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The 2030 to 2035 NDC Update

Capacity Building Session

Caveat: These slides do not represent recommendations of the PCC. They are slides intended to explain what an NDC is, why it is important, and how we might structure the logic for the NDC update for the period 2030 to 2035.

AGENDA

No.	Item	Presenter
1.	Registration and refreshments	• All
1.	Welcome and opening	• PCC
1.	NDC overview	• PCC
1.	Adaptation Overview and Discussion	• PCC
1.	Facilitated Discussion	• All
1.	Mitigation Overview	• PCC
1.	Tea/Coffee Break	
1.	Facilitated Discussion - Mitigation	• All
1.	Overview of Means of Implementation (Climate Finance and Innovation)	• PCC
1.	Facilitated Discussion	• All
1.	Next Steps and Closure	• PCC
	Lunch	

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The adaptation component of an NDC

Introduction to Climate Change & Adaptation

"A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere, and which is in addition to natural climate variability observed over comparable time periods.“

UNFCCC

“Adaptation refers to changes in processes, practices and structures to moderate potential damage or to take advantage of opportunities associated with climate change.”

CityAdapt.com

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Contents

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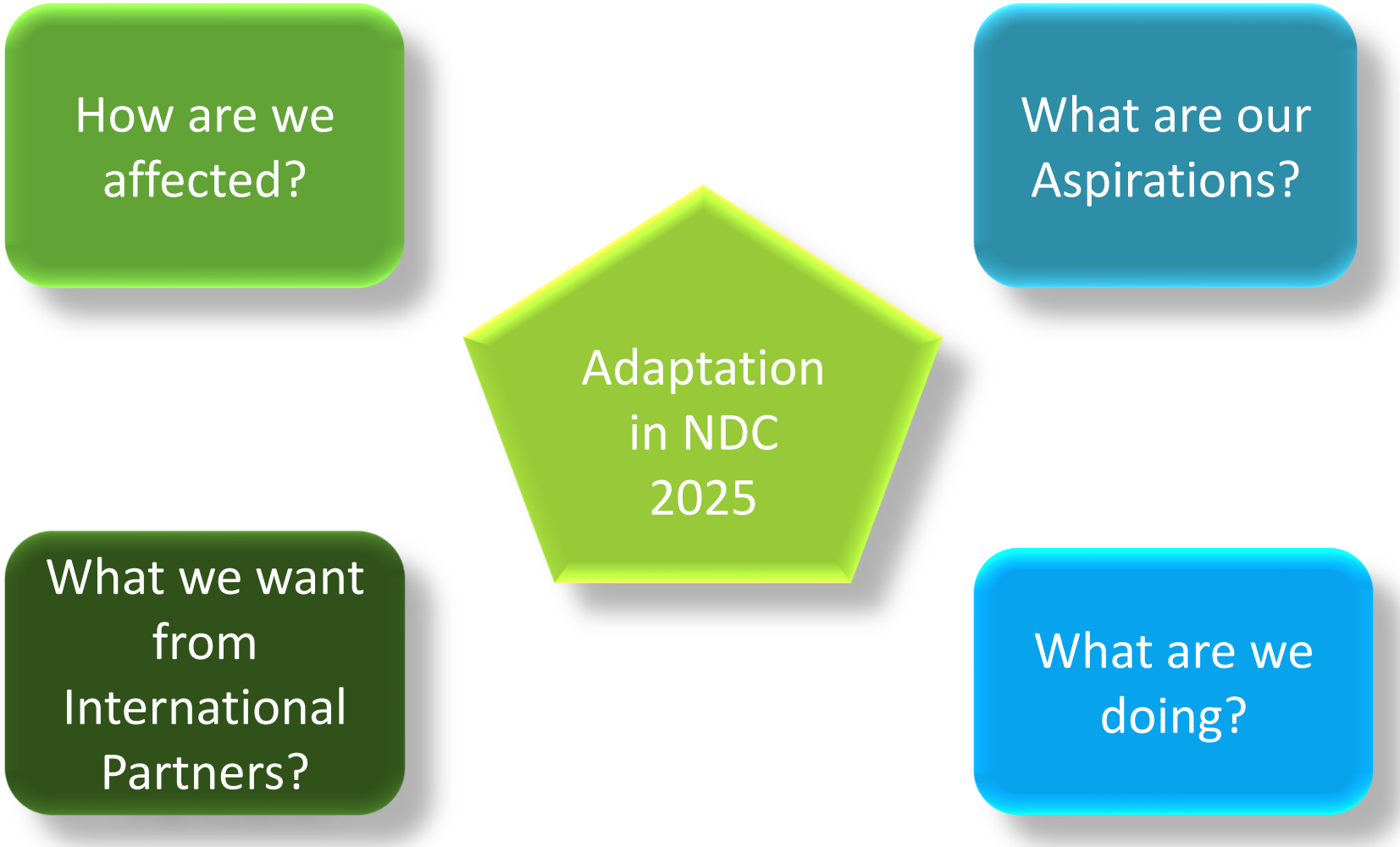
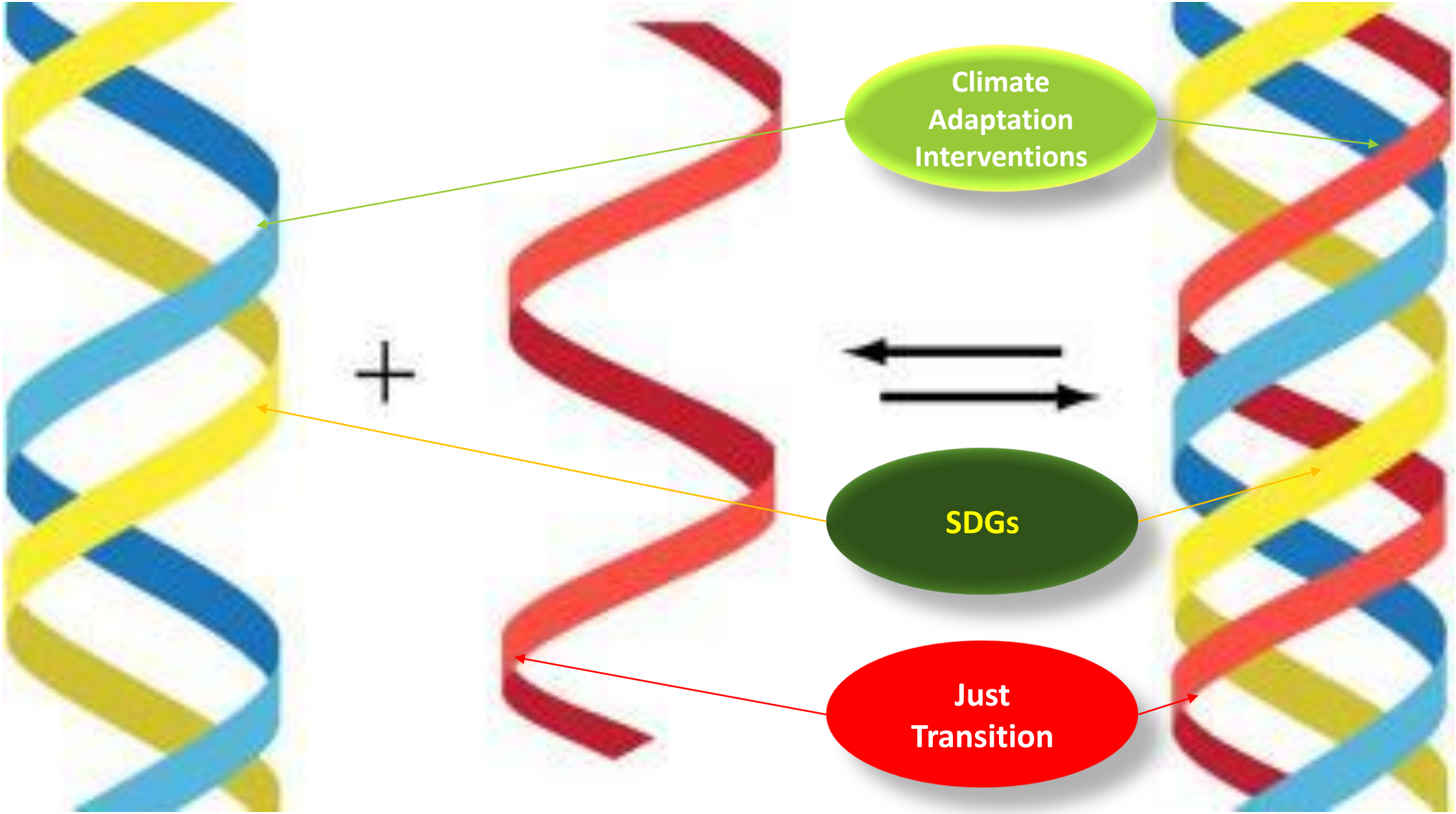
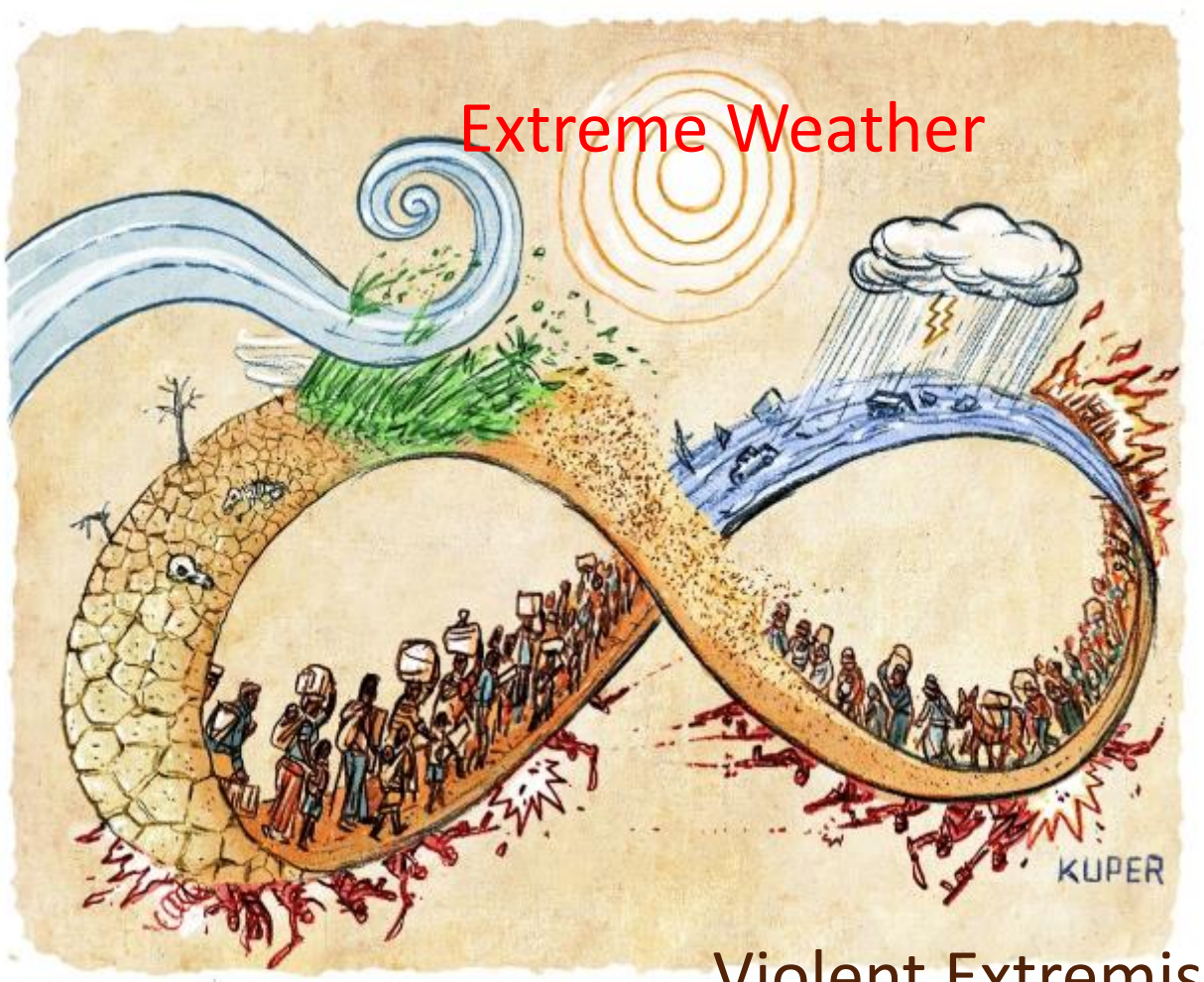
What does South Africa want to communicate on Adaptation?

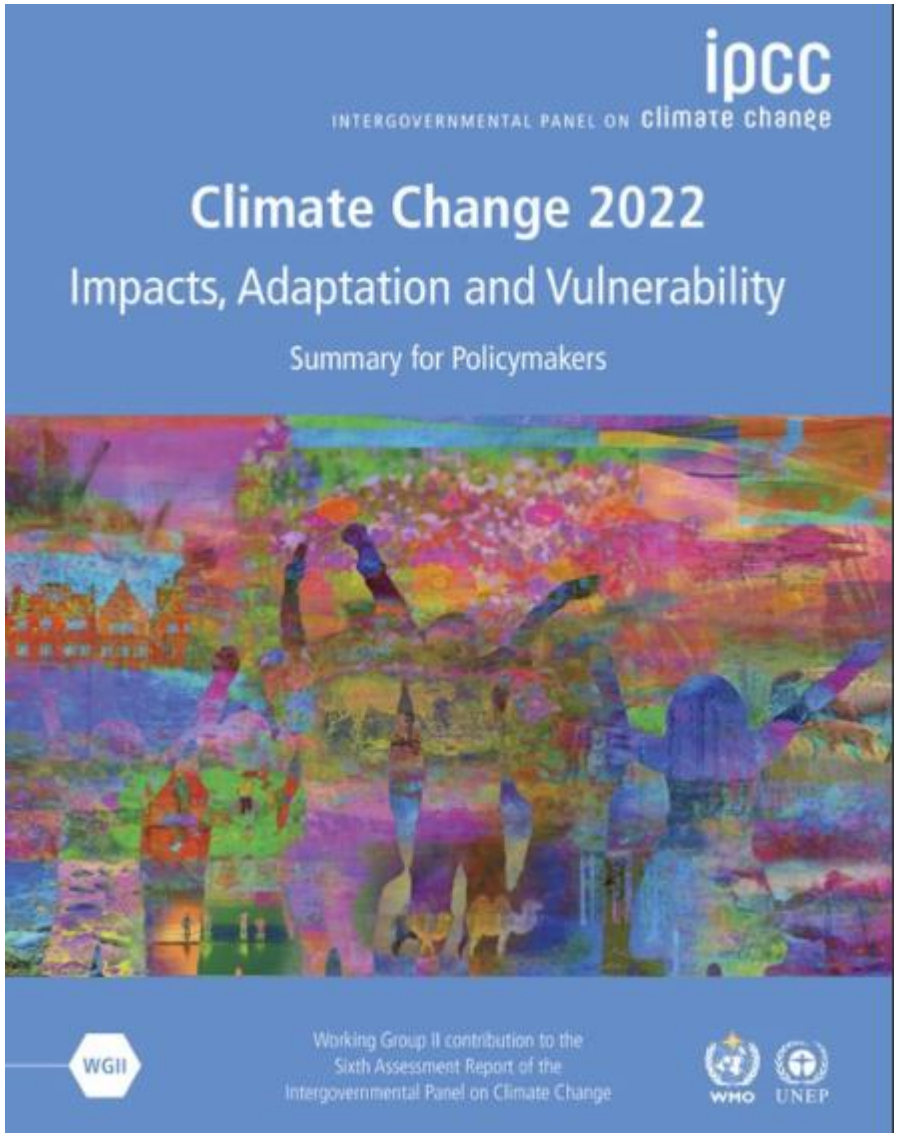



Climate Adaptation Interventions
+
SDGs
Just Transition

IPCC 6 Assessment Report



ICRC Report



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Dimensions of the South African Climate Challenge

Economic

Social Fabric

Climate Change

Environmental

Security

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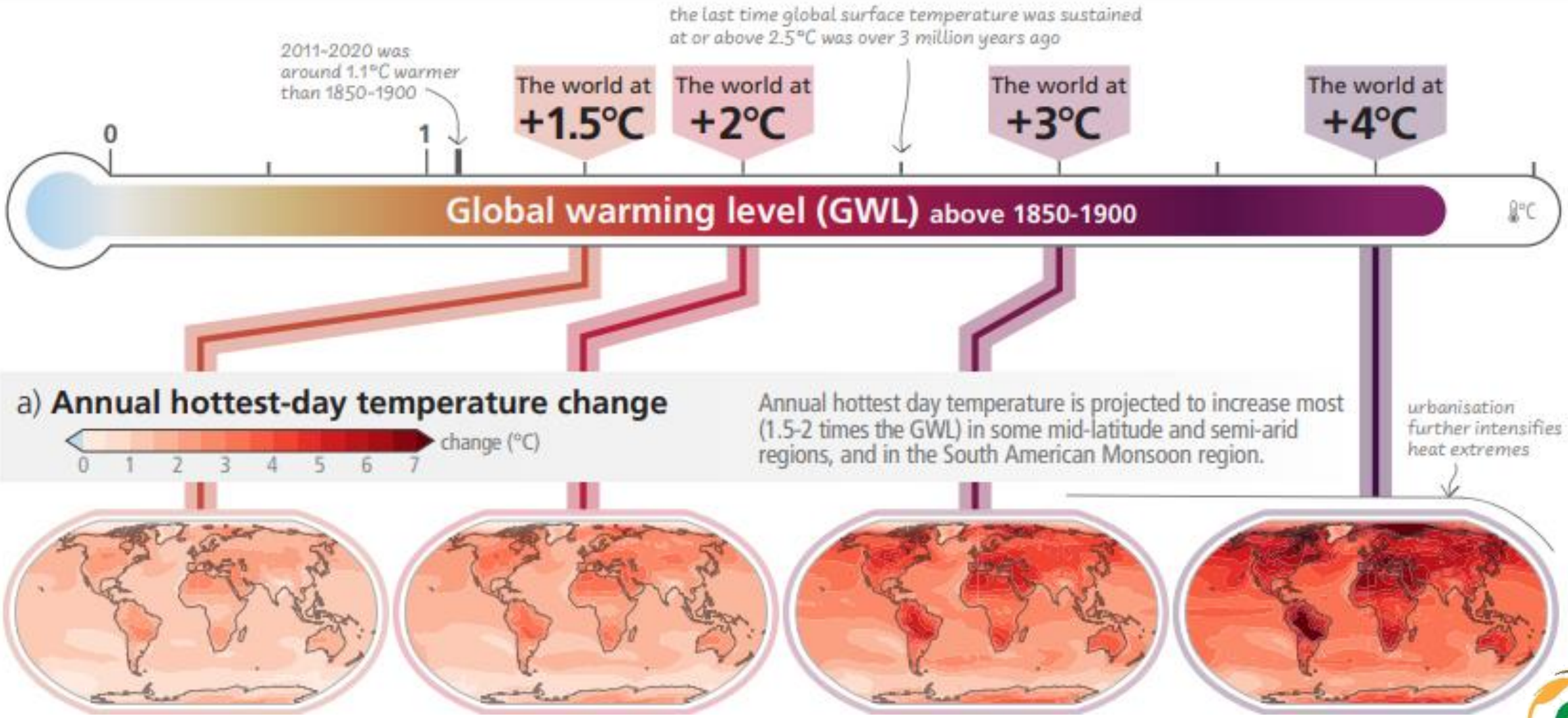
Impacts of Global Warming – Temperature



(IPCC, 2022)

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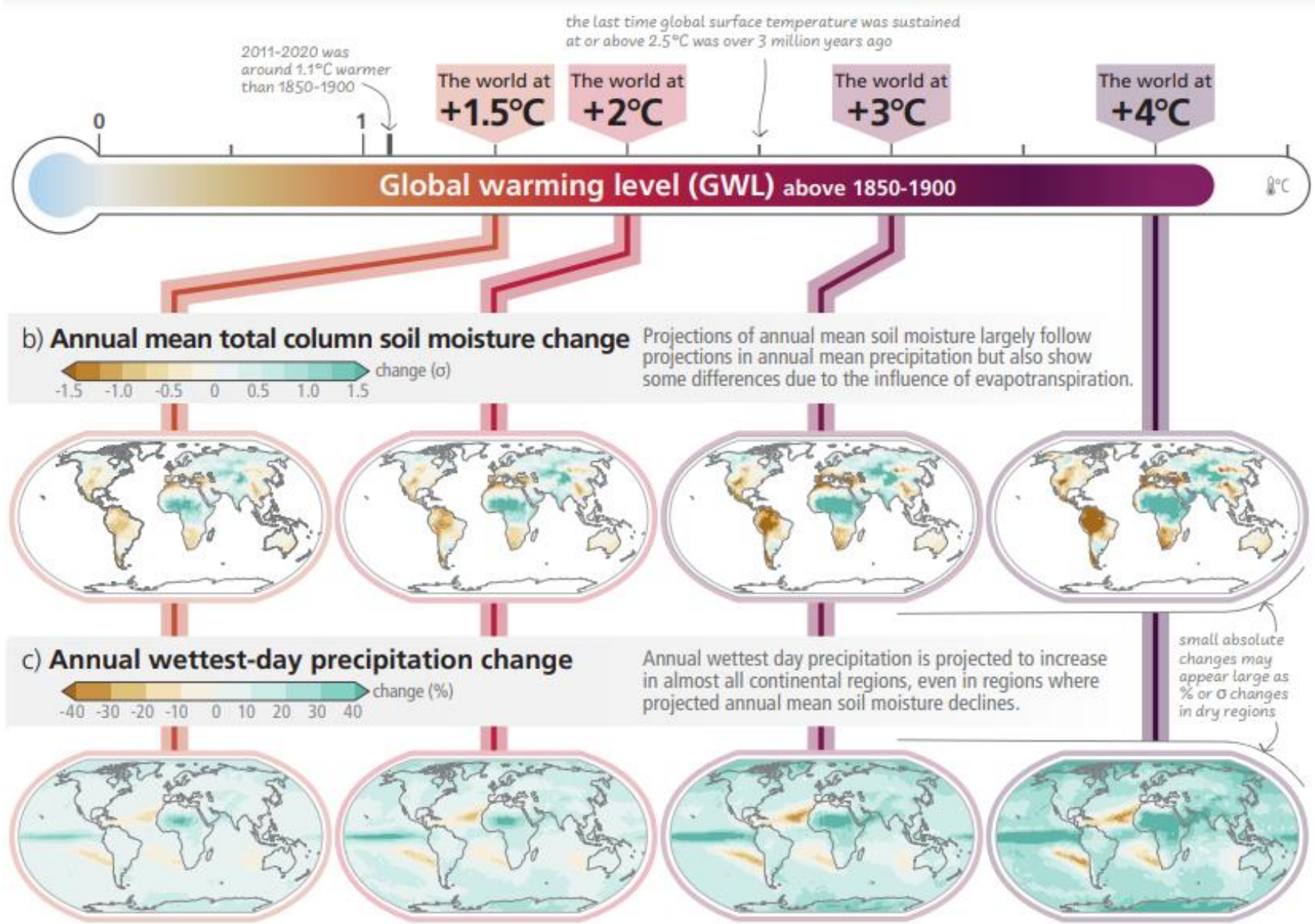
Impacts of Global warming – Soil moisture & precipitation



(IPCC, 2022)

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Impacts of Global warming - GDP

	Temperature rise scenario, by mid-century			
	Well-below 2°C increase	2.0°C increase	2.6°C increase	3.2°C increase
	Paris target	*The likely range of global temperature gains*		*Severe case*
Simulating for economic loss impacts from rising temperatures in % GDP, relative to a world without climate change (0°C)				
World	−4.2%	−11.0%	−13.9%	−18.1%
OECD	−3.1%	−7.6%	−8.1%	−10.6%
North America	−3.1%	−6.9%	−7.4%	−9.5%
South America	−4.1%	−10.8%	−13.0%	−17.0%
Europe	−2.8%	−7.7%	−8.0%	−10.5%
Middle East & Africa	−4.7%	−14.0%	−21.5%	−27.6%
Asia	−5.5%	−14.9%	−20.4%	−26.5%
Advanced Asia	−3.3%	−9.5%	−11.7%	−15.4%
ASEAN	−4.2%	−17.0%	−29.0%	−37.4%
Oceania	−4.3%	−11.2%	−12.3%	−16.3%

Global temperature rises will negatively impact GDP in all regions by mid-century. Image: Swiss Re Institute: The economics of climate change.

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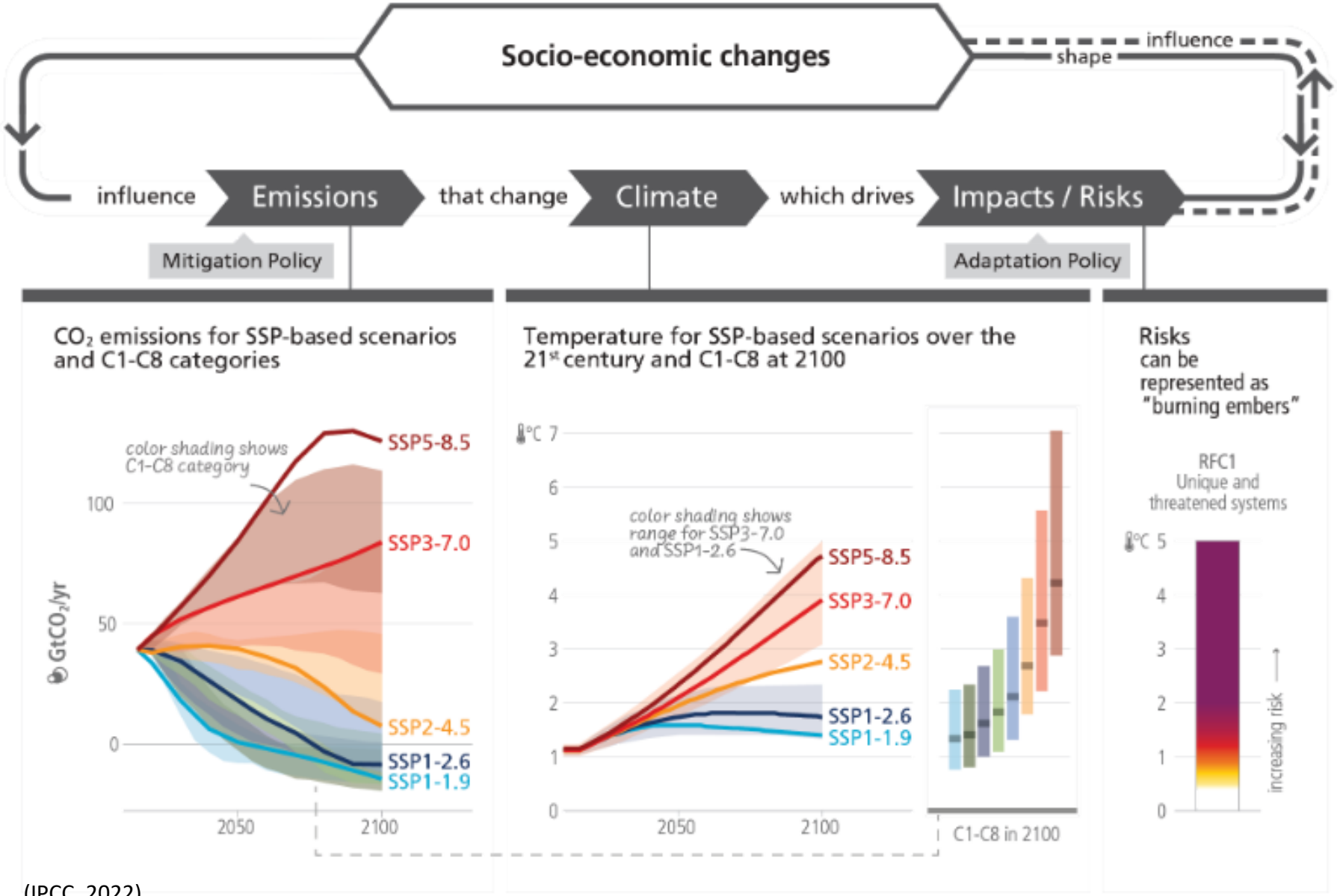
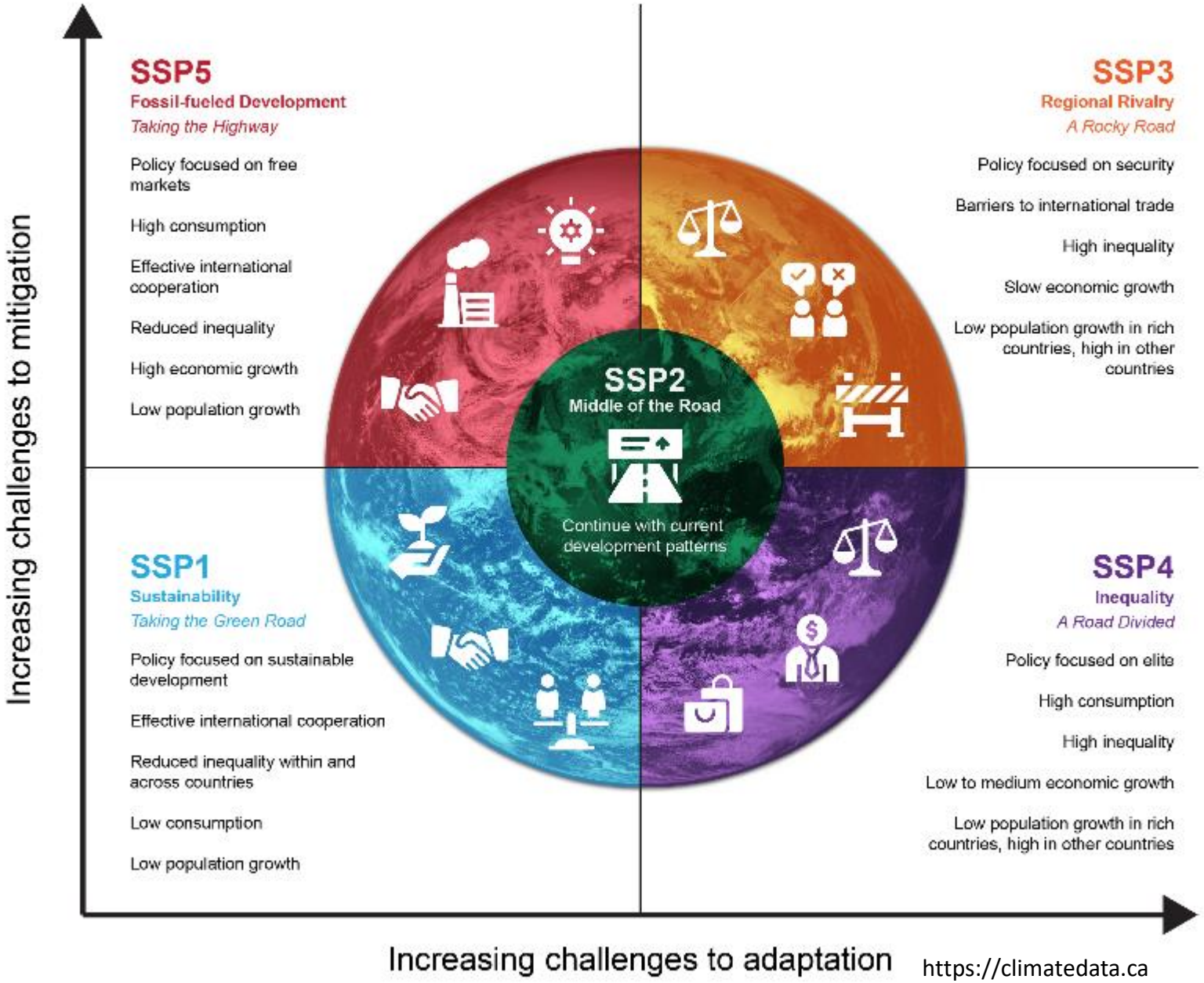
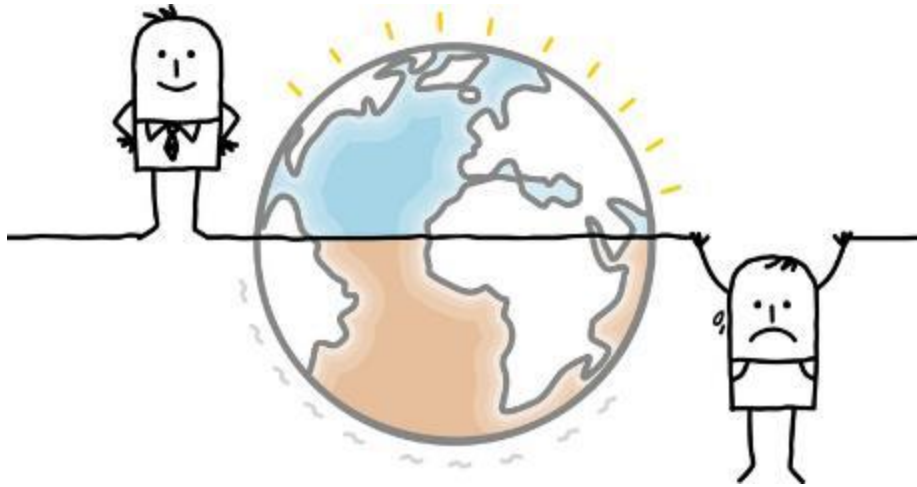
Global Scenarios Projections



(IPCC, 2022)

Outcomes of Shared Socio-Economic Pathway Scenarios





https://climatedata.ca

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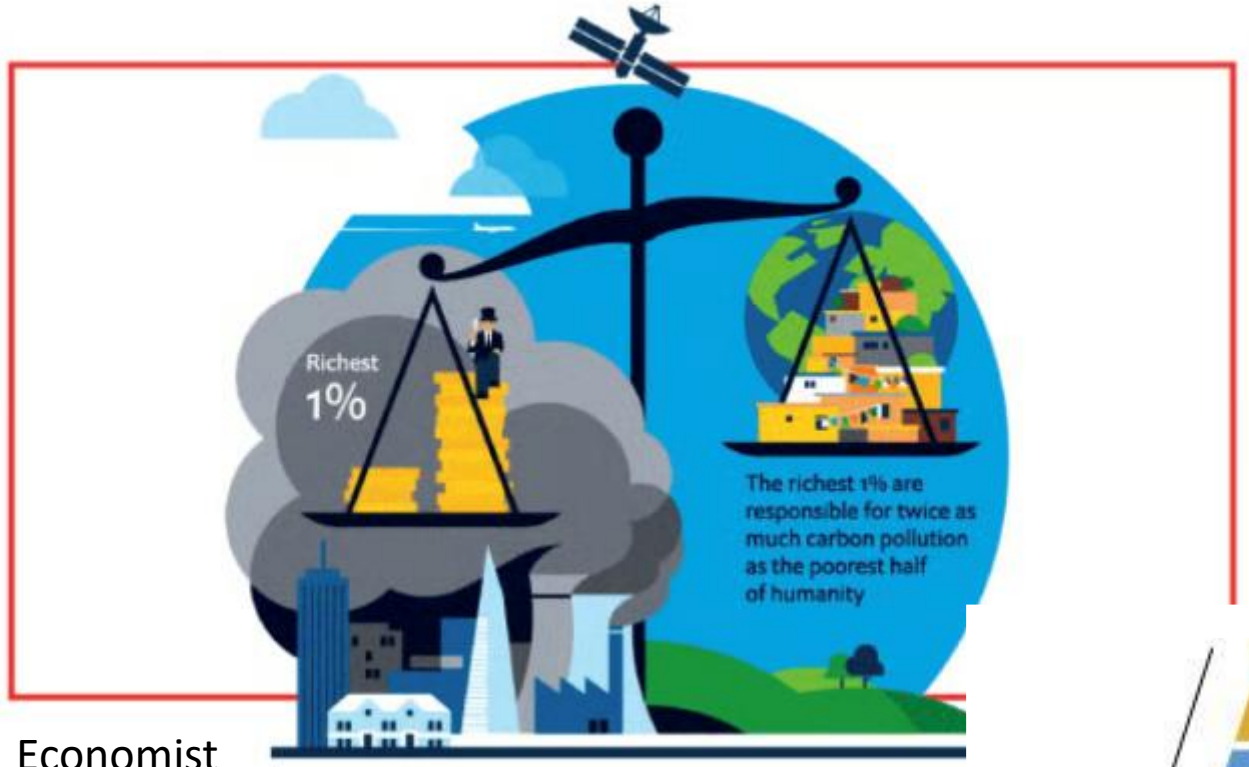
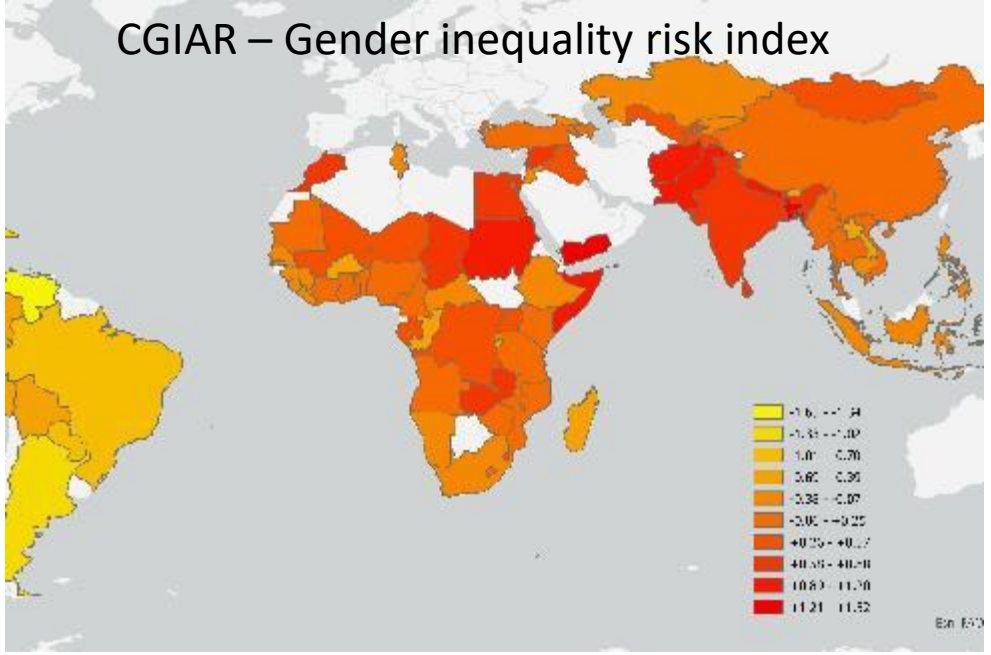
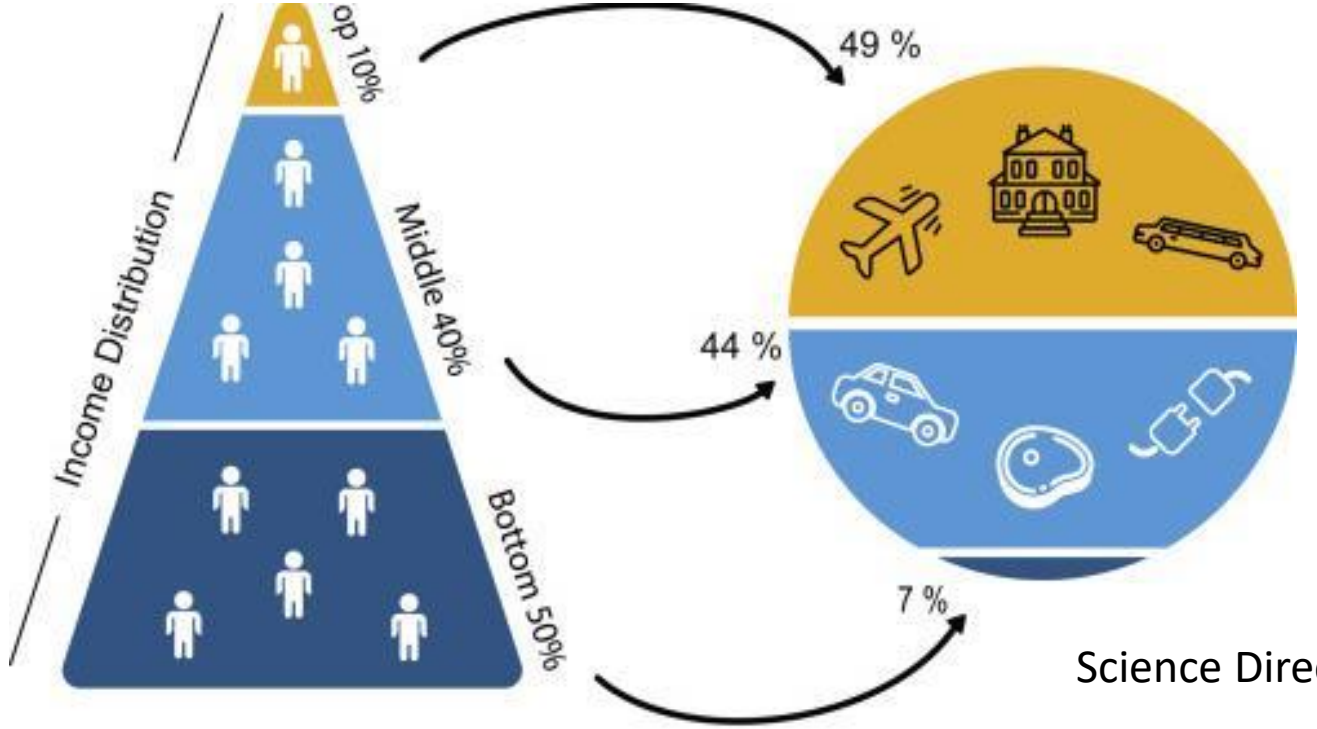


Economist

CGIAR – Gender inequality risk index





Science Direct

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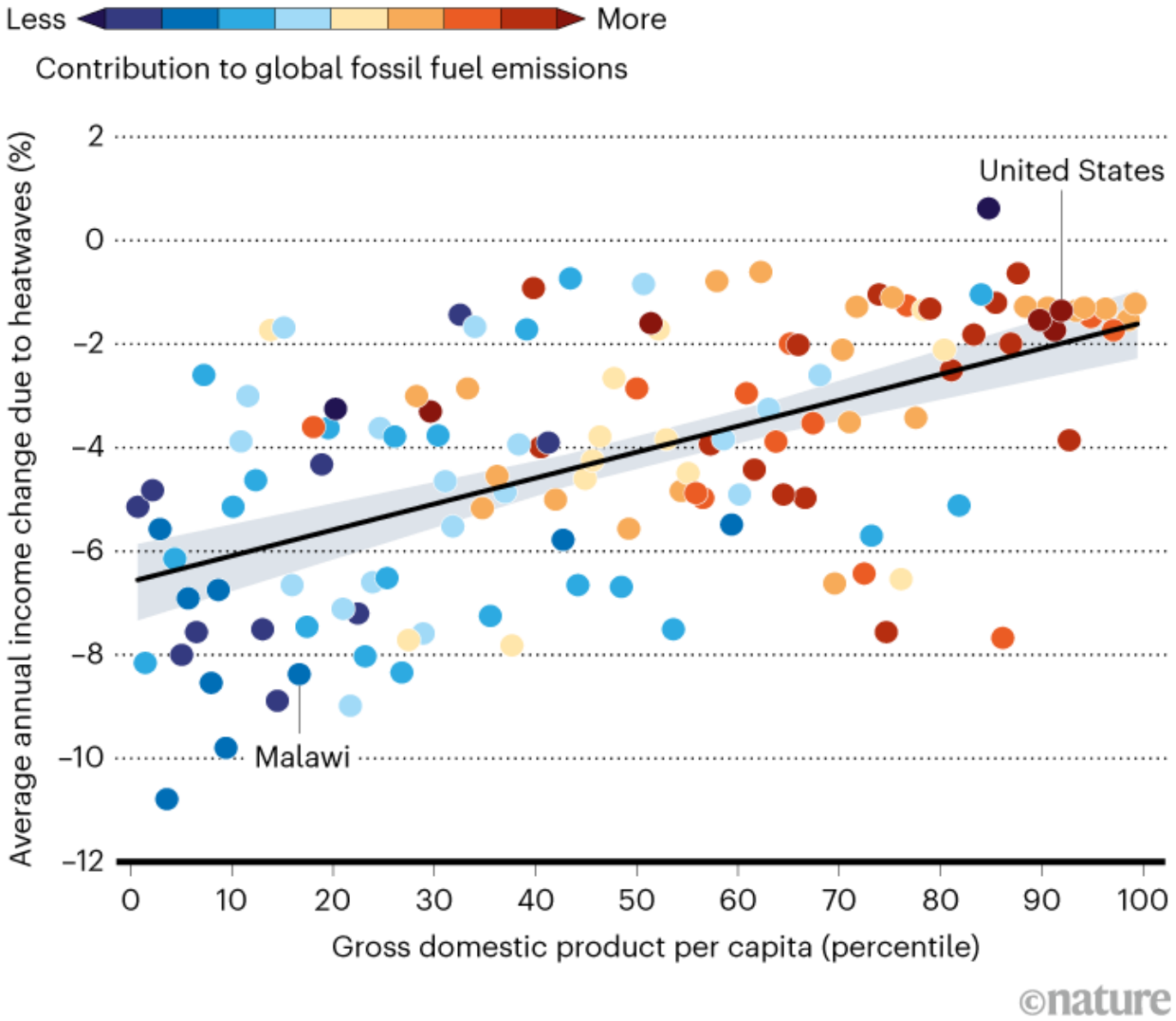
Who Pays

UNEQUAL BURDEN

Despite contributing least to global emissions, tropical and low-income countries suffer the largest economic impacts as a result of heatwaves.



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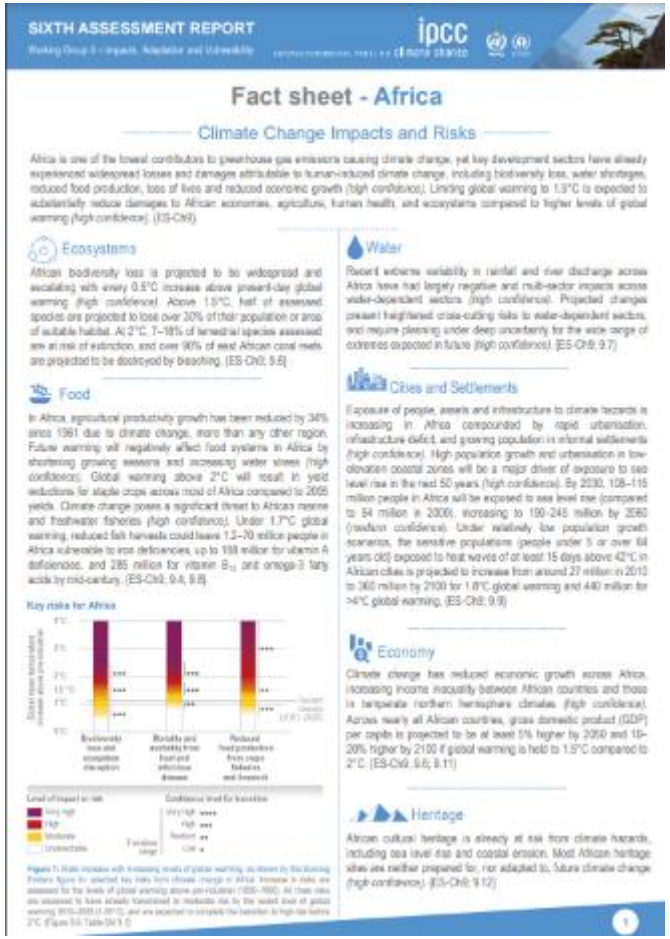
Climate impacts the poor and vulnerable (people and nations) disproportionately


SIXTH ASSESSMENT REPORT

ipcc

Fact sheet - Africa

Climate Change Impacts and Risks

Ecosystems

Water

Food

Cities and Settlements

Economy

Heritage

Impacts

- A 34% reduction in agricultural output due to climate change, more than any other region.
- Reduced income and growth and increased income inequality for African countries compared to their northern hemisphere counterparts.
- Over 3.6 million weather related displacements.
- A -5% impact on GDP per capita for South Africa

Projected Impacts

- A further 25 to 75% reduction on agricultural output, depending on crop and scenario
- A 50% drop in South Africa's GDP by 2100 (abstraction)
- With 1.7°C global warming by 2050, 17–40 million people could migrate internally in sub-Saharan Africa, increasing to 56–86 million for 2.5°C

Source: IPCC 6th Assessment Report Working Group II, Chapter 9: Africa

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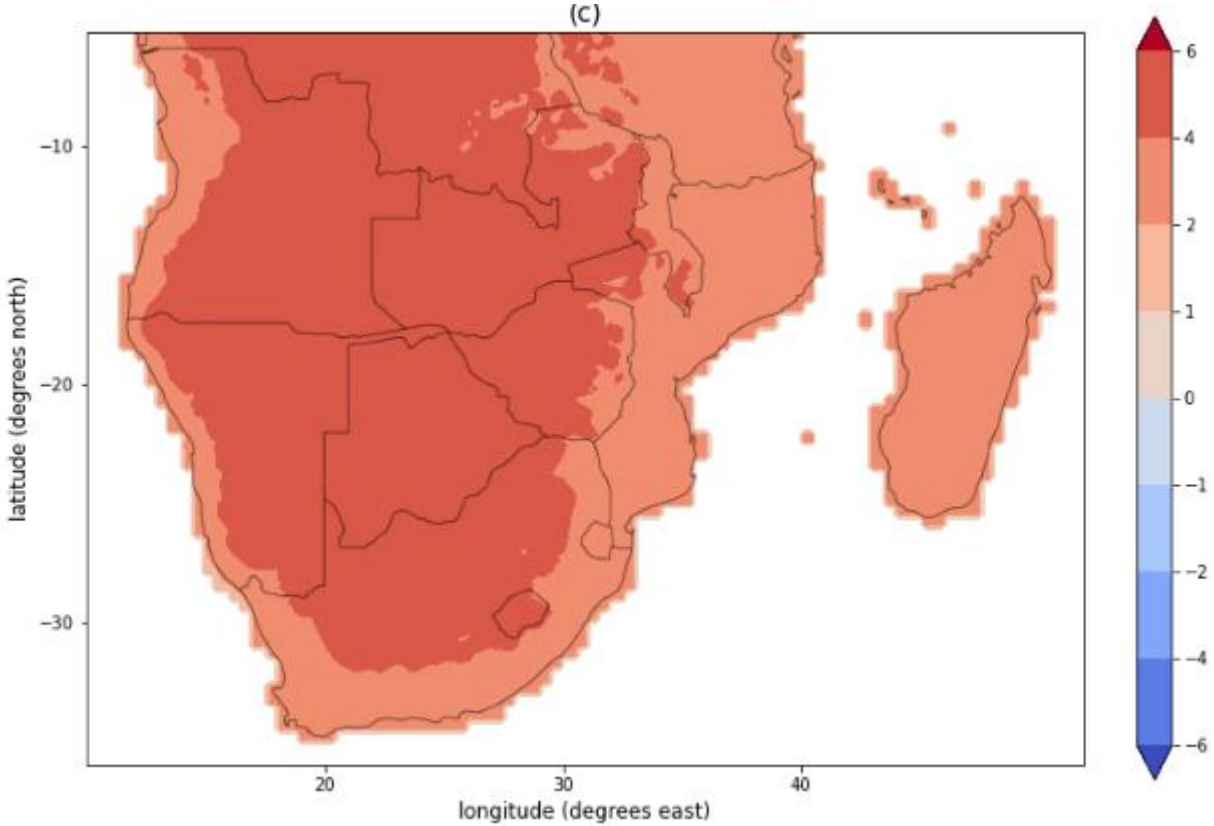
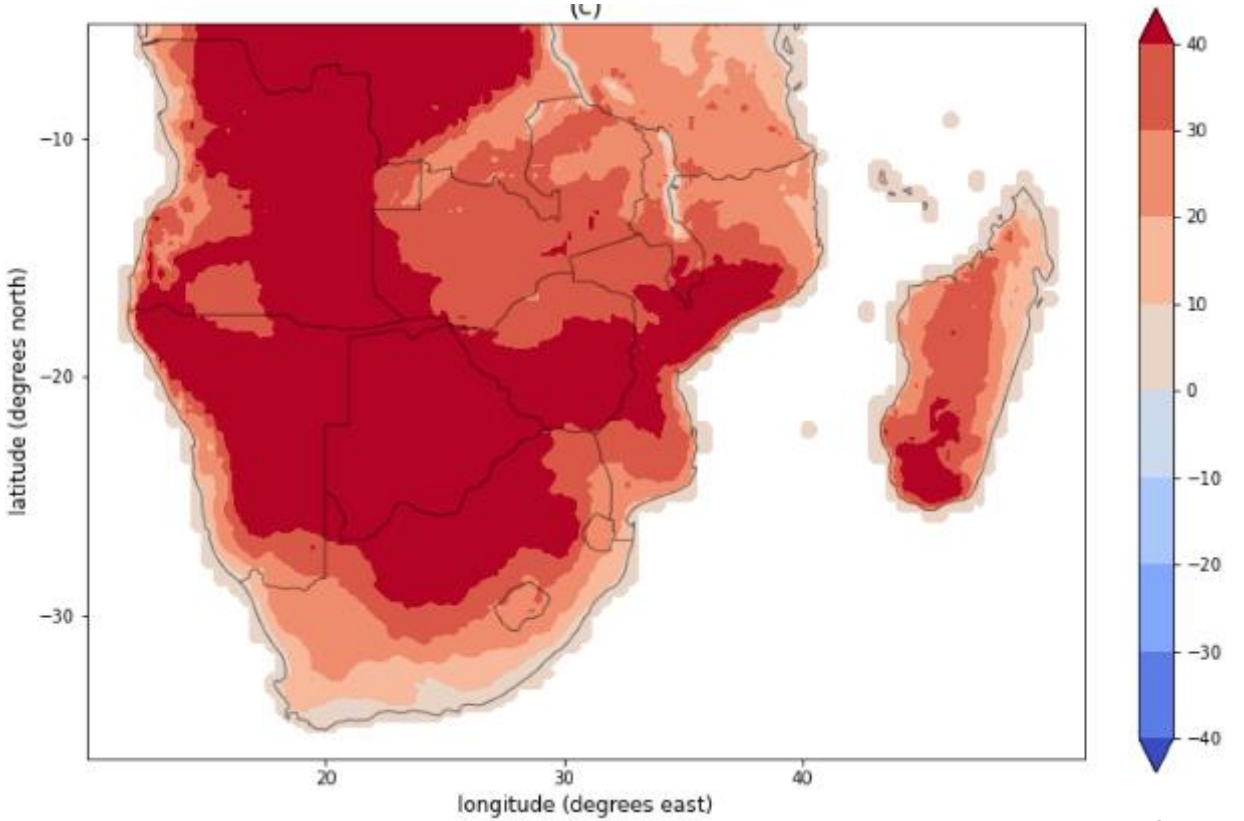
For low mitigation futures, local climate models predict hotter times…



Median projected changes in annual average temperature (°C) for the ensemble of 9 CORDEX core RCMs for 2080 2099 relative to 1981 2000.



Median projected changes in annual average heat wave days for the ensemble of 9 CORDEX core RCMs for 2080 2099 relative to 1981 2000.

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GLOBAL CHANGE Institute
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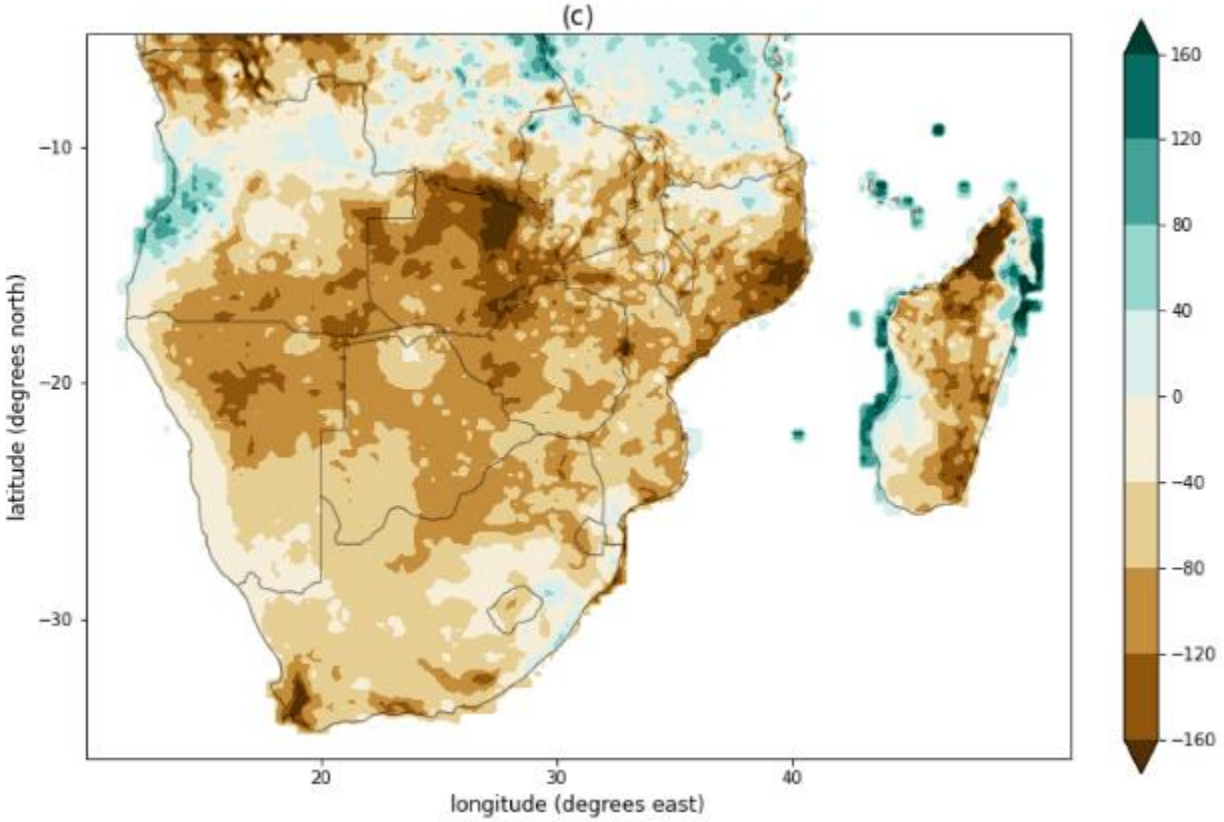
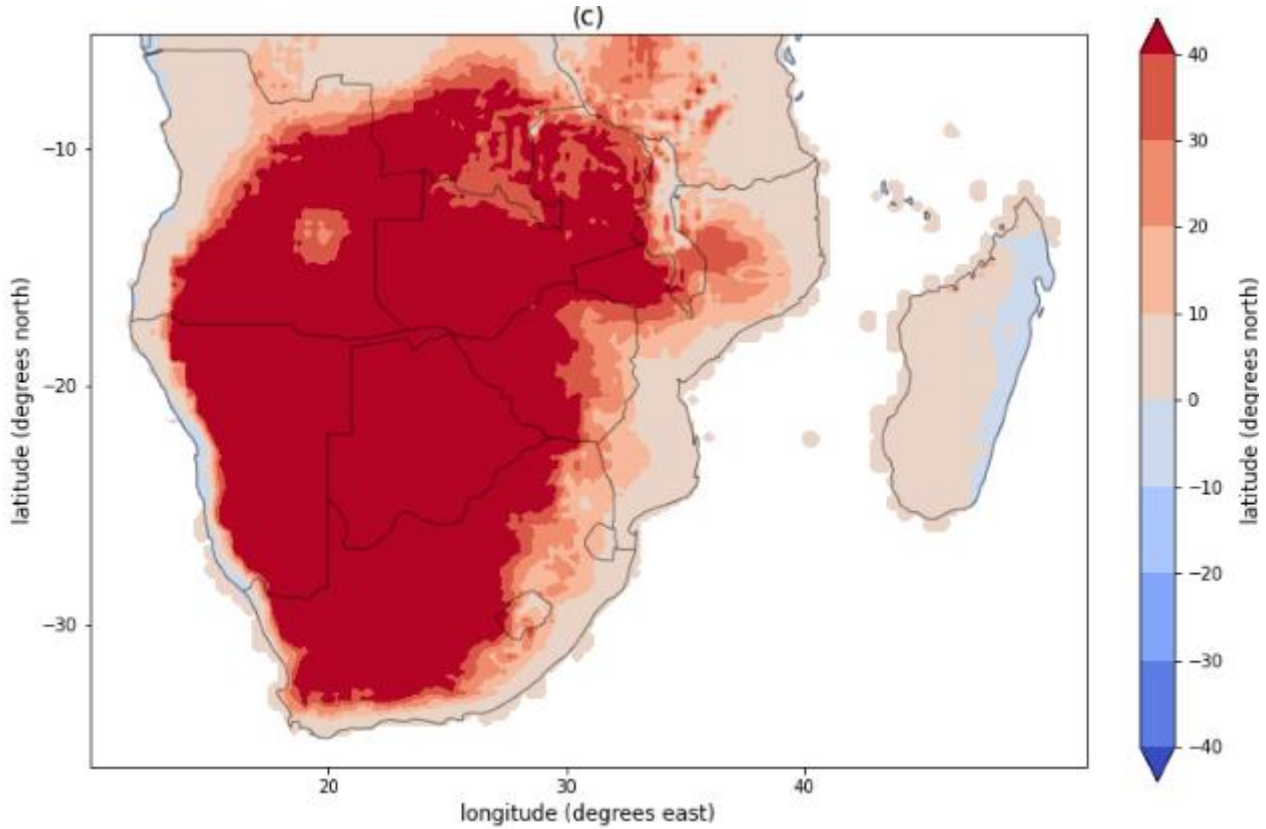
With lower rainfall and more high fire-danger days…



Median projected changes in annual rainfall for the ensemble of 9 CORDEX core RCMs for 2080 2099 relative to 1981 2000.



Median projected changes in number of high fire-danger days (shown as number of events per year per location) for the ensemble of 9 CORDEX core RCMs for 2080 2099 relative to 1981 2000.

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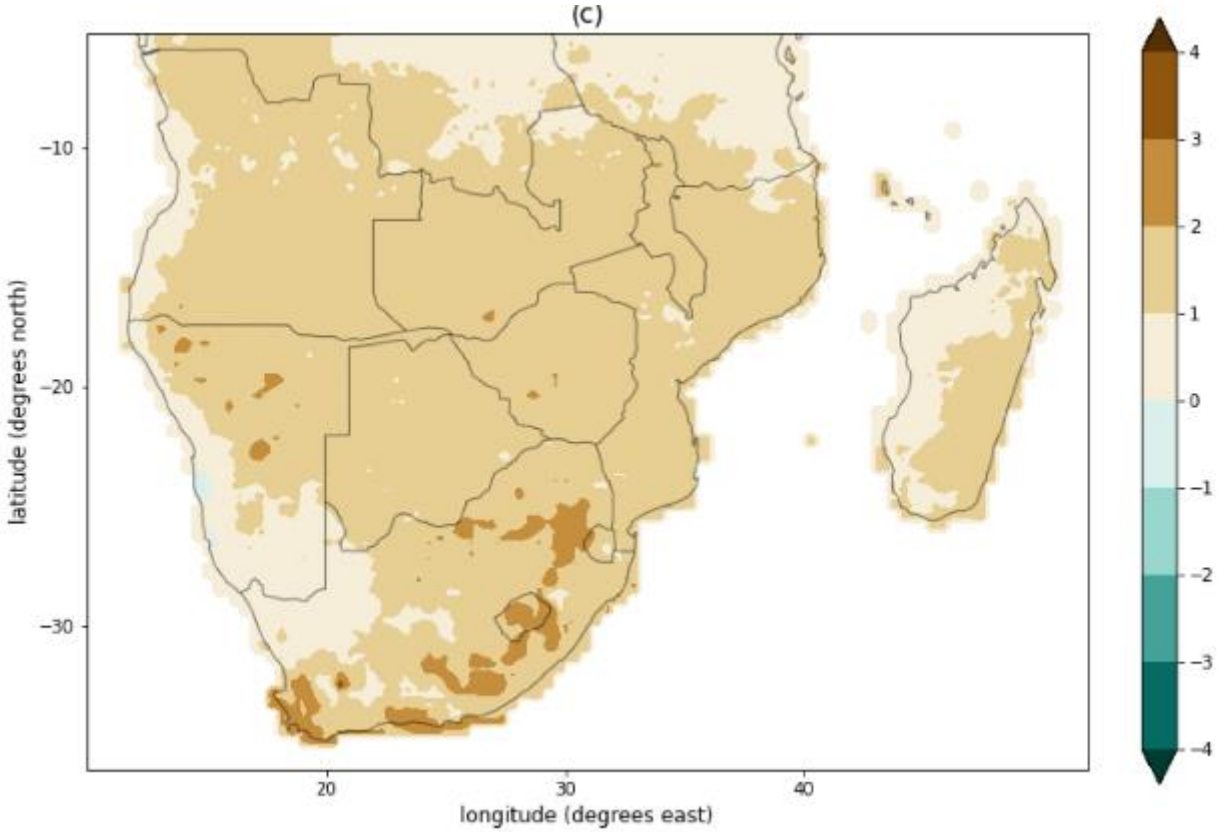
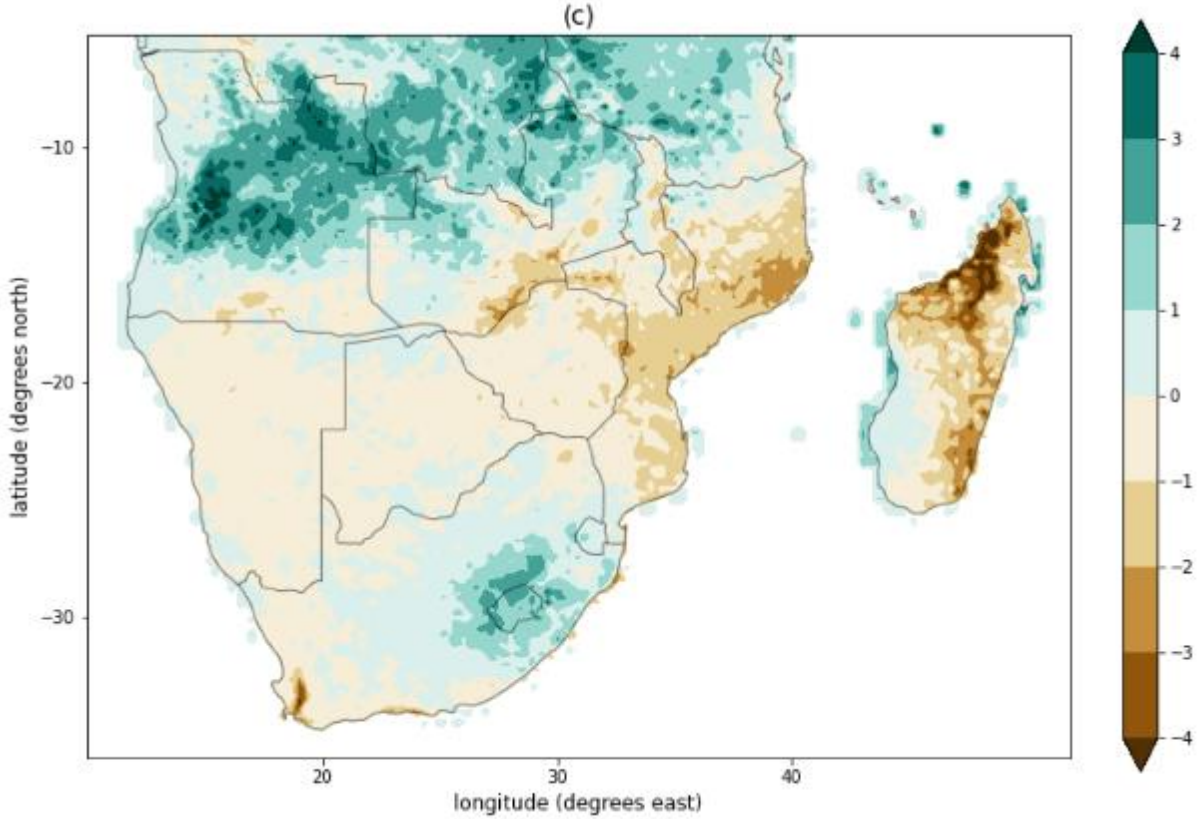
Water management becomes increasing challenging as soil moisture dries and rainfall more concentrated



Median projected changes in soil moisture for the ensemble of 9 CORDEX core RCMs for 2080 2099 relative to 1981 2000.



Median projected changes in heavy rainfall days for the ensemble of 9 CORDEX core RCMs for 2080 2099 relative to 1981 2000.

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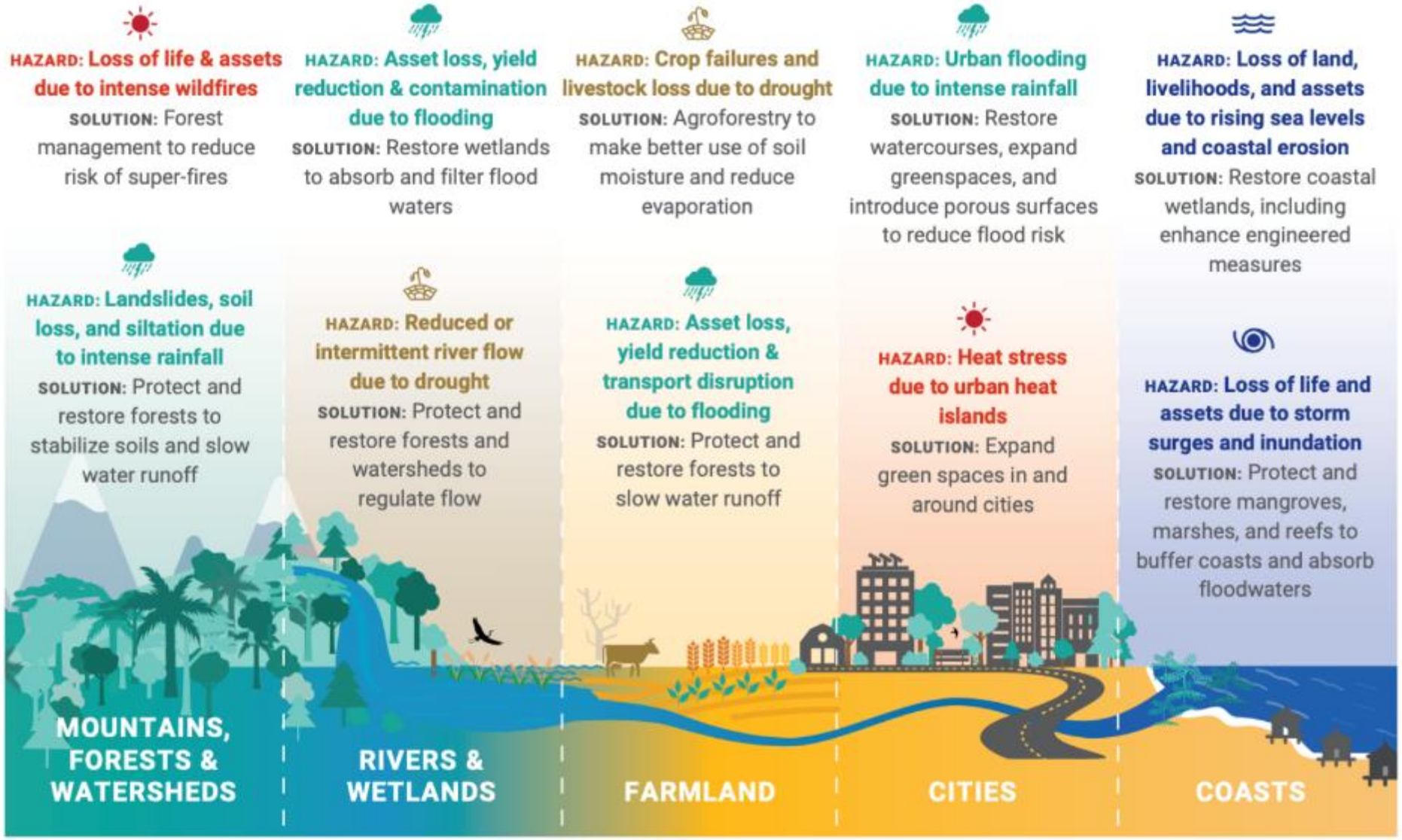
Physical impacts



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WITS Global Change Institute identifies dire emergent risks/ tipping points

1. **A day zero in Gauteng (the socio-economic and security impacts of Gauteng running out of water)**

2. **Collapse of the maize crop in sub-Saharan Africa (with huge impacts on food security and balance of payments)**

3. **Category 4 or 5 Cyclones making landfall on the Southern African East Coast (with risks for livelihoods and key energy, rail and port infrastructure, Security)**

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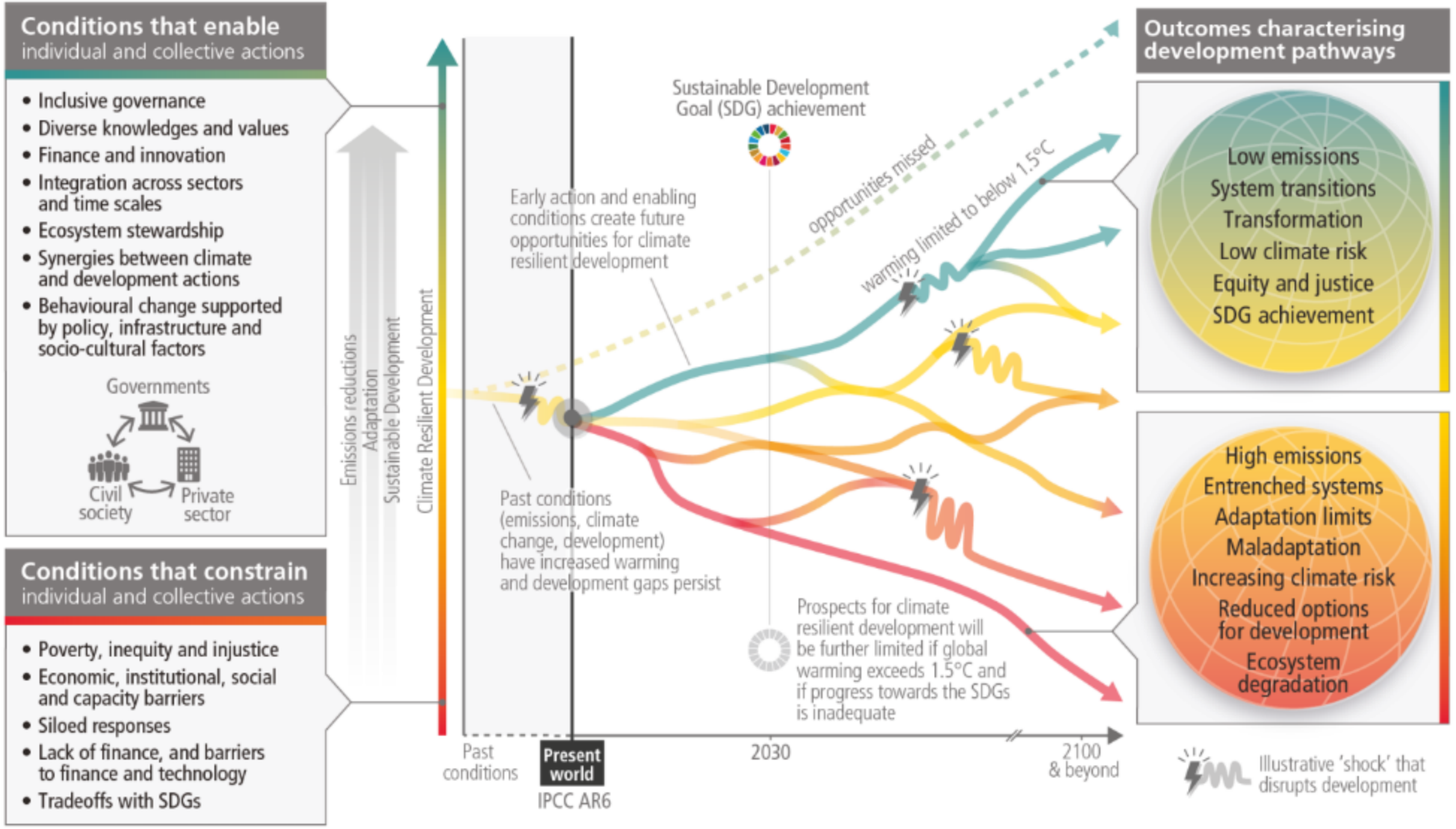
There is a rapidly narrowing window of opportunity to enable climate resilient development

Multiple interacting choices and actions can shift development pathways towards sustainability



(IPCC, 2022)

Global- Adaptation framing

Cancun Adaptation Framework

- The Cancun Adaptation Framework (COP16) in 2010.
- Seeks to improve adaptation efforts through international cooperation and by addressing the urgent needs of vulnerable countries.
- Principles – Adaptation must be-
  - **Country-Driven**: Guided by national priorities & circumstances.
  - **Gender-Sensitive & Participatory**
  - **Science-Based**: Informed by the best available scientific knowledge, as well as traditional and indigenous knowledge.

Paris Agreement

- Adopted at COP21 I
- Includes provisions for adaptation, **emphasizing the need for a global goal on adaptation** to enhance adaptive capacity, strengthen resilience, and reduce vulnerability to climate change.
- Article 7 of the Paris Agreement deals with adaptation
- Annex to decision 9/CMA.1 regarding adaptation communications are:

Sustainable Development Goals

- **Goal 13 (Climate Action**), calls for urgent action to combat climate change and its impacts, including enhancing resilience and adaptive capacity

Climate Consideration in all SDGs

Loss & Damage Mechanism

- **Warsaw International Mechanism for Loss and Damage**.
  - COP19 in 2013 to enhance knowledge & understanding of loss & damage, **strengthening dialogue** and **coordination** among stakeholders, & **facilitating support**, including **finance** and **technology**, to address loss & damage
- **Loss and Damage Fund** was established during the COP27 conference in 2022 as a significant breakthrough in addressing the impacts of climate change on vulnerable countries

Others

- **Talanoa Dialogue:** Assessed NDC progress & informed future NDCs. where we are, where we want to go & how do we get there?
- **Sendai Framework:** primary focus disaster risk reduction but emphasises the importance of integrating climate adaptation into disaster risk management strategies
- **Santiago Network:** Established at COP25, aims to catalyze technical assistance for implementing approaches to avert, minimize, and address loss and damage at local, national, and regional levels
- **Green Climate Fund (GCF):** Fund supports developing countries in efforts to respond to climate change, including financing for adaptation projects.
- **Global Climate Action Agenda**: is a framework aimed at accelerating efforts to combat climate change by engaging both state and non-state actors.

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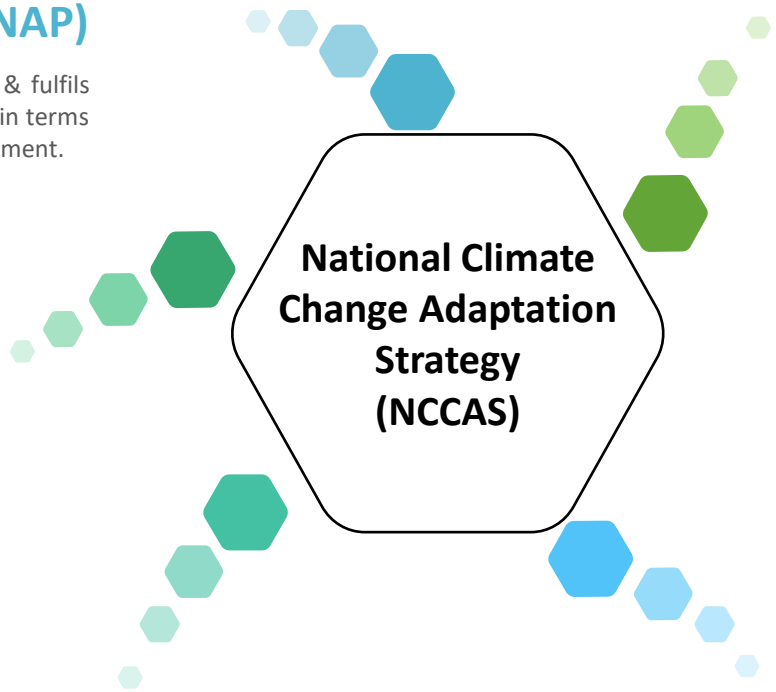
Local- Adaptation framing

National Adaptation Plan (NAP)

- NCCAS will serve as SA's NAP & fulfils commitment to its obligations in terms of Article 7.9 of the Paris Agreement.



Alignment to country legislation

- Grounded in the South African Constitution, particularly Section 24, of the Bill of Rights which includes, the right to a safe and healthy environment.
- National Climate Change Response Policy (NCCRP) (DEA 2011a), National Development Plan (NDP) (NPC 2011), National Strategy for Sustainable Development (NSSD) (DEA 2011b), sector adaptation strategies/plans, as well as provincial and municipal adaptation strategies/plans.
- The Climate Change Act 22 of 2024 provides legislative basis for the implementation of the NCCAS, fostering institutional coherence & enhancing climate change adaptation governance across the spheres, national and sub-national layers of government in South Africa.

A-NDCs

The NCCAS is the key domestic policy instrument to guide implementation & informs this update to the A-NDC.

NCCAS Strategic objectives

Strategic objectives to which sectoral responses need to be aligned:

1. Reduce human, economic, environmental, physical and ecological infrastructure vulnerability and build adaptive capacity.
2. Develop a coordinated Climate Services system that provides climate products and services for key climate vulnerable sectors and geographic areas.
3. Develop a vulnerability and resilience methodology framework that integrates biophysical and socio-economic aspects of vulnerability and resilience.
4. Facilitate mainstreaming of adaptation responses into sectoral planning and implementation.
5. Promote research application, technology development, transfer and adoption to support planning and implementation.
6. Build the necessary capacity and awareness for climate change responses.
7. Establish effective governance and legislative processes to integrate climate change in development planning.
8. Enable substantial flows of climate change adaptation finance from various sources.
9. Develop and implement a monitoring and evaluation (M&E) system that tracks implementation of adaptation actions and their effectiveness.

Sectors for Adaptation Response

The key sectors identified by the NCCAS include:

1. Water: Addressing water security & management
2. Agriculture & Commercial Forestry: Enhancing resilience in food production systems & forestry practices to cope with climate variability.
3. Health: Strategies to manage climate-related health risks, including the monitoring of climate-induced diseases.
4. Biodiversity & Ecosystems: Protecting and managing natural ecosystems that are vulnerable to climate change impacts.
5. Human Settlements: Ensuring that urban, rural, and coastal planning incorporates climate resilience measures.
6. Disaster Risk Reduction and Management: Strengthening capacity to manage and respond to climate-related disasters.
7. Transportation & Infrastructure: Developing climate-resilient infrastructure to support economic activities & community safety.
8. Energy: Enhancing the resilience of energy systems to climate impacts.
9. Mining: Addressing the vulnerabilities of the mining sector to climate change.
10. Oceans & Coasts: Protecting coastal communities & ecosystems from the impacts of sea-level rise & extreme weather events

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Summary of last A-NDC submission…

Focus	Goal
National circumstances, institutional arrangements and legal frameworks	Goal 1: Enhance climate change adaptation governance and legal frameworks
Impacts, risk & vulnerability	Goal 2: Understanding of the impacts on SA of 1.5 & 2o C global warming & the underlying global emission pathways
National adaptation priorities, strategies, plans, goals and actions	Goal 3: Implementation of NCCAS adaptation interventions for the period 2021 to 2030.
Implementation & support needs of, & provision of adaptation support to SA	Goal 4: Mobilise funding for adaptation implementation through multilateral funding mechanisms
Implementation of adaptation action & plans including (ii) Adaptation efforts of developing countries for Recognition	Goal 5: Quantification & acknowledgement of the national adaptation & resilience efforts

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Summary of last A-NDC submission

- South Africa aims to limit global warming to 1.5°C and achieve net-zero CO2 emissions by 2050, as outlined in its NDC. This aligns to the international frameworks including the Paris Agreement.
- NDC alignment with National Climate Change Adaptation Strategy (NCCAS
- Aimed to promote collaboration across various stakeholders
- Highlighted the funding need particularly grant-based funding to support adaptation efforts.
- Emphasises the need to leverage private sector investment into mitigation efforts.
- Monitoring and reporting to track progress and ensure accountability

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Review of previous A-NDC submission

Goal 1:
Enhance climate change adaptation governance and legal frameworks

Goal 2:
Understanding of the impacts on SA of 1.5 & 2° C global warming & the underlying global emission pathways

Goal 3:
Implementation of NCCAS adaptation interventions for the period 2021 to 2030.

Goal 4:
Mobilise funding for adaptation implementation through multilateral funding mechanisms

Goal 5:
Quantification & acknowledgement of the national adaptation & resilience efforts

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Climate Change Act #22 of 2024 and the NDCs

- Promotes formalisation of adaptation processes through policy interventions.
- Mandates clear adaptation road map based on scenarios to assist with planning and resourcing.
- Promotes coordination through different tiers of Government.
- Allows for sectoral-specific interventions which focuses on interventions particularly for vulnerable sectors.
- Encourages mainstreaming of climate adaptation through policy and planning tools.
- Aims to facilitate effective resourcing through the establishment of financial mechanisms to support response.
- Encourages stakeholder engagement in planning to tap into local knowledge and create buy-in.
- Supports South Africa's international obligations under the Paris Agreement, ensuring that national adaptation efforts contribute to global climate goals.
- It establishes mechanisms for tracking progress on adaptation actions, to provide feedback mechanism for future planning and decision-making.

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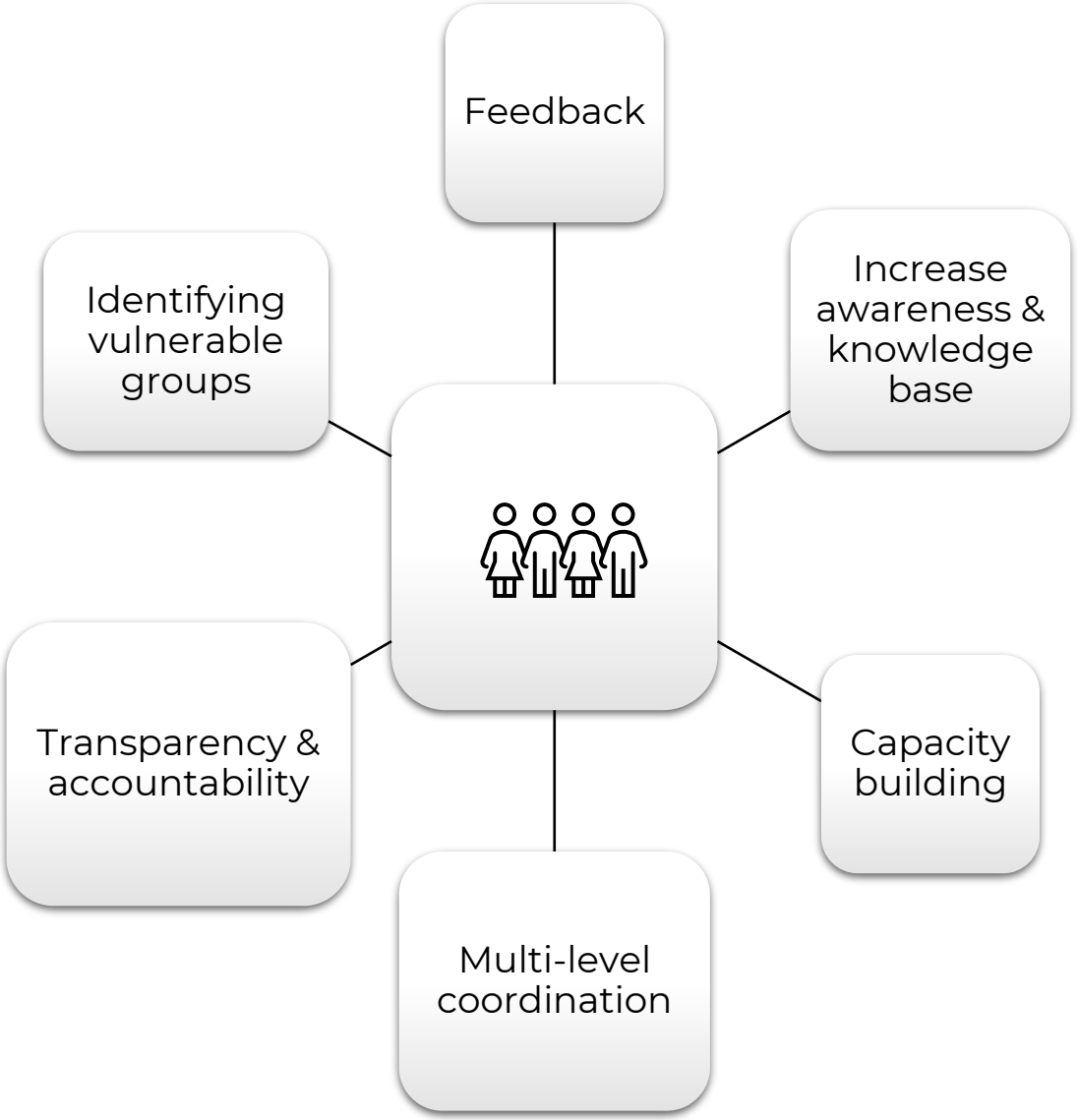
Role of stakeholders



Investment is required across the spectrum of anticipation to adaptation to recovery

Resilience: pre-empt and withstand variability in social, economic & environmental conditions

Early Warning	Adaptation	Recovery
Scenario Development/Forecasting	Autonomous Adaptation	Disaster Management
Early Warning System and Outreach	Planned Adaptation	Emergency Response
		Rebuilding

NBI Green Economy Finance Project (2015)

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Thank You / Ngiyabonga