CLIMATE JUSTICE AND GENDER

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"Strengthening the Judiciary's Adjudicative Role in Administering Climate Justice"

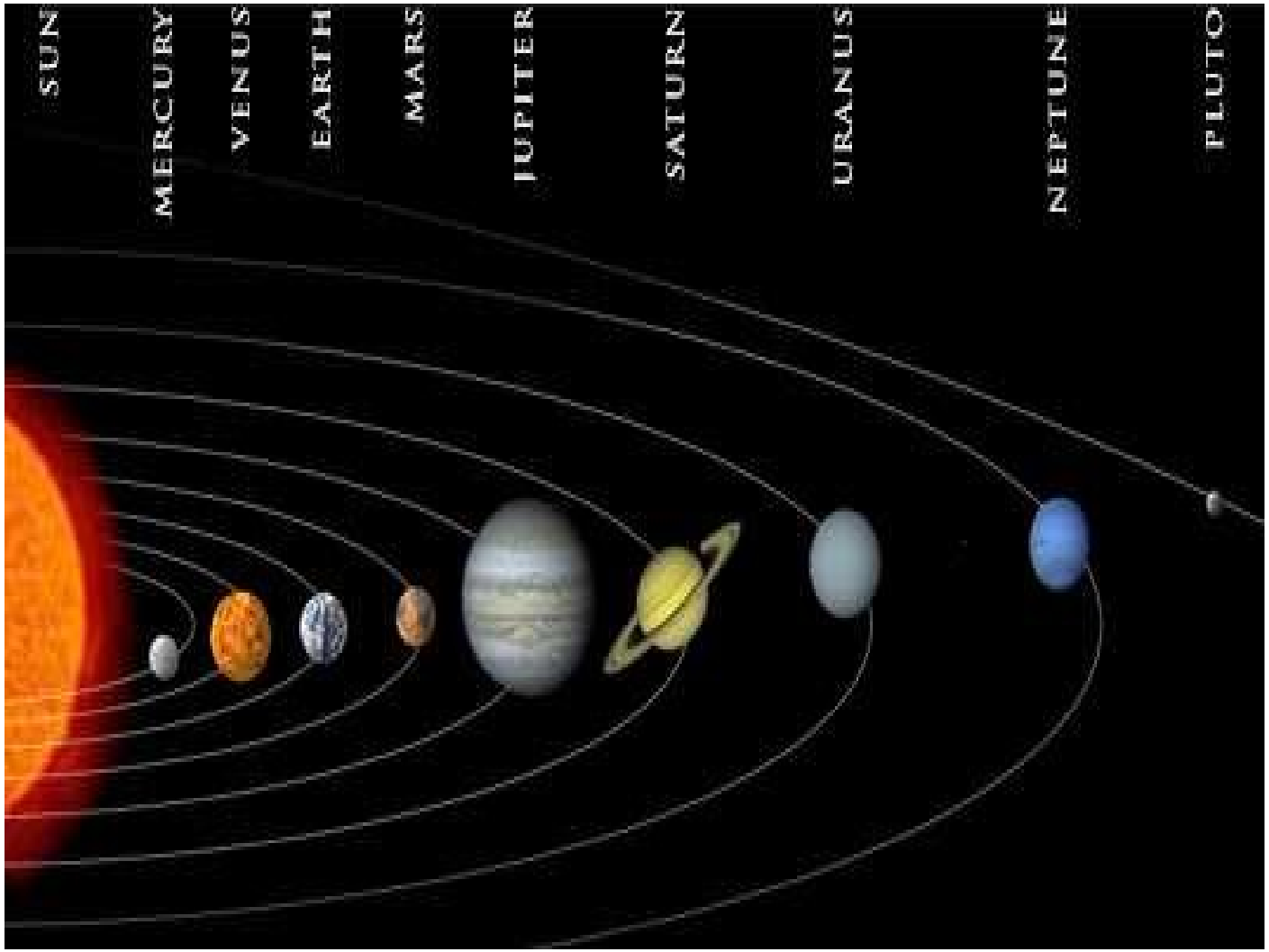
GREENWATCH

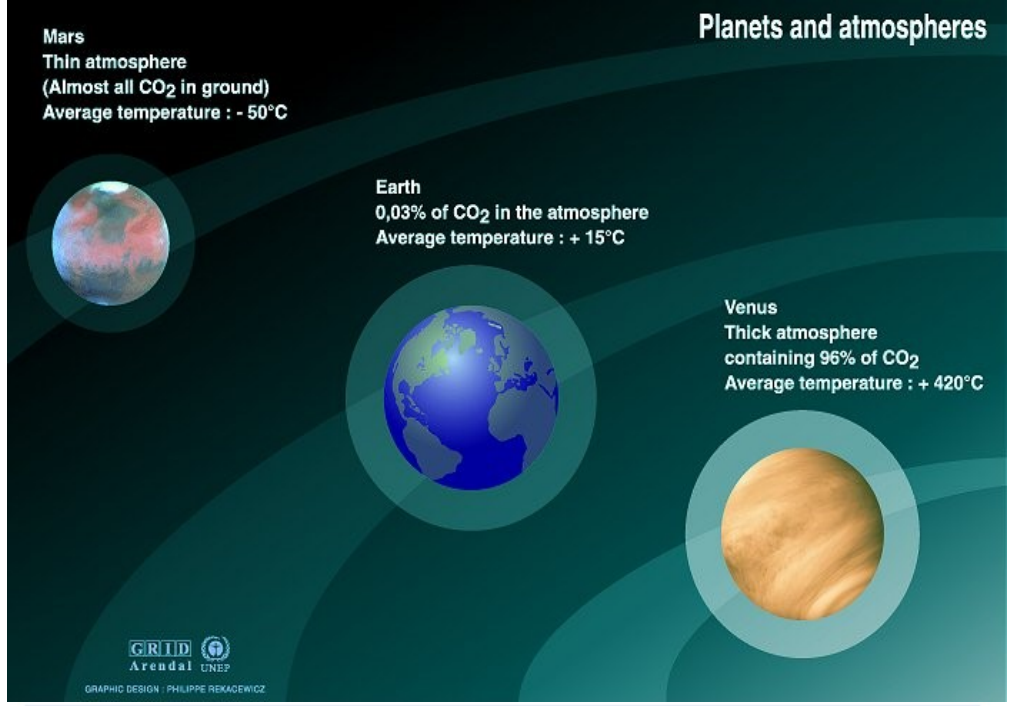
Presentation Outline

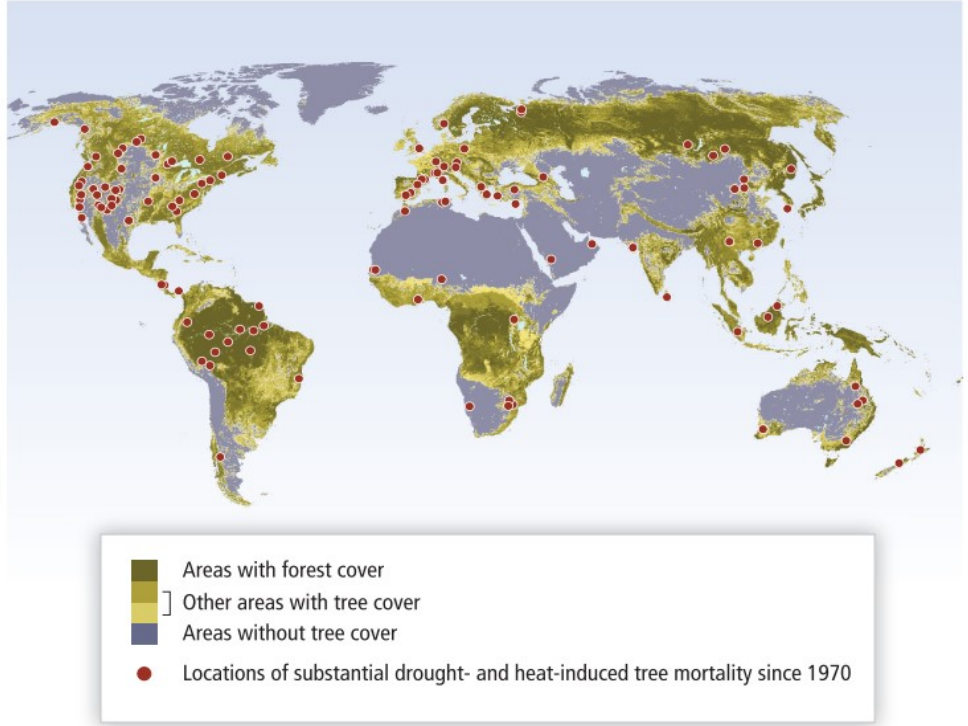
1) Introduction
2) Climate Change
3) Climate Justice
4) Climate Change impacts and Justice
5) Climate Justice and Gender
6) Case studies
7) Administering Climate Justice in the context of Gender

Introduction: The Earth

The planet that supports life







Climate

- In a narrow sense - is the average weather.
  - Weather - is the fluctuating state of the atmosphere around us.

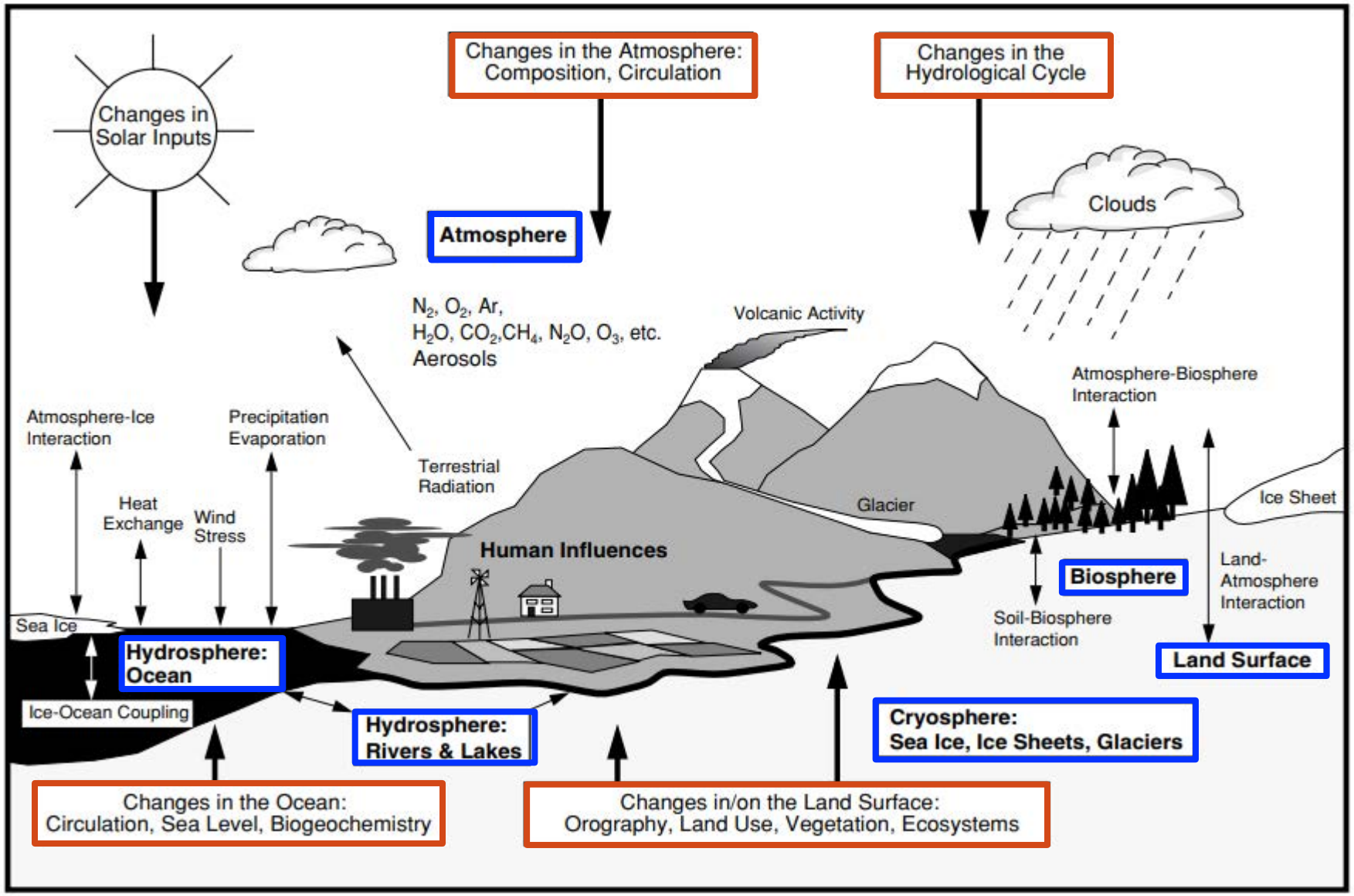
- Rigorously and statistically - is the mean and variability of relevant quantities over a period of time ranging from months to thousands or millions of years.
  - but at least for 30 years as defined by the World Meteorological Organization (WMO).

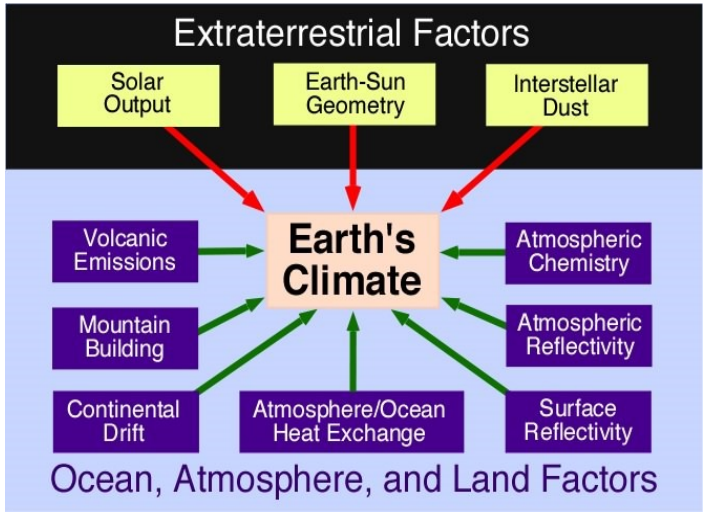
- In a wider sense - is the state, including a statistical description, of the climate system.

- The climate system evolves in time under the influence of:
  - its own internal dynamics e.g. processes and interactions in the system.
  - external natural forcings e.g. volcanic eruptions, solar variations.
  - anthropogenic forcings e.g. the changing composition of the atmosphere, land-use change.

Source: IPCC (2018)

The Climate System





- **Climate depends on:**
  - Latitude & Longitude
  - Distance to the sea
  - Vegetation
  - Presence or absence of mountains or other geographical factors (terrain & altitude)
- **It varies** in time, by season, year, decade, or much longer time-scales

Source: IPCC (2018)

Climate Variability and Climate Change

Climate Variability

- Any deviation in the long-term statistics of climate elements over a short period of time:
  - Diurnal; seasonal; year-to-year and decade-to-decade differences in climate

NB: Climate has always varied naturally

Climate Change

- Any systematic change in the long-term statistics of climate elements sustained over several decades or longer;

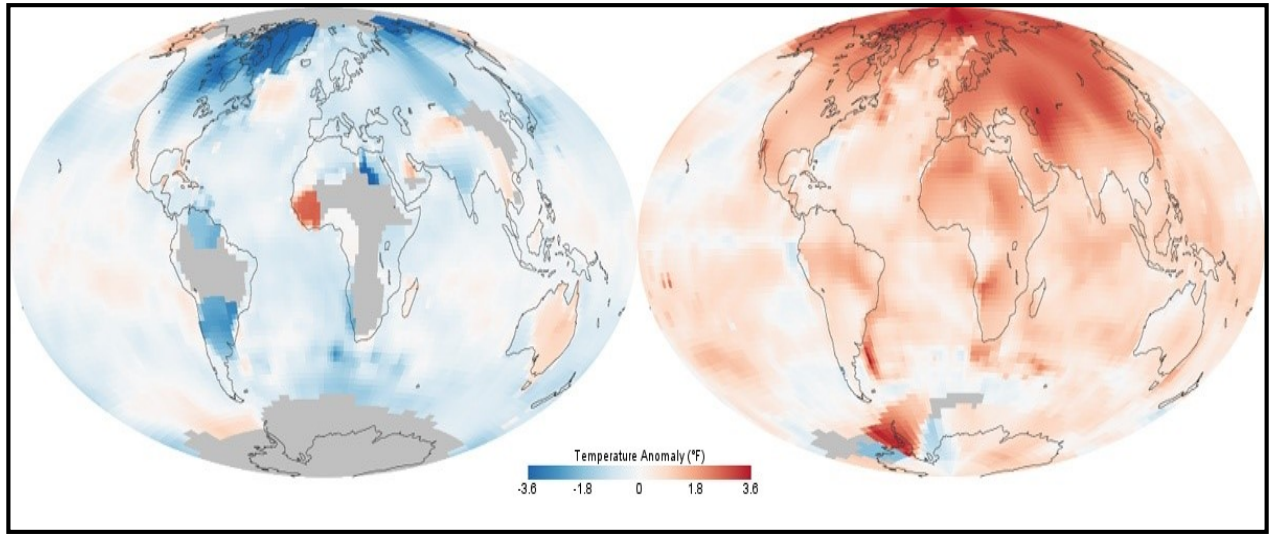
IPCC def.:

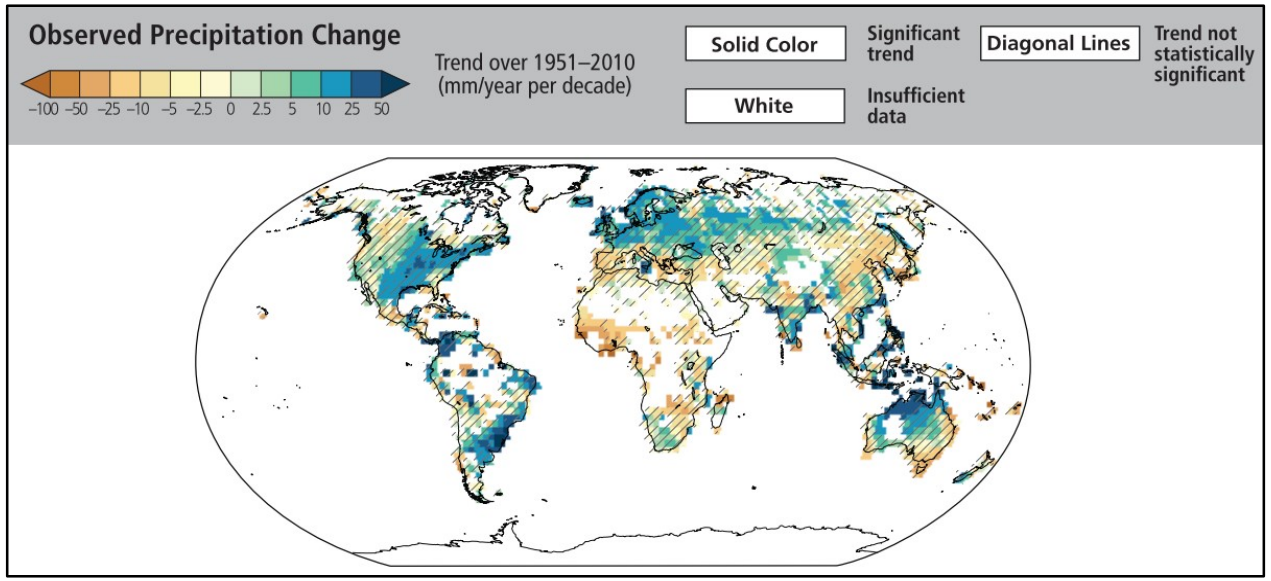
A change in the state of the climate that can be identified (e.g. using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. It refers to any change in climate over time, **whether due to natural variability or as a result of human activity**.

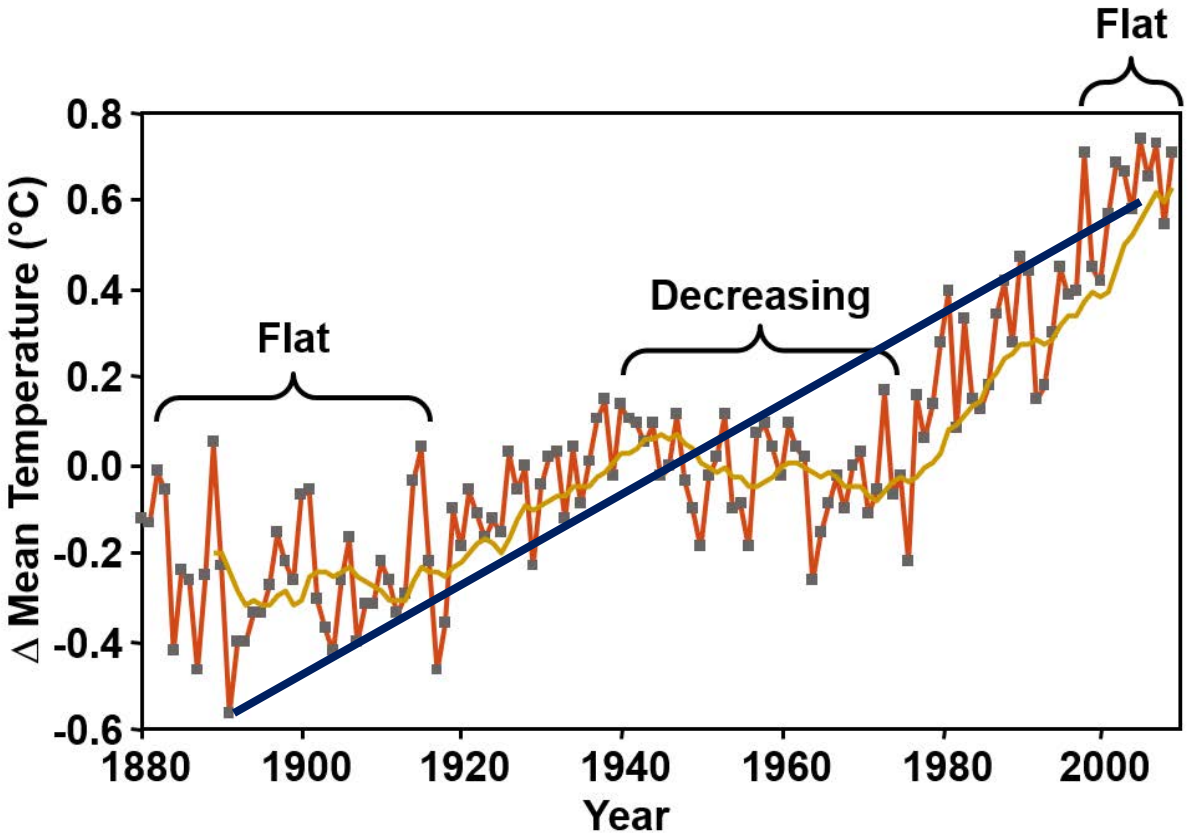
UNFCCC def.:

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

Observed Temperature & Rainfall changes

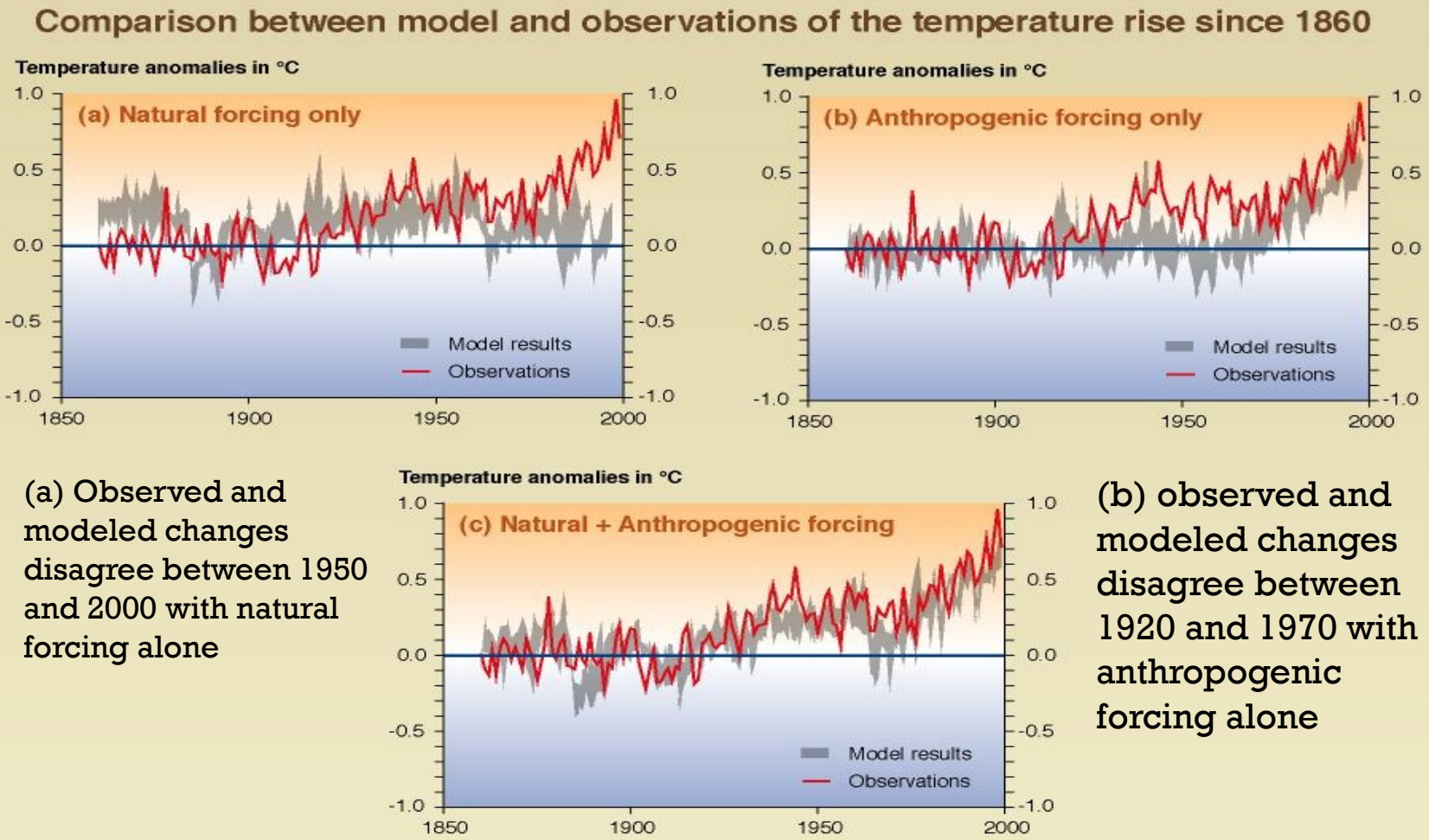






Source: van Aalst (2014)

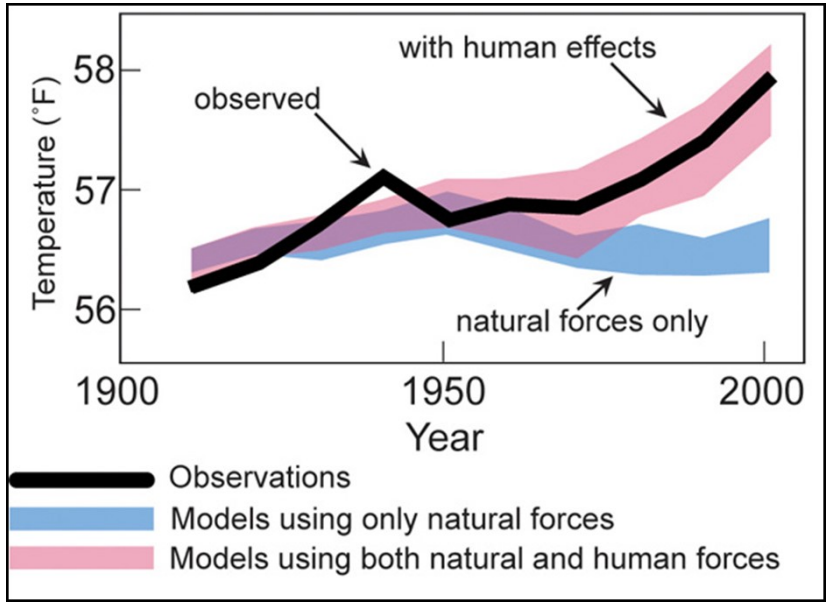
Attribution: Most (greater than 50%) of the Observed Warming of the Last 50 Years is attributable to Human Activities

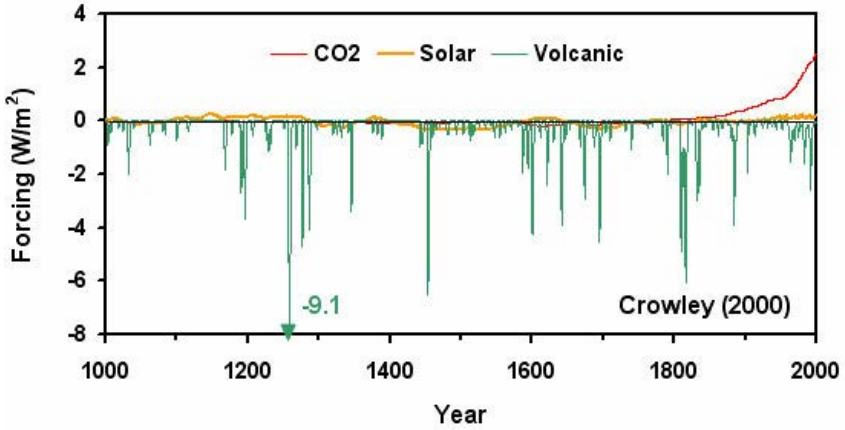


(a) Observed and modeled changes disagree between 1950 and 2000 with natural forcing alone

(b) observed and modeled changes disagree between 1920 and 1970 with anthropogenic forcing alone

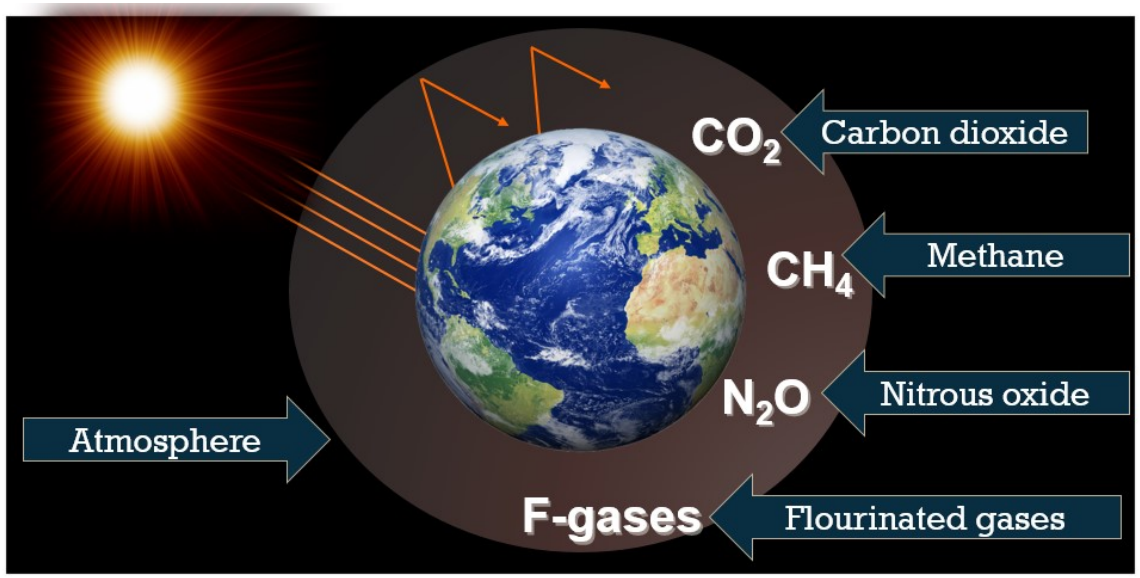
(c) Observed and modeled changes in are in good agreement with natural and anthropogenic forcing

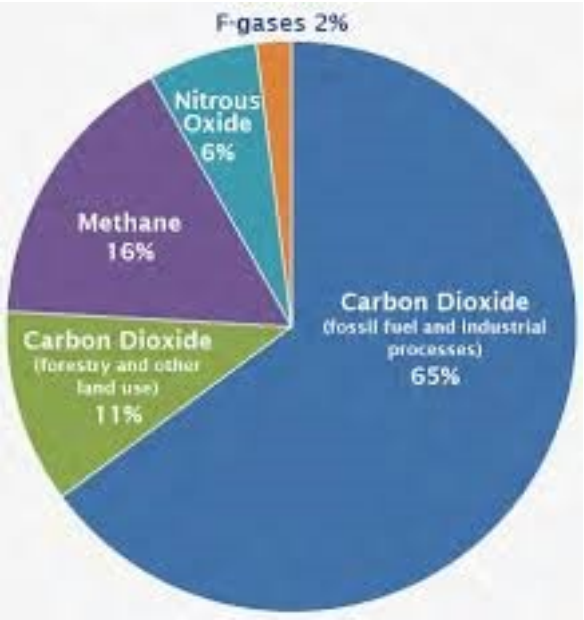


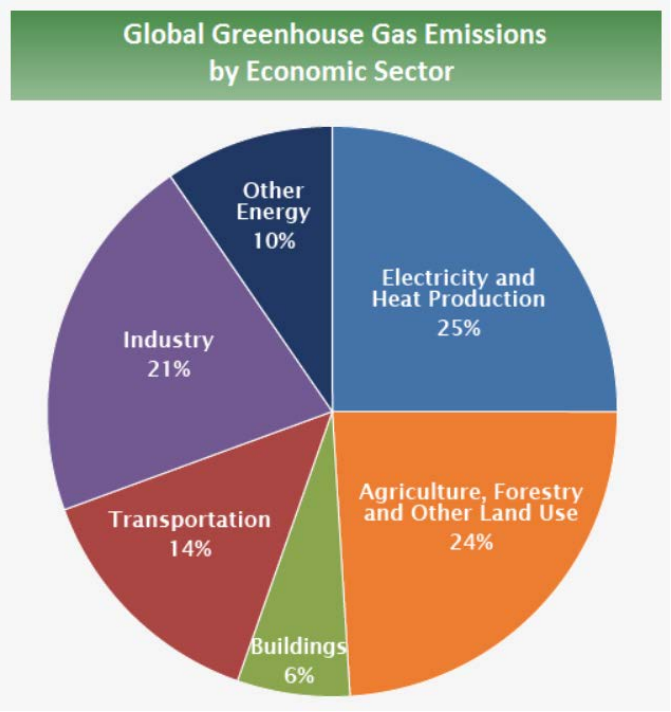


Source: NOAAA National Climatic Data Center

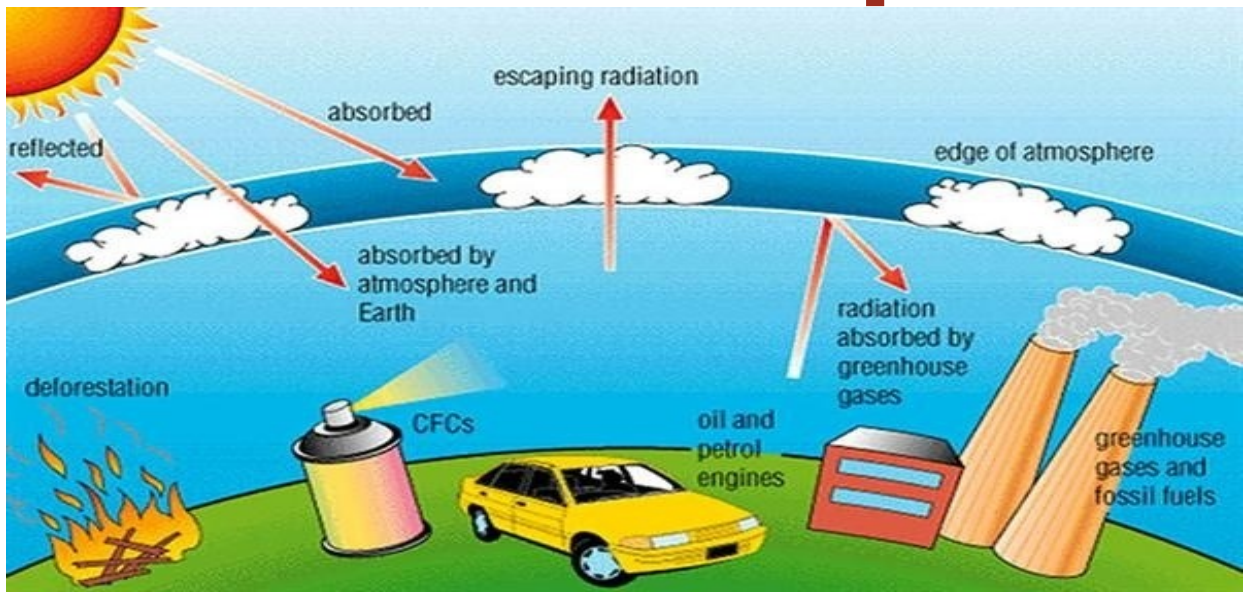
Greenhouse Gases







People - Climate Change Nexus

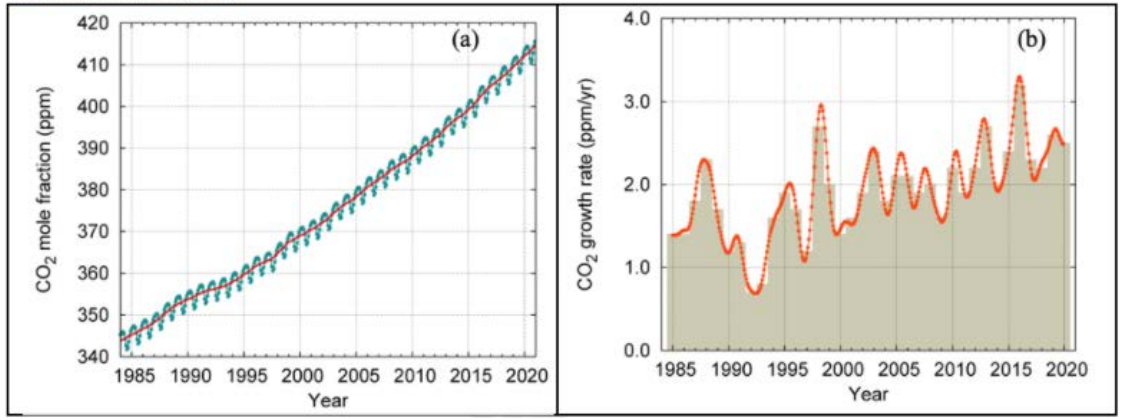


Burning of fossil fuels

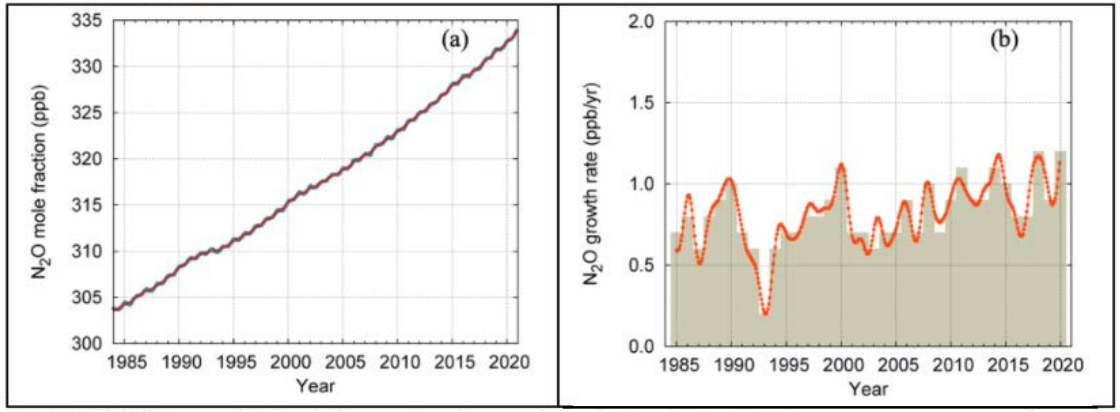
Widespread deforestation

Greenhouse Gas Concentrations

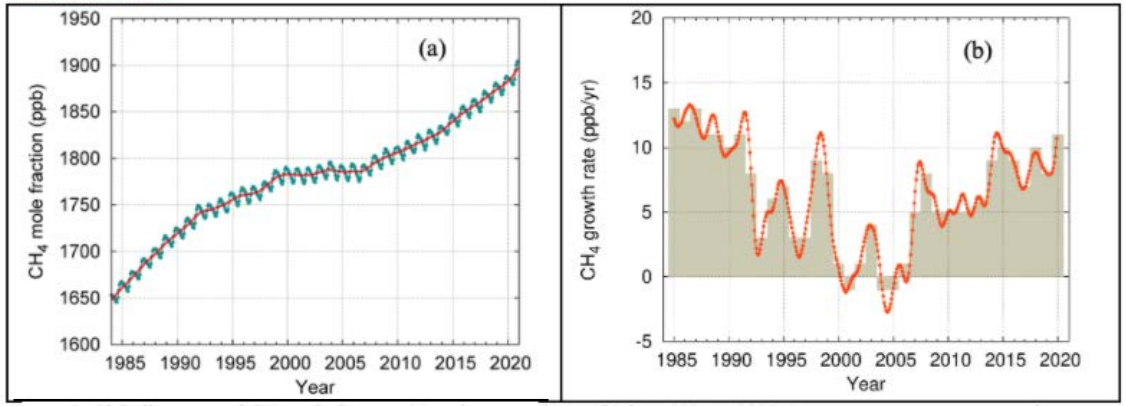
Carbon Dioxide (CO_2)

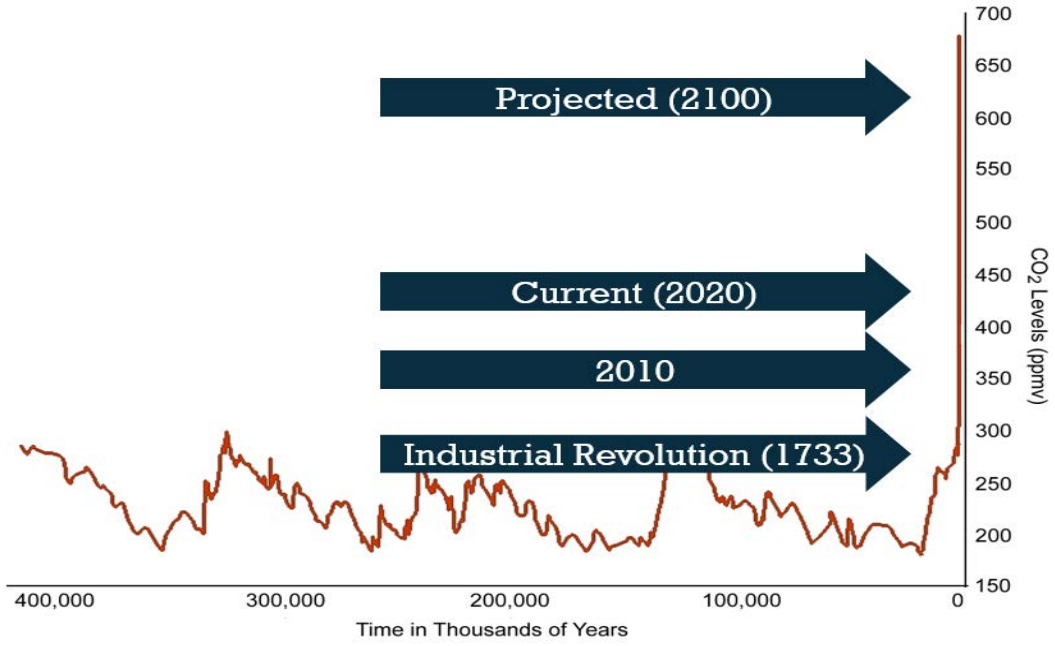


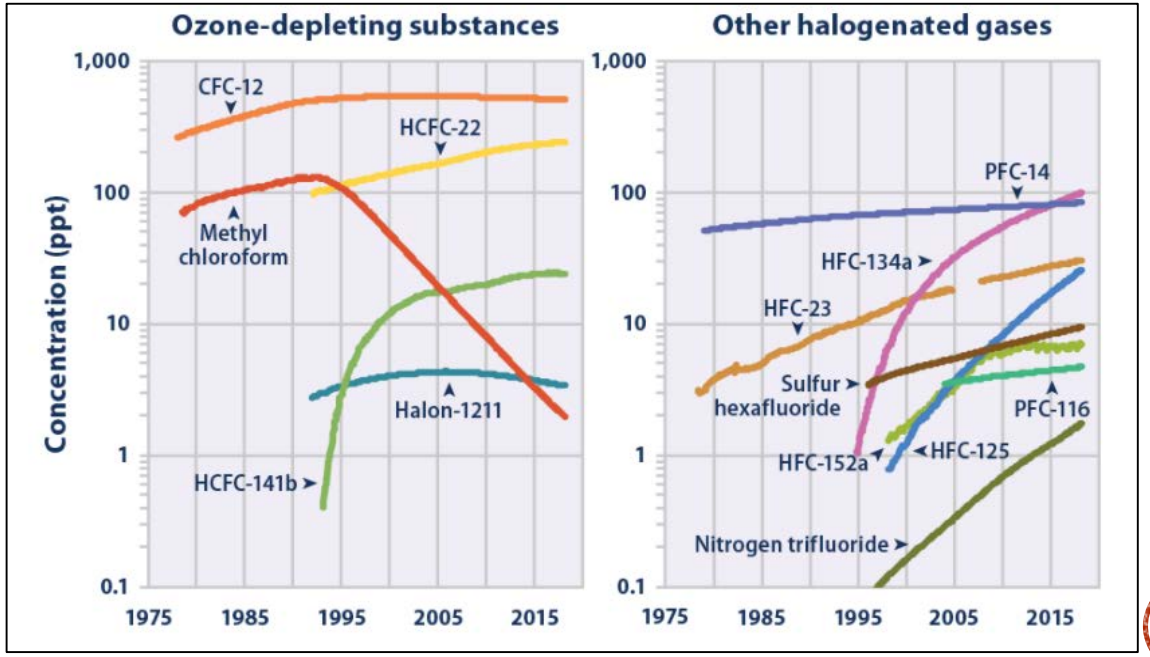
Nitrous Oxide (N_2O)



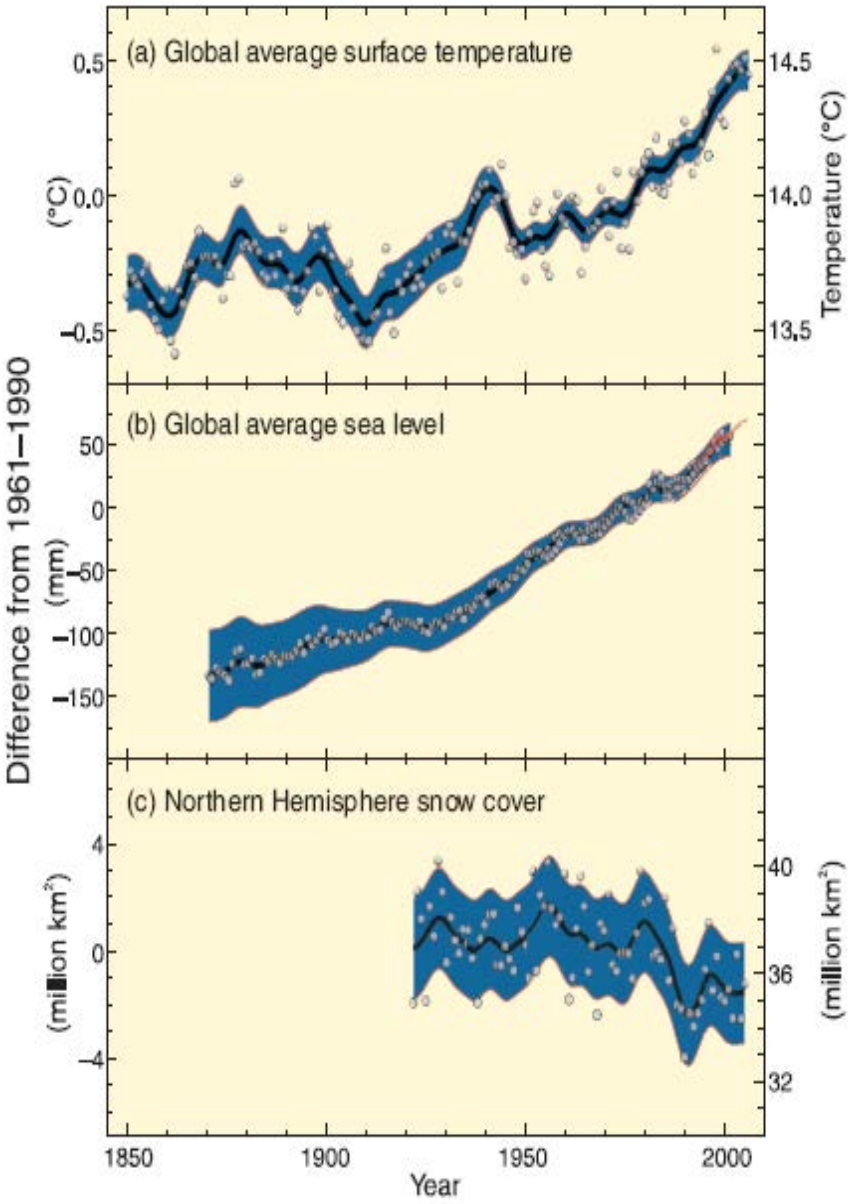
Methane (CH_4)



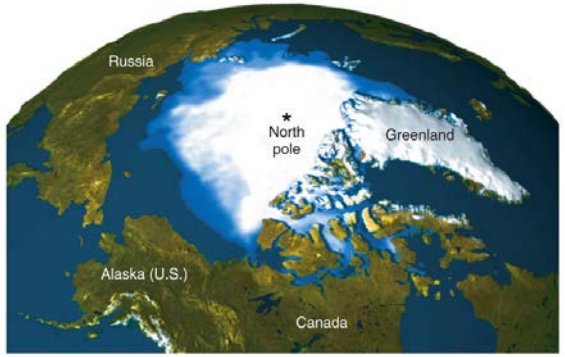




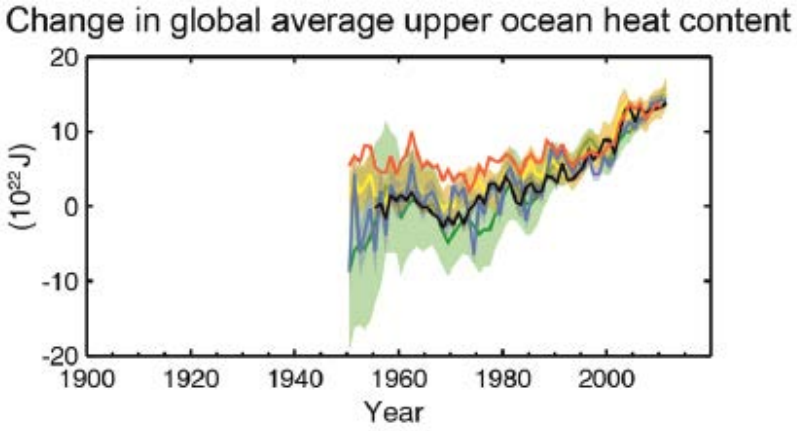
Evidence of a warming Earth

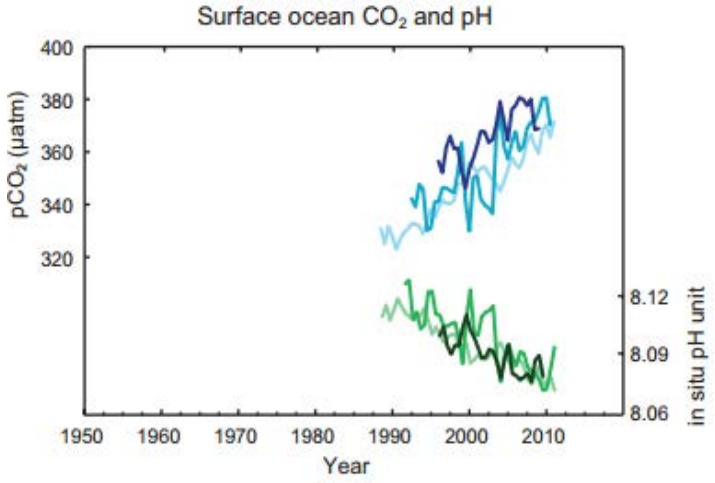


Average Drop in Arctic Sea Ice (1979-2005)



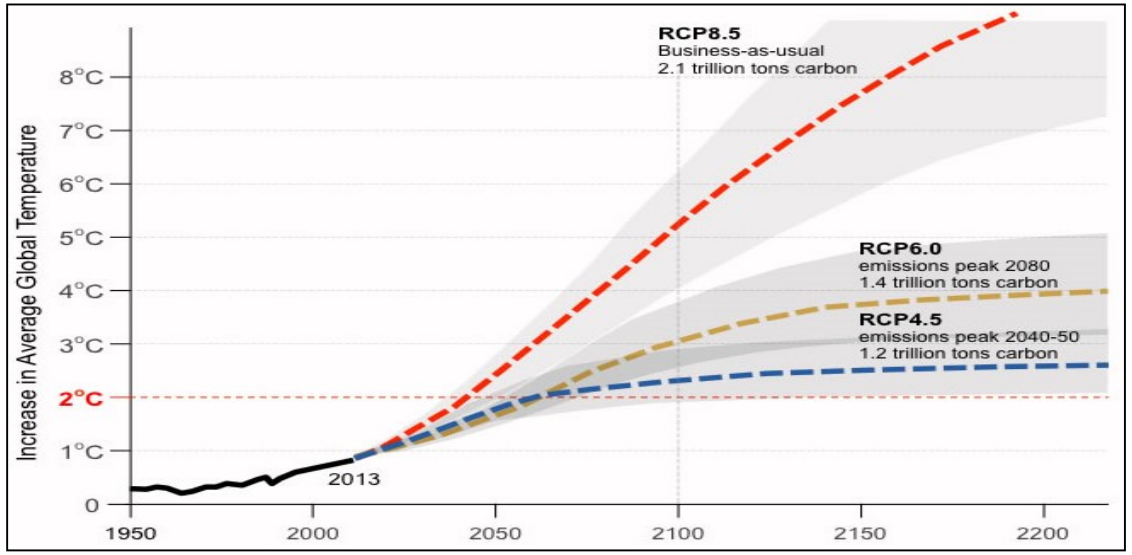
Melting of Alaska's Muir Glacier

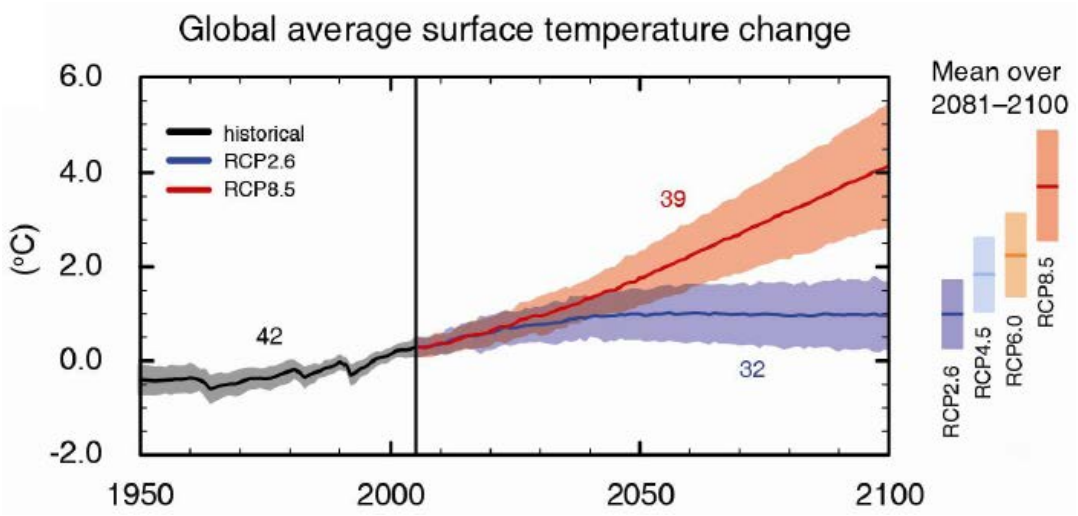




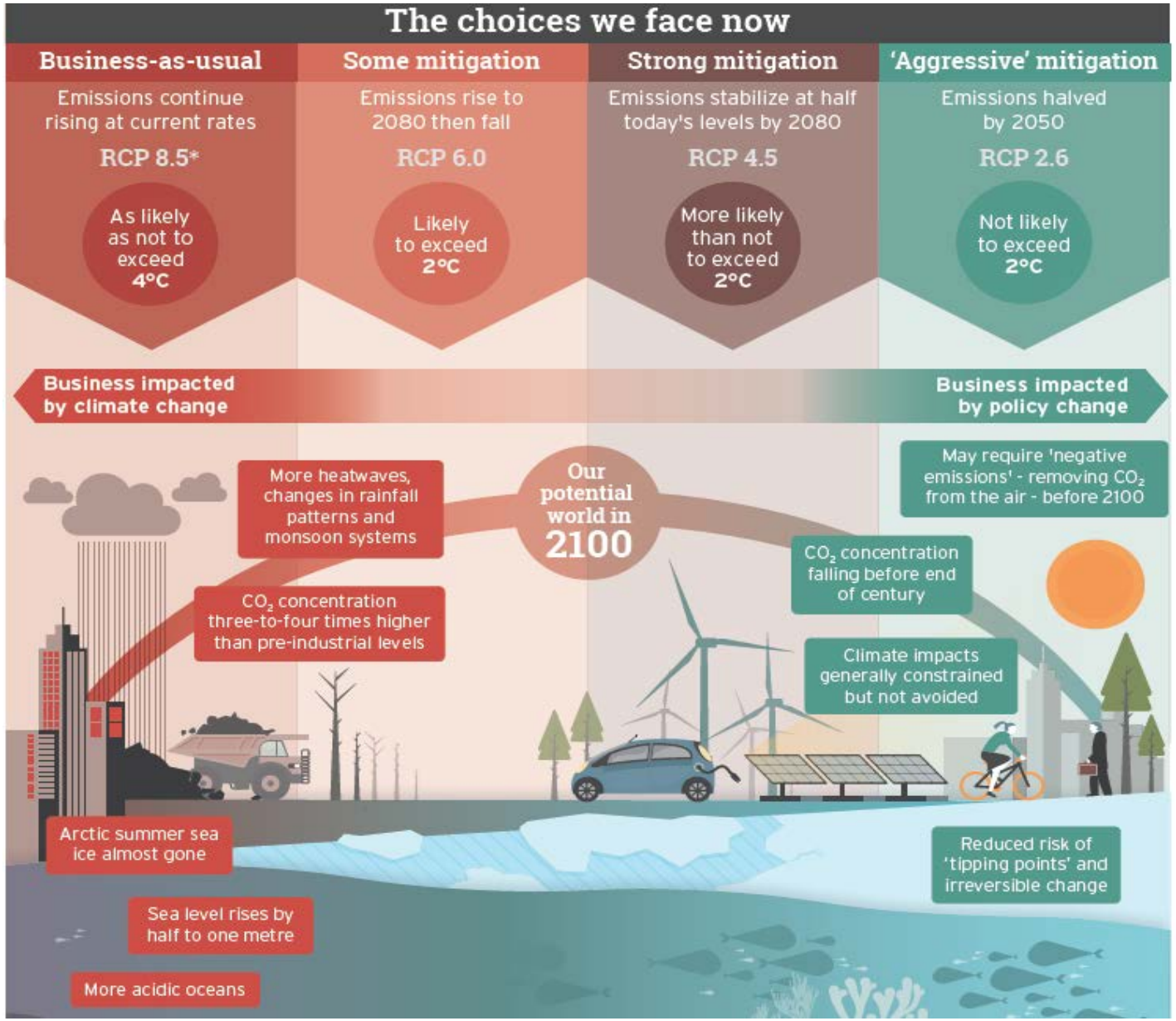
What's the future likely to be? Projected Change in Temperature

2 degrees - The tipping point!





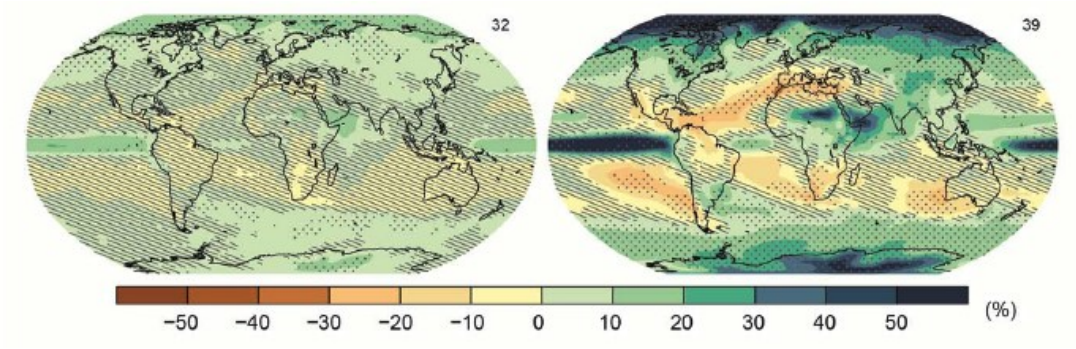
Global surface temperature change for the end of the 21st century is likely to reach 4°C if no action is taken.



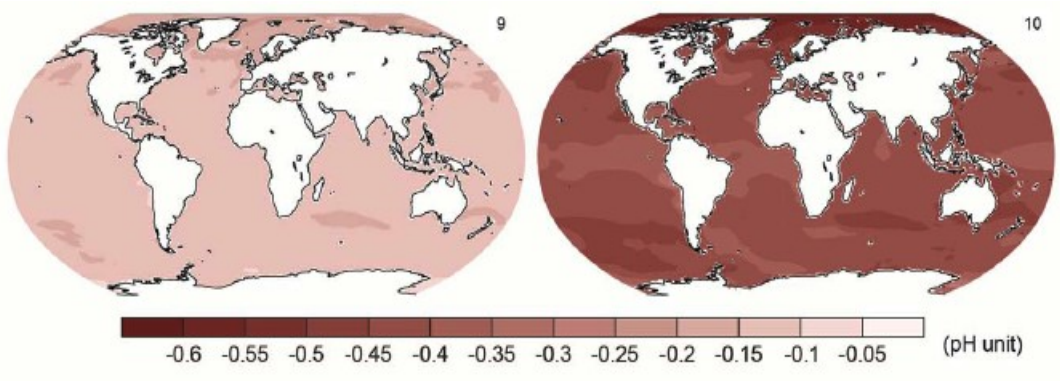
Projected Changes - Time Period: 1986-2005 to 2081-2100

Scenario RCP 2.6 Scenario RCP 8.5

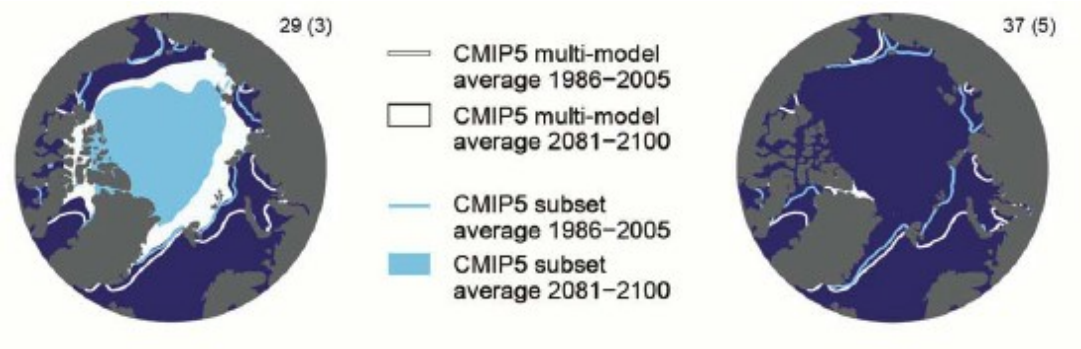
Average Precipitation



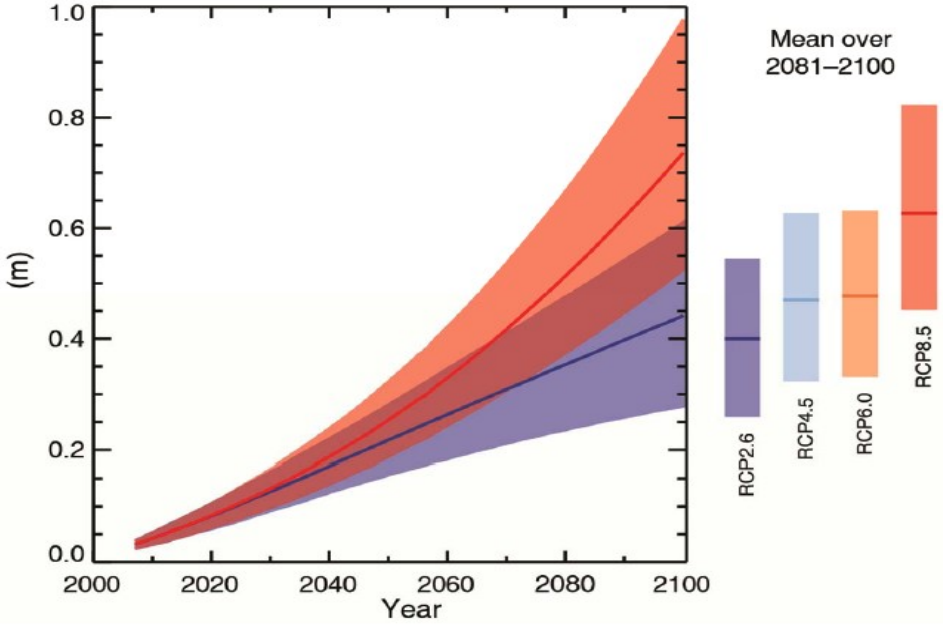
Ocean Surface pH



Sea Ice Extent



Sea Level



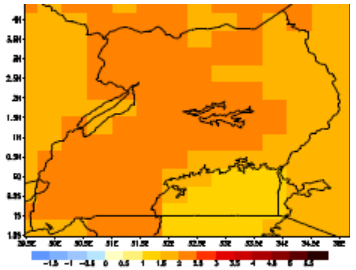
Global mean sea level will continue to rise during the 21st Century.

Source: IPCC (2013), p20

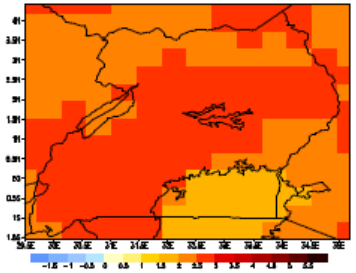
Temperature projections (relative to 1985-2005 period)

2046-2065

RCP4.5, MAM



RCP8.5, MAM



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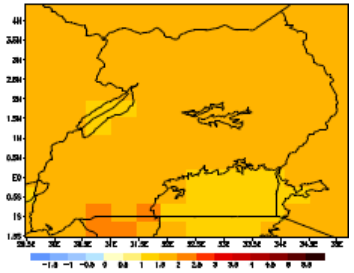

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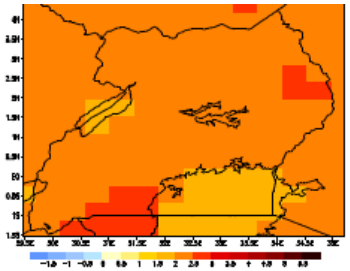
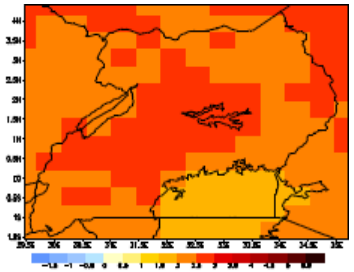
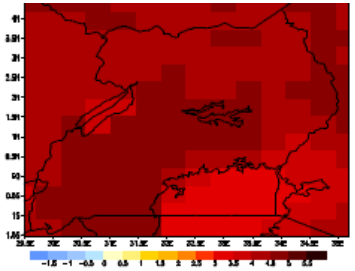


2076-2095

RCP4.5, MAM



RCP8.5, MAM



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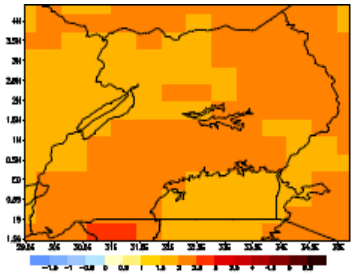

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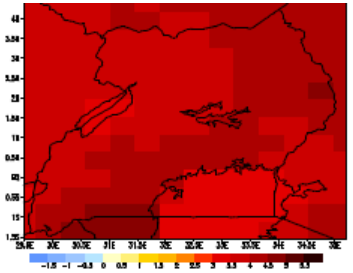
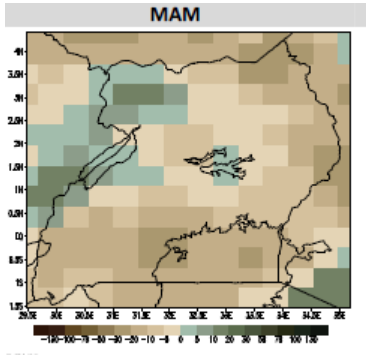


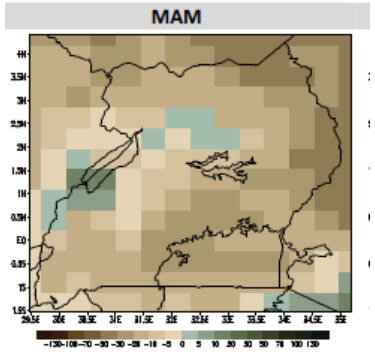
Precipitation projections (relative to 1985-2005 period)

2046-2065

RCP4.5

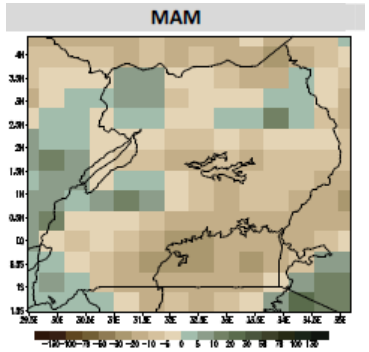


RCP8.5

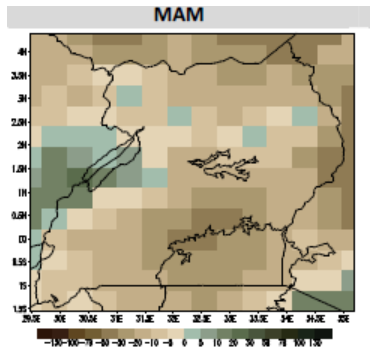


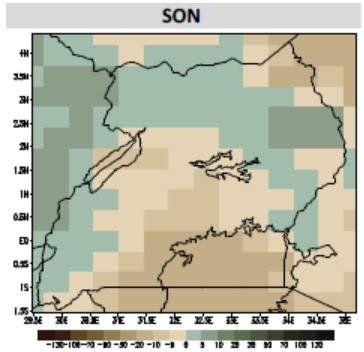
2076-2095

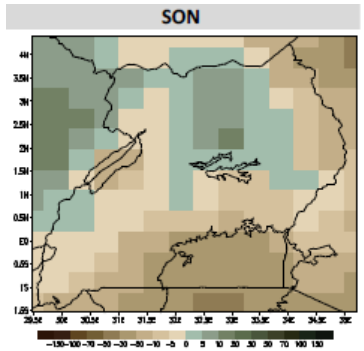
RCP4.5

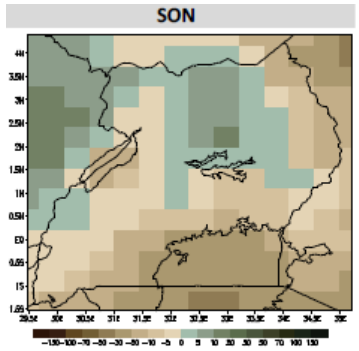


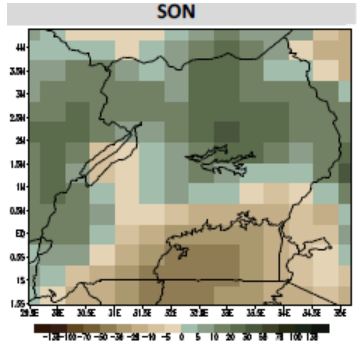
RCP8.5











Climate Change – Temperature Projections

Study	Period	Trend
Carol et al., 2012	2070-2100	MAM and SON **temperature increase** of 0.9°C relative to 1960-1991 average JJA **temperature increase** of 0.6°C relative to 1960-1991 average
McSw 2007	[illegible]	annual **tempe**[illegible]
Hepw Goul	[illegible]	[illegible] [illegible]erage
USAID, 2013	2030-2039	annual **temperature increase** greater than 2°C relative to 1961-1990 average
MWE, 2015	2046-2065 2076-2095	annual **temperature increase** of 1.5 to 2.0°C for RCP 4.5 and 2.0 to 3.0°C for RCP 8.5 relative to 1985-2005 average annual **temperature increase** of 2.0 to 2.5°C for RCP 4.5 and 4.0 to 5.0°C for RCP 8.5 relative to 1985-2005 average

Annual temperature increases of 1. 5°C – 5°C

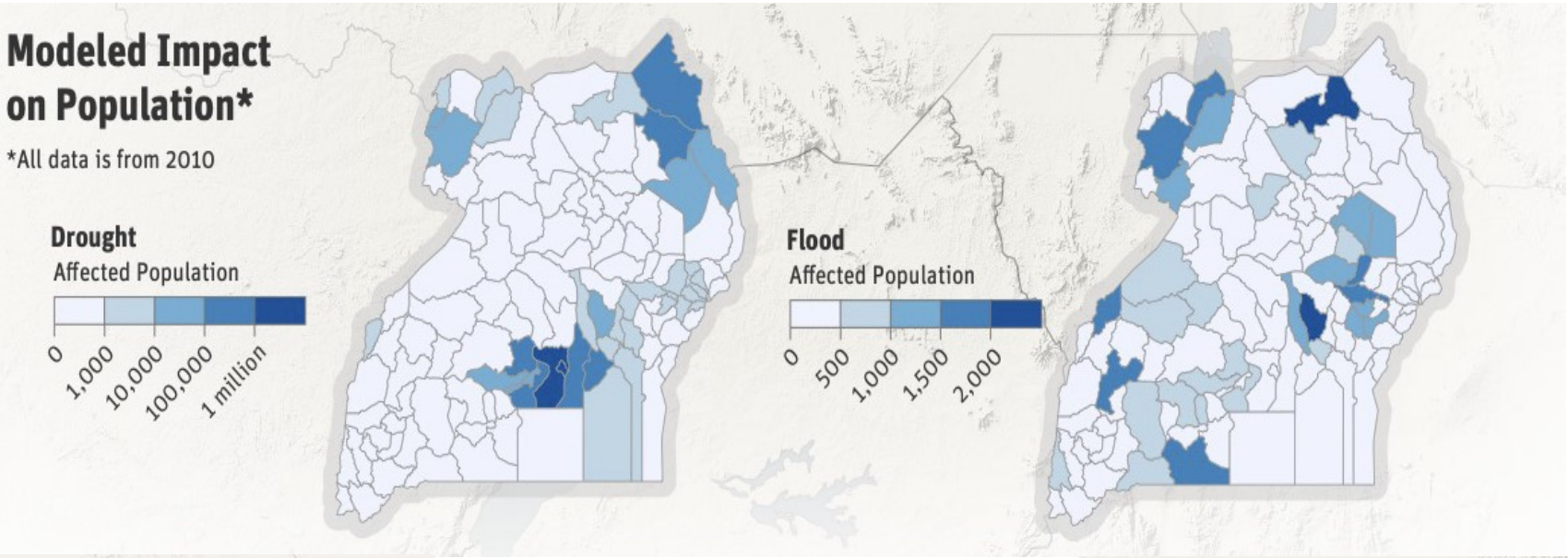
Depend on the emissions scenario and climate model used

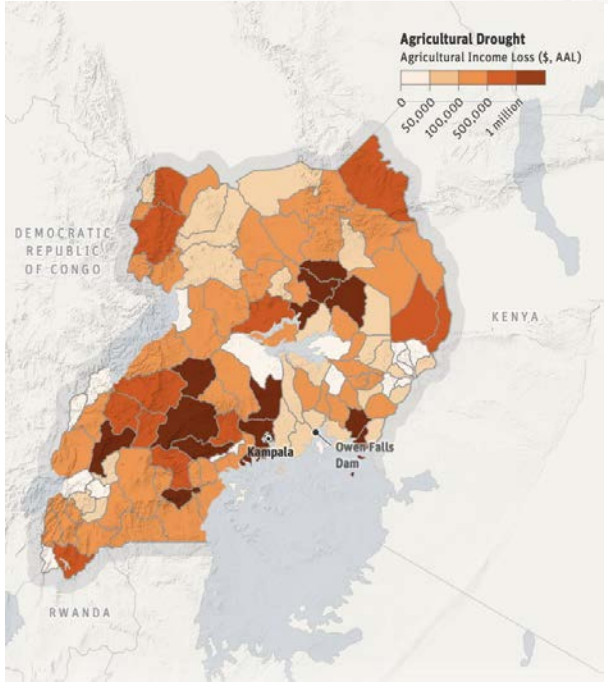
Climate change –rainfall projections

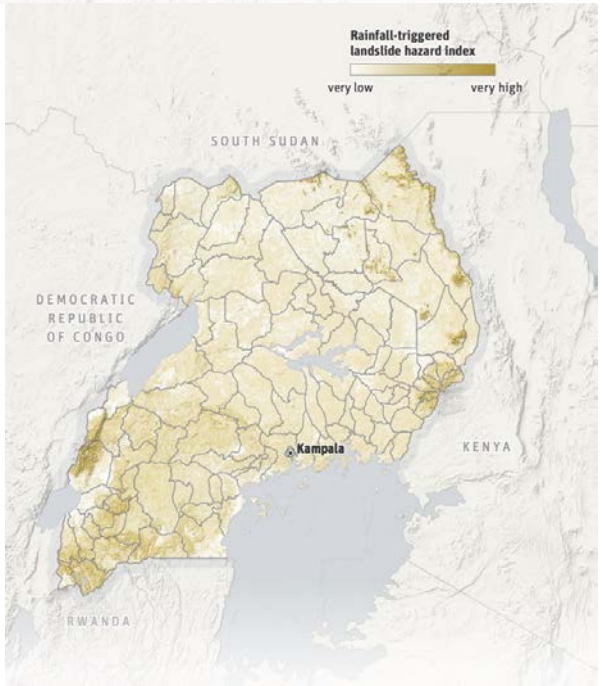
Study	Period	Trend
Carol et al., 2012	2070-2100	MAM **rainfall increase** of 0.2 mm day^{-1} SON **rainfall decrease** of 0.7 mm day^{-1}
McSweeney *et al.*, 2007	2090-2099	Annual rainfall changes of **-8 to +46%** relative to 1970-
He Go		% 3%
Bastel, 2015	2046-2065	nual changes of **-10 to +5%** fo RCP4.5 and **1 to 5%** for RCP8.5 relative to 1985-2005 average Annual rainfall changes of -5 to -20% for RCP4.5 and -20 to **20%** for RCP8.5 relative to 1985-2005 average
Carol et al., 2012	2070-2100	MAM **rainfall increase** of 0.2 mm day^{-1} SON **rainfall decrease** of 0.7 mm day^{-1}

Annual rainfall changes -20 to +46%
Depend on the emissions scenario and climate model used
More useful to look at seasonal changes

Uganda Risk Profile: Drought, Floods And Landslides

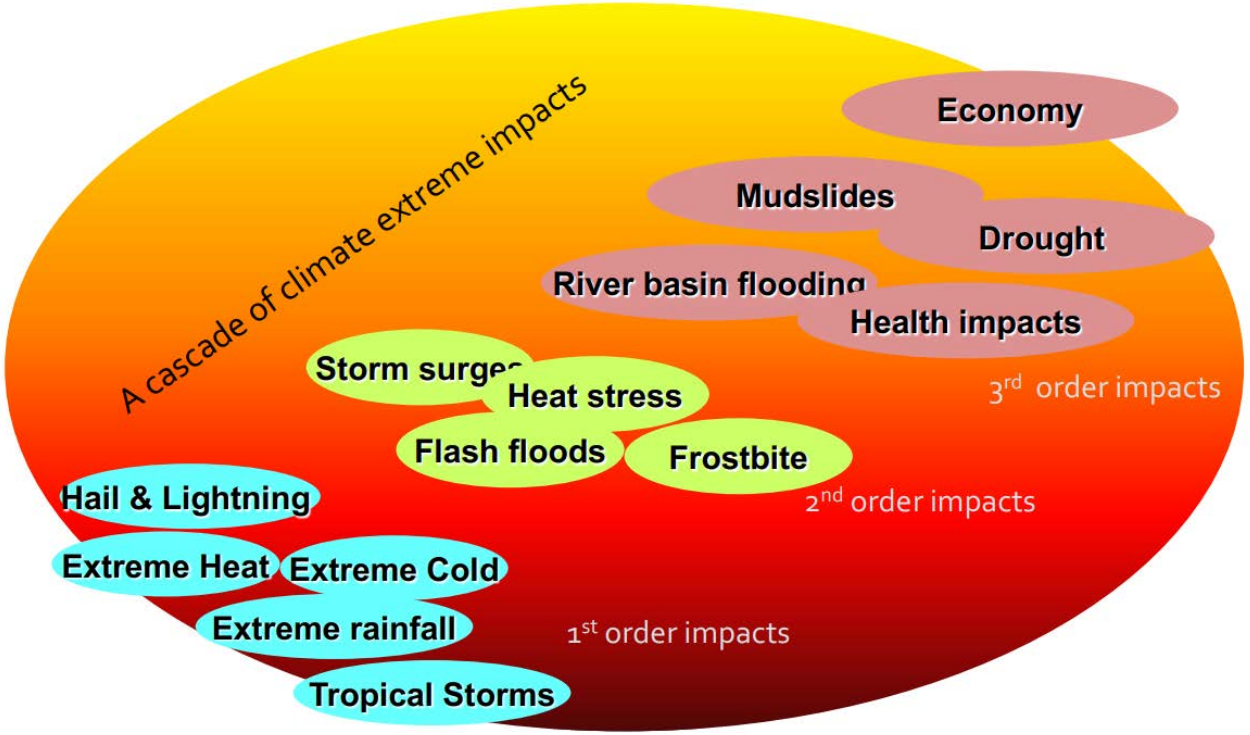


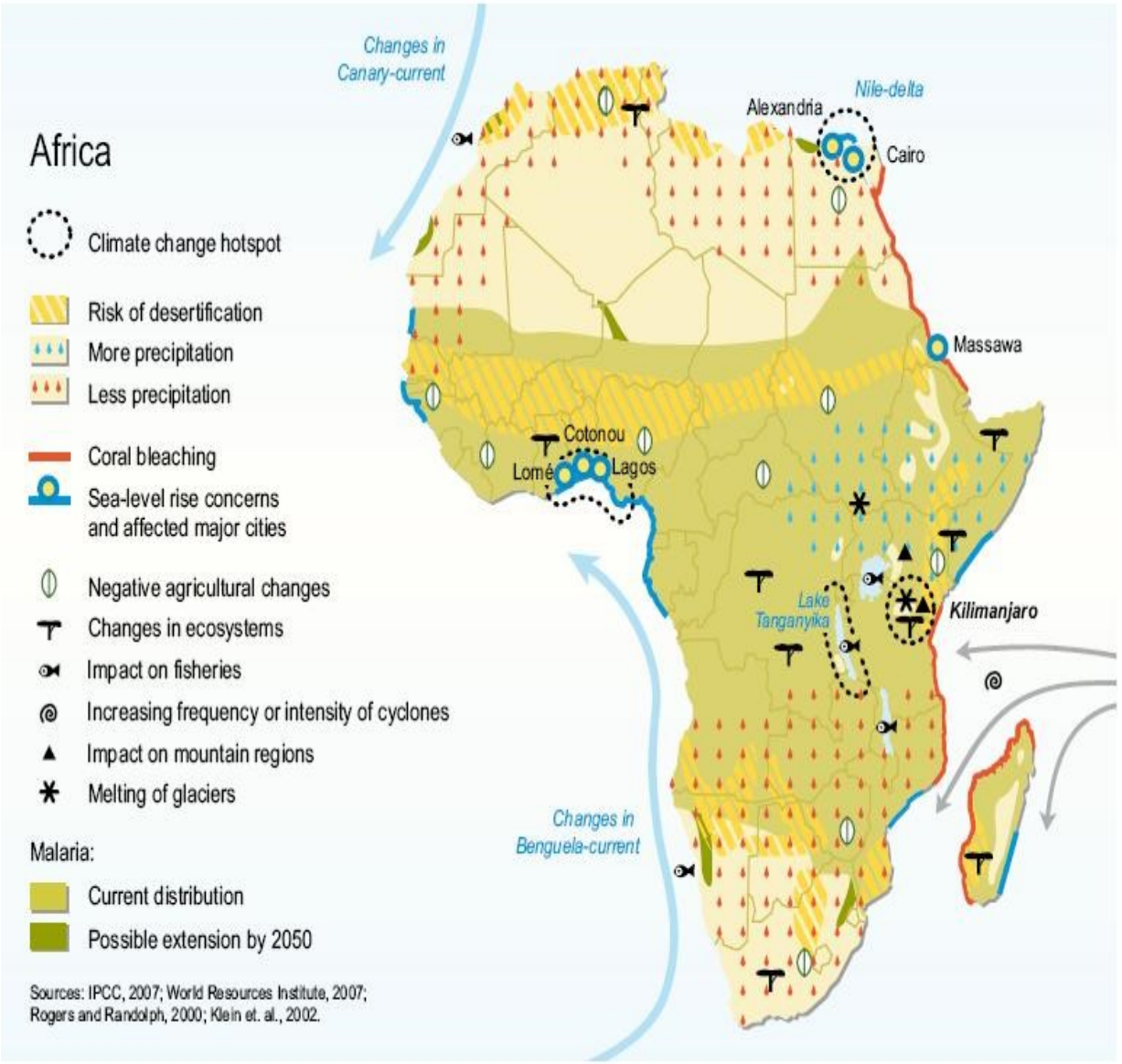




Projected Impacts of Climate Change

- Many of the impacts of global warming have been well-documented.
- The precise extent is visible but difficult to predict.





Source: UNEP (2009), p32

Climate-related drivers of impacts

Warming trend | Extreme temperature | Drying trend | Extreme precipitation | Precipitation | Snow cover | Damaging cyclone | Sea level | Ocean acidification | Carbon dioxide fertilization

Level of risk & potential for adaptation

Potential for additional adaptation to reduce risk

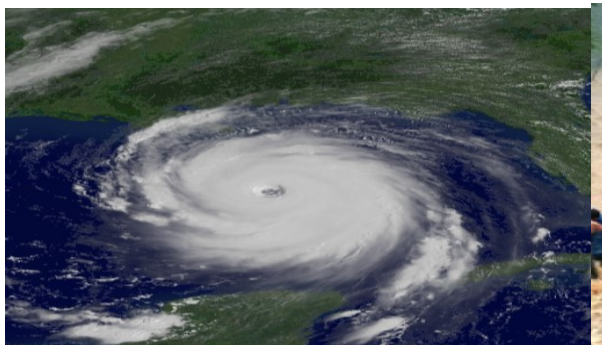
Risk level with **high** adaptation

Risk level with **current** adaptation

Africa

Key risk	Adaptation issues & prospects	Climatic drivers	Timeframe	Risk & potential for adaptation (Very low – Medium – Very high)
Compounded stress on water resources facing significant strain from overexploitation and degradation at present and increased demand in the future, with drought stress exacerbated in drought-prone regions of Africa (*high confidence*) [22.3, 22.4]	• Reducing non-climate stressors on water resources • Strengthening institutional capacities for demand management, groundwater assessment, integrated water-wastewater planning, and integrated land and water governance • Sustainable urban development		Present Near term (2030–2040) Long term (2080–2100) 2°C 4°C	
Reduced crop productivity associated with heat and drought stress, with strong adverse effects on regional, national, and household livelihood and food security, also given increased pest and disease damage and flood impacts on food system infrastructure (*high confidence*) [22.3, 22.4]	• Technological adaptation responses (e.g., stress-tolerant crop varieties, irrigation, enhanced observation systems) • Enhancing smallholder access to credit and other critical production resources; Diversifying livelihoods • Strengthening institutions at local, national, and regional levels to support agriculture (including early warning systems) and gender-oriented policy • Agronomic adaptation responses (e.g., agroforestry, conservation agriculture)		Present Near term (2030–2040) Long term (2080–2100) 2°C 4°C	
Changes in the incidence and geographic range of vector- and water-borne diseases due to changes in the mean and variability of temperature and precipitation, particularly along the edges of their distribution (*medium confidence*) [22.3]	• Achieving development goals, particularly improved access to safe water and improved sanitation, and enhancement of public health functions such as surveillance • Vulnerability mapping and early warning systems • Coordination across sectors • Sustainable urban development		Present Near term (2030–2040) Long term (2080–2100) 2°C 4°C	

Impacts of Climate Change



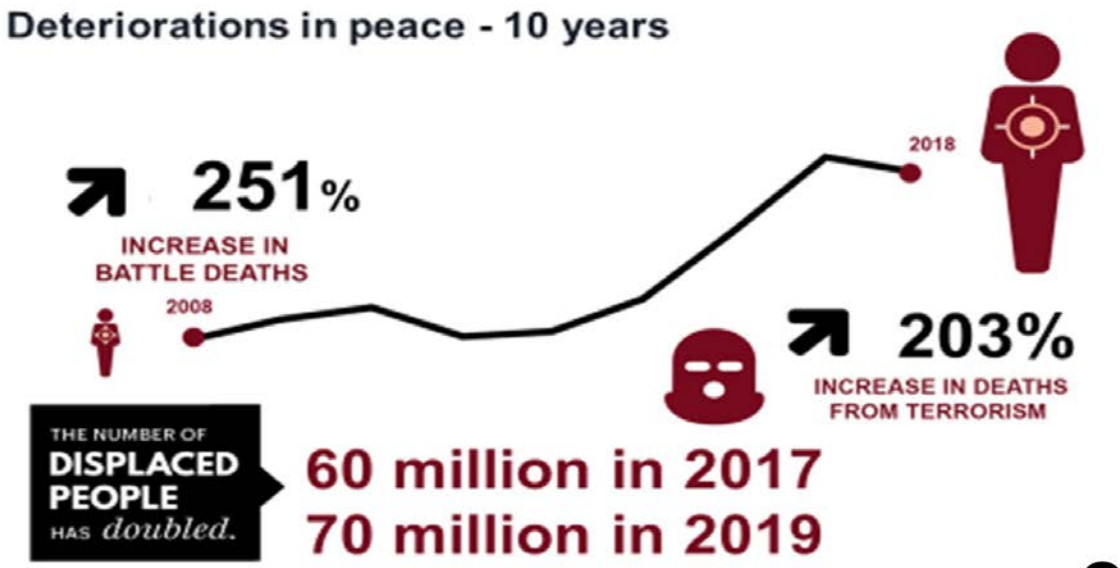
Changes in rainfall patterns

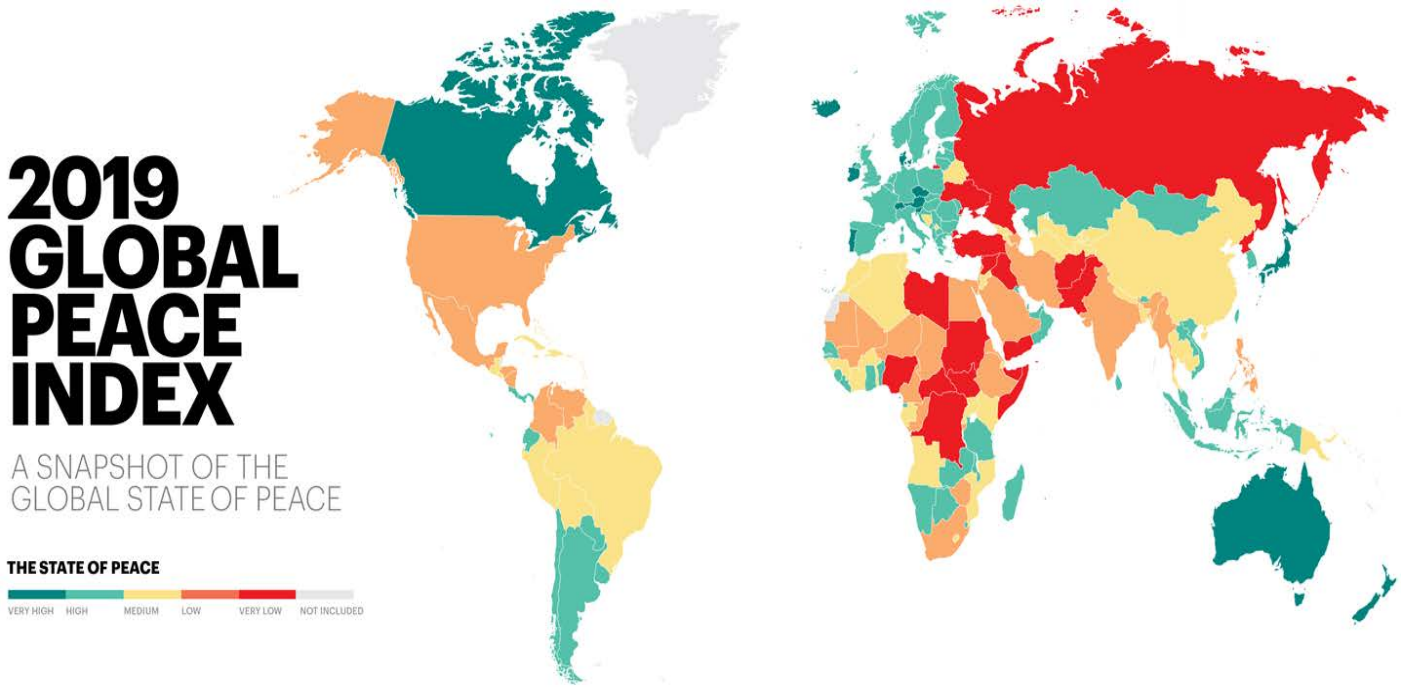
Warmer in northern regions

Damage in vulnerable areas

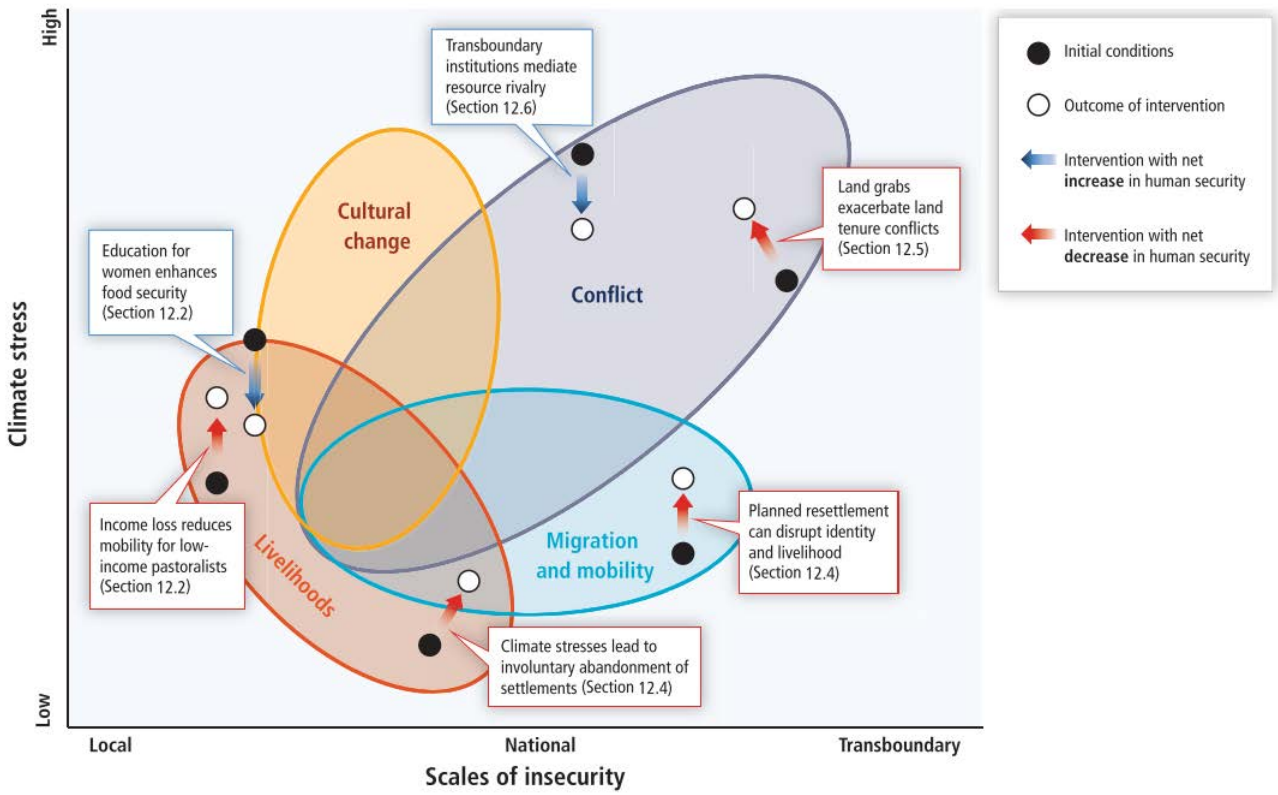
Incident of pest and disease

Does Climate Change Cause Conflict?

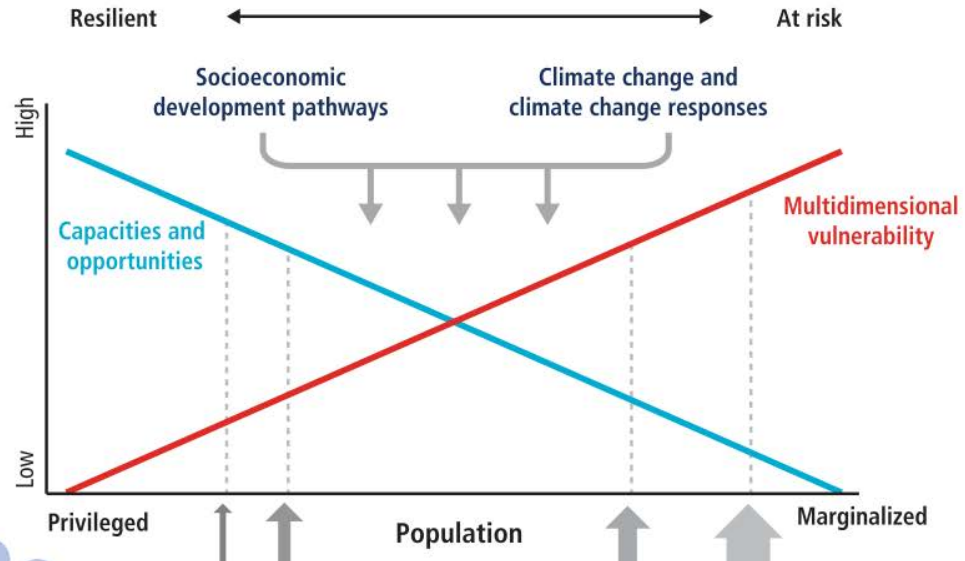




Climate Change and Gender

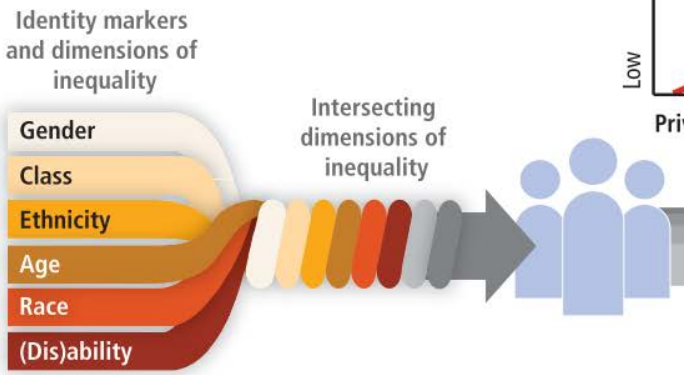


Dimensions of insecurity, inequality & Vulnerability to Climate Change



Gender roles based on the dictates of culture

- Reproduction
- Nurturing and caring
- Production



Climate Change Impacts: A Gender perspective

Elderly people are particularly prone to heat stress

Women have to find alternative livelihoods

Warm and wet climates favour mosquitoes that spread diseases such as West Nile virus, malaria, etc

Smog is harmful to human health

Women have to shoulder extra responsibilities.

Floods

Note: Women are either directly or indirectly affected by each of the processes

Gendered Impacts of Climate Change in Uganda

Livelihoods versus dignity

Drought in Karamoja

Livelihood versus education

Water availability and quality

Narture and care

Charcoal trade

Locust drying even when unsafe for humans

Firewood

Environmental Violence and Women

- Several villages buried
- Displaced at least 3,500 people
- Destroyed dozens of houses and food crops in 20 villages

Bududa Landslide 2010

Gender, climate change and environmental migration

- Women
- Children
- Youth
- Men

Resettlement Villages in Bulambuli District

What Would This Helpless Woman Require After Disaster?

- What do you think she has lost?
- What do you think is in her mind right now?
- How will she provide for the household when the household possessions have been buried?

Climate Change, Women and Work

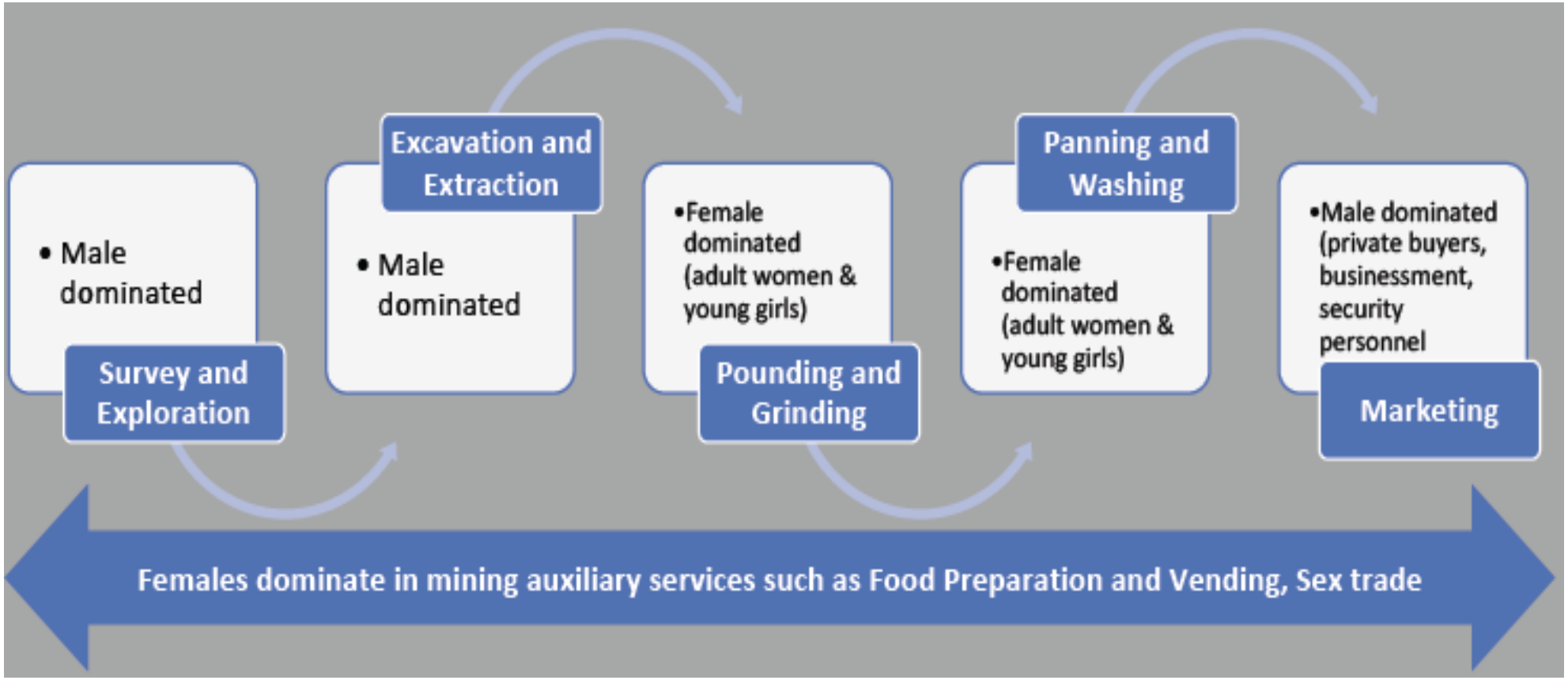
Climate Change in the Karamoja Region

- Gradual but progressive increase in temperature for the last 25 years
- Heavily dependent on rain-fed agriculture
- Characterised by intermittent and unpredictable weather patterns
- Impact on food production, nutritional security and livelihoods
  - ❖One meal a day for most households
  - ❖Many sleep on empty stomachs
- *Women are responsible for food production and provision*
- What alternative livelihoods are available for Karamajong women in a region that is highly vulnerable to climate change?
- Do the available livelihood options lessen or amplify the burden and suffering of women in Karamoja?

Positions of Women in Mining in Karamoja

'Gold disappears when a woman enters or jumps over the mining pit. It is most critical when the woman is in her menstrual period. If a woman is to enter the mining pit, she must be naked' (Interview, Lolung mine, 11/12/2018).

Artisanal Mining in Karamoja and Dominant Actors



Implication For Women In Karamoja

Pounding, grinding and panning/washing (90% women)

- **Pounding**: food preparation process in the home
- **Grinding**: food preparation process in the home
- **Panning**: winnower to free grain from the lighter particles of chaff and dirt
- **Washing**: an everyday activity for women in the domestic sphere

Key lessons

- Women restricted to activities outside of the mining pits but closer to their everyday domestic responsibilities
- Less-rewarding and poorly remunerated activities reserved for women.
- Core and most lucrative activities reserved for men
- Secondary support work activities

Climate Justice

- Climate justice - preventing the serious consequences of climate change in a fair and equitable way.
- It is the inclusion, fair treatment, ***meaningful involvement of all peoples regardless of race, gender, age, national origin or income*** when developing and implementing climate policy.
- Governments, businesses and citizens can all work together to cut greenhouse gas emissions at the source, while enabling everyone, including ***the poor and vulnerable*** among us, to benefit at the same time.
- Climate justice ensures that when it comes to putting measures in place to combat the effects of climate change, ***everyone is treated equally and benefits as a result of the climate action implemented***.
  - Respect and Protect Human Rights
  - Support the Right to Development
  - Share Benefits and Burdens Equitably
  - Ensure that Decisions on Climate Change are Participatory, Transparent and Accountable
  - ***Highlight Gender Equality and Equity***
  - Harness the Transformative Power of Education for Climate Stewardship
  - Use Effective Partnerships to Secure Climate Justice

Climate Justice and Gender

- Issues to address towards climate justice in the context of gender:
  - Climate change, hazards, and their gender dimensions
  - Understanding disasters and vulnerability in gender contexts
  - Gender inequality, women's status, and capacity for protection
  - Women's nutritional status and coping capacity
  - Women's domestic burden and increased hardship
  - Women's reduced ability to provide self-protection
  - Women's labour linked to household welfare and income
  - High female illiteracy rates
  - Women and Girls Most Impacted, but Least Represented
  - What and how do the legal frameworks favour the gender context in climate adaptation actions?

Climate Justice and Gender – Women as agents of Social Change

1. Women are most affected by climate change due to socio-cultural roles.

2. Women will continue to occupy the margins whether in agriculture, mining etc.

3. Address the root causes of climate change and socio-cultural rigidities.

4. Climate change is amplifying the existing gender inequalities.

Administering Climate Justice in the context of Gender

Gender should be treated as a substantive issue and not 'add on'

- Affirmative action through education and sensitization
- Women sensitized on climate change and gender issues at all levels.
- Yes, some women have access to resources such as land but not much can be gained with climate change.
- Engage women in climate change debates and discussions
- Local, national and international participation, representation and recognition

SDG

SDG

THANK YOU!

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GREENWATCH