

A light blue world map is visible in the background, showing the outlines of continents and countries. A horizontal blue line is drawn across the middle of the map, separating the title from the speaker information.

Climate and Disaster Resilience: Injustice through Failures in Adapting

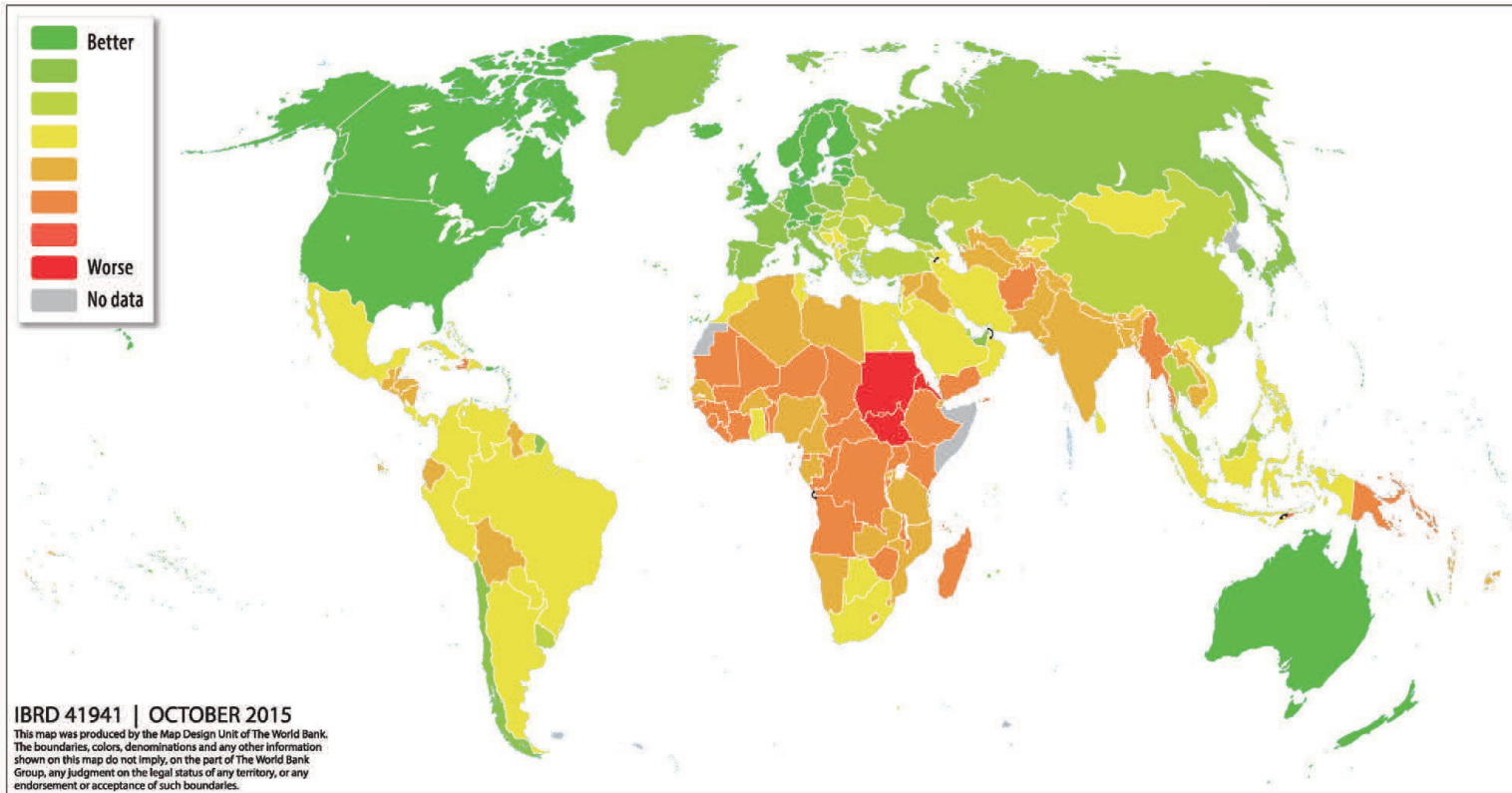
Megumi Muto
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Outline

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1. Introduction
 2. Key facts, concepts and issues around adaptation
 3. Difficulties in implementing risk reduction
 4. Case studies: Philippines and Thailand
 5. Concluding remarks

Adaptation funding

Vulnerability to Climate Change, by Country



Source: World Bank

Adaptation funding

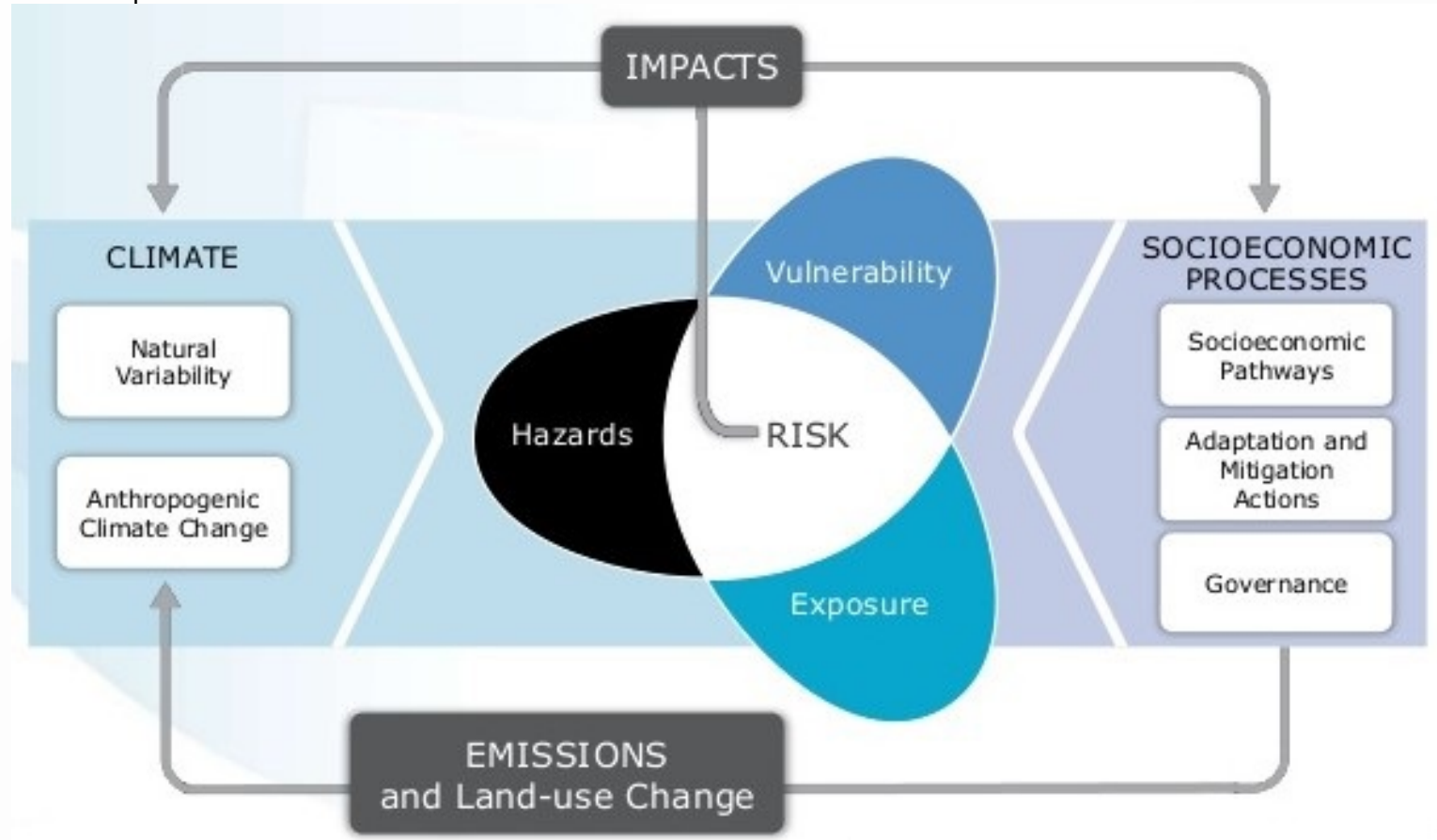
Countries receiving GCF fund for adaptation projects

	Countries
More than three projects	Bangladesh, Benin, Morocco, Namibia, Senegal, Tajikistan
Two projects	Bhutan, India, Ghana, Guatemala, Kenya, Marshall Islands, Pakistan

Note: Based on number of projects only, not weighted with amount
<https://www.greenclimate.fund/what-we-do/projects-programmes>

Objective of adaptation: risk reduction

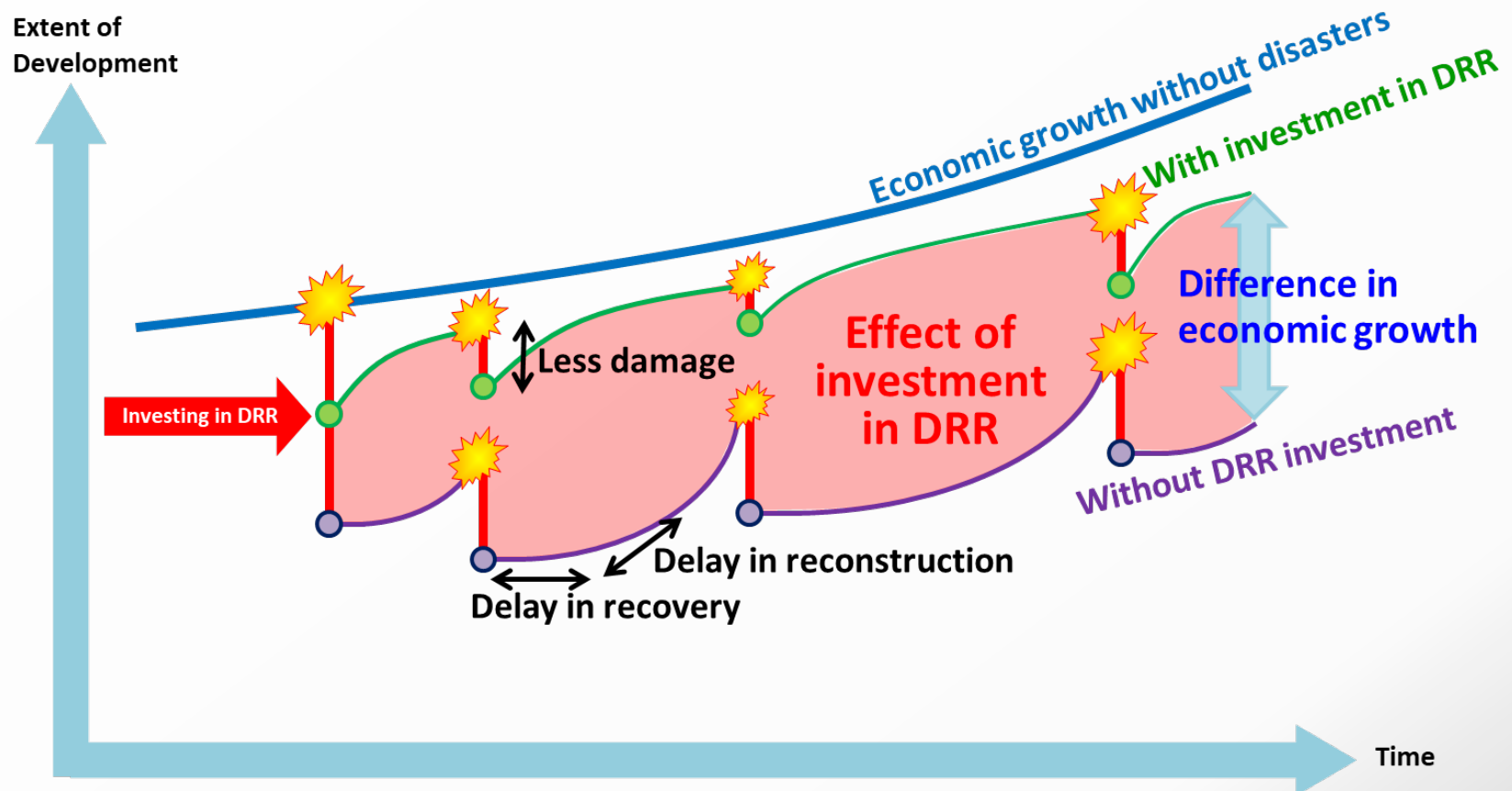
Concept of Climate Risk



Source: IPCC

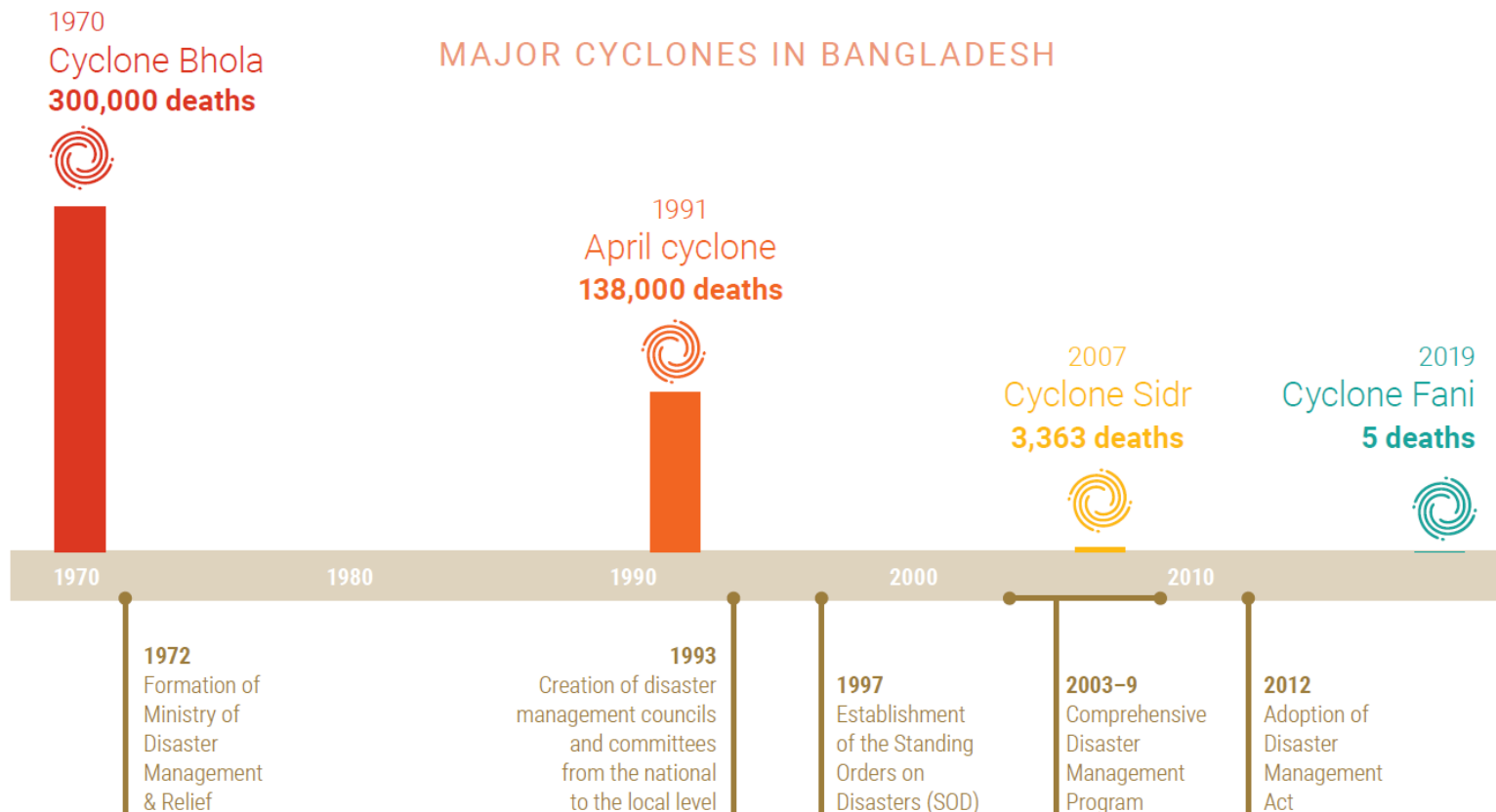
Objective of adaptation: risk reduction

DRR investment reduces the damage of disasters, and contributes to faster recovery and reconstruction



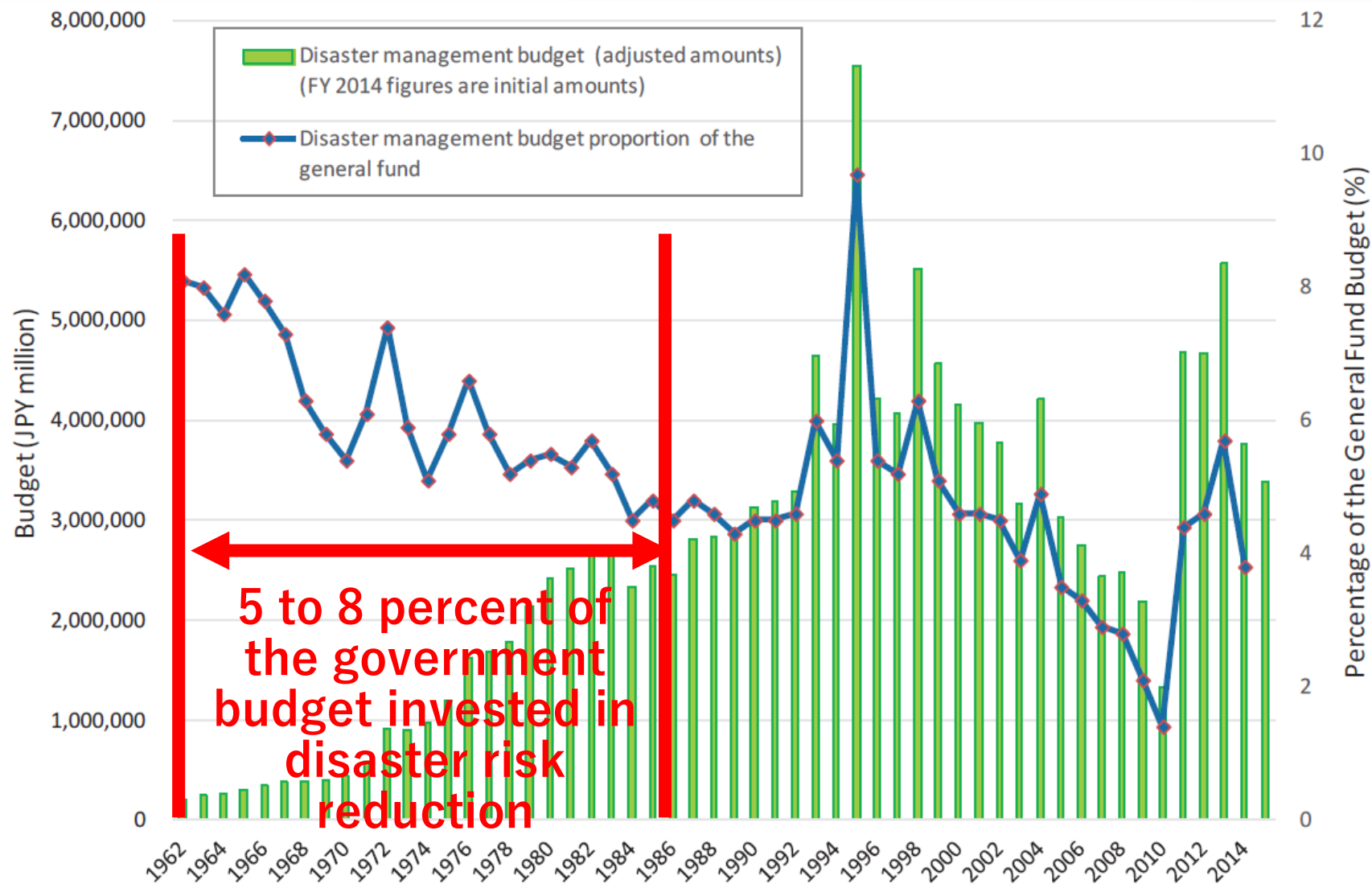
Objective of adaptation: risk reduction

BANGLADESH IS A STRIKING EXAMPLE OF THE POWER OF EFFECTIVE ADAPTATION:
Starting with **early warning systems**, scaled-up disaster response has included **cyclone shelters**,
building civic awareness, strengthening buildings, and improving **post-disaster recovery**

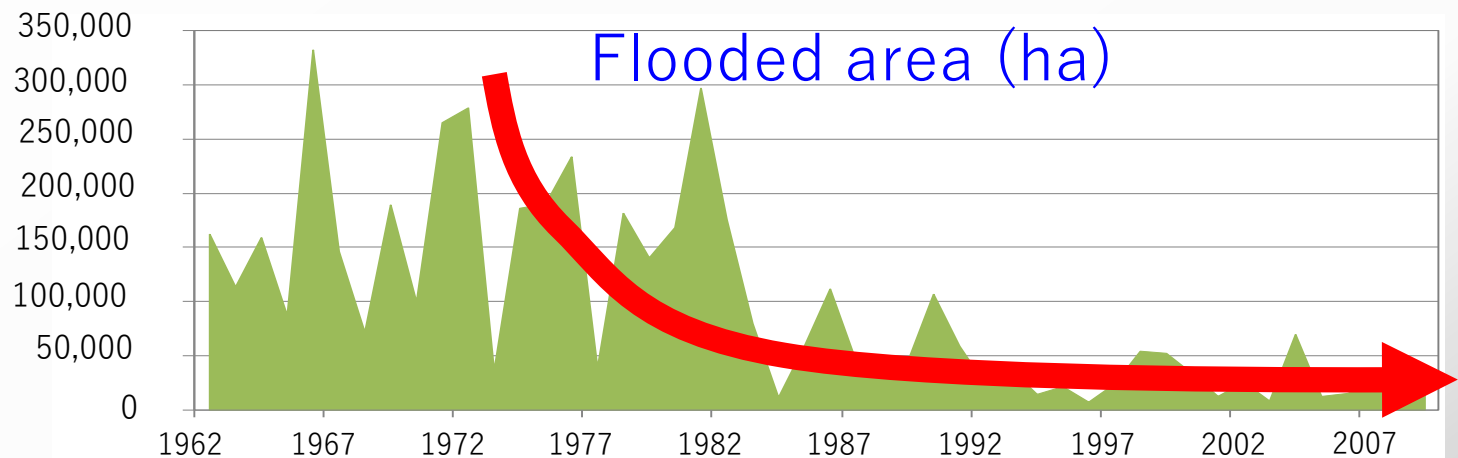
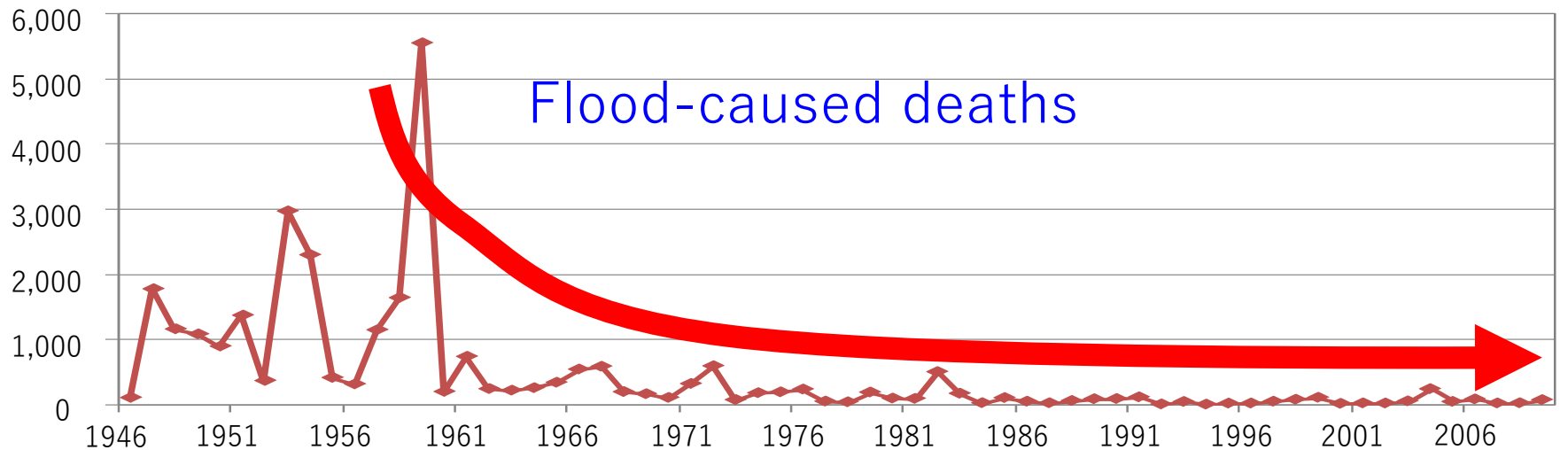


Source: Global Commission on Adaptation

Continued Investment in Disaster Risk Reduction



Flood-caused deaths and flooded areas were reduced



“Chronic” vulnerabilities



The poor
Living in an inexpensive
place = vulnerable to
disasters



Shifted to a place more vulnerable, or to
living on the street in some cases

Poorer

Easily
suffer
from a
disaster

Liable to
suffer
from
another
disaster

Chain of poverty
Decrease in national power
Worsening of public security

Lose assets and
production base

Negative
spiral



Practical steps to reduce risk

Methods of “Reserve” – “Prepare” – “Flow”

大雨による水害から命と暮らしをまもるために、
県や市町とともに『総合治水』にとりくみましょう。

まちを守るために、
みんなできりくもう!



Source: Hyogo
Prefectural
Government
/JICA

THE EIGHT STEPS: practical method for developing Local DRR strategies

Step 1: Collecting local hazard information

Step 2: Understanding local disaster risks

Step 3: Confirming DRR plans by national and other authorities

Step 4: Identifying residual risks considering time-scale (i.e. return periods/ time horizon)

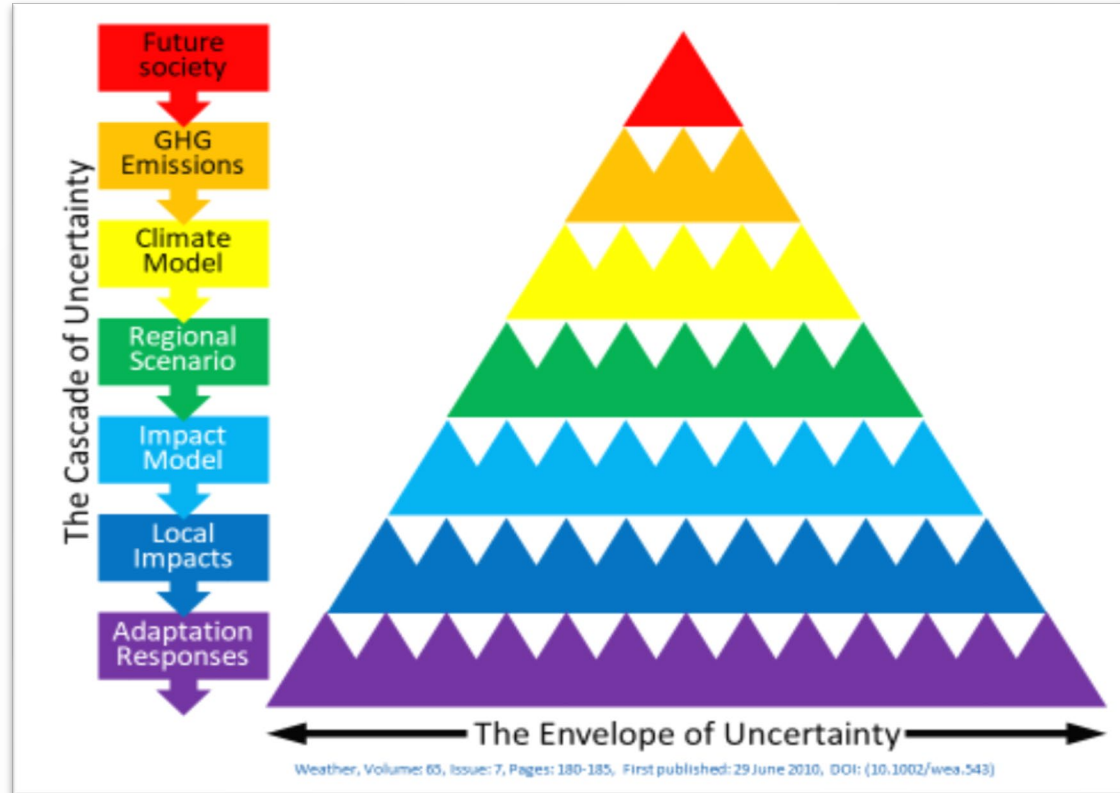
Step 5: Listing all necessary DRR measures by local government

Step 6: Prioritizing DRR measures

Step 7: Allocating budget at all necessary levels

Step 8: Executing DRR measures and reviewing periodically

Difficulty in identifying risk: uncertainties



Philippines



パシグ・マリキナ川流域面積: 約540km²
 ラグナ湖流域面積: 3,281km²

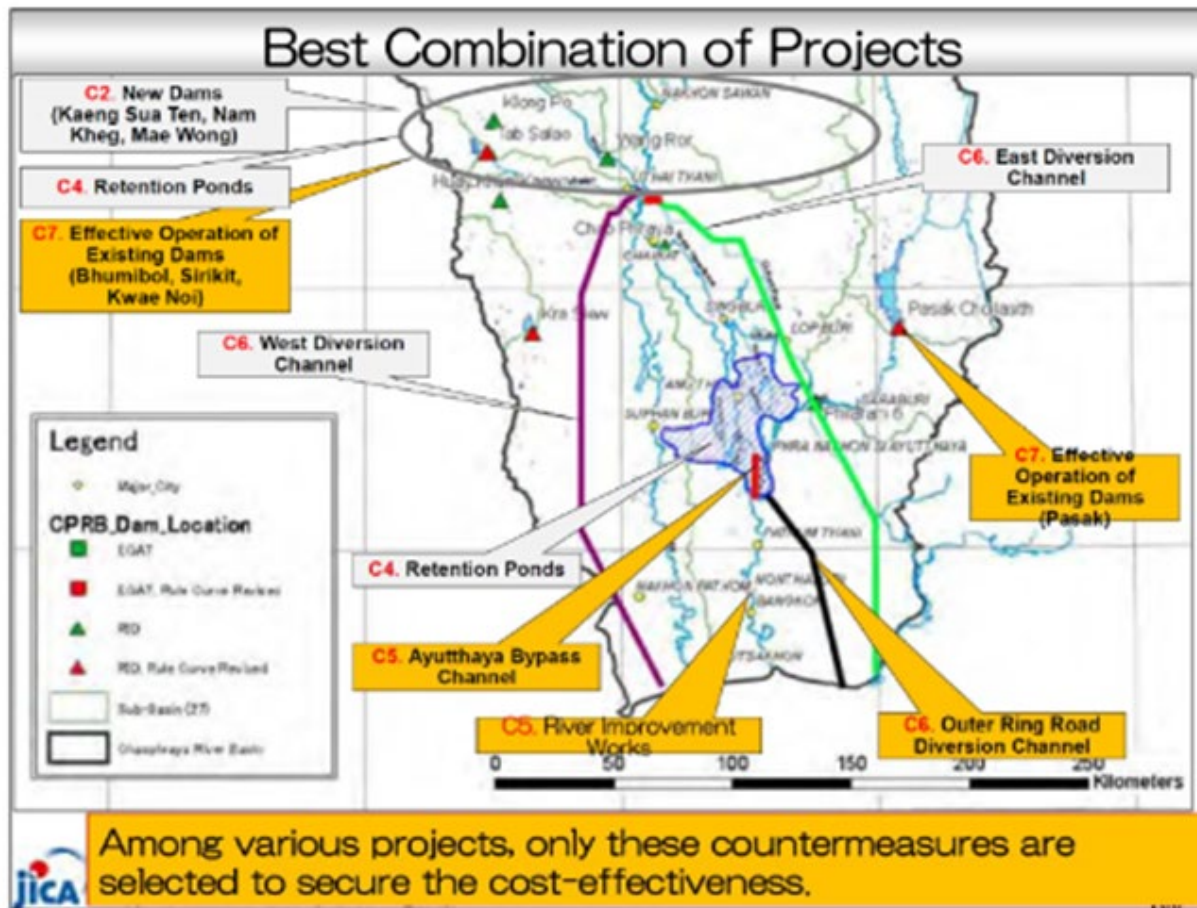
ラグナ湖面積: 900km²



1982年	パシグ河治水事業 (PH-P10. マンガハン放水路)
1990年	マニラ洪水対策計画調査 (M/P策定)
2002年	PMRCIPフェーズ1 (PH-P23. 全体D/D)
2006年～	PMRCIPフェーズ2 (PH-P26. パシグ川区間)
2011年～	PMRCIPフェーズ3 (マリキナ川下流+パシグ川区間)

Source: JICA

Thailand



Concluding remarks

- Bringing risk reduction into reality is a challenge: lack of capacity and existence of “chronic” vulnerability
- Scarcity of capacity among development partners
- How can we accelerate/ scale up Disaster Risk Reduction at global scale?
- E.g. Synergy between Sendai Framework and Paris Agreement (around GCF)
- E.g. Partnership among Sendai Framework, GFDRR, Delta Plan