

Climate Change – Livelihoods and Poverty

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Ch13, WGII, AR5

Uneven Development

- **Climate change is a threat to equitable and sustainable development; it exacerbates livelihood struggles, esp. among disadvantaged people**
- **Structural disadvantage (marginalization) drives vulnerability, and risk**
- **Averages and aggregates mask disproportional impacts and risks**
- **Critical thresholds for communities/society NOT from a global average**
- **Yardstick: transition from acceptable to unacceptable at the local level**

Highlighting Risk in the AR5

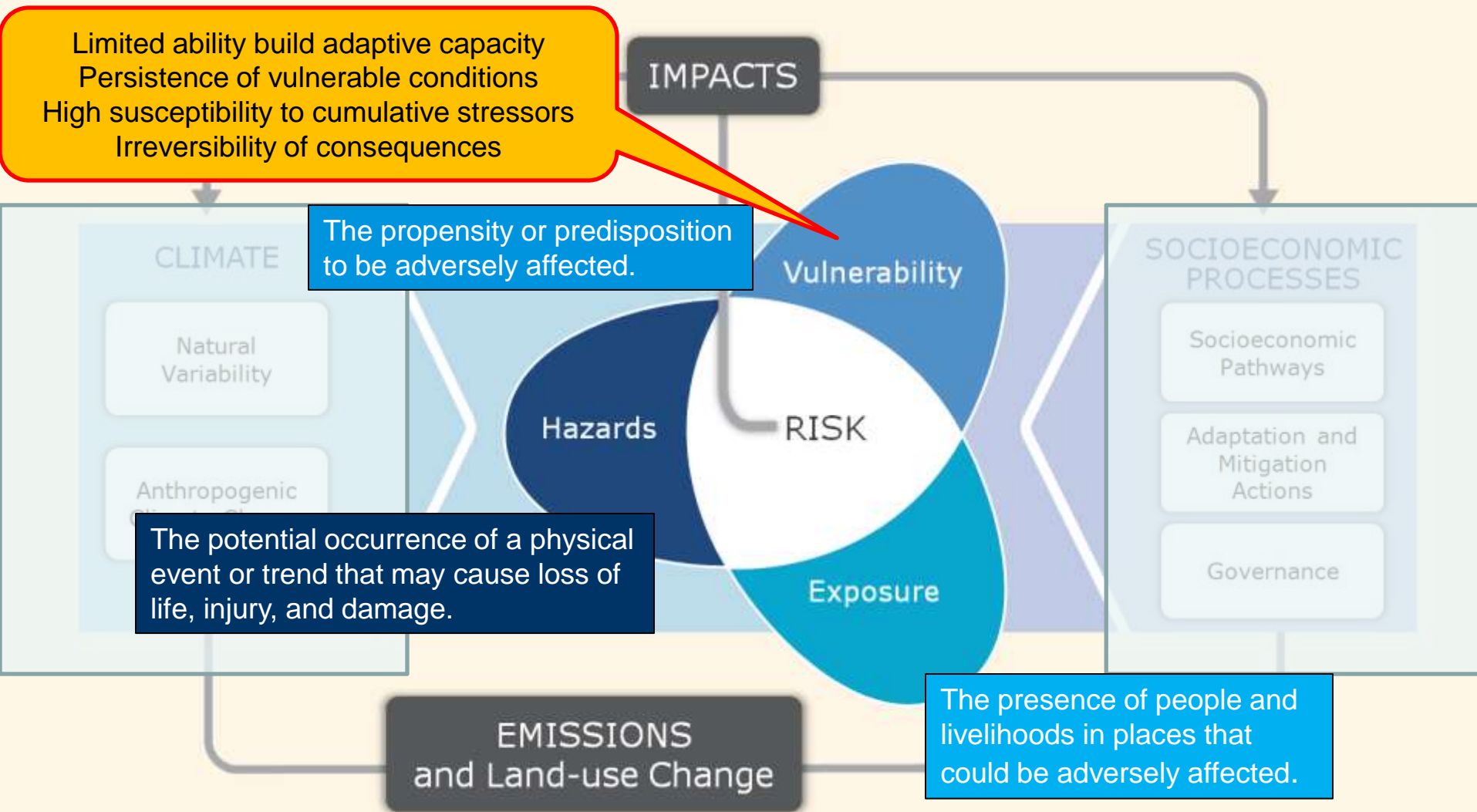


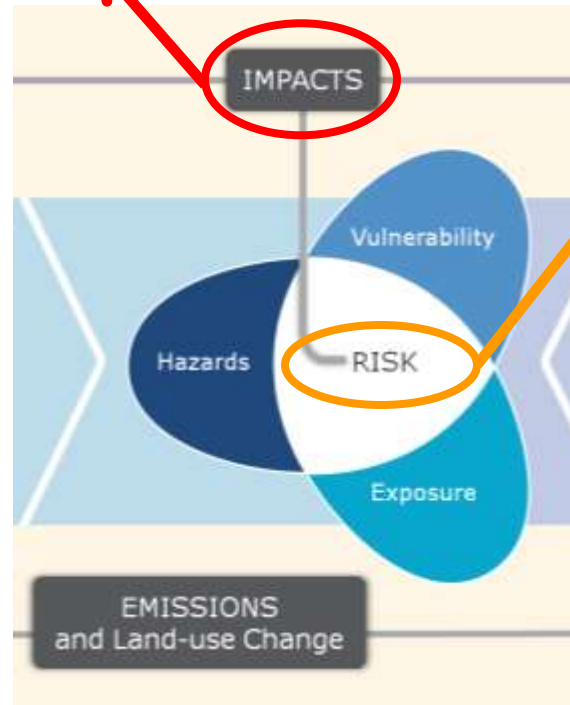
Figure SPM.1

Examples of Impacts and Risks for People

Example: **Additional duties for woman** as laborers and caregivers, reduced food intake, more distress, adverse mental health, and in some cases increasing incidences of domestic violence.



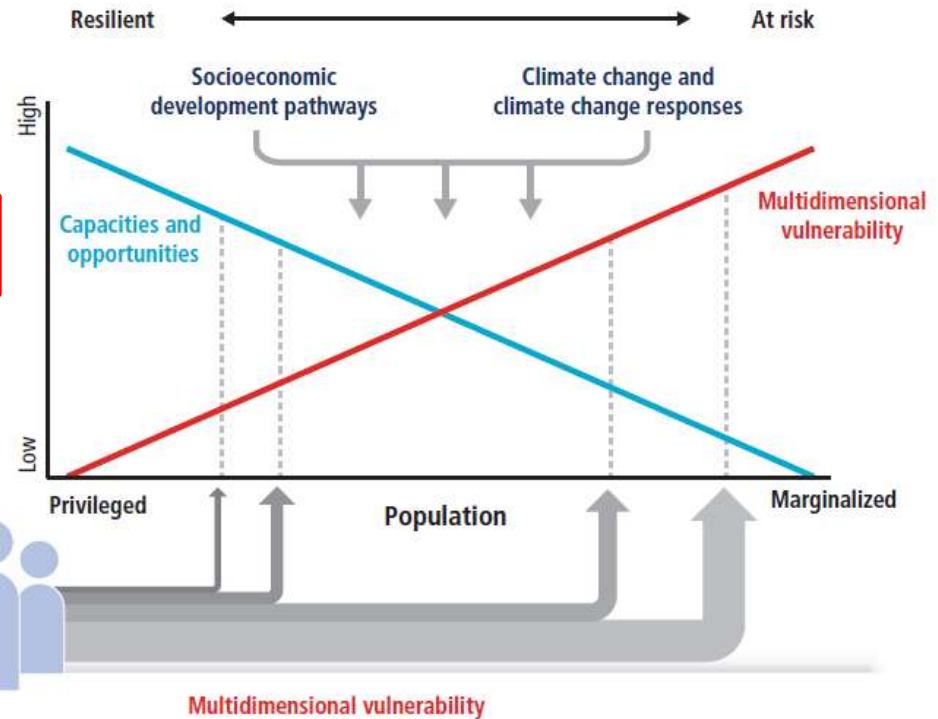
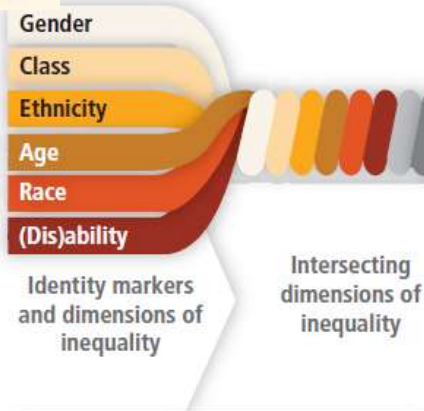
Example: **Heat waves:** declining work productivity, dehydration, heat stroke, and death



Multidimensional Inequalities



Inequalities



- Producing some privileged and resilient people with very little or no multidimensional vulnerability
- Producing many marginalized and at risk people, with fewer capacities and opportunities, and higher multidimensional vulnerability
- Many people in between

Fig 13.5 and Box TS 4 Fig 1

Structural Disadvantage

Socially and geographically disadvantaged people exposed to persistent inequalities at the intersection of various dimensions of discrimination based on gender, age, race, class, caste, indigeneity, and (dis)ability are particularly negatively affected by climate change and climate-related hazards. Context-specific conditions of marginalization shape multidimensional vulnerability and differential impacts.

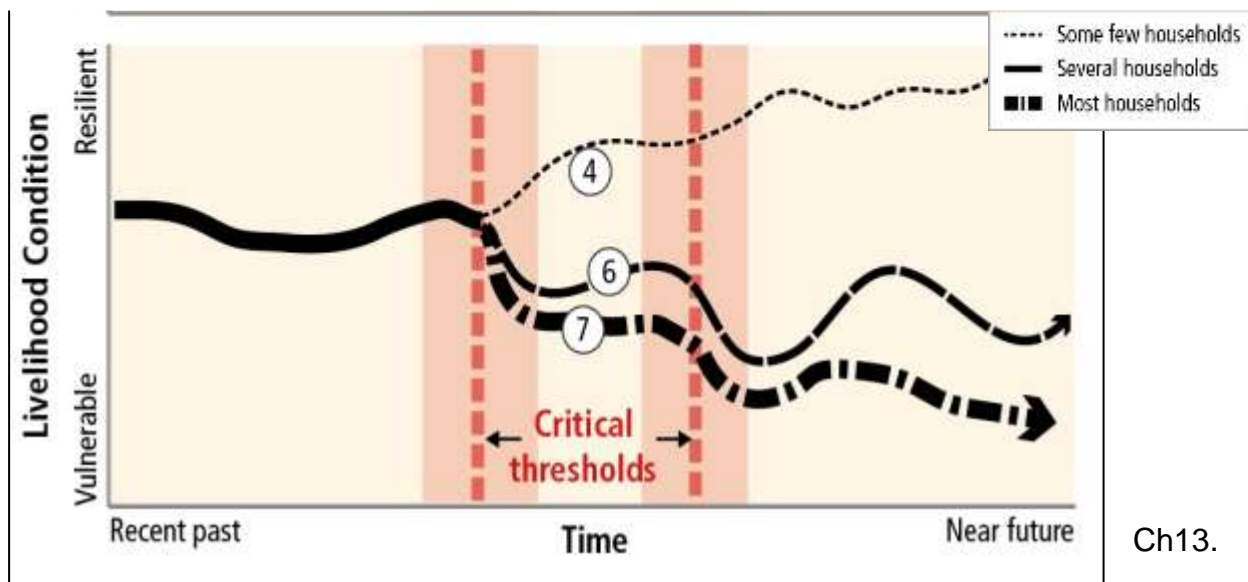
Gendered livelihood impacts; Feminization of responsibilities; Occupational hazards; Emotional and psychological distress; Mortality

Table 13-1 | Examples of gendered climate experiences.

Experiences	Male farmers	Female farmers
Increased workload	Demanding tasks such as feeding livestock, carting water, destroying frail animals (A)	Assistance with farm tasks and working off the farm for additional income (A)
	Increased migration for wage labor, typically farther away from home (I)	Increased collection of firewood and uptake of wage labor (especially lower castes) in neighboring villages (I)
Community interactions, isolation, and exploitation	Locked into farms, loss of political power (A)	Increased interactions and caregiving work, taking care of others' health at the expense of their own (A)
	Exploitation by labor contractors when migrating (I)	Disadvantage in accessing institutional support and climate information (I)
Physical and psychological toll	Feel demonized (farmers seen as responsible for crisis), increased stress, social isolation, depression, and high suicide levels (A)	Working lives appear indefinite, resulting in increased stress (A)
	Increased anxiety to provide food and access loans and escape trap of indebtedness, increase in domestic fights, sometimes suicide (I)	Increased pressure to provide food and save some more from sale for consumption, less food intake, increase in domestic fights (I)

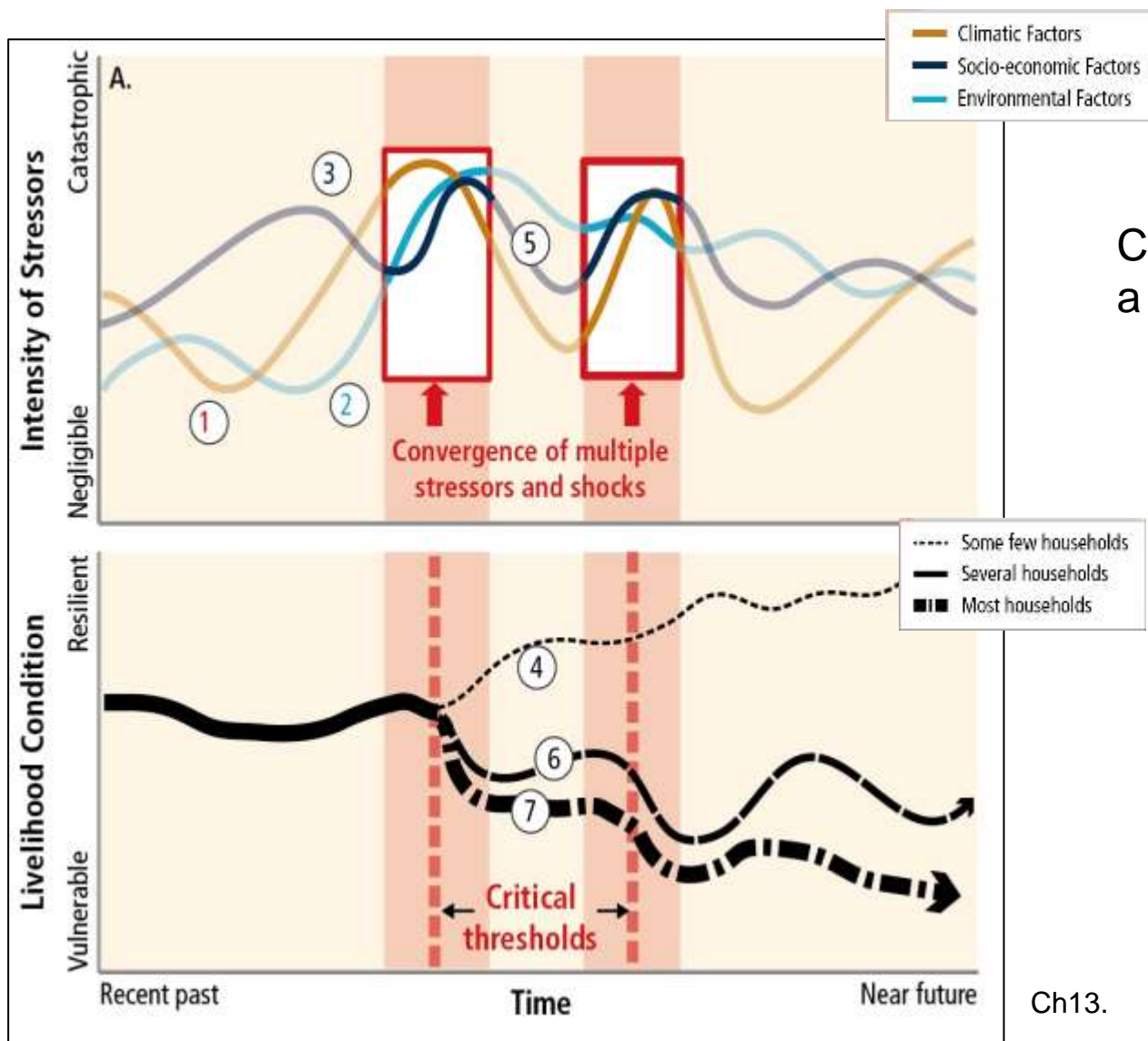
(A) = Australia (ten-year drought, 2003–2012), based on Alston (2011); (I) = India (climate variability and changing climatic trends), based on Lambrou and Nelson (2013).

Livelihoods are Dynamic



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Livelihoods are Dynamic

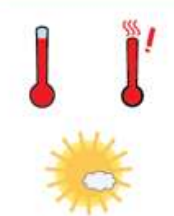










Climate change =
a threat multiplier



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Key Risks for the Poor

Key risk	Adaptation issues & prospects	Climatic drivers	Timeframe	Risk & potential for adaptation
<p>Deteriorating livelihoods in drylands, due to high and persistent poverty. Risk of reaching tipping points for crop and livestock production in small-scale farming and/or pastoralist livelihoods (<i>high confidence</i>)</p> <p>[13.2.1.2, 13.2.2.1, 13.2.2.3]</p>	<p>Adaptation options are limited owing to persistent poverty, declining land productivity, food insecurity, and limited government support due to marginalization. Rural–urban migration is a potential adaptation strategy.</p>		<p>Very low Medium Very high</p> <p>Present</p> <p>Near term (2030 – 2040)</p> <p>Long term 2°C (2080 – 2100) 4°C</p>	<p>Very low Medium Very high</p> <p>Present</p> <p>Near term (2030 – 2040)</p> <p>Long term 2°C (2080 – 2100) 4°C</p>
<p>Shifts from transient to chronic poverty due to persistent economic and political marginalization of poor people combined with deteriorating food security (<i>high confidence</i>)</p> <p>[13.2.1.3, 13.2.2.4]</p>	<p>Adaptation options are limited due to exclusion from markets and low government support. Policies for adaptation are unsuccessful because of failure to address persistent inequalities.</p>		<p>Very low Medium Very high</p> <p>Present</p> <p>Near term (2030 – 2040)</p> <p>Long term 2°C (2080 – 2100) 4°C</p>	<p>Very low Medium Very high</p> <p>Present</p> <p>Near term (2030 – 2040)</p> <p>Long term 2°C (2080 – 2100) 4°C</p>
<p>Declining work productivity, morbidity (e.g., dehydration, heat stroke, and heat exhaustion), and mortality from exposure to heat waves. Particularly at risk are agricultural and construction workers as well as children, homeless people, the elderly, and women who have to walk long hours to collect water (<i>high confidence</i>)</p> <p>[13.2.1.1, 13.2.1.5, 13.2.2.4, Box 13-1]</p>	<p>Adaptation options are limited for people who are dependent on agriculture and too poor to afford agricultural machinery. Adaptation options are limited in the construction sector where many poor people work under insecure arrangements. Adaptation might be impossible in certain areas in a +4°C world.</p>		<p>Very low Medium Very high</p> <p>Present</p> <p>Near term (2030 – 2040)</p> <p>Long term 2°C (2080 – 2100) 4°C</p>	<p>Very low Medium Very high</p> <p>Present</p> <p>Near term (2030 – 2040)</p> <p>Long term 2°C (2080 – 2100) 4°C</p>

Climate-related drivers of impacts						Level of risk & potential for adaptation
						<p>Potential for additional adaptation to reduce risk</p> <p>Risk level with high adaptation</p> <p>Risk level with current adaptation</p>
Warming trend	Extreme temperature	Drying trend	Extreme precipitation	Damaging cyclone	Sea level	

Main Findings

Climate change and climate variability **worsen existing poverty, exacerbate inequalities, and trigger both new vulnerabilities and some opportunities** for individuals and communities. Poor people are poor for different reasons and thus are not all equally affected, and not all vulnerable people are poor. Climate change interacts with non-climatic stressors and entrenched structural inequalities to shape vulnerabilities
(*very high confidence, based on robust evidence, high agreement*).

Climate change **will create new poor** between now and 2100, in developing and developed countries, and **jeopardize sustainable development**. The majority of severe impacts are projected for urban areas and some rural regions in sub-Saharan Africa and Southeast Asia
(*medium confidence, based on medium evidence, medium agreement*).

Current **policy responses** for climate change mitigation or adaptation will result in **mixed, and in some cases even detrimental, outcomes for poor and marginalized people**, despite numerous potential synergies between climate policies and poverty reduction
(*medium confidence, based on limited evidence, high agreement*).