

Harnessing Synergies Between Climate Change Adaptation and Disaster Risk Reduction: Pertinent Issues, Success Cases and Way Forward

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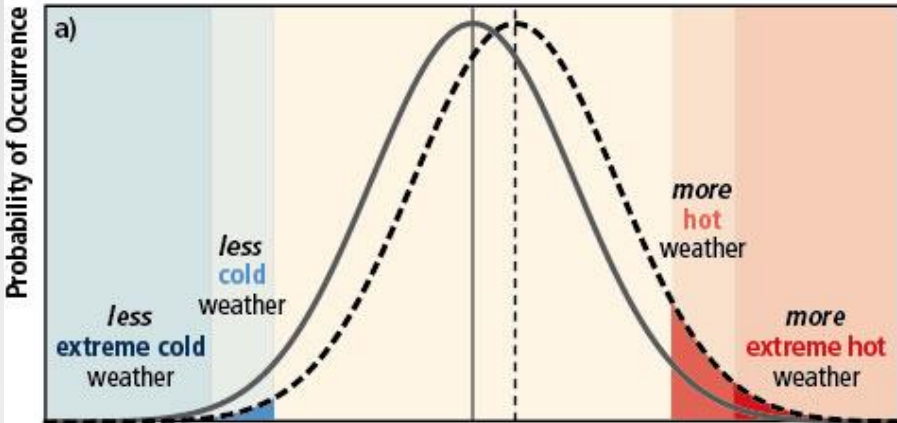
Session Objectives

- To discuss the current conceptual understanding on synergies and differences between disaster risk reduction and climate change adaptation
- To evaluate the current experiences of operationalizing these synergies between DRR and CCA in actual implementation
- To discuss existing bottlenecks and way forward for harnessing the synergies between CCA and DRR, and
- To identify crucial research questions to be addressed and methodologies to be followed in this field

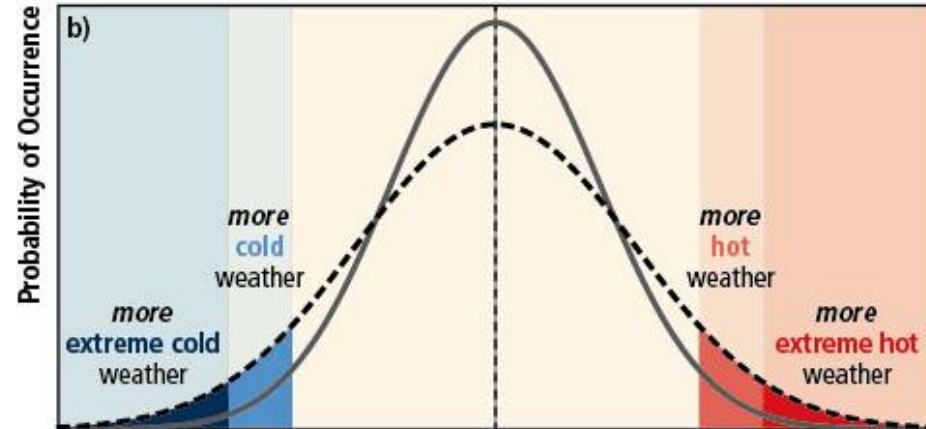


Change in Extremes

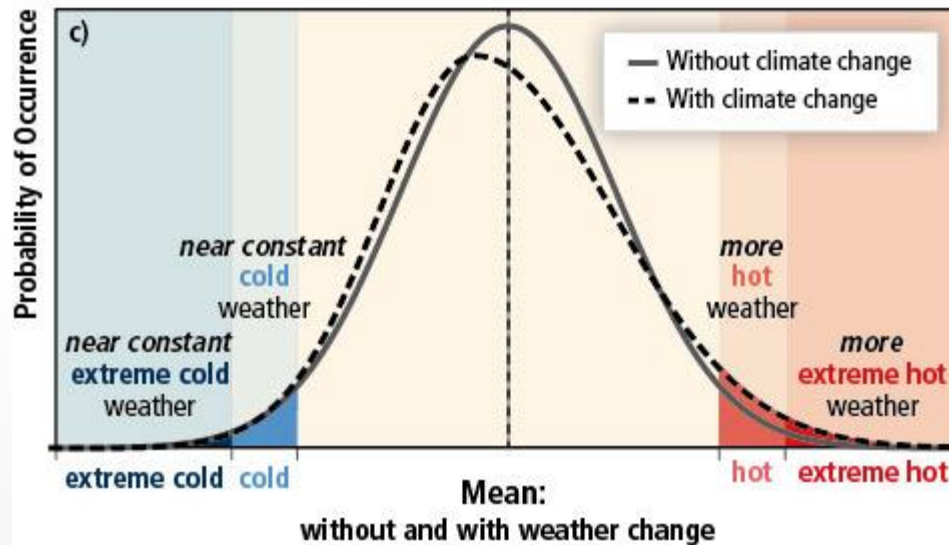
Shifted Mean



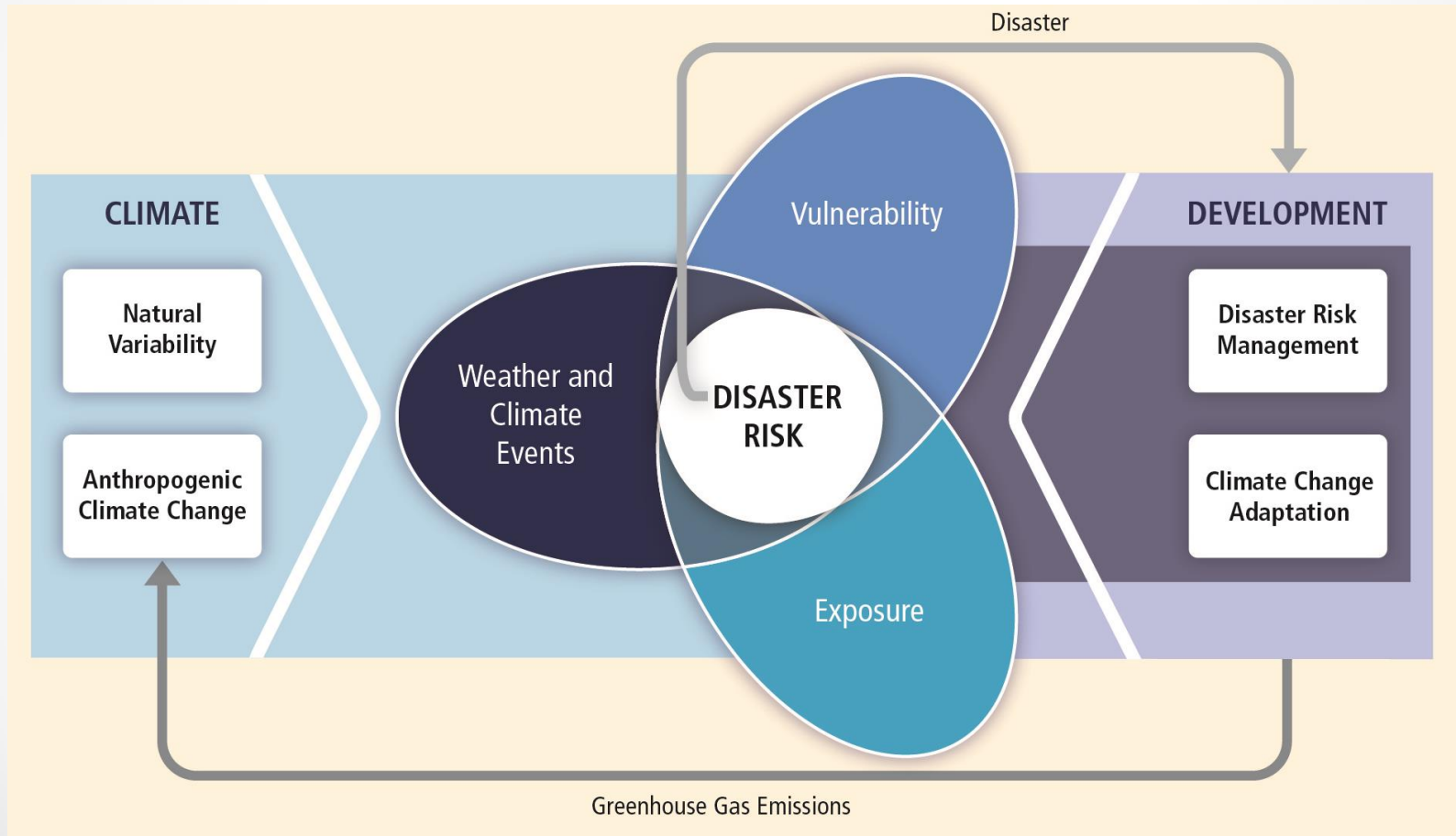
Increased Variability



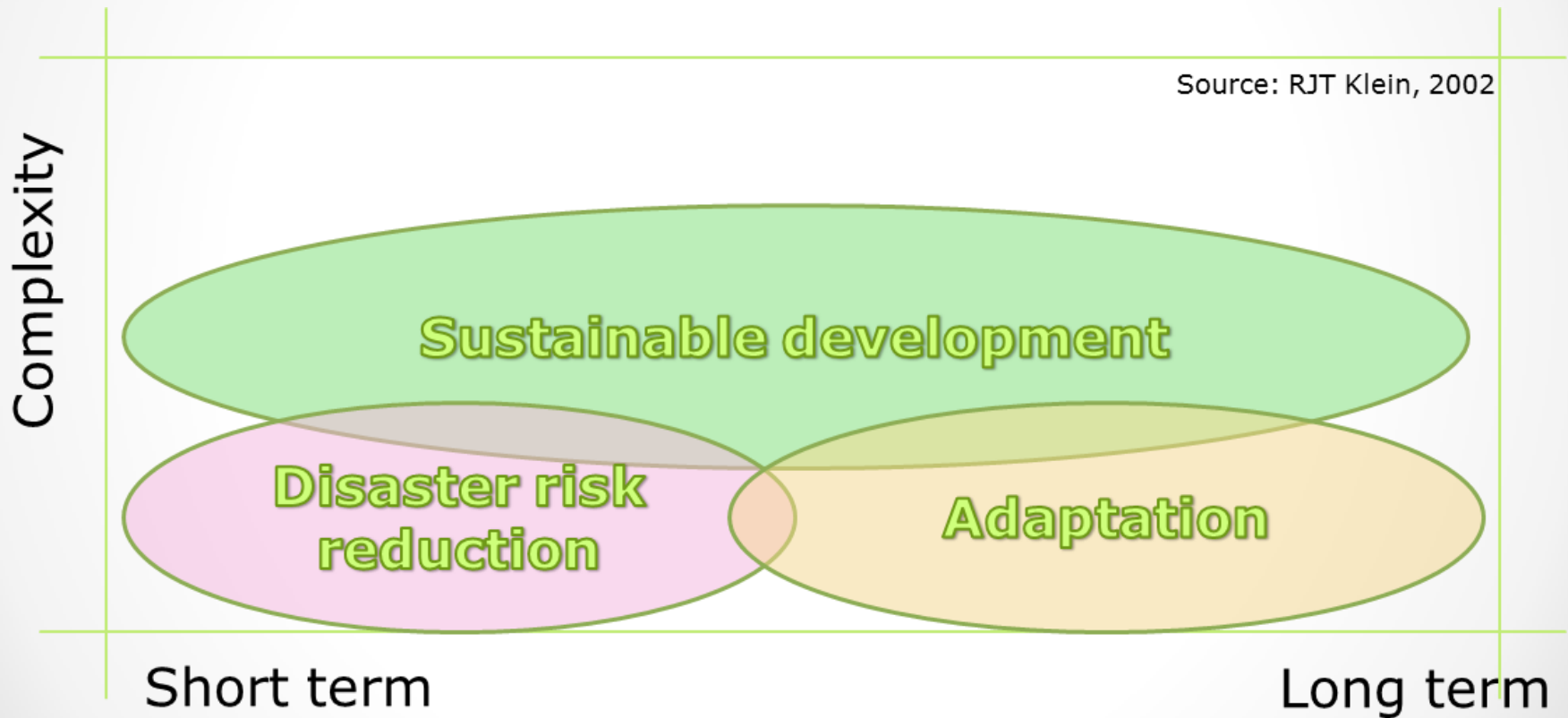
Changed Symmetry



Addressing Vulnerability and Exposure



CCA & DRR: Synergies along the time scales



Recognition of Need For Synergistic Approaches

- “Promote the integration of risk reduction associated with existing climate variability and future climate change into strategies for the reduction of disaster risk and adaptation to climate change, which would include the clear identification of climate related disaster risks, the design of specific risk reduction measures and an improved and routine use of climate risk information by planners, engineers and other decision-makers.”

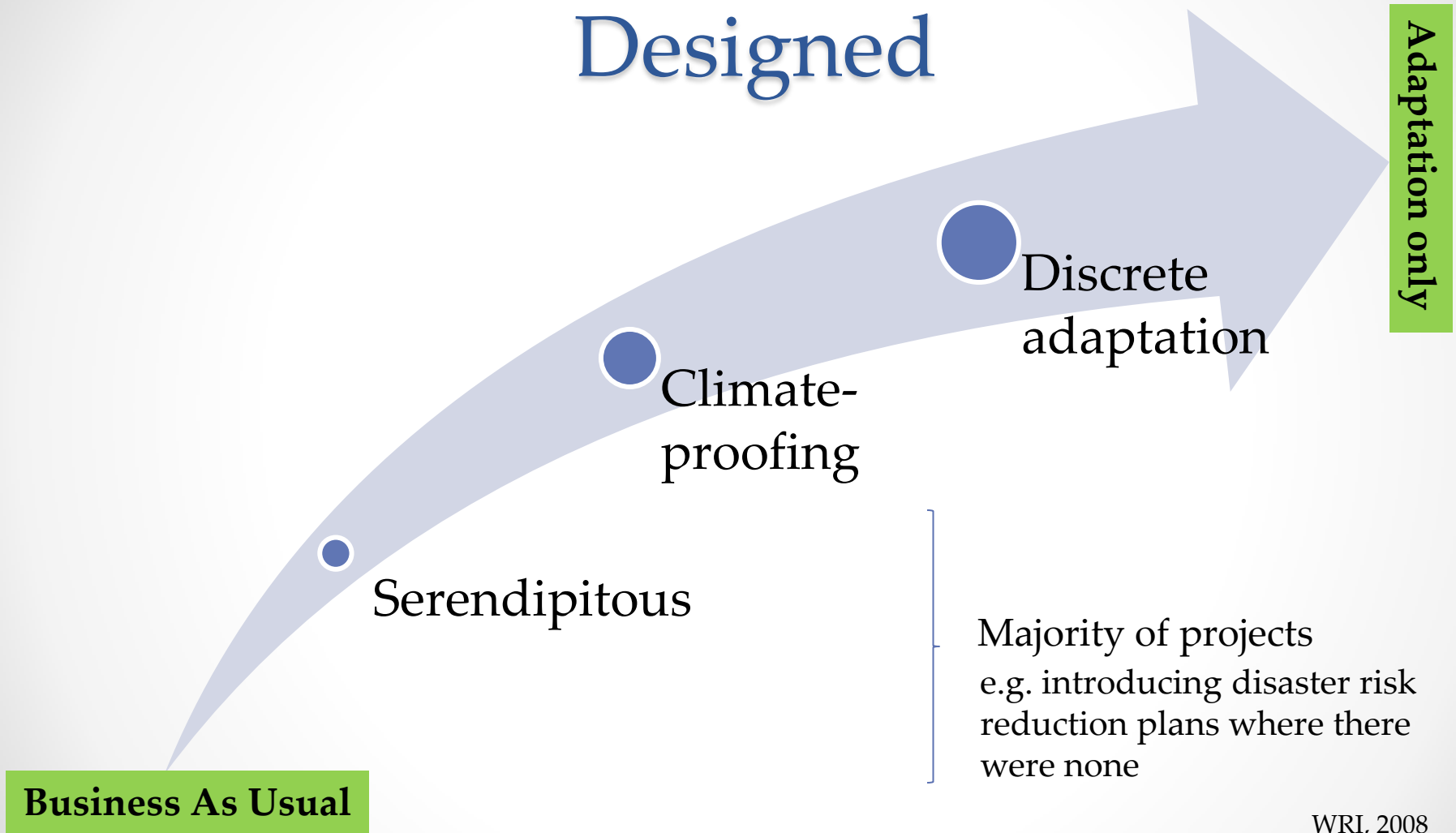
HFA, UNISDR (2005)

Recognition of Need for Synergistic Approaches

- Climate Change Texts: Largely avoids using disaster risks terminology!

COP Text	DRR related entry
COP 19, Warsaw ADP text, 2013	<ul style="list-style-type: none"> • Reduce [climate change] vulnerability and building resilience of developing countries...
COP 18, Doha, Qatar, 2012	<ul style="list-style-type: none"> • Reduce [climate change] vulnerability and building resilience of developing countries... • Adaptation to adverse effects of climate change...
COP 17, Durban, 2011	<ul style="list-style-type: none"> • Adaptation to adverse effects of climate change...
COP 16, Cancun Agreements, 2010	<ul style="list-style-type: none"> • Enhancing climate change related disaster risk reduction strategies, taking into consideration the Hyogo Framework for Action where appropriate, early warning systems, risk assessment and management, and sharing and transfer mechanisms such as insurance...
COP 15, Copenhagen Accord, 2009	<ul style="list-style-type: none"> • Adaptation actions aimed at reducing vulnerability and building resilience...

Range of Adaptation Projects are Designed



WRI, 2008

- Climate change adaptation communities tend to see more synergies between CCA and DRR than the DRR community!

How CCA & DRR Manifests in Projects?

Author	Project	DRR Elements	CCA Elements
Davies et al., 2011	Combining DRR with social protection for CCA in agriculture	<ul style="list-style-type: none"> • Immediate disaster compensation • Vulnerability assessment and mapping • Financial instruments were used for resilient economies and livelihoods 	<ul style="list-style-type: none"> • Diversifying livelihoods towards more climate resilient options • Increasing the economic resilience by introducing micro-insurance and other social protection schemes • Combining DRR and social protection in order to expand time horizons increasing the relevance to long term CCA
Binh, 2010	DRR and CCA to combat salinity intrusion in agriculture	<ul style="list-style-type: none"> • Infrastructure (e.g. embankments) was built to reduce hazard exposure 	<ul style="list-style-type: none"> • Livelihood diversification • Migration and changes in crop calendar
Holder, 2011	Hurricane preparedness, mitigation and response in agriculture	<ul style="list-style-type: none"> • Immediate relief to farmers • Provide water and enhance drainage 	<ul style="list-style-type: none"> • Financial risk management tools • Natural resource management with emphasis on soil management • Livelihood diversification
Gero et al., 2010	Reducing disaster vulnerability through poverty reduction	<ul style="list-style-type: none"> • Immediate relief • Build infrastructure 	<ul style="list-style-type: none"> • Bottom up approaches for resilience building • Climate change elements incorporated into disaster management plans

Two Communities, Different Means and A Common Goal



Benefits of Promoting DRR-CCA Synergistic Approaches

- **Reduces costs:** Synergies and complementarities
- **Capacity building:** conscious process
- Helps in **maturing the concepts** and identify knowledge and practice gaps
- **Better interaction** between CCA and DRR stakeholders
- **Generates ownership** among a wide range of stakeholders
- Lead to robust risk reduction



Introducing disaster risk management elements in an area with no such interventions can have adaptation benefits. However, what could be done in areas where there are already some plans in place?

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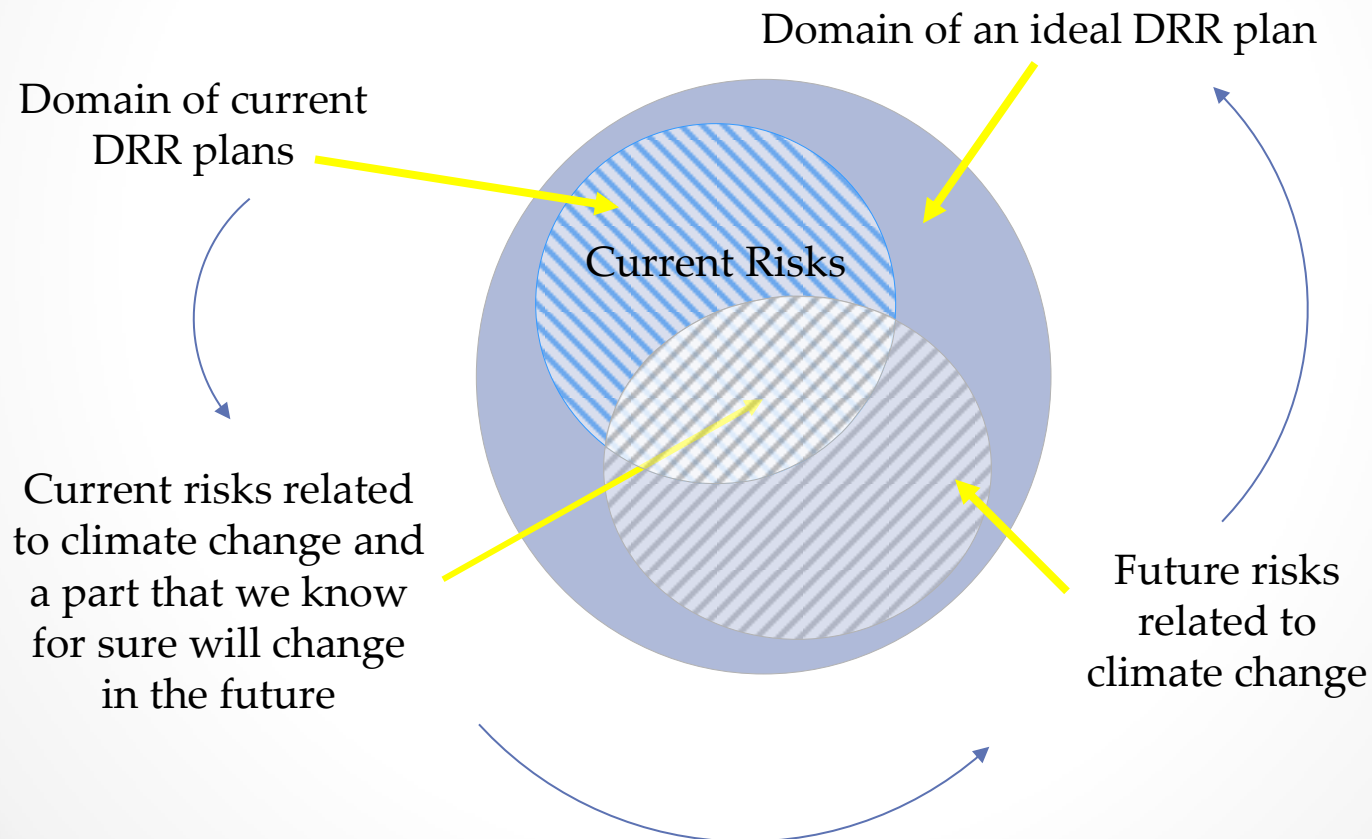
**What does it mean
Mainstreaming CCA into
DRR?**

Issues with Current Disaster Risk Reduction Approaches

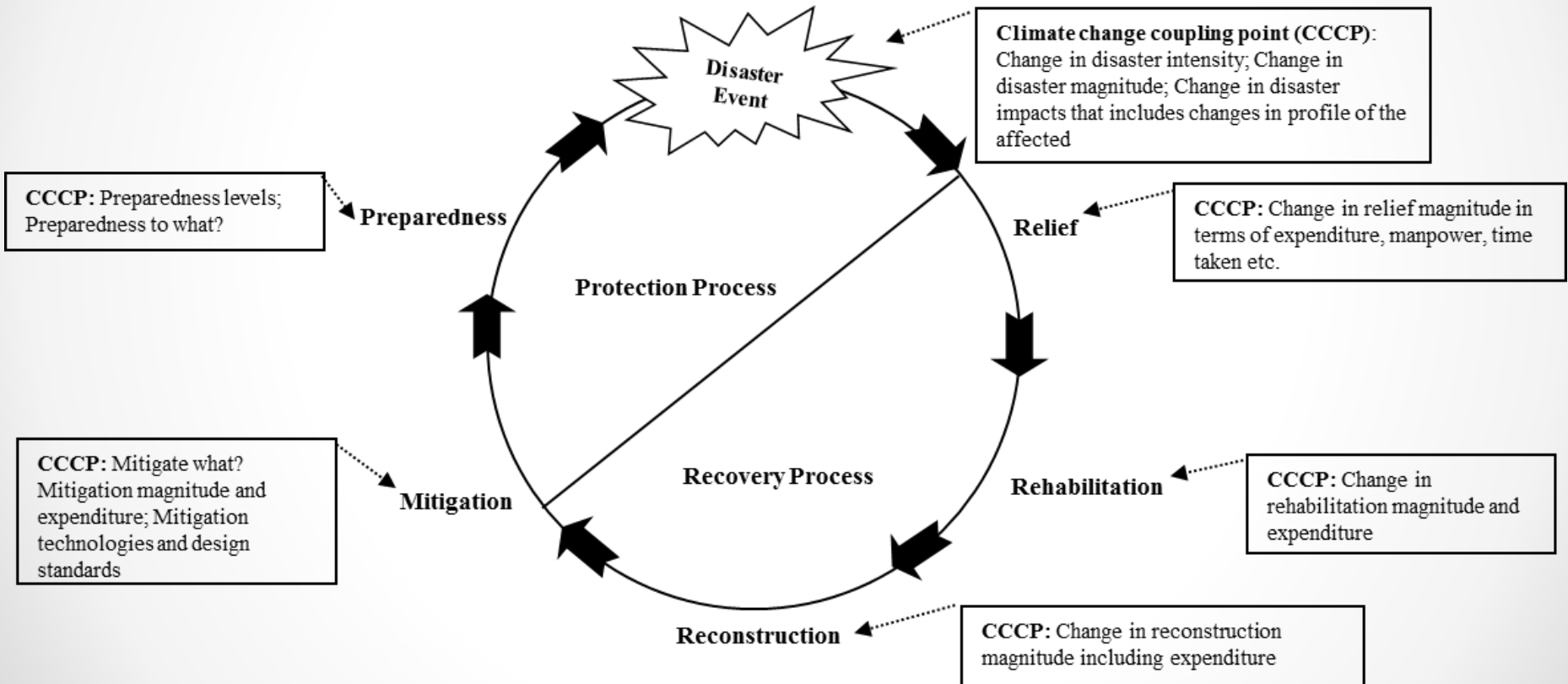
- Largely response oriented (rescue and relief) with poorly developed mitigation and preparedness
- Aimed at reducing current disaster risks
- Severely limited in looking into the future risks and vulnerabilities even without taking into consideration the climate change
- Risk assessments are based on past data and in a changing climate past trends could mean no relevance for the future
- Risk management plans are often static and are not regularly revised



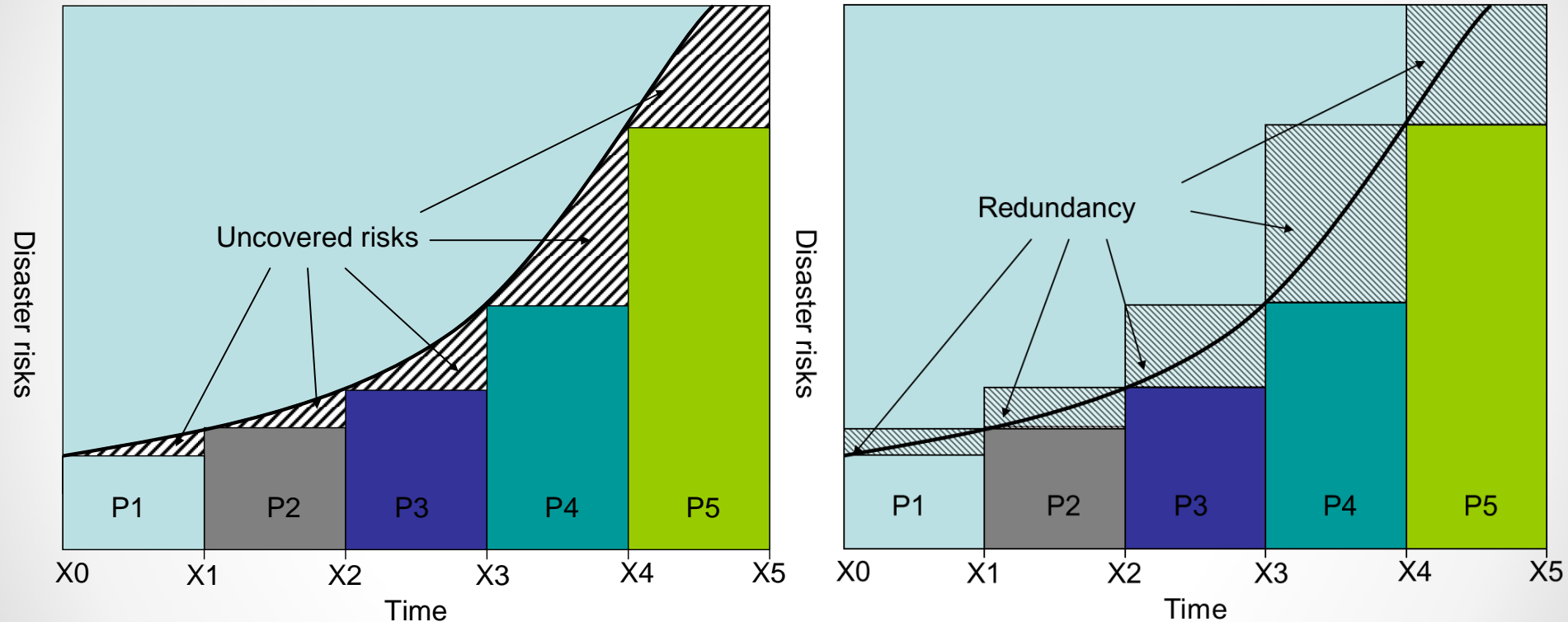
What Mainstreaming CCA into DRR means?



Complete Integration of Climate Change into DRR Planning



What Mainstreaming CCA into DRR Means: Addressing Uncertainties



A. Exponentially growing risks and DRR planning. B. Planning with built in redundancy.

Questions for Discussion

- What are the synergies between climate change adaptation and disaster risk reduction? How can we characterize them?
- What these synergies mean for DRR and CCA planning and processes and what indicators will help capture these synergies? [Each participant may want to provide an example project and list some indicators that helps in attributing the project effectiveness in terms of CC and DRR]
- To what extent these synergies are being captured in the ongoing interventions in CCA and DRR?
- What bottlenecks are limiting the full realization of these synergies and how they can be overcome?
- What are the important policy research questions to be addressed in this area and what methodological approaches could be utilized for this purpose?
- Q&A if any and wrap up

Thank You!

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