Shaping policy for development

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Lives, livelihoods and wealth creation: Disaster risk management beyond 2015

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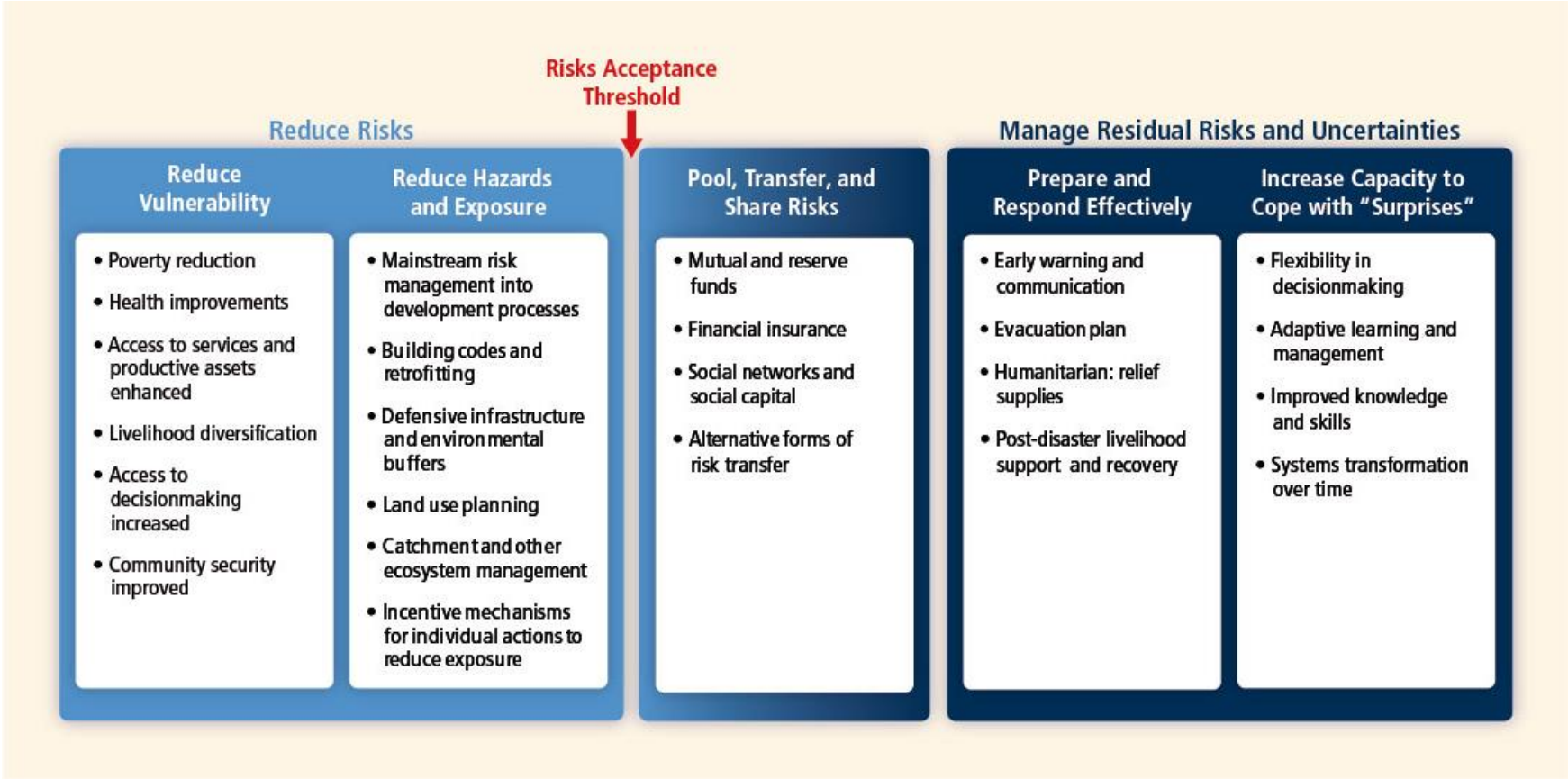
28th January 2014

Overview

- Introduction: The 3rd Age of Disaster Risk Management
- A 2015 and beyond vision for disaster risk management
- Conclusions

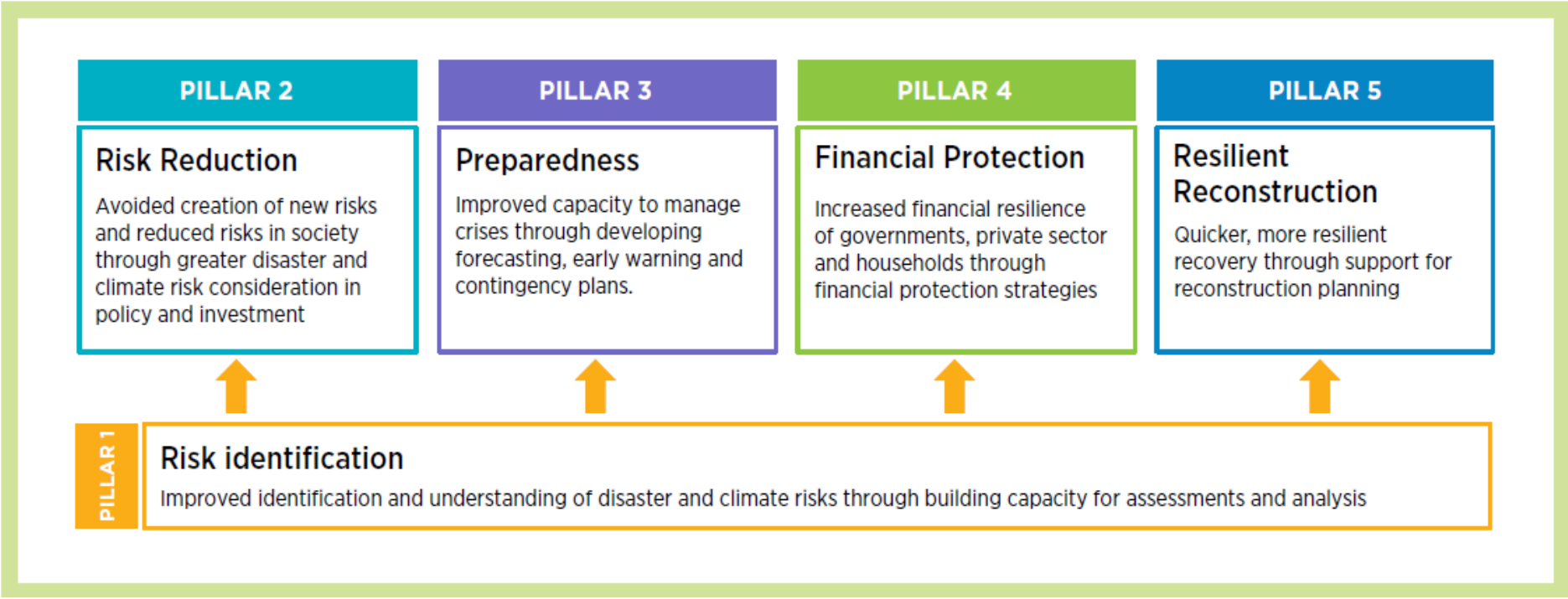
The 3rd Age of Disaster Risk Management

The 3rd Age of Disaster Risk Management



Source: IPCC SREX (2012) Chapter 6

The 3rd Age of Disaster Risk Management



Source: World Bank (2013)

The 3rd Age of Disaster Risk Management

	Infancy	Adolescence	Maturity
Policy Framework	International Decade for Natural Disaster Reduction	Hyogo Framework for Action	Beyond 2015 Landscape
Narrative	Moving beyond relief	Saving lives, early action avoids losses	Pillar of wealth creation, livelihood protection, poverty alleviation
Risk	Civil protection	Disaster risk management as a sector, or standalone concern	A fused approach to risk management across government: conflict, climate + disasters
Assessment	Hazard Science, infrastructure solutions	Vulnerability assessments, community-solutions	Joint modelling of the future: Hazard, exposure, vulnerability hand-in-hand,
Leadership	UN-led	UN/Government-led	All actors, with governments, regional organisations, households and private sector prominent
Finance	Large scale, response investments (flood protection)	Off-budget, often donor-led projects	On budget, domestic finance led

A vision for disaster risk management – 2015 and beyond

Beyond the Hyogo Framework for Action

Member state priorities for beyond 2015 DRM framework

		% of member states
1=	Disaster risk management needs to involve everyone, particularly including women, children, civil society and private sector in national systems	35
1=	Local capacity should be increased	35
3	Good practice knowledge should be shared	27
4	National plans/development strategies should integrate risk management	18
5=	Public awareness must be improved	15
5=	Accountability/clearer metrics should support action	15
7	Access to early warnings must be timely and equitable	11

Source: Mountfort, ODI (2013)

The 3rd Age of Disaster Risk Management

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2015 and beyond

1. **Policy Framework: Beyond 2015 landscape, looking to 2030**
2. Narrative: Pillar of wealth creation, livelihood protection, poverty alleviation
3. Risk: A fused approach to risk management embedded across government: conflict, climate + disasters
4. Assessment: Joint modelling of the future: Hazard, vulnerability and exposure hand-in-hand
5. Leadership: All actors with government, regional organisations, private sector and households prominent
6. On budget, domestic resources-led

UNISDR
The United Nations Office for Disaster Risk Reduction

More information on the post-2015 process:
http://www.preventionweb.net/posthfa/

Towards a post-2015 DRR Framework

- Requested by the UN General Assembly Resolution A/RES/66/199
- UNISDR is facilitating a multistakeholder consultation process and engages a full range of actors from Member States to civil society.
- Consultation events include the Global and Regional Platforms, national and local events, and targeted events of stakeholders, partners and networks.
- Builds on the *International Framework for the International Decade for Natural Disaster Reduction of 1989, the Yokohama Strategy and Plan of Action of 1994, the International Strategy for Disaster Reduction of 1999, the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters (HFA), and the Mid-Term Review of the HFA (2010-2011).*
- Expected to be adopted at the Third UN World Conference on Disater Risk Reduction and endorsed by the UN General Assembly in 2015.

2013

Consultations started in March 2012 (with some 89 events up to the Global Platform) through 2013...

MINISTERIAL CONFERENCES AND REGIONAL PLATFORMS ON DISASTER RISK REDUCTION

- Feb 13-15 : Africa (Arusha, Tanzania)
- Mar 19-21 : Arab States (Aqaba, Jordan)
- Sep 23-25 : Europe (Oslo, Norway)

MAY 19-23
Global Platform for Disaster Risk Reduction (Geneva, Switzerland)

SEP-NOV
UN Secretary-General's Report and UN General Assembly Resolution on the *International Strategy for Disaster Reduction*

2014

... and continues in 2014

MINISTERIAL CONFERENCES AND REGIONAL PLATFORMS ON DISASTER RISK REDUCTION

- Apr/May : Europe (Brussels, Belgium)
- May 6-8: Arab States (Sharm El-Sheikh, Egypt)
- May 27-29 : Americas (Guayaquil, Ecuador)
- May/Jun : Africa (TBC)
- Jun 23-26 : Asia (Bangkok, Thailand)
- Jun : Pacific (TBC)
- Oct : Europe (Madrid, Spain)

JUL 14-15
1st Preparatory Committee Meeting (Geneva, Switzerland)
Subject to an anticipated decision of the UN General Assembly in 2013

NOV 17-18
2nd Preparatory Committee Meeting (Geneva, Switzerland)
Subject to an anticipated decision of the UN General Assembly in 2013

SEP-NOV
UN Secretary-General's Report and UN General Assembly Resolution on the *International Strategy for Disaster Reduction*

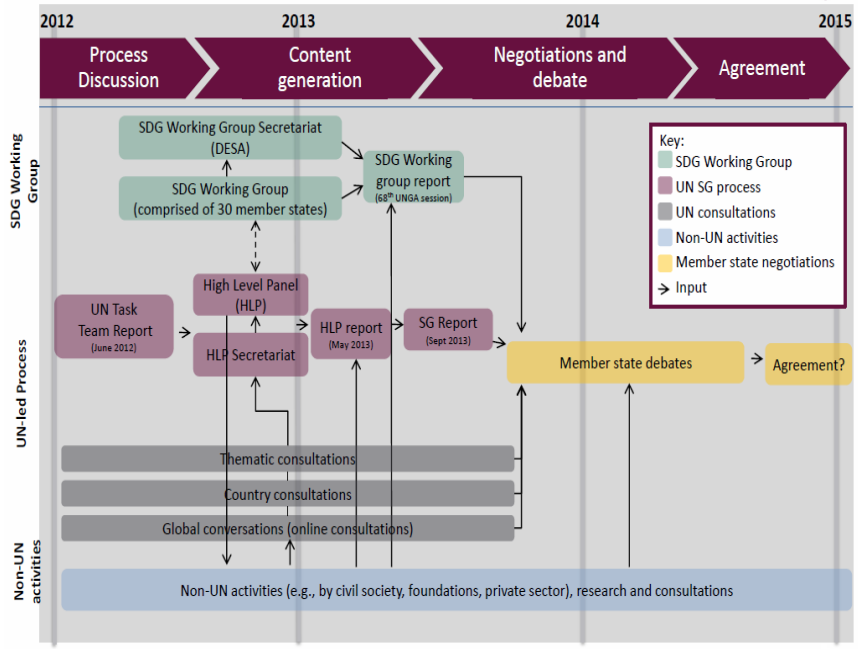
2015

MAR 14-18 / SENDAI, JAPAN
The Third UN World Conference on Disaster Risk Reduction will review the implementation of the Hyogo Framework for Action and is expected to adopt a successor framework for disaster risk reduction.

SEP-NOV
UN Secretary-General's Report and UN General Assembly Resolution on the *International Strategy for Disaster Reduction*. The UN General Assembly Session will also consider the post-2015 disaster risk reduction framework for endorsement.

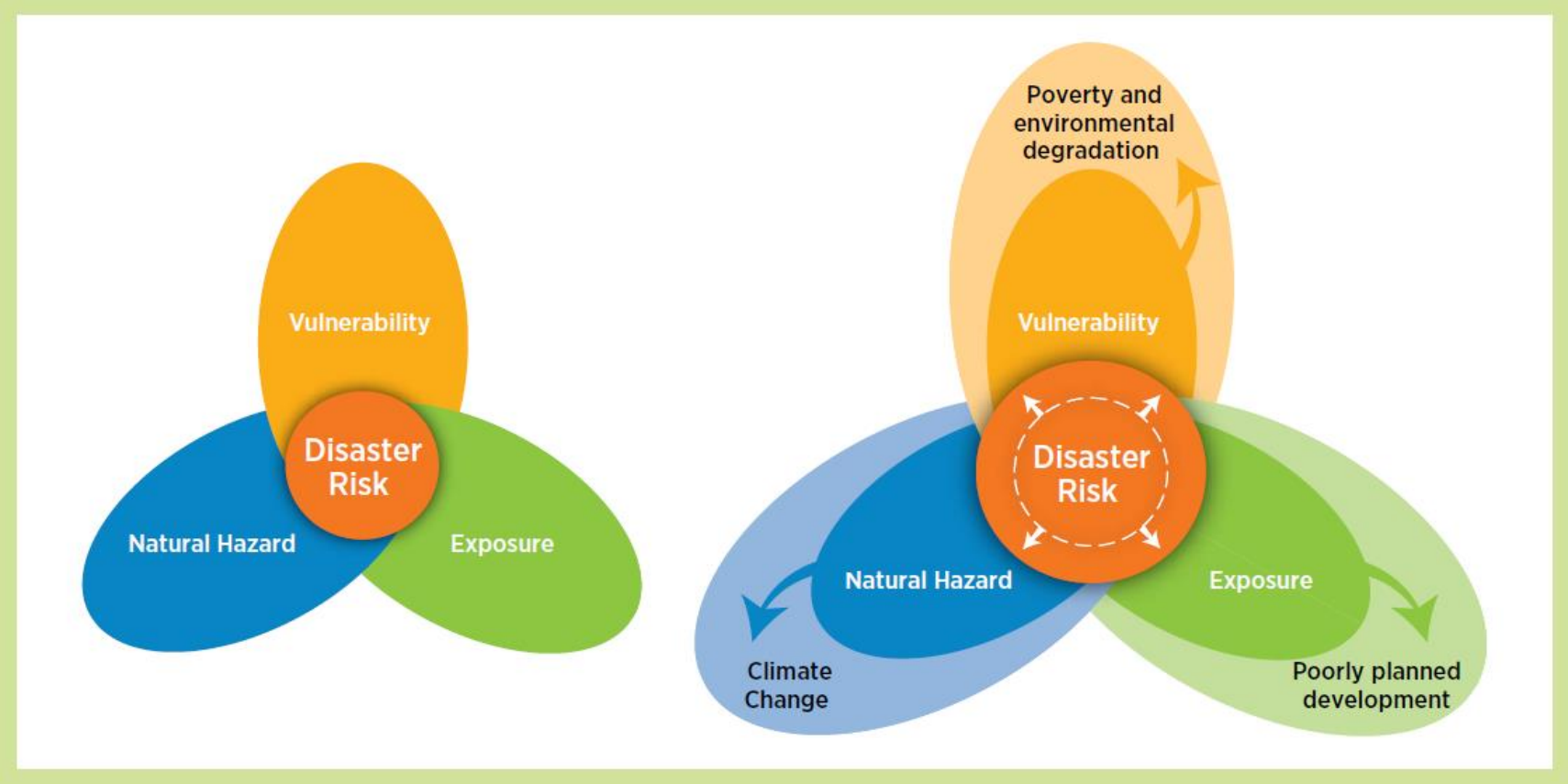
Version: 30 October 2013
More information on UNISDR:
http://www.unisdr.org

Processes that are providing input into the post-2015 dialogue



Source: UNF and Dalberg analysis

Looking to 2030

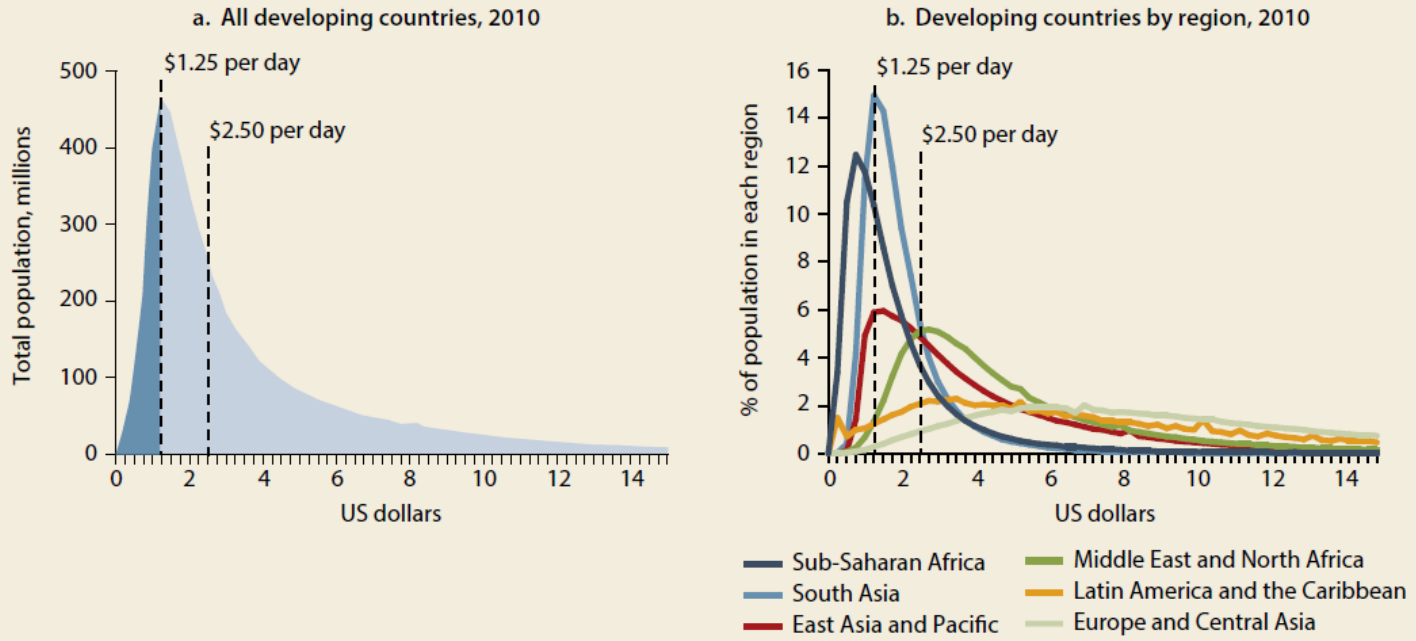


Source: IPCC (2012), World Bank (2013)

Disasters and impoverishment

FIGURE 1 *Many people around the world are poor or live very close to poverty; they are vulnerable to falling deeper into poverty when they are hit by negative shocks*

More than 20 percent of the population in developing countries live on less than $1.25 a day, more than 50 percent on less than $2.50, and nearly 75 percent on less than $4.00.



Source: WDR 2014 team based on data from World Bank PovcalNet (database).

Source: WDR (2013)

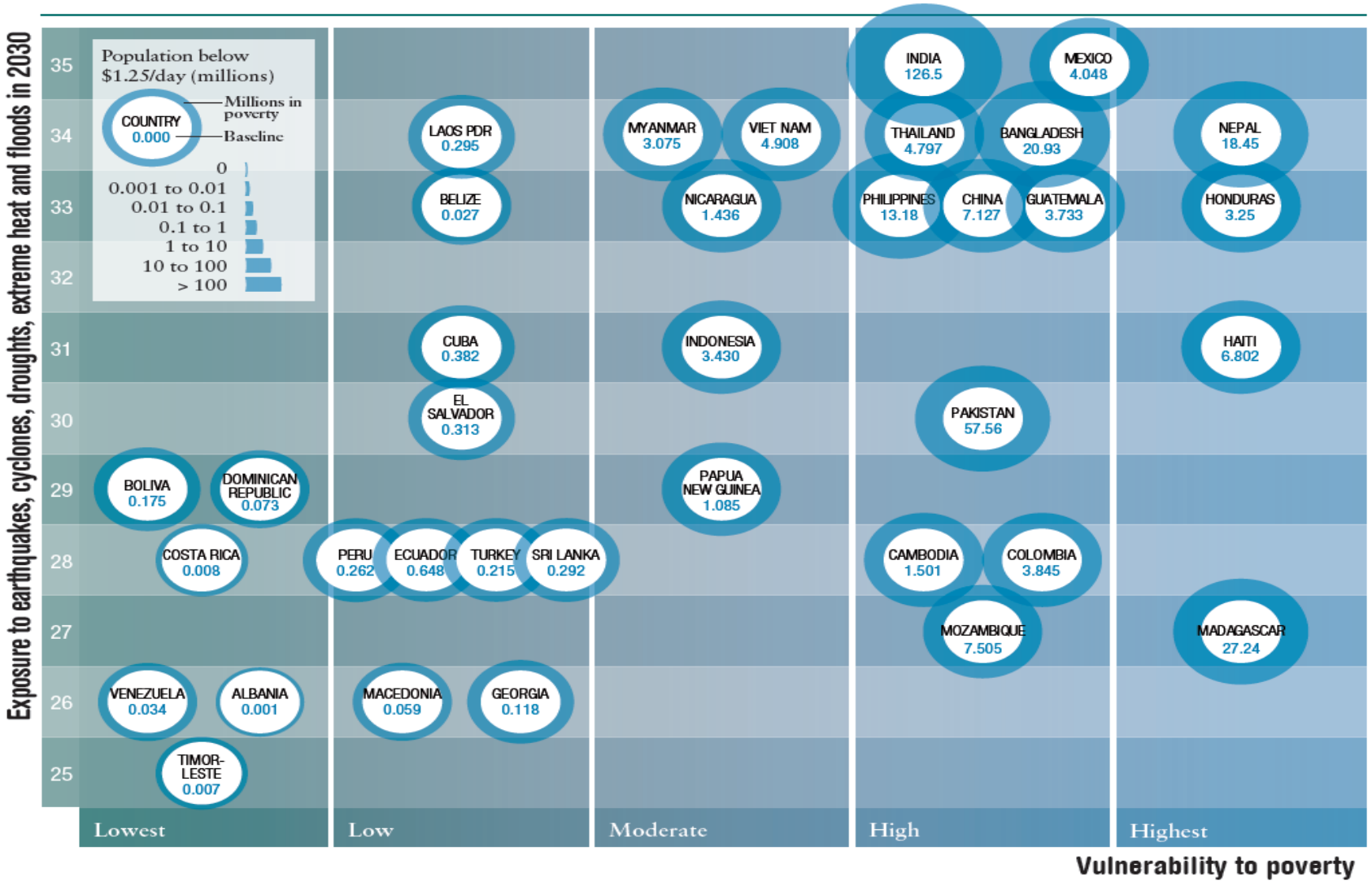
EXECUTIVE SUMMARY

The geography of poverty, disasters and climate extremes in 2030

Andrew Shepherd (ODI)
Tom Mitchell (ODI)
Kirsty Lewis (UK Met Office)
Amanda Lenhardt (ODI)
Lindsey Jones (ODI)
Lucy Scott (ODI)
Robert Muir-Wood (RMS)

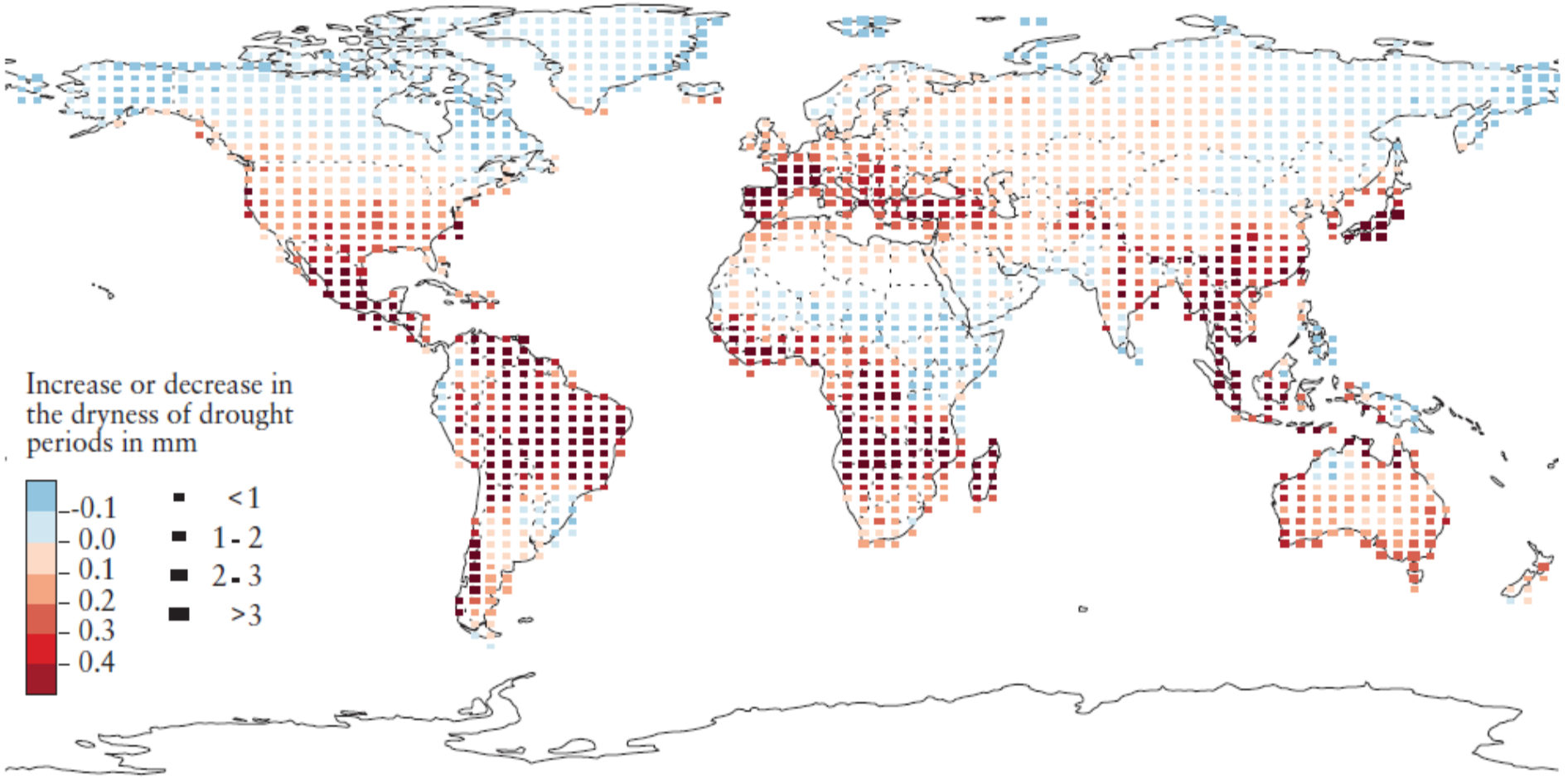
October 2013

Figure A: Projected poverty levels in 2030 in countries ranking highest on the multi-hazard (earthquakes, cyclones, droughts, extreme heat and floods) index[5]



NOTE: The figure shows a set of countries with the highest exposure to the five hazards in 2030, plotted against their 'vulnerability to poverty', which is a measure of the risk they face of future poverty when presented with shocks, such as 'natural' disasters (see Chapter 2). The circles indicate projected poverty numbers for each of the countries in 2030 assuming a baseline projection. This graphic does not account for the capacity of each country to manage disaster risk, which is why the countries plotted here differ from the lists of countries highlighted in the text.

Figure D: Projected change in the global drought hazard indicator between 1971-2000 and 2021-2050



NOTE: The drought hazard indicator is a measure of how exposed an area is to droughts. This is measured as the deficit in rainfall during periods when the rainfall is below average, i.e. when rainfall is below average, how dry it is. The absolute measure of drought by this means is the shortfall of precipitation, compared to the mean precipitation at the time of year, in an average dry spell. The figure shows the change in drought by highlighting the increase or decrease in the dryness of drought periods, in mm. Blue squares indicate that droughts are getting less severe, red,

Table 2: Projected changes in temperature and precipitation extremes, including dryness, in Asia

Table 2 shows projected changes in temperature and precipitation extremes, including dryness, in Asia. The projections are for the period 2071-2100 (compared with 1961-1990) or 2080-2100 (compared with 1980-2000) and are based on GCM and RCM[12] outputs run under the A2/A1B emissions scenario.

Region and Sub-region	Trends in maximum temperature (the frequency of warm and cold days)[13]	Trends in minimum temperature (the frequency of warm and cold nights)[14]	Trends in heat waves/ warm spells[15]	Trends in heavy precipitation (rain, snow)[16]	Trends in dryness and drought[17]
North Asia	Likely increase in warm days (decrease in cold days)	Likely increase in warm nights (decrease in cold nights)	Likely more frequent and/or longer heat waves and warm spells	Likely increase in heavy precipitation for most regions	Inconsistent change
Central Asia	Likely increase in warm days (decrease in cold days)	Likely increase in warm nights (decrease in cold nights)	Likely more frequent and/or longer heat waves and warm spells	Inconsistent signal in models	Inconsistent change
East Asia	Likely increase in warm days (decrease in cold days)	Likely increase in warm nights (decrease in cold nights)	Likely more frequent and/or longer heat waves and warm spells	Increase in heavy precipitation across the region	Inconsistent change
Southeast Asia	Likely increase in warm days (decrease in cold days)	Likely increase in warm nights (decrease in cold nights)	Likely more frequent and/or longer heat waves and warm spells Low confidence in changes for some areas	Inconsistent signal of change across most models (more frequent and intense heavy precipitation suggested over most regions)	Inconsistent change
South Asia	Likely increase in warm days (decrease in cold days)	Likely increase in warm nights (decrease in cold nights)	Likely more frequent and/or longer heat waves and warm spells	Slight or no increase in %DP10 index More frequent and intense heavy precipitation days over parts of S. Asia	Inconsistent change
West Asia	Likely increase in warm days (decrease in cold days)	Likely increase in warm nights (decrease in cold nights)	Likely more frequent and/or longer heat waves and warm spells	Inconsistent signal of change	Inconsistent change
Tibetan Plateau	Likely increase in warm days (decrease in cold days)	Likely increase in warm nights (decrease in cold nights)	Likely more frequent and/or longer heat waves and warm spells	Increase in heavy precipitation	Inconsistent change

Figure 2: Projected return period (in years) of late 20th century 20-year return values of annual maximum (a) of the daily maximum temperature; and (b) 24-hour precipitation rates[18]

(a) Temperature

These graphs show how often the hottest day in the last 20 years of the 20th century will be experienced by the middle and end of the 21st century. These are shown under three different emissions scenarios: B1, A1B and A2.[19] For example, in Western Asia, the hottest day experienced in the last 20 years at the end of the 20th century will occur annually or biannually by 2046-65. So what are now considered temperature extremes will become much more like 'normal' temperatures in less than 50 years time.

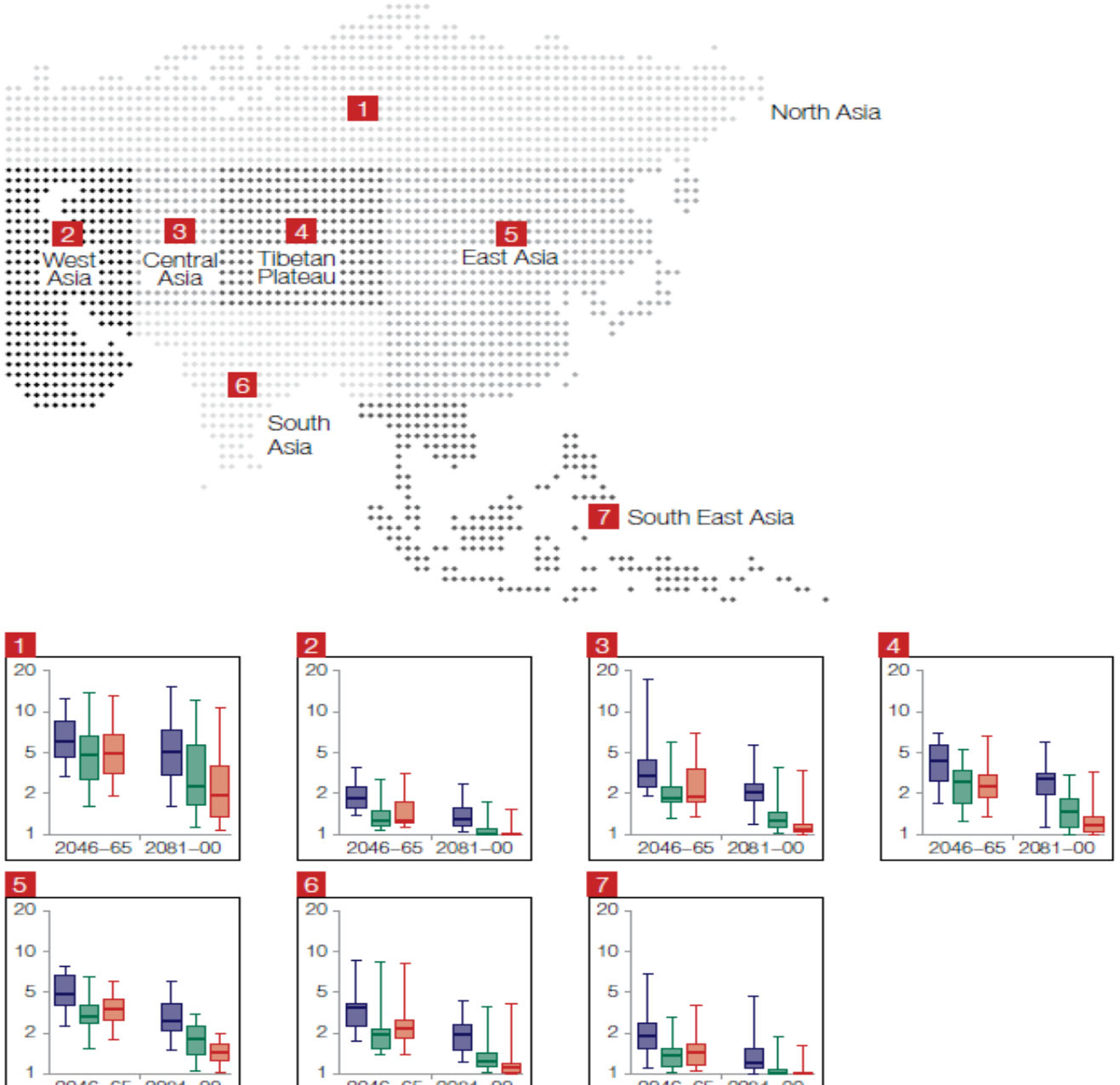
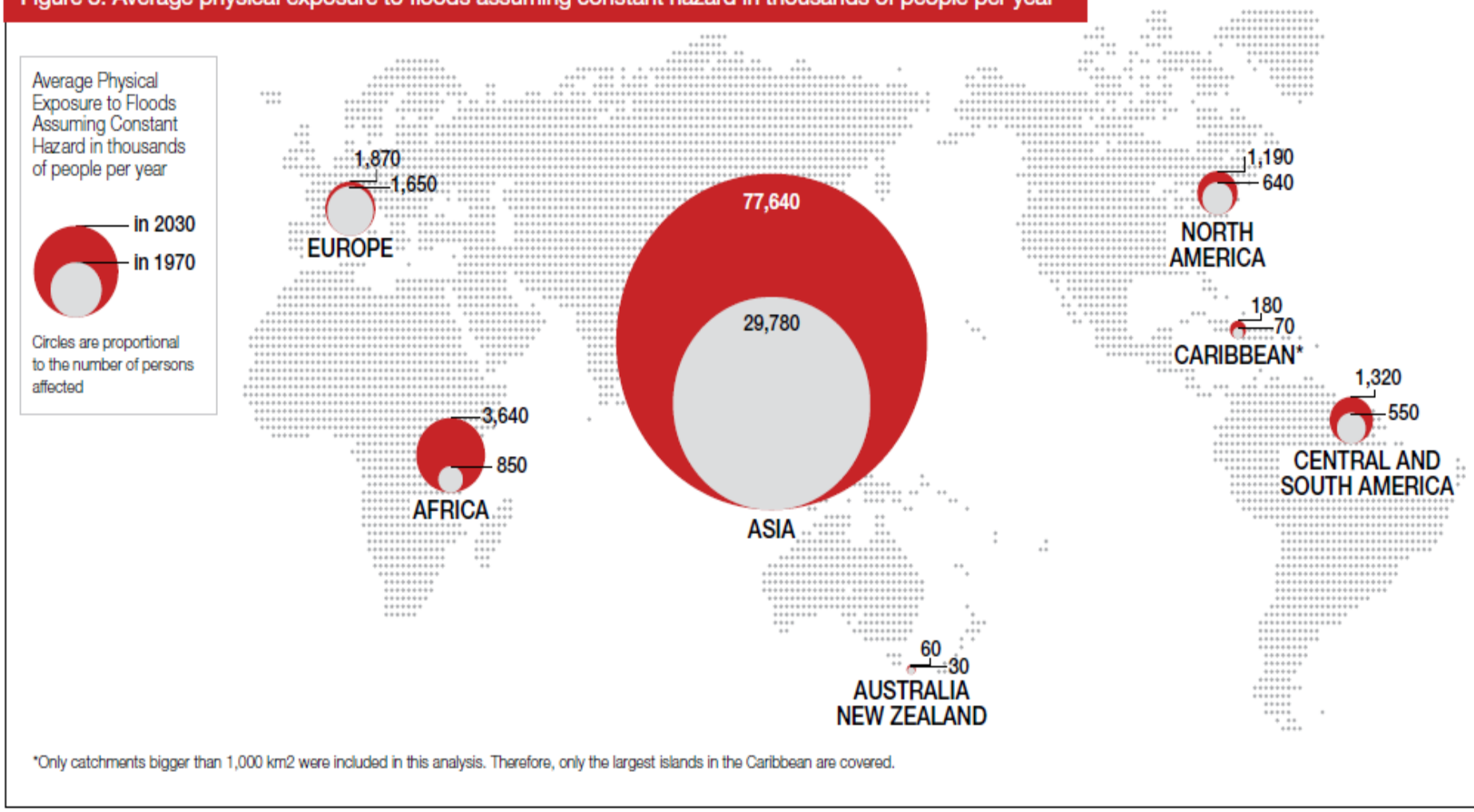


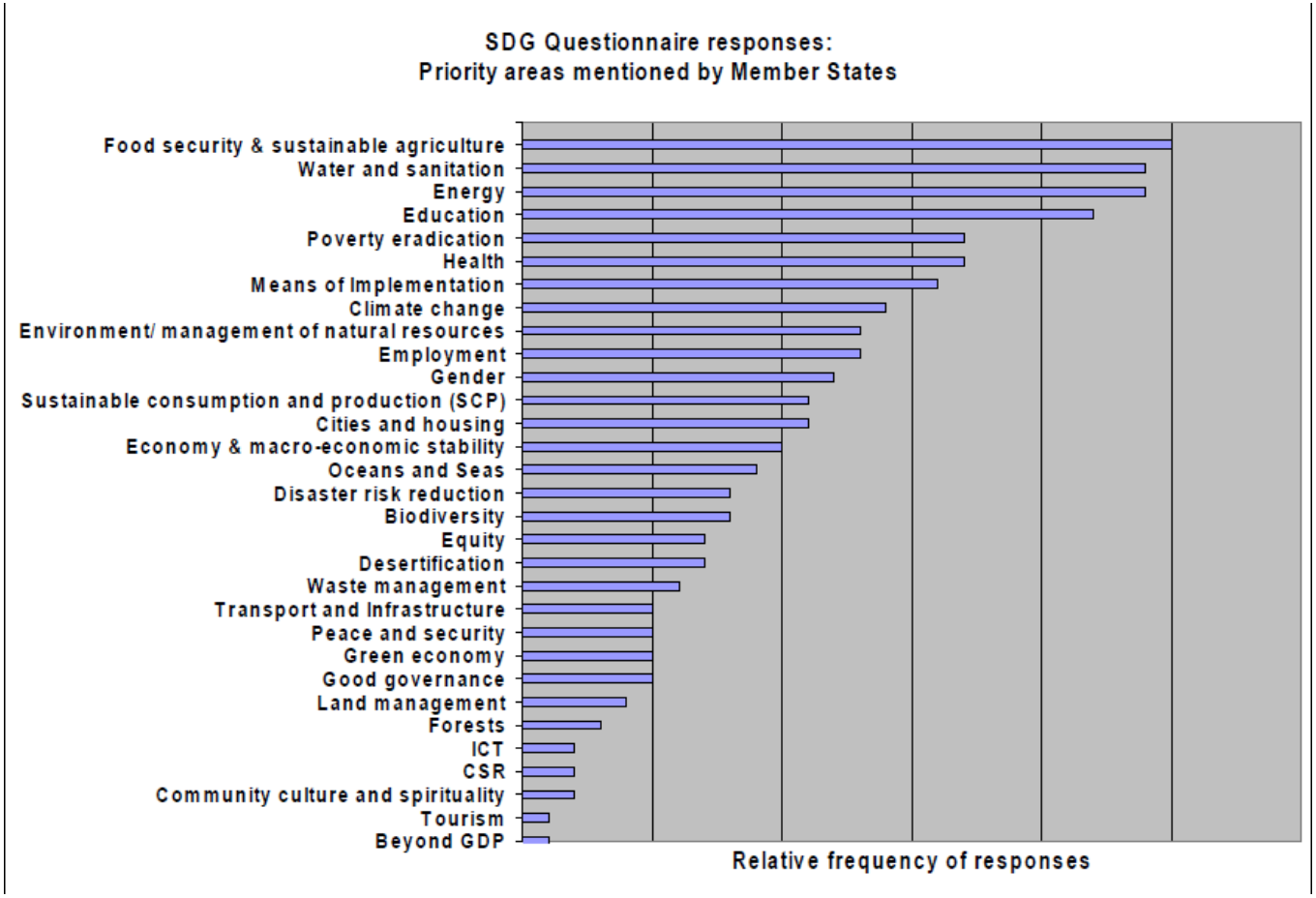
Figure 3: Average physical exposure to floods assuming constant hazard in thousands of people per year[23]



*Only catchments bigger than 1,000 km2 were included in this analysis. Therefore, only the largest islands in the Caribbean are covered.

Where is this heading?

UNSGs SDGs Questionnaire



Who voted for it?

- Japan
- Mongolia
- Nepal
- Nicaragua
- Pakistan
- Switzerland
- Thailand

Criteria for Disaster Risk Reduction Targets

A target and indicator set on disaster resilience should:

Be motivating – ambitious but achievable;

Be amenable to aggregation globally but also suitable for translating to national, sub-national and community levels;

Include outcome-oriented components;

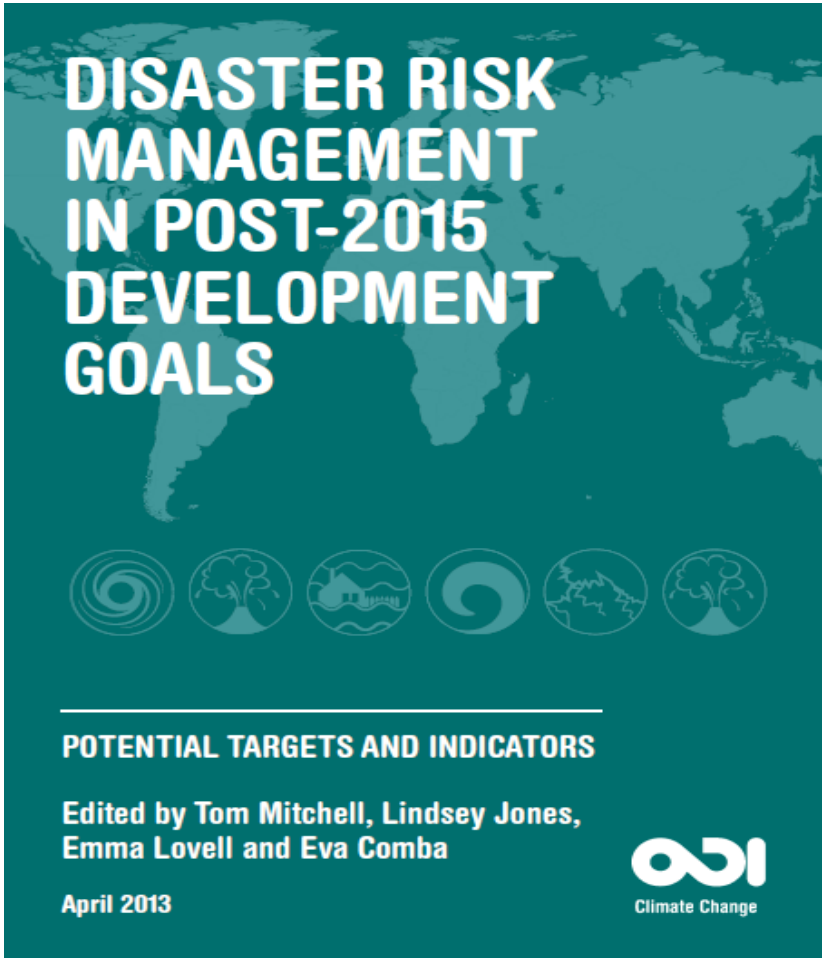
Include risk reduction components;

Add value rather than focusing on aspects that are already improving;

Be simple and straightforward to communicate;

Be measurable, though not necessarily already measured globally, with the potential for a baseline to be created;

Be able to capture trends in intensive and extensive risk.


DISASTER RISK MANAGEMENT IN POST-2015 DEVELOPMENT GOALS
POTENTIAL TARGETS AND INDICATORS
Edited by Tom Mitchell, Lindsey Jones, Emma Lovell and Eva Comba
April 2013
Climate Change

Scenario 1: Standalone disasters goal

Goal	Targets	Indicators
• Reduce the risk of disasters	• By 2030, reduce by 20% the economic loss from disasters • By 2030, halve the number of people killed by disasters • By 2030, no additional people enter poverty • By 2030, all new hospitals and health facilities are built to withstand local hazards	• Number of men, women, children killed by age, location, hazard type and socioeconomic group as proportion of population exposed (combining actual and modelled data) • Direct economic losses as a % of gross domestic product (GDP) (combining actual and modelled data) • % of budget allocated to disaster risk reduction/preparedness • Proportion of people living in poverty in areas exposed to natural hazards (combining actual and modelled data) • Proportion of new health care facilities built in compliance with building codes and standards to withstand hazards

Scenario 3: Disasters mainstreamed across other goals

Goals	Targets	Indicators
Goal on poverty reduction	Reduce by 1 billion, the number of people 'at risk' [of falling into poverty]	• Proportion of the population above/below the 'security poverty line' of $10 PPP per capita at which the risk of falling back into poverty falls drastically
Goal on education	By 2030, halve the number of children killed in schools by disasters, with no children killed by disasters in new schools built after 2015	• % of newly built early childhood development, primary and secondary educational facilities certified to be in conformity with locally appropriate hazard-resistant building standards, codes and norms • # of children killed in schools by disasters, with no children killed by disaster in new schools built after 2015 (disaggregated by sex, age and disability)

Reduce by x% the impact of disasters on economic growth and end disaster-induced poverty	**Reduce by x% the impact of disasters on economic growth and reduce by x% the number of deaths from disasters**

2015 and beyond

1. Policy Framework: Beyond 2015 landscape
2. **Narrative: Pillar of wealth creation, livelihood protection, poverty alleviation**
3. Risk: A fused approach to risk management embedded across government: conflict, climate + disasters
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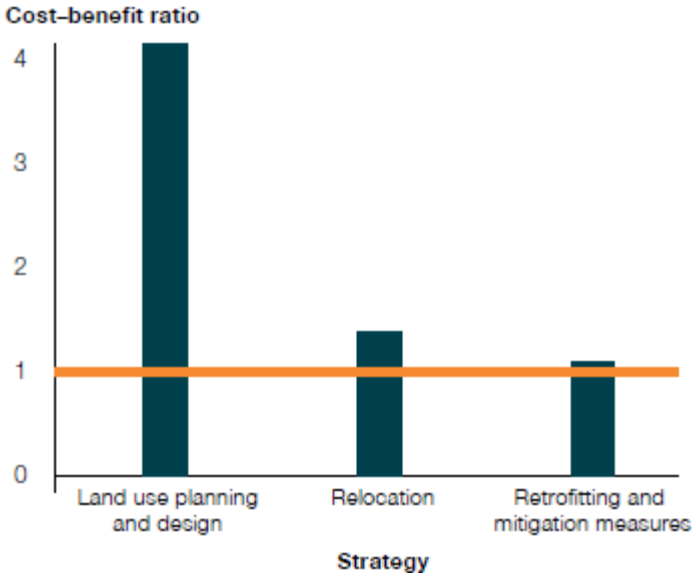
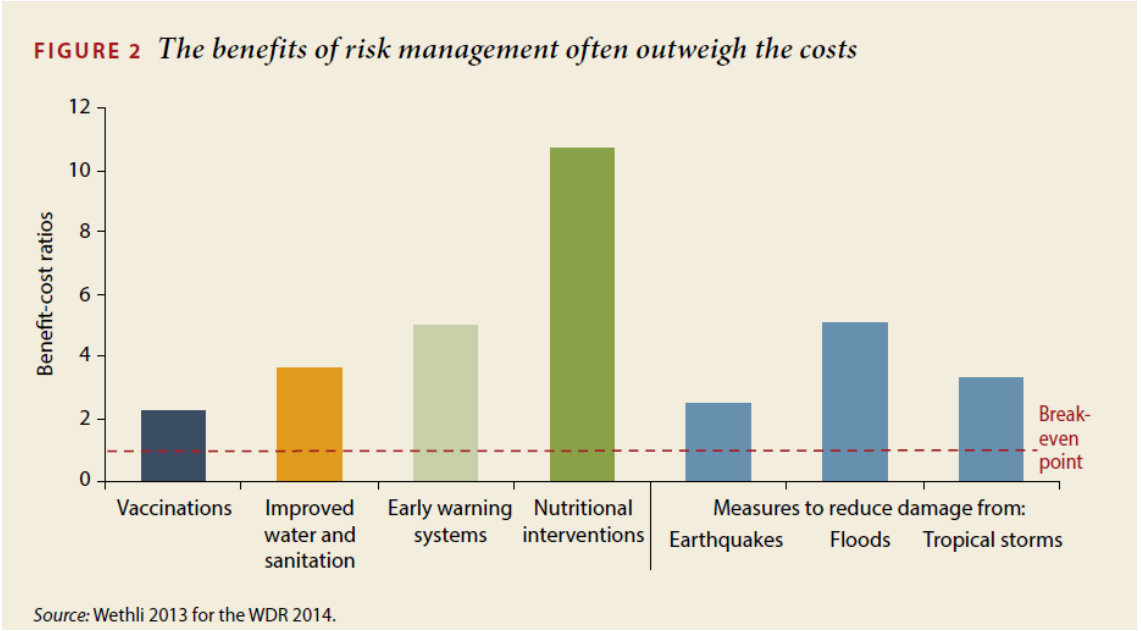
6. On budget, domestic resources-led

Cost-benefit/benefit-cost





Source: WDR (2013), GAR (2011)

DRR for wealth creation

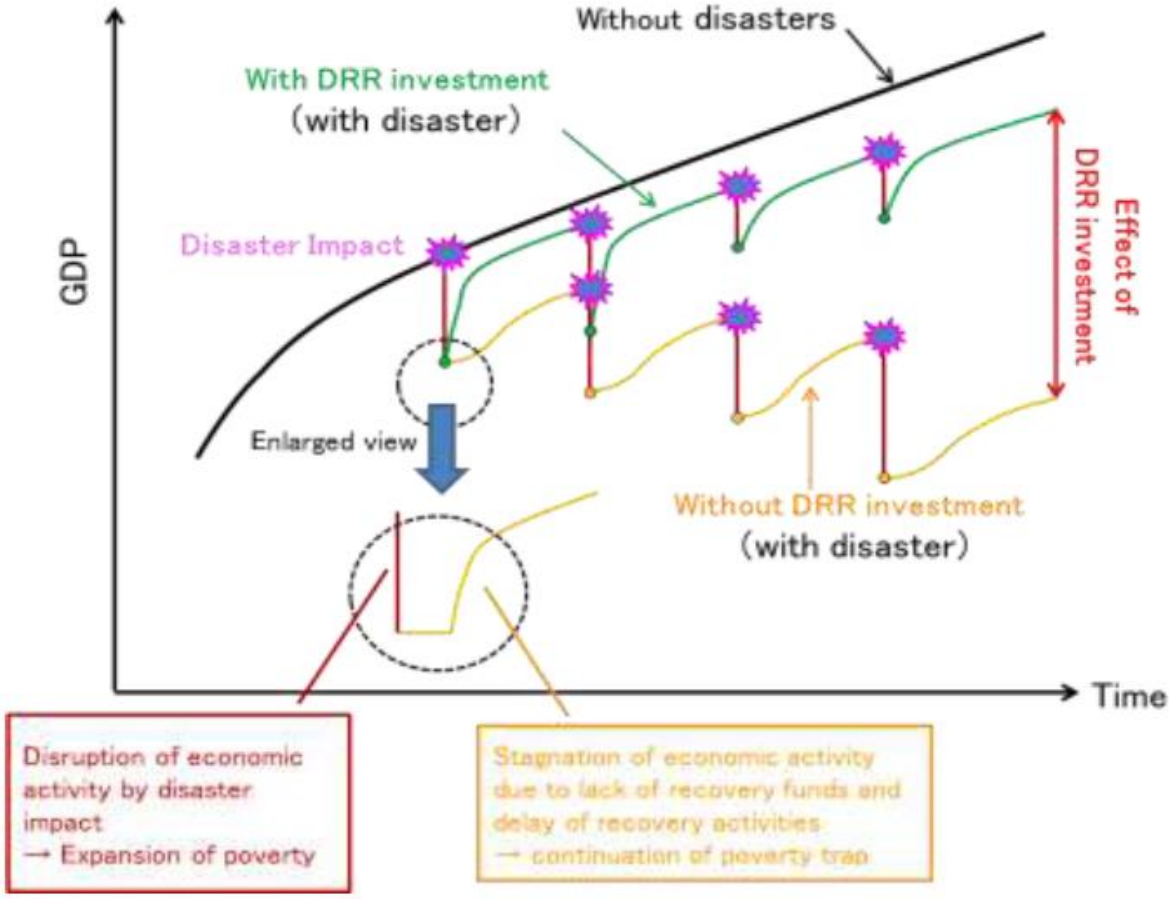


Figure 1.1 Image of verification model of DRR investment effect and its evaluation results (output A)

DRM: Good for growth

2015 and beyond

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Conflict and Disasters

High-level Meeting
Global Thematic Consultation

Conflict, violence and Disaster and the Post-2015 Development Agenda

13 March 2013
Helsinki, Finland

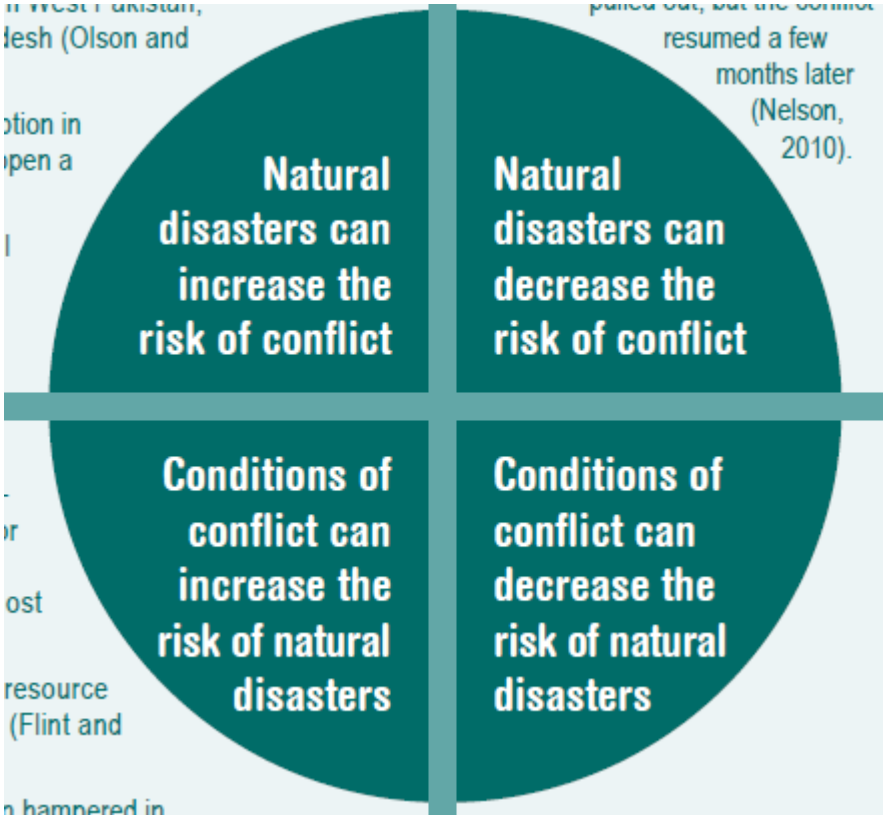

Figure 6: Continuum of intent: disaster risk reduction and conflict prevention

DRR as conflict prevention: actively seeking to use measures to reduce risk to natural hazards to promote dialogue, negotiations and prevent conflict.

DRR amidst conflict and fragility: working 'around' conflict and fragility, seeking to do no harm but not actively addressing conflict dynamics.

2015 and beyond

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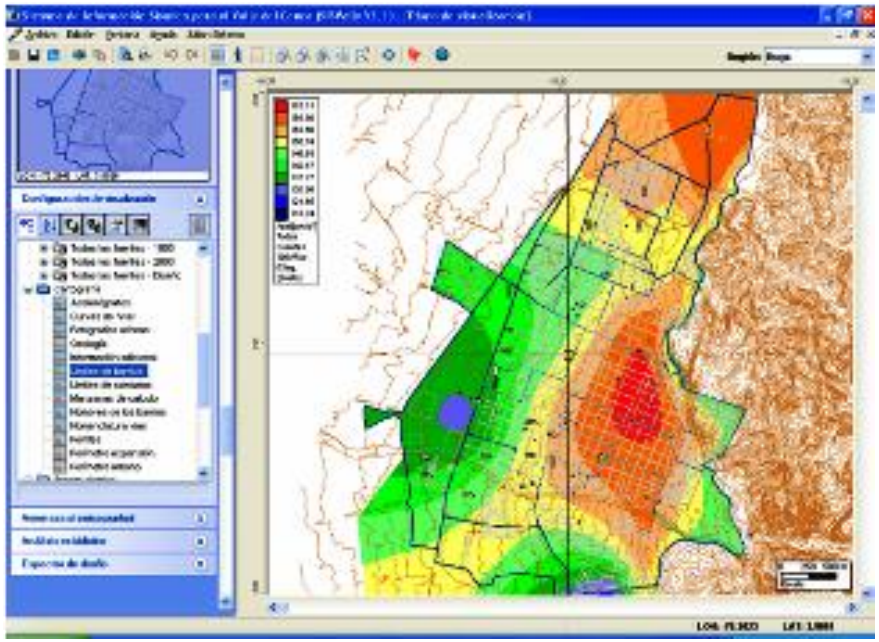
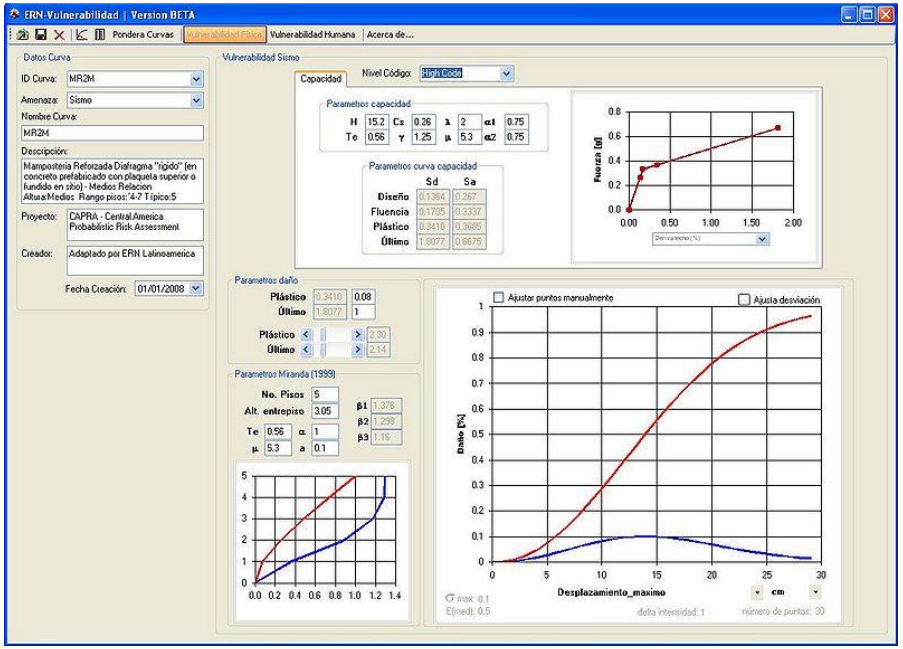
Ownership, uptake …





The good	The bad	The ugly
Discourse has taken root	The topic is still marginal for politicians	DRM and CCA still separated
Potential for integration of methods in DRM and CCA	It is difficult to measure impact	Low levels of national investment in risk assessments
Interest and demand from municipalities	Lack of conceptual precision/ tried and tested methodologies	Lack of political support to increase knowledge of risk
Examples that medium-term DRM assessments/planning can be effective	Persistent feuds between sectors – lack of information sharing	Link to development processes is still weak
Successful assessments are not expensive	Many assessments end in financing of measures (but little implementation)	

2015 and beyond

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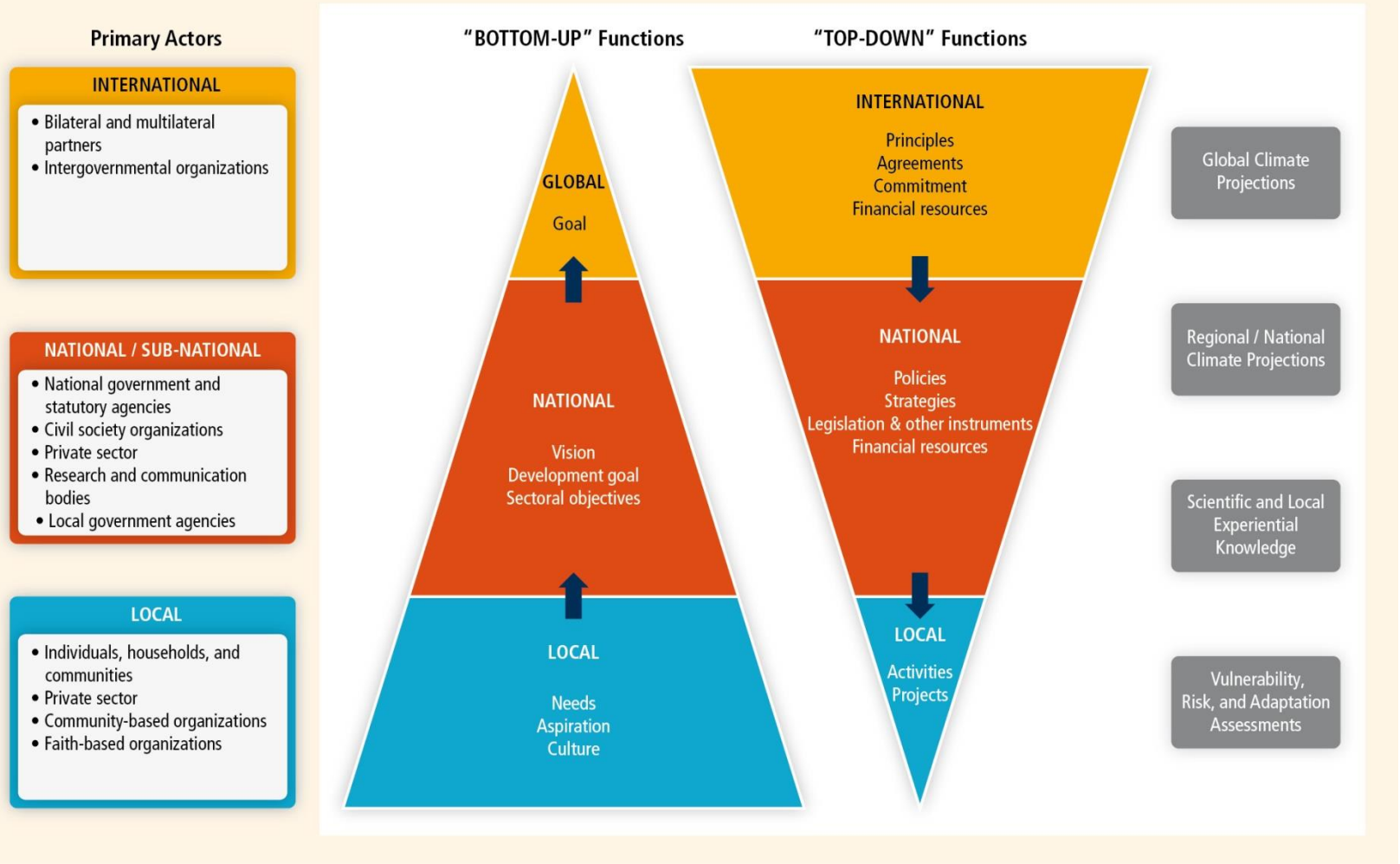
A role for all …



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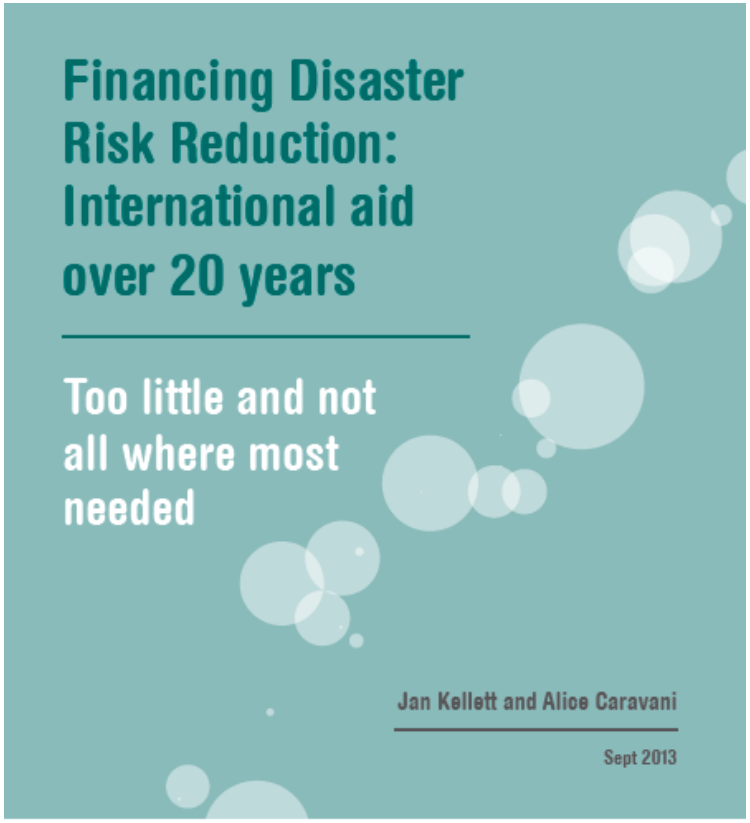


GFDRR
Global Facility for Disaster Reduction and Recovery

Figure 2.4: DRR compared with other international aid investments (2010 figures)

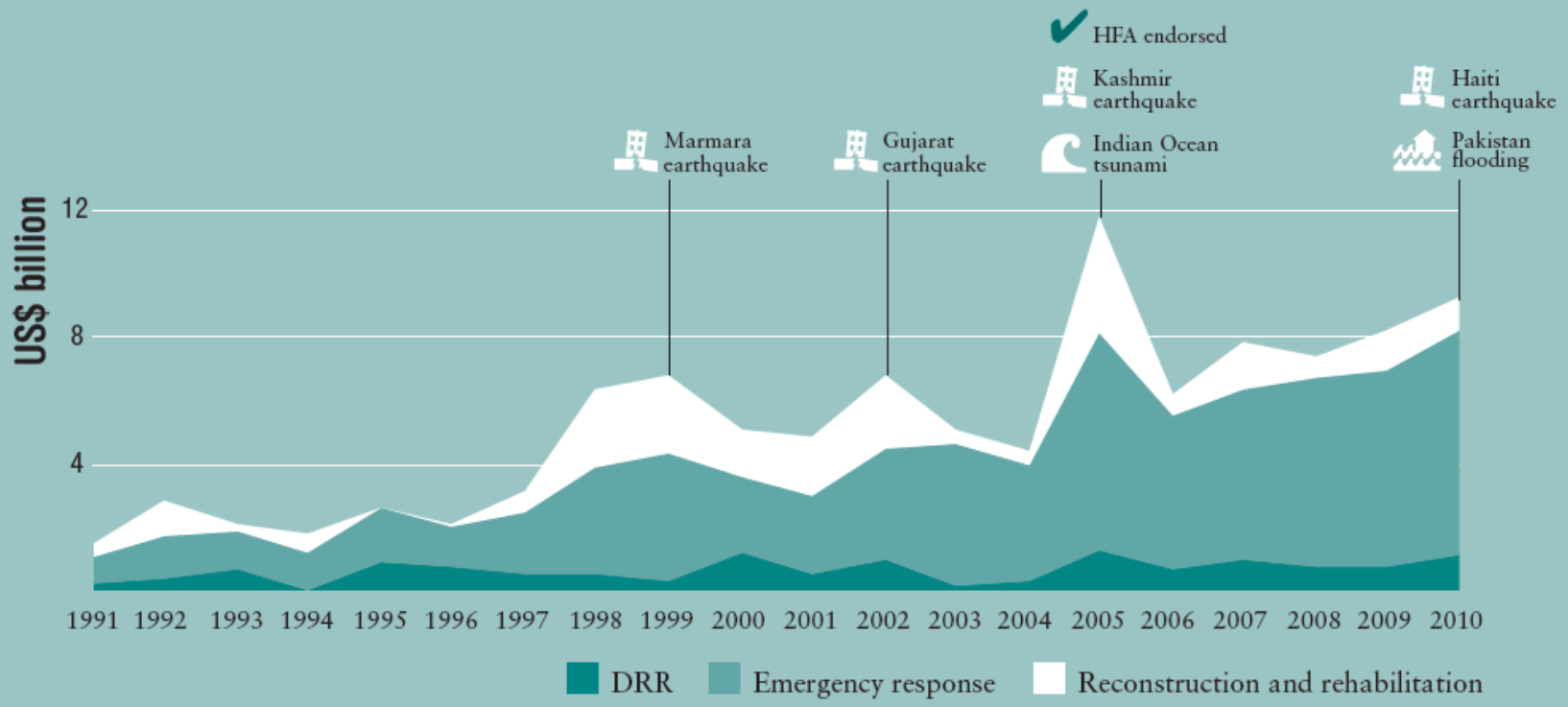
$9.5 billion
on peacekeeping

$4.2 billion
on food aid

$2.6 billion
Global Fund

$1.1 billion
Disaster risk reduction (2nd highest year on record)

Figure 2.2: Disaster-related financing, 1991-2010



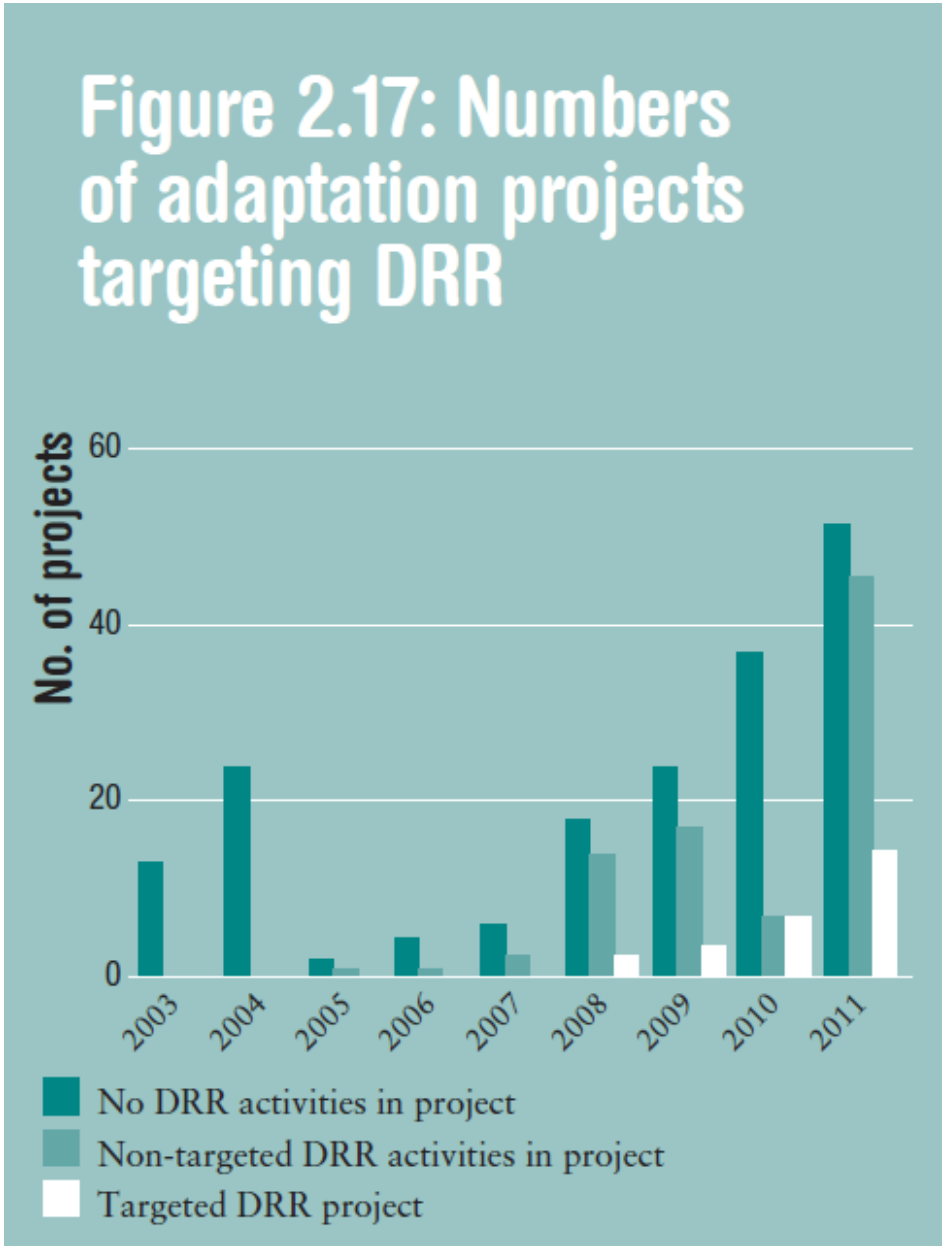


Figure 2.17: Numbers of adaptation projects targeting DRR
No. of projects
60
40
20
0
2003
2004
2005
2006
2007
2008
2009
2010
2011
No DRR activities in project
Non-targeted DRR activities in project
Targeted DRR project

Conclusions

- Opportunity for a major leap forward … if:
  - Recognise scale of the problem and consider what 2030 and 2050 will be like
  - Strive for embedded approach across 2015 landscape
  - Focus on accountability frameworks
  - Shift narrative from one of losses to one of livelihood protection, growth and wealth creation
  - Work together, with local government and communities empowered to lead with right support

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