



**Conferência sobre o
Impacto das Mudanças
Climáticas na Saúde**

Global Climate Trends and Their Impact on Healthcare Infrastructure

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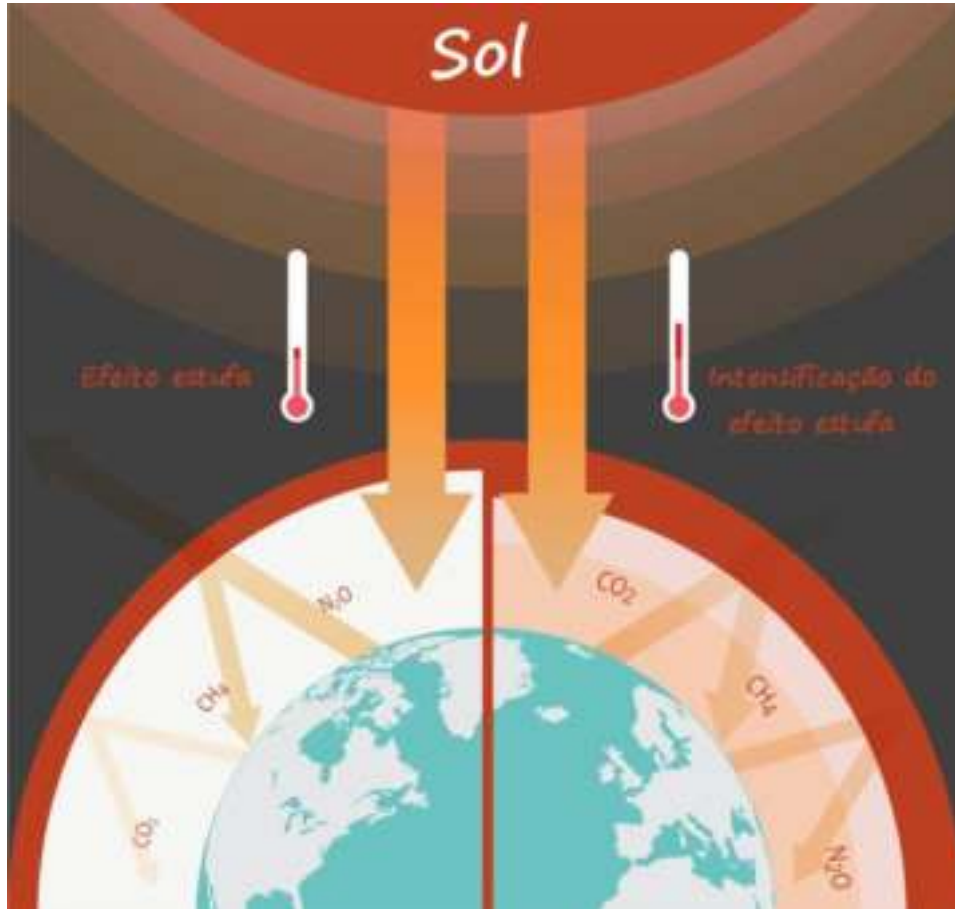


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- Context and Background;
- Current climate stage;
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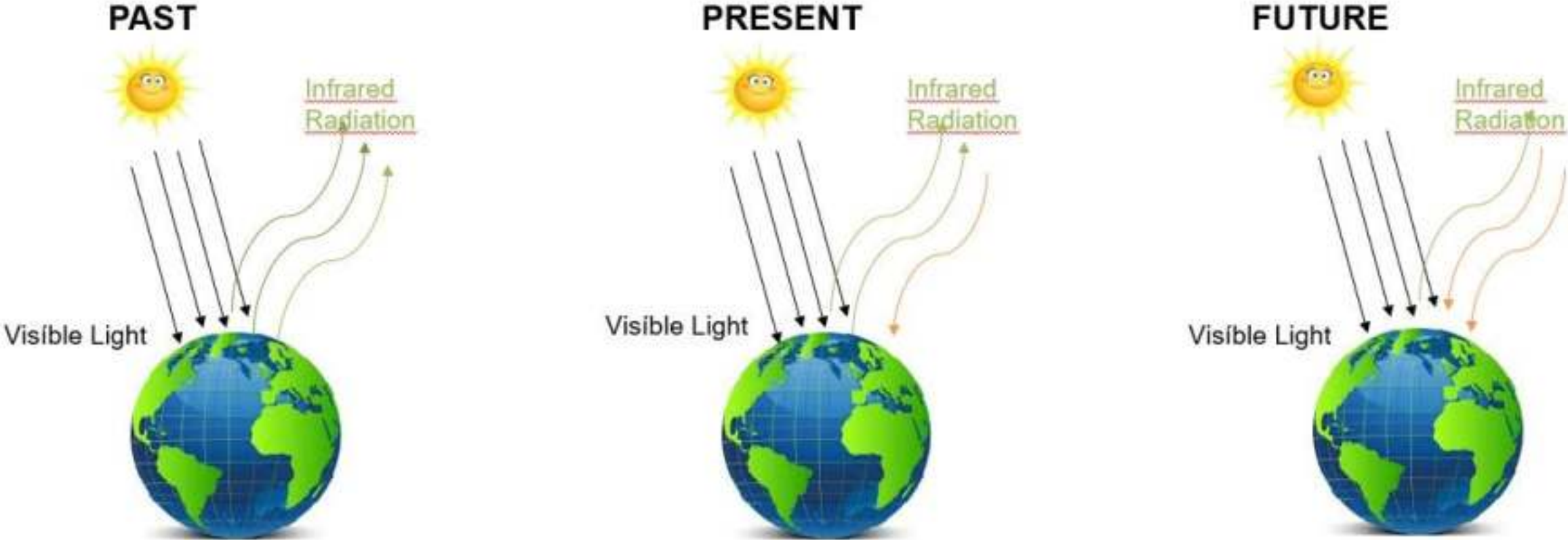
Context and background

Global Warming



The world went from a discussion about **whether or not** climate change was happening to decide **what to do** about climate change.

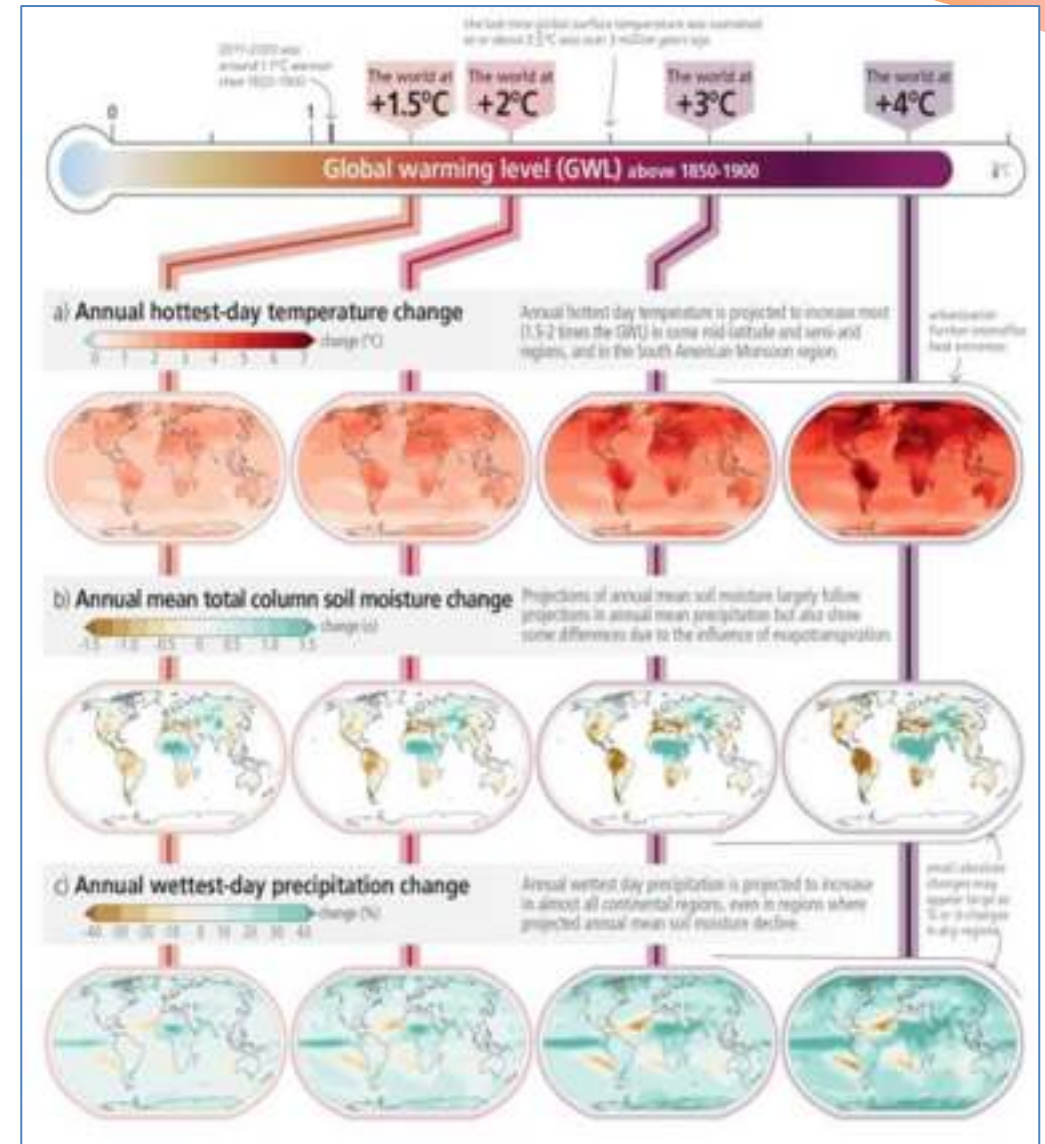
Global Warming



Present climate stage

Climate Change - Paris Agreement

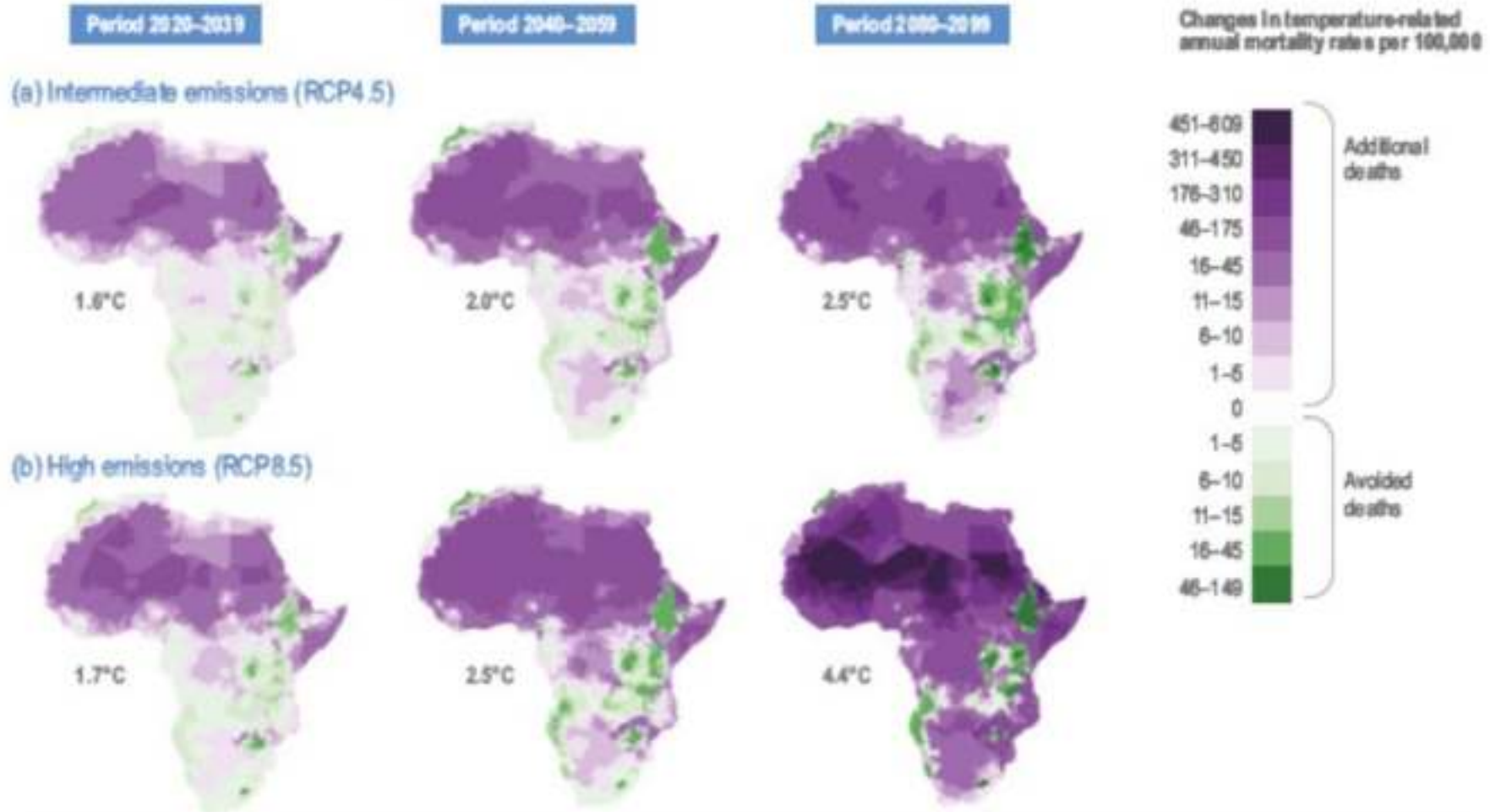
- Climate Change is a reality and one of the defining issues of this century.
- The occurrence and intensification of extreme events, serious loss and damage, affecting people, societies and economies is increasing;
- Each increment in global warming, extreme regional weather phenomena become more widespread and pronounced;
- Invest in adaptation Vs Early Warning.



IPCC, AR6.

Temperature-Related Mortality Risk

Temperature-related mortality risk in Africa with increased global warming



Extreme climate events - MOZ

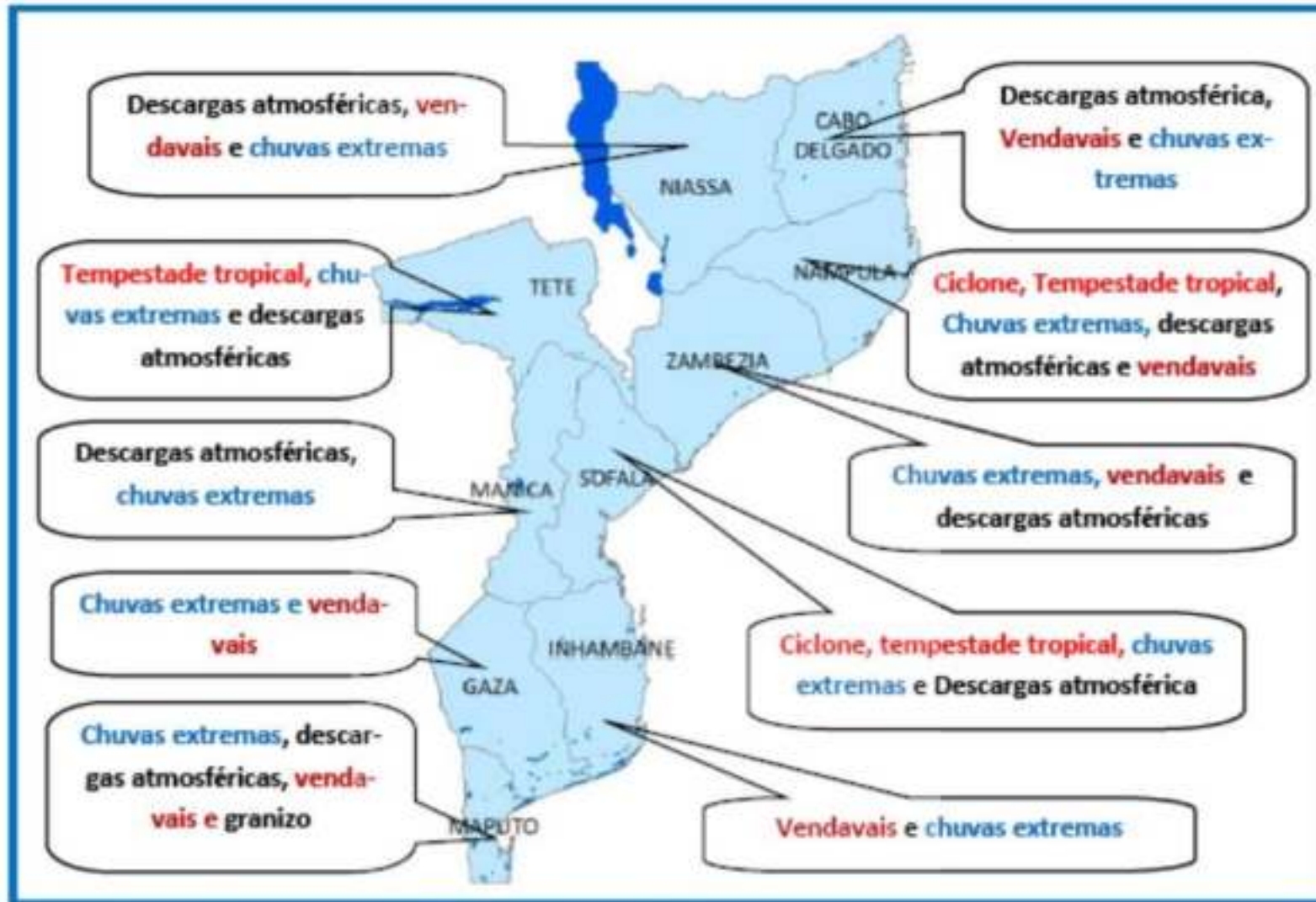


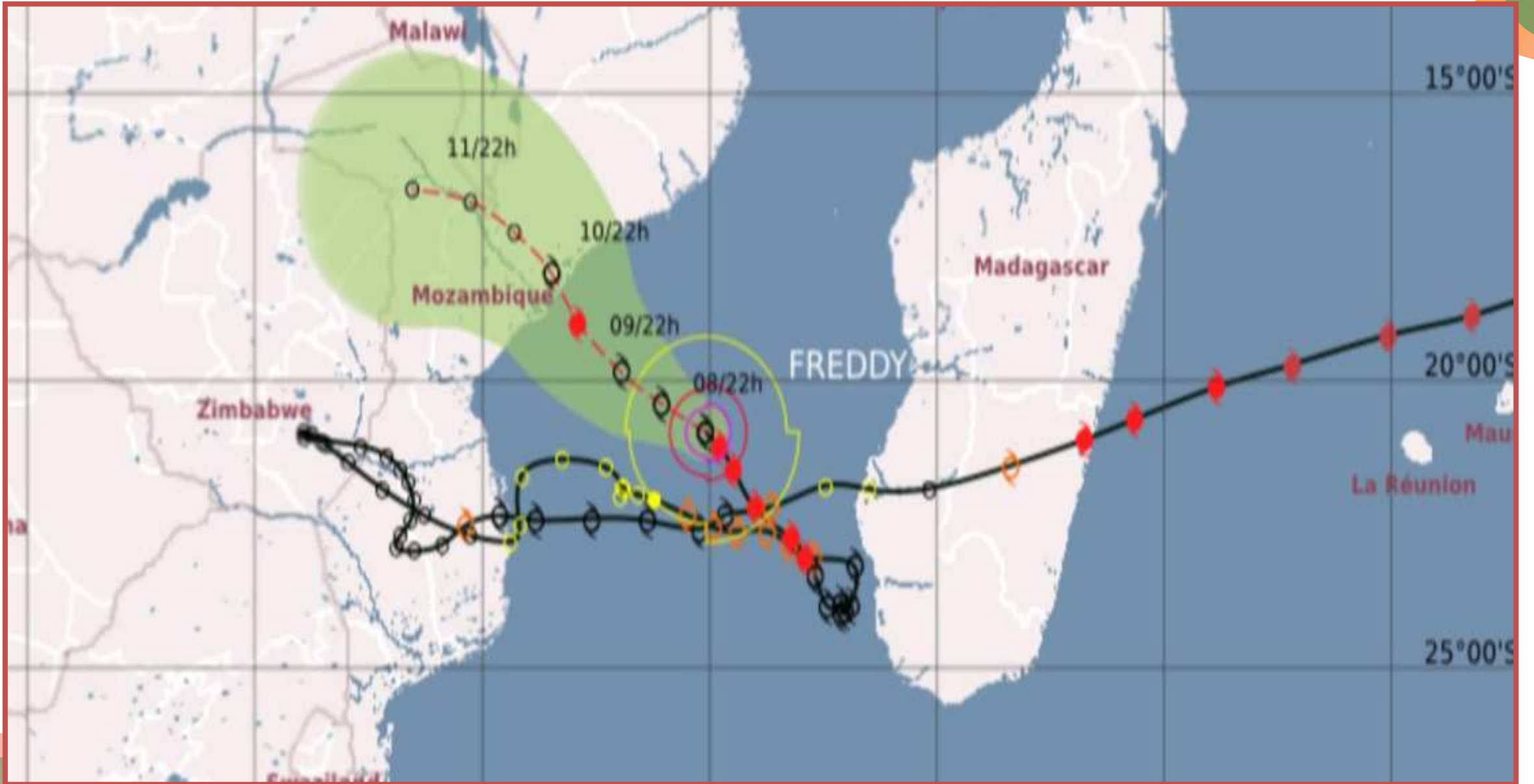
Figura 6: Diagrama de eventos extremos registados em Moçambique em 2022.

Tropical systems

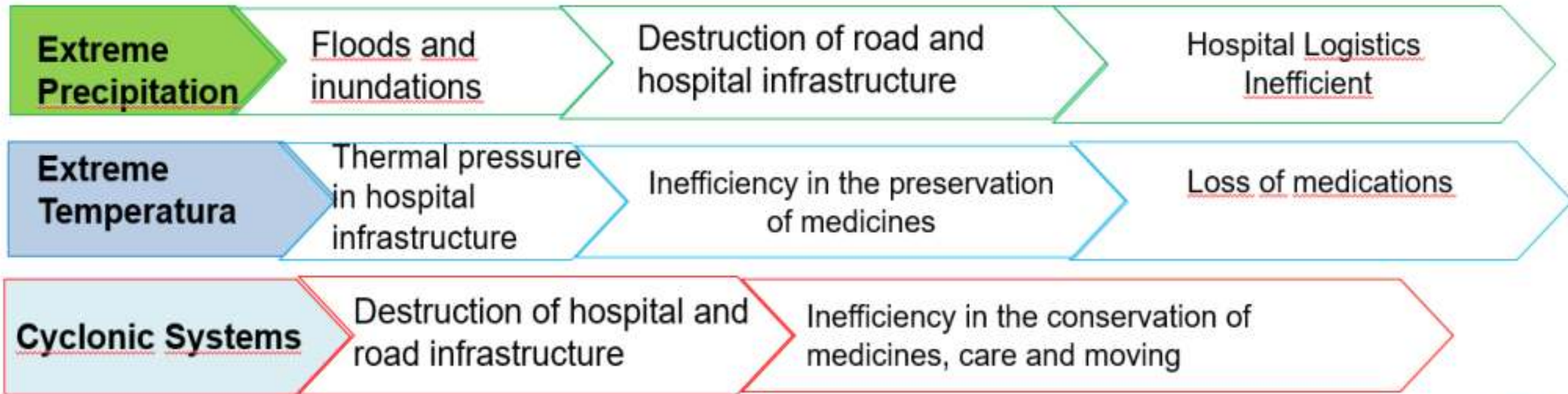


Figura 7: Sistemas tropicais que se formaram na bacia do Sudoeste do Oceano Índico (azul), que evoluíram à categoria de ciclone tropical (vermelho) e os que atingiram a costa Moçambicana (verde) de 1959 a 2022.

Climate Scenarios



Climate Vs health system



**Degradation of
Human Health**

Infrastructures



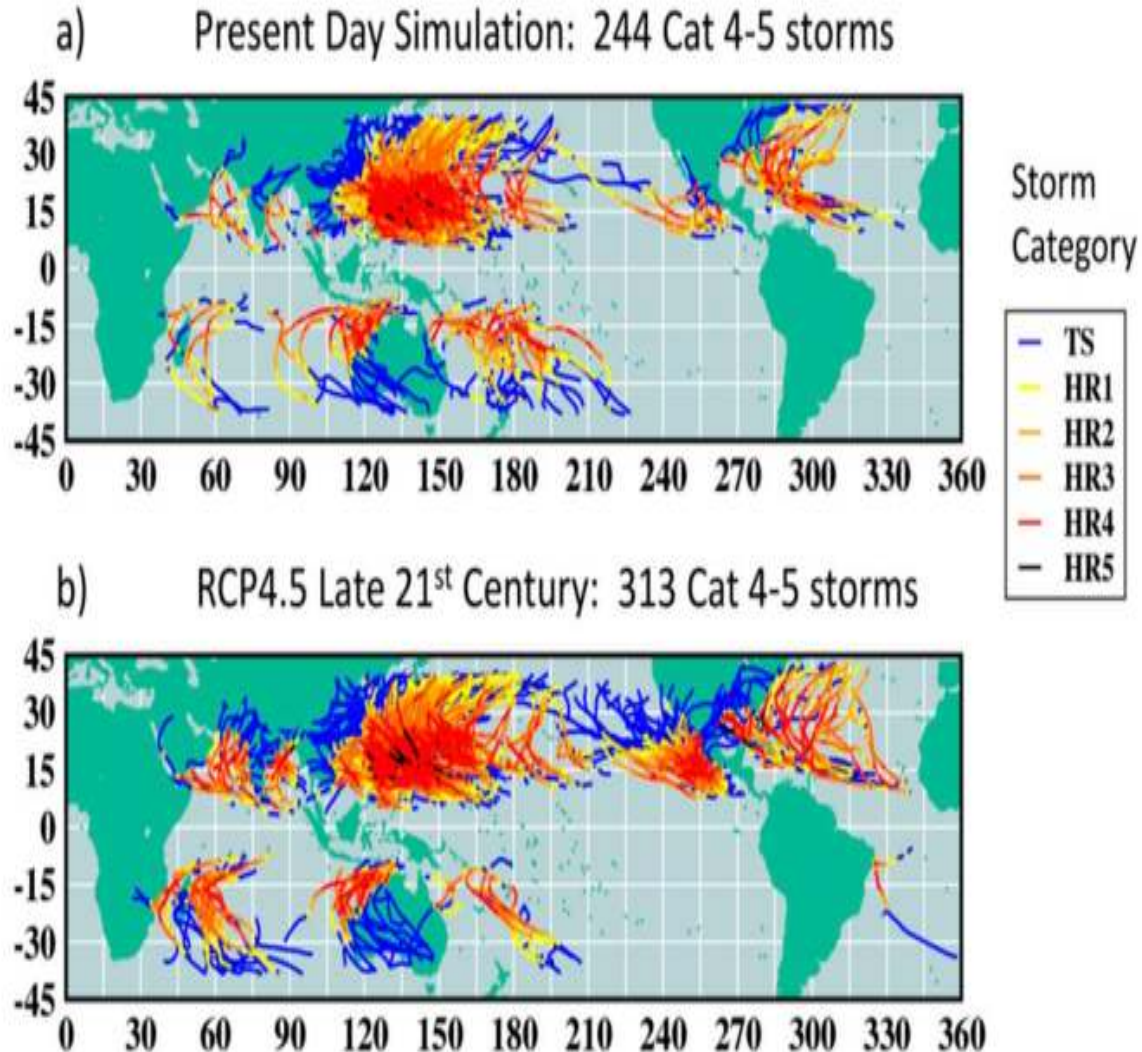
Infrastructure is one of the **necessary** conditions for the development and competitiveness of a country.

Health Infrastructure - destroyed



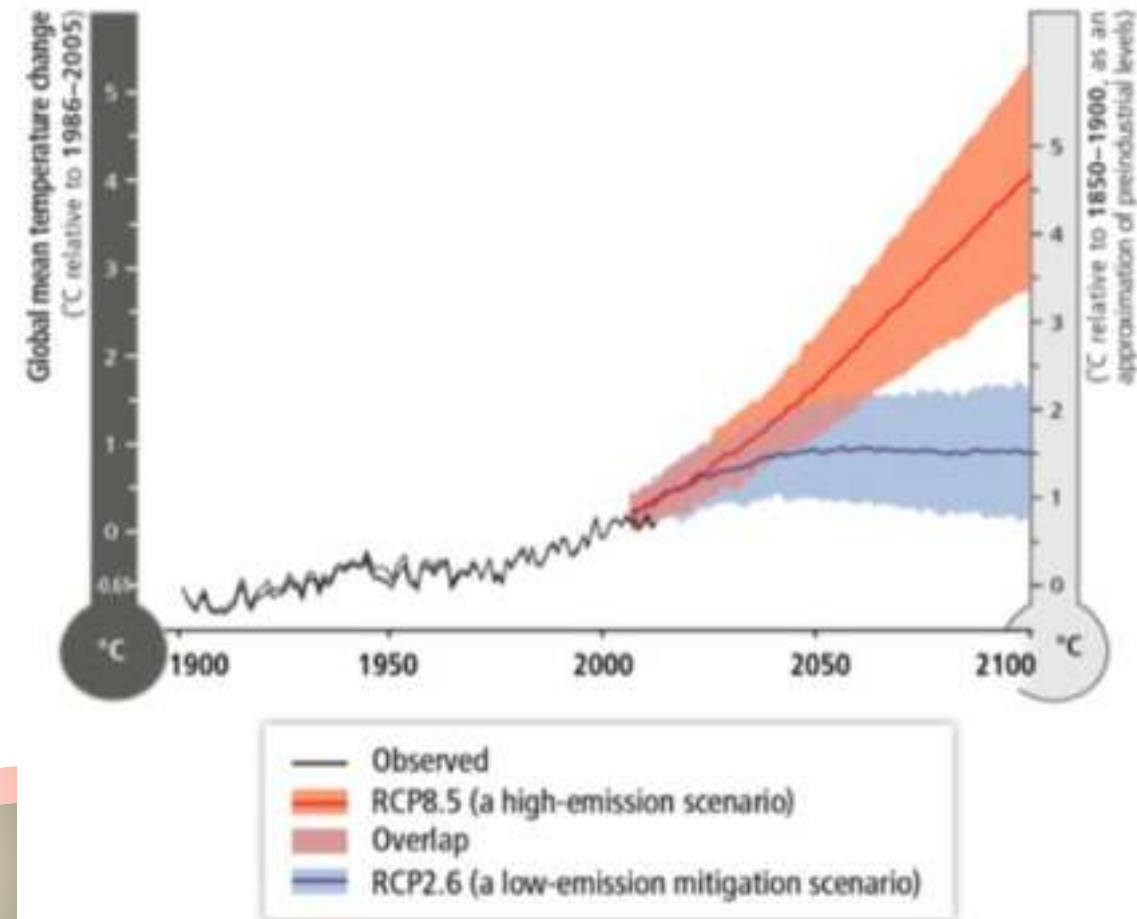
Future climate stage

Tropical cyclone behavior



- Simulated tropical cyclone bands 4-5 for (a) current or (b) late 21st century (RCP4.5); CMIP5 multimodel set conditions obtained using the GFDL hurricane model to resimulate (at higher resolution) tropical cyclone cases originally obtained from the HiRAM C180 global model. (Source: Knutson et al, 2015).
- 28% increase in storms;
- The number of category 4-5 days is projected to increase by 35% globally.

Challenges



- Establishes a global framework for avoiding severe climate change by limiting global warming to well **below 2 °C** and pursuing efforts to limit it **to 1.5 °C**;
- It also aims to strengthen the capacity of countries to deal with the impacts of climate change and support them in their efforts;
- The implementation of the **Paris Agreement** requires an economic and social transformation, based on the best available scientific knowledge.

Challenges

- Climate-related infrastructure damage and repairs will be a significant financial burden for countries.
- Without adaptation, the aggregate damage caused by sea level rise and coastal extremes in 12 major African coastal cities in 2050, under medium and high emissions scenarios, will be \$65 billion and \$86.5 billion, respectively.
- By **2100**, potential costs of up to \$183.6 billion could be incurred to maintain existing road networks damaged by changes in temperature and precipitation due to climate change.
- Increased rainfall variability is expected to affect electricity prices in countries that are highly dependent on hydropower.

SOLUTIONS AND CALL TO ACTION

Resilience.

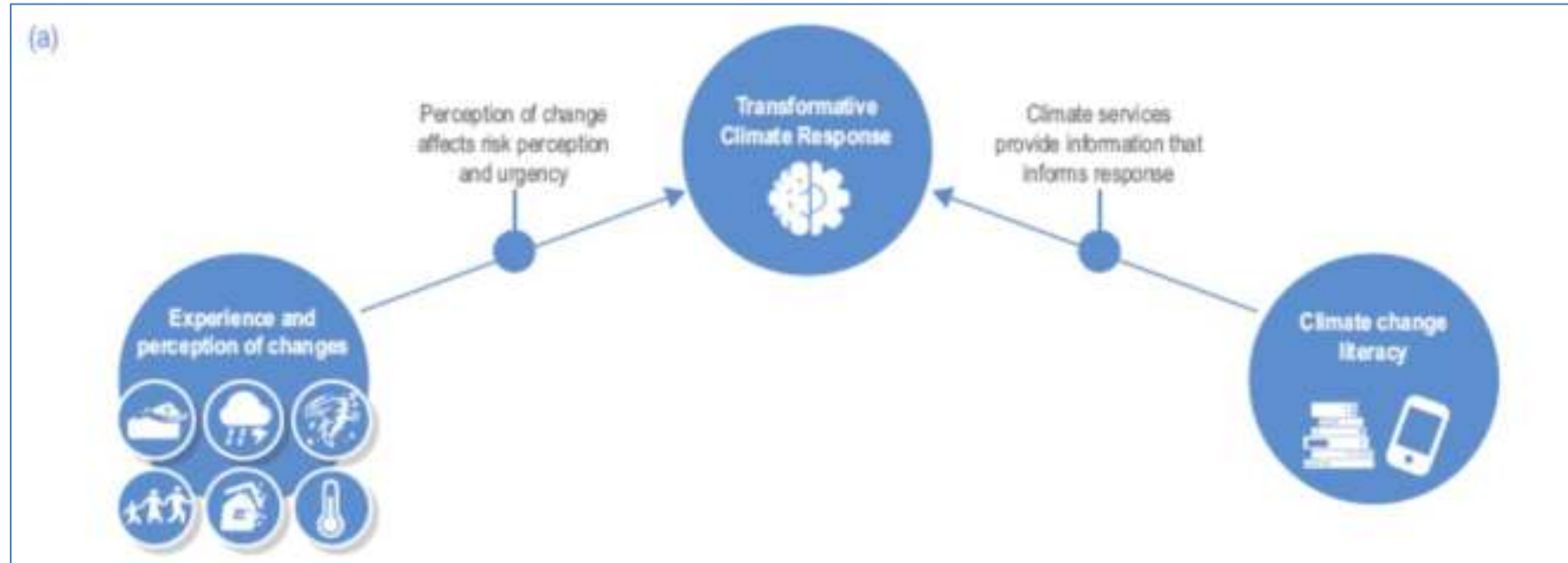
MITIGATION

- Reduce GHG emissions;
- Increase areas for carbon sequestration;
- Sustainable mobility...

ADAPTATION


- Change in activities and lifestyle;
- **Safer and more sustainable infrastructure;**
- Crop diversification... answer...

Climate Serv & CC literacy



UN sustainable development objectives


3 SAÚDE DE QUALIDADE



GARANTIR O ACESSO À SAÚDE DE QUALIDADE E PROMOVER O BEM-ESTAR PARA TODOS, EM TODAS AS IDADES




9 INDÚSTRIA, INOVAÇÃO E INFRAESTRUTURAS



CONSTRUIR INFRAESTRUTURAS RESILIENTES, PROMOVER A INDUSTRIALIZAÇÃO INCLUSIVA E SUSTENTÁVEL E FOMENTAR A INOVAÇÃO

13 AÇÃO CLIMÁTICA



ADOTAR MEDIDAS URGENTES PARA COMBATER AS ALTERAÇÕES CLIMÁTICAS E OS SEUS IMPACTOS

Environmental education

- Environmental education as a necessary and modifying instrument, aiming to improve man's relationship with nature;
- Techniques for construction and requalification of health infrastructures resilient to climate change, obeying the return period
- Hospitals need to look into resilient design techniques.
- Improve the mechanisms for monitoring the elements of weather and climate to better define mitigation and adaptation practices, leading to the creation of resilience;
- Need for financing for the materialization of activities conducive to adaptation to climate change.



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Thank you

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