
# Training on gender and disaster risk management

## Session 7 – Key concepts – climate change

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# Inputs and materials gratefully received from

- Thomas Jensen and Martin Krause, UNDP
- Stephanie Zoll, SOPAC
- Lorena Aguilar, IUCN
- Global Gender and Climate Alliance (GGCA)

# DEF of climate change

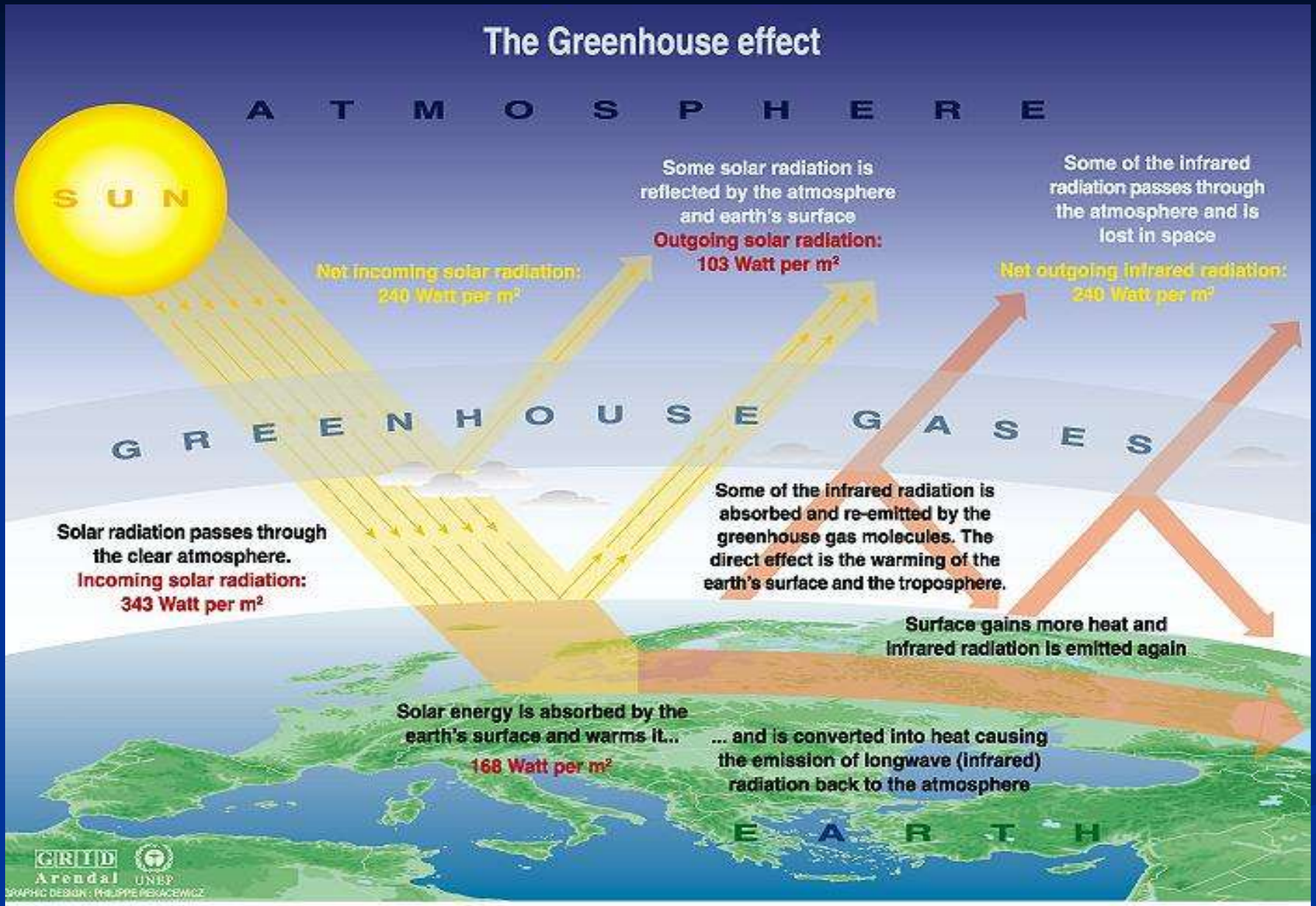
- Statistically significant variations in the average weather, over long period – decades or longer

- Key variables are temperature, rainfall and wind

# the climate system

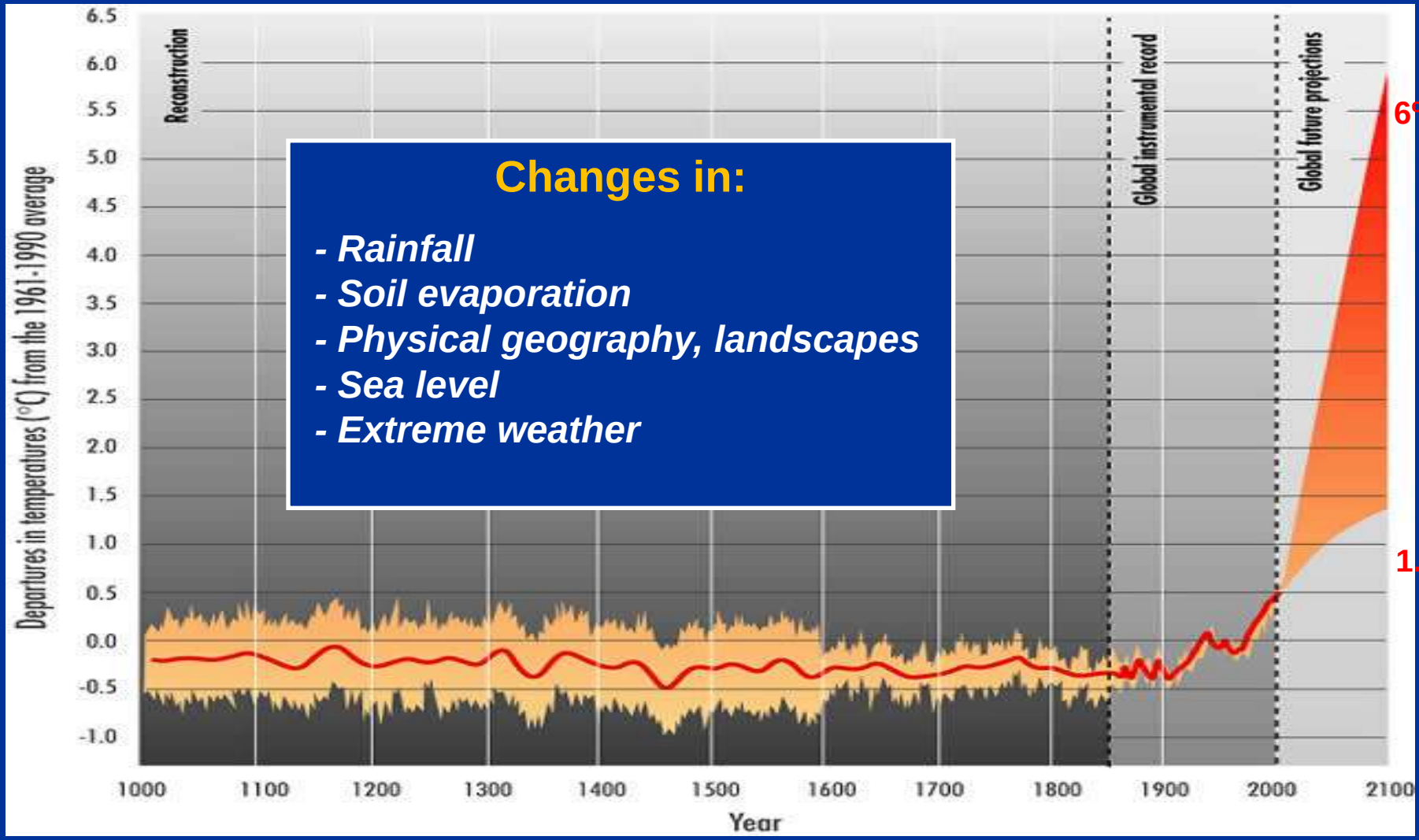
- **Five major components**: the atmosphere, the hydrosphere, the cryosphere, the land surface and the biosphere, and the interactions between them.

- Evolves in time under the influence of its own **internal dynamics** and because of **external forcings** such as volcanic eruptions, solar variations and human-induced forcings such as the changing composition of the atmosphere and land-use change.




Sources: Okanagan university college in Canada, Department of geography, University of Oxford, school of geography; United States Environmental Protection Agency (EPA), Washington; Climate change 1995, The science of climate change, contribution of working group 1 to the second assessment report of the intergovernmental panel on climate change, UNEP and WMO, Cambridge university press, 1996.

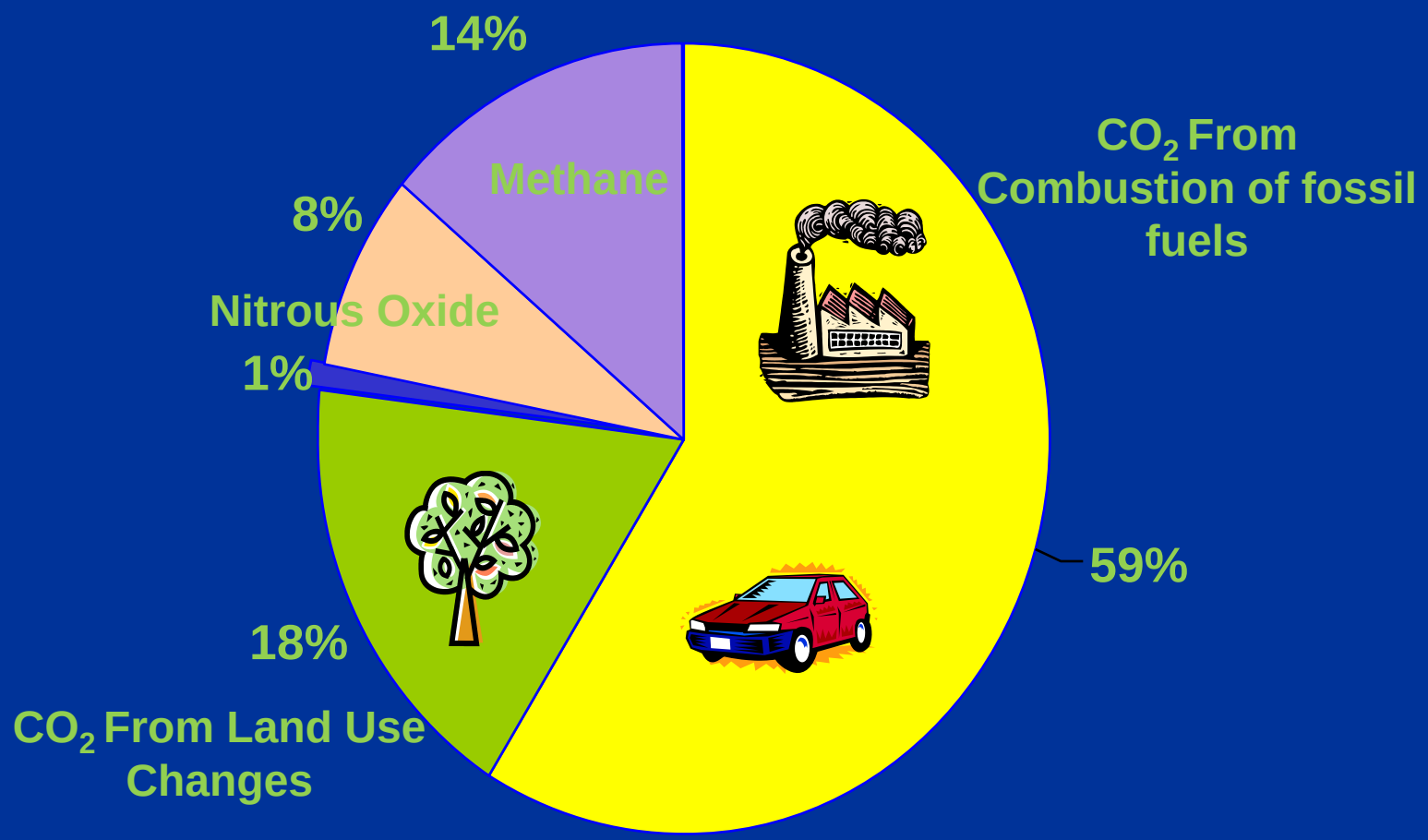
# Global warming is changing the world we live in



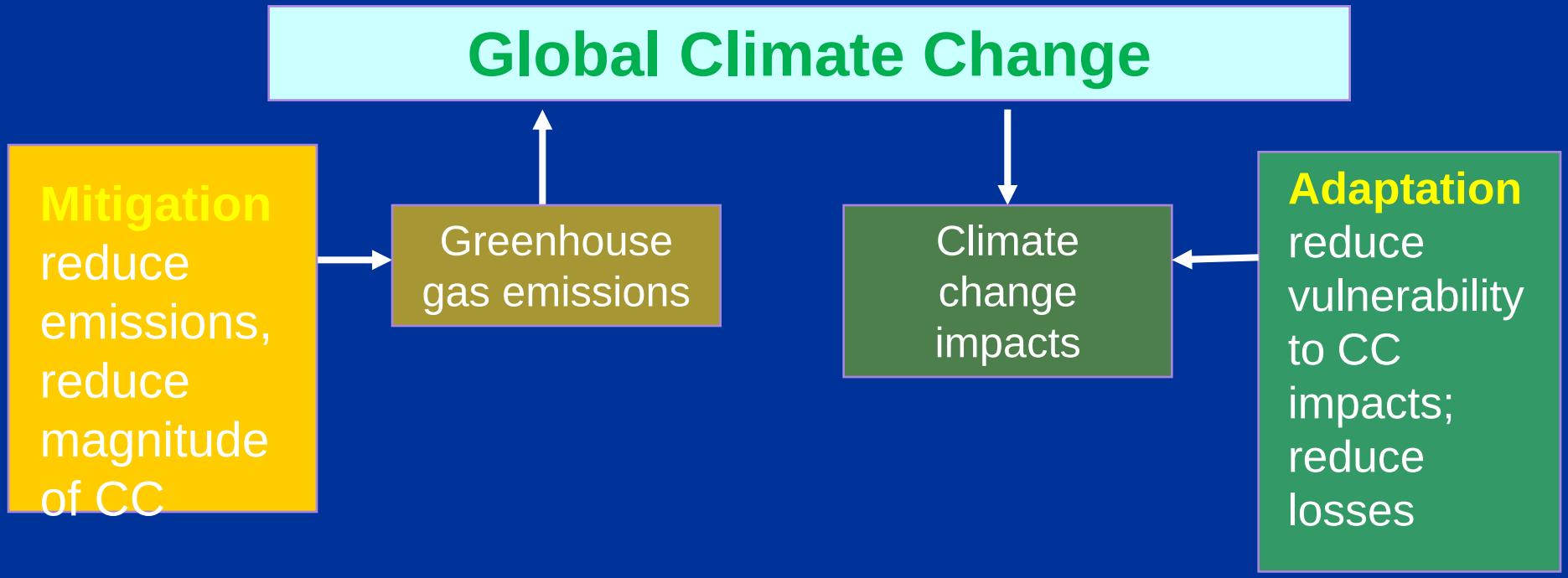
# Climate change mitigation

- Reduction of greenhouse gas emissions
- Reducing the extent (pace, rate, magnitude, probability, scope) of human induced climate change

# Mitigation: where emissions are coming from



# Mitigation and Adaptation




**Adaptation and Mitigation:**
**Complementary risk management strategies**

# Gender aspects of mitigation

- Women are often in charge of household energy and cooking (eg,. Firewood, stoves, heating)
- Poor women are disproportionately affected by emissions which they are not contributing to
- Transportation systems should take into account needs of both men and women
- Women can be powerful agents of change

# Carbon footprints

- Common but differentiated responsibilities, between industrialized and developing countries
- Studies show that globally on average women leave a smaller ecological footprint and cause less climate change
- Through greater mobility and more extensive travel, men account for more CO2 emissions – rich men especially
- www.myfootprint.org

# IPCC emissions scenarios

A1 – very rapid economic growth, low population growth, rapid introduction of new and more efficient technologies. Pursuit of personal wealth rather than environmental equality

A2 – Strengthened regional cultural identities. Emphasis on family values and local traditions, high population growth, less economic development

B1 – convergent world, rapid change in economic structures, introduction of clean technologies. Improved equity and global solutions for environmental and social sustainability.

B2 – heterogeneous world with less rapid, more diverse technological changes and a strong emphasis on community. Local solutions for sustainability.

# Climate change adaptation

- Initiatives and measures to reduce the vulnerability of natural and human systems against actual or expected climate change effects

- Many possible examples

# Gender aspects of adaptation

- Many women work in agriculture, one of the sectors most needing to adapt
- Women and girls are often responsible for fetching water for the household
- Men and women usually engage in the fishing sector in distinct ways
- Both men and women have different types of traditional knowledge important for adaptation and coping practices

# *Climate Change is not an environmental issue – it's a vulnerability issue!*

Changes in forest composition, extent, health & productivity

Variability in water supply, quality and distribution. More competition and cross-border conflicts over water resources

Erosion, inundation, salinisation, stress on mangroves, marshes, wetlands

PUBLIC HEALTH | AGRICULTURE | FORESTRY | WATER RESOURCES | COASTAL SYSTEMS | ECOSYSTEM SERVICES






Increasing incidents of infectious, water-borne and vector-borne diseases, heat stress & mortality, additional public health costs

Less predictability in crop yield, changing irrigation demand, growing risk of pest infestations

Loss of habitat, species and protective ecosystems, migratory shifts

# CC financing
## under UNFCCC and Kyoto Protocol

| GEF Trust Fund | Mitigation, adaptation | Mit = $3.3 billion (1991-2010)<br>Adpt = $50 million |
|---|---|---|
| Special Climate Change Fund | Mitigation, adaptation | $74 million (to 2008) |
| Least Developed Countries Fund | Adaptation | $173 million pledged (to 2008) |
| Adaptation Fund | Adaptation | $80-300 million (to 2012) |
| Clean Development Mechanism | Mitigation | $7 billion (as of 2008) |

# High vulnerability of SIDS

- Economically fragile
- Limited resources - natural, financial, human
- Infrastructure - located primarily in coastal zones; more than 50% of population as well
- Highly exposed to impacts of sea level rise and increasing temperatures; finite land area, thin fresh water lenses
- Highly susceptible to natural hazards - tropical cyclones, storm surges, drought

*info from AOSIS*

# “No regrets” approach

- 'no-regrets' adaptation interventions, meaning actions that generate net social benefits under all future scenarios of climate change and impacts

- Climate change adaptation activities which also reduce the risk of disasters, such as mangrove expansion, taking care of coral reefs, retrofitting of schools and hospitals

Fa’afetai

*Vinaka vakalevu*

Meitaki