

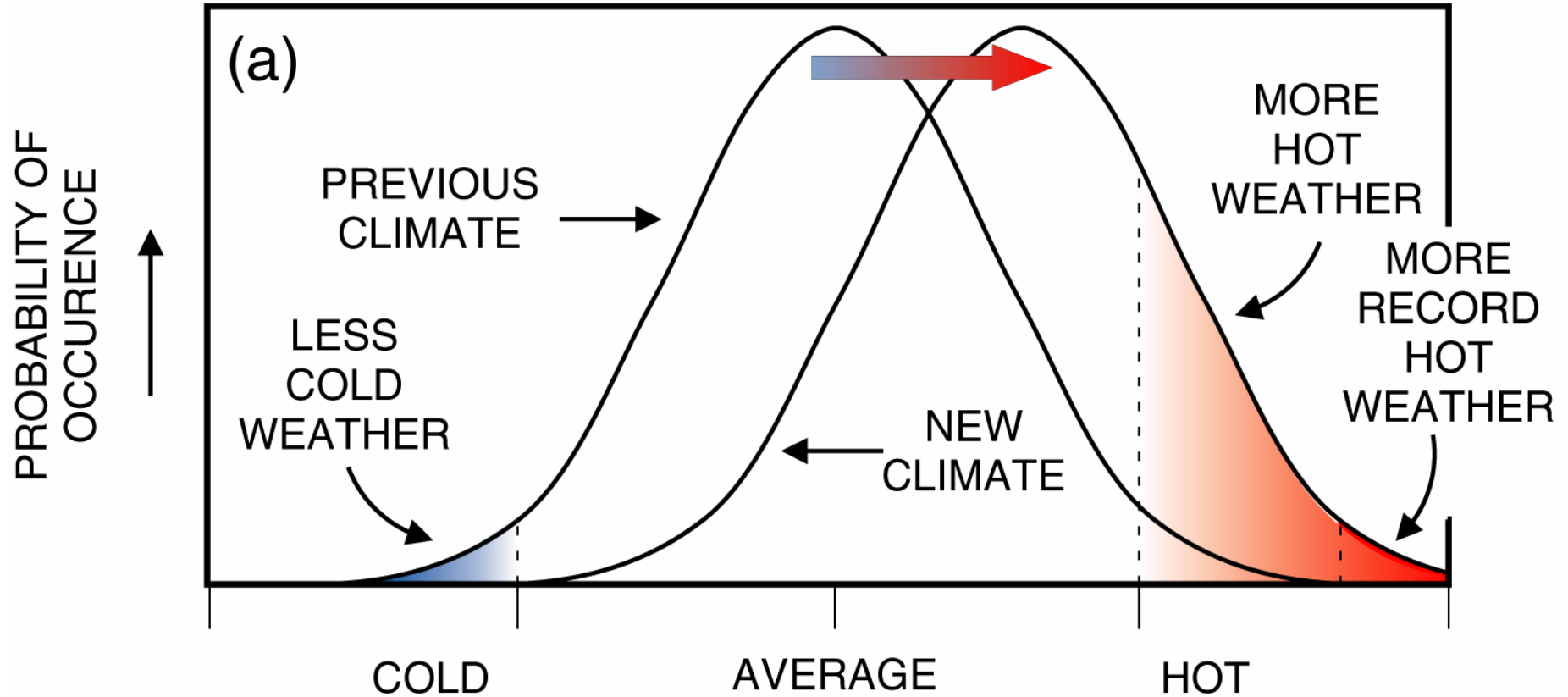
IPCC Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation

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BACKGROUND

IPCC Fourth Assessment

INCREASE IN MEAN



Large percentage change in extremes

IPCC Fourth Assessment

Phenomenon ^a and direction of trend	Likelihood that trend occurred in late 20th century (typically post-1960)	Likelihood of a human contribution to observed trend	D	Likelihood of future trend based on projections for 21st century using SRES ^b scenarios
Warmer and fewer cold days and nights over most land areas	<i>Very likely^c</i>	<i>Likely^e</i>	*	<i>Virtually certain^e</i>
Warmer and more frequent hot days and nights over most land areas	<i>Very likely^d</i>	<i>Likely (nights)^e</i>	*	<i>Virtually certain^e</i>
Warm spells / heat waves: Frequency increases over most land areas	<i>Likely</i>	<i>More likely than not</i>		<i>Very likely</i>

IPCC Fourth Assessment

Phenomenon ^a and direction of trend	Likelihood that trend occurred in late 20th century (typically post-1960)	Likelihood of a human contribution to observed trend	Likelihood of future trend based on projections for 21st century using SRES ^b scenarios
Heavy precipitation events. Frequency (or proportion of total rainfall from heavy falls) increases over most areas	<i>Likely</i>	<i>More likely than not</i>	<i>Very likely</i>
Area affected by droughts increases	<i>Likely</i> in many regions since 1970s	<i>More likely than not</i>	<i>Likely</i>
Intense tropical cyclone activity increases	<i>Likely</i> in some regions since 1970	<i>More likely than not</i>	<i>Likely</i>
Increased incidence of extreme high sea level (excludes tsunamis) ^f	<i>Likely</i>	<i>More likely than not</i> ^g	<i>Likely</i> ^h

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- There is evidence for observed changes in weather and climate extremes.
- Model projections suggest we will continue to see changes.
- Some changes have been attributed to human-induced climate change.



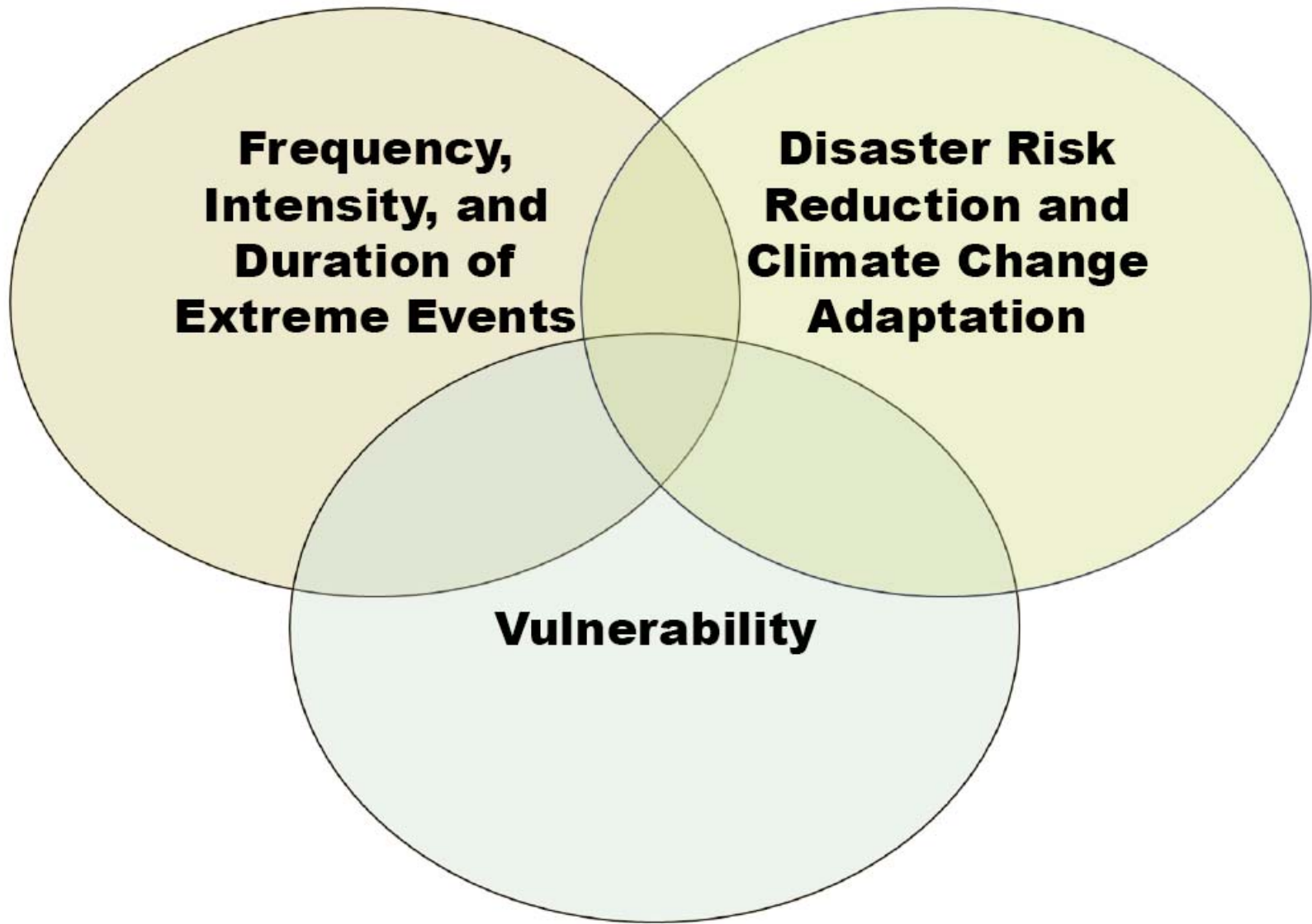
Impacts are increasing

**ISDR REPORT
ON RISK AND POVERTY IN A CHANGING CLIMATE
2009**

- **Bali Action Plan (2007) called for enhanced action on risk management and risk reduction strategies**
- **The Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters (2005) aims for “the substantial reduction of disaster losses, in lives and in the social, economic, and environmental assets of communities and countries.”**

History

- September 2008, Norway introduced a proposal, prepared with the International Strategy for Disaster Reduction
- March 2009, a scoping meeting was held in Oslo, Norway
- April 2009, the IPCC Plenary approves the outline for such a Special Report
- November 2009, First lead author held in Panamá
- October /December 2011. Publication



**Frequency,
Intensity, and
Duration of
Extreme Events**

**Disaster Risk
Reduction and
Climate Change
Adaptation**

Vulnerability

Three Communities Involved

- Climate scientists
- Experts on the impacts of climate change and adaptation policies
- Experts on disaster risk reduction

Special Report Focus on

- Factors that make people and infrastructure vulnerable to extreme events
- Recent and future changes in the relationship between climate change and extremes
- Managing the risks of disasters, over a wide range of spatial and temporal scales

IPCC Special Report Outline

- 1. Climate change: New dimensions in disaster risk, exposure, vulnerability, and resilience**
- 2. Determinants of risks: Exposure and vulnerability**
- 3. Changes in climate extremes and their impacts on the natural physical environment**
- 4. Changes in impacts of climate extremes: human systems and ecosystems**
- 5. Managing the risks from climate extremes at the local level**
- 6. Managing the risks from climate extremes at the national level**
- 7. Managing the risks: International level and integration across scales**
- 8. Toward a sustainable and resilient future**
- 9. Case studies**

Thank you