ❑ States agreed to reduce disaster risk posed by climate change (Section 4.i.c) through:
  - Identification of climate-related risk
  - Design of specific risk reduction measures
  - Improved and routine use of climate risk information by planners, engineers and other decision makers
- ❑ States agreed to integrate disaster reduction and adaptation to climate change (IV.B.g)
- ❑ To mobilize resources, States agreed to mainstream disaster risk reduction into development and climate adaptation (IV.F.c)

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# Strengthened ISDR System - to support HFA

- ❑ “Global Platform for Disaster Reduction” (meets April/May 2007) for wider participation for governments and other stakeholders (development banks, UN, regional bodies, NGOs, private sector, etc)
- ❑ “National platforms for risk reduction”
- ❑ Integrated joint work plan on priority issues by ISDR partners
- ❑ Groupings (clusters, platforms, etc) to address regional interests and specific thematic topics (like environment)
- ❑ Science committee and panels
- ❑ Systematic approaches - guidance products, tools etc; monitoring of progress (with indicators and benchmarks), databases on initiatives and commitments; tracking of resources invested



# Roundtable on Indian Ocean Tsunami Warning and Response Systems, Bonn, Germany, 27 March 2006

*A good example of ISDR System multi-partner initiative*

- ❑ Review of progress and needs
- ❑ Coordinated package offered to assist up to 10 Governments
- ❑ Build on/support existing efforts
- ❑ Two-step approach – national plans, then implementation



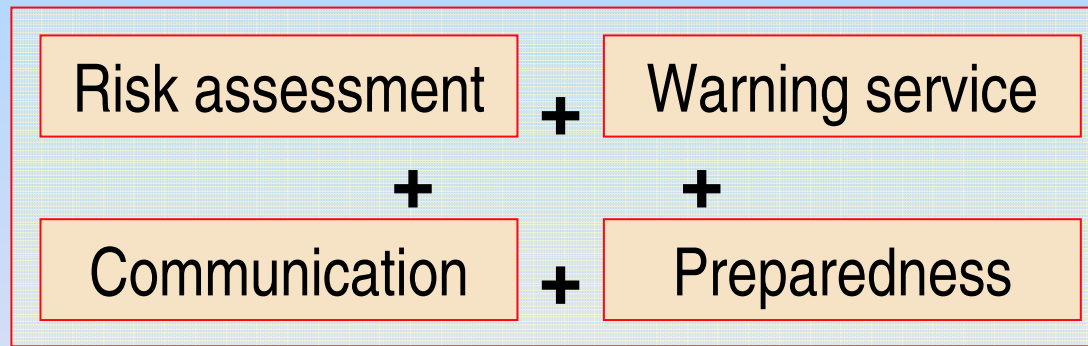
# Early warning – taking a broader view

*Provide early warning and foresight of hazards and ... Declining environmental state? Risk-raising development projects? Social communications and capacity weaknesses? Trends in markets, migration, conflict, health vulnerability?*

<u>Element</u>	<u>-Hour-Day-Week-Month-Year-Decade</u>				
Seismic risk, tsunami	XXXX				
Weather, oceans, floods, soils	XXXXX		XXXXX		
Reservoirs, snow pack		XXXXXXXXX			
People exposed, conflict, migration		XXXXXX			
Crop production, prices, reserves, food aid		XXXXXX			
Environmental management			XXXXXXXXX		
Industry, urban, infrastructure design			XXXXXX		
Land use planning, climate change				XXXXXX	



# The four components of systematic people-centred early warning systems



- ❑ EW systems typically fail in the communication and preparedness elements
- ❑ In Hurricane Katrina, the risk knowledge also failed to effectively penetrate public and policymaker consciousness
- ❑ With the Indian Ocean tsunami, failures occurred in all four elements

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# Global survey of EW systems – main results\*

- ❑ Many gaps and shortcomings in EW systems, especially in developing countries
- ❑ Dissemination, preparedness and response is the weakest link worldwide
- ❑ Weaknesses in political commitment, EW institutions, and public participation
- ❑ BUT great capacities upon which to base a globally integrated system

*\* Report was requested by UN Secretary General Kofi Annan and was released at 3rd International Early Warning Conference, Bonn, March, 2006*



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# Five recommendations of global survey

- 1. Develop a globally comprehensive EW system, rooted in existing early warning systems and capacities*
- 2. Build national people-centred early warning systems*
- 3. Fill the main gaps in global early warning capacities*
- 4. Strengthen the scientific and data foundations for early warning*
- 5. Develop the institutional foundations for a global early warning system*

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# ISDR initiatives on climate change adaptation

- ❑ ISDR Working Group on Climate Change and Disaster Risk Reduction
- ❑ Paper on terms and concepts to bridge understanding between both communities (to be launched at COP 12)
- ❑ Collaboration with VARG: position paper and country studies of disaster policies and institutions for adaptation (Kenya, Mexico, Vietnam)
- ❑ Paper on disaster risk reduction tools useful for climate change adaptation (presented at side event COP 11)
- ❑ Production of *DR+CC Infolink* newsletter
- ❑ Support to UNFCCC workshops on vulnerability, risk assessment and adaptation



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# Issues and next steps – disasters and adaptation

- ❑ Lack of attention to disaster risk reduction in convention processes – this is a major gap
- ❑ Direction has been provided by governments in the Hyogo Framework and needs to be acted upon
- ❑ High potential for synergy in mainstreaming between the two fields
- ❑ Methodologies and tools are available but much to be done to shape them to adaptation purposes

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# Overall conclusions

- ❑ Intimate linkages between disaster reduction and adaptation
- ❑ Clear need for more coherence and mutually reinforcing policies
- ❑ Adaptation agenda needs to adopt goal of “resilience building”
- ❑ Priority for disaster risk assessment and early warning capacities
- ❑ Immediate tasks - building bridges, sharing information, developing institutional capacities and policy tools especially at national level



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