

# Global Warming of 1.5°C

An IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.

## Climate Change Adaptation

Joy Jacqueline Pereira  
Vice Chair, IPCC Working Group II

Siem Reap, 27 May 2019

Climate change is **already** affecting people, ecosystems and livelihoods around the world

Limiting global warming to 1.5°C is **not impossible**, but would require unprecedented transitions in all aspects of society

**There are clear benefits** to keeping warming to 1.5°C rather than 2°C or higher

Limiting warming to 1.5°C **can contribute** to achieving other world goals

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Where are we now?

Robert van Waarden / Aurora Photos

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A person wearing a light-colored long-sleeved shirt, a wide-brimmed hat, and sunglasses is standing outdoors, looking at a whiteboard. The background is a clear blue sky. The whiteboard has some faint markings on it. The person is positioned on the left side of the frame, and the whiteboard is in the center. The overall scene suggests a field or outdoor work environment.

## Where are we now?

Since pre-industrial times, human activities have caused approximately 1.0°C of global warming.

- At current rate, would reach 1.5°C between 2030 and 2050
- Past emissions alone do not commit the world to 1.5°C
- Already seeing consequences for people, nature and livelihoods

Ashley Cooper / Aurora Photos

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Where do we want to go?

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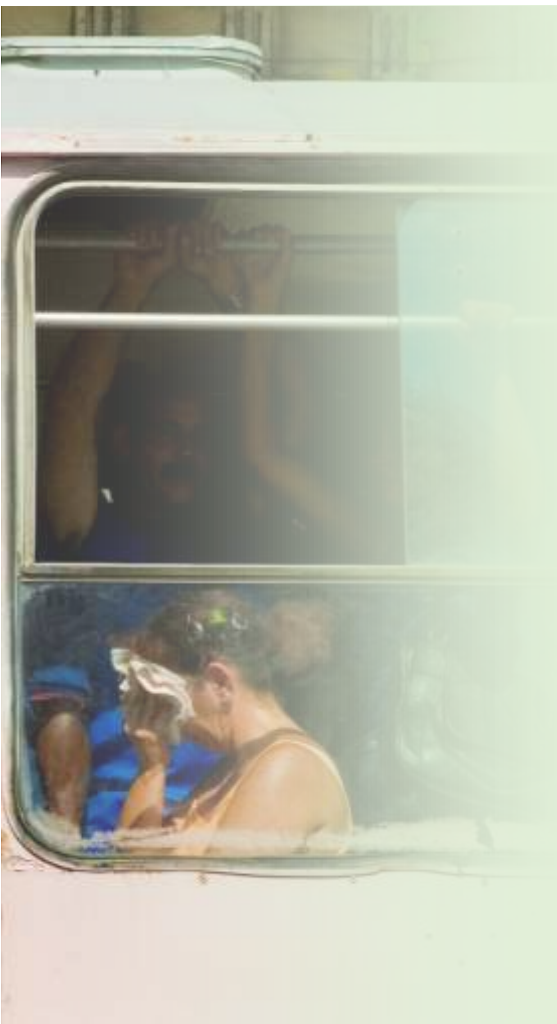
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# Where do we want to go?

At 1.5°C compared to 2°C:

- There are clear differences in climate and extremes between today, a 1.5°C and a 2°C warmer world
- Less impacts from extreme weather where people live
- By 2100, global mean sea level rise will be around 10 cm lower but will continue to rise for centuries
- 10 million fewer people exposed to risk of rising seas and less coastal ecosystems exposed



Jason Florio / Aurora Photos



## Where do we want to go?

At 1.5°C compared to 2°C:

- Smaller reductions in yields of maize, rice, wheat and sorghum
- Global population exposed to water stress is up to 50% less, also less water stress for ecosystems
- Up to several hundred million fewer people exposed to climate-related risk and susceptible to poverty by 2050
- Lower impact on biodiversity and species
  - High risk of losing 70-90% of warm water coral reefs and their services to humankind, even higher at 2°C

**Tropical Southeast Asia: projected to experience the largest impacts on economic growth**

Andre Seale / Aurora Photos

## Where do we want to go?

- At 1.5 and even more so at 2°C, there is disproportionately high risk for Arctic, dryland regions, small island developing states and least developed countries

At 1.5°C compared to 2°C:

- Lower risks for health, livelihoods, food security, water supply, human security and economic growth
- A wide range of adaptation options can reduce climate risks; less adaptation needs at 1.5°C

Jason Florio / Aurora Photos





How is Cambodia doing?

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# Cambodia's Second National Communication

Submitted under the United Nations Framework Convention on  
Climate Change



Figure 2.1: Third Rectangular Strategy (NSDP 2014-2018)



Ministry of Environment  
Kingdom of Cambodia

NOVEMBER 2015

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# Issues and Challenges

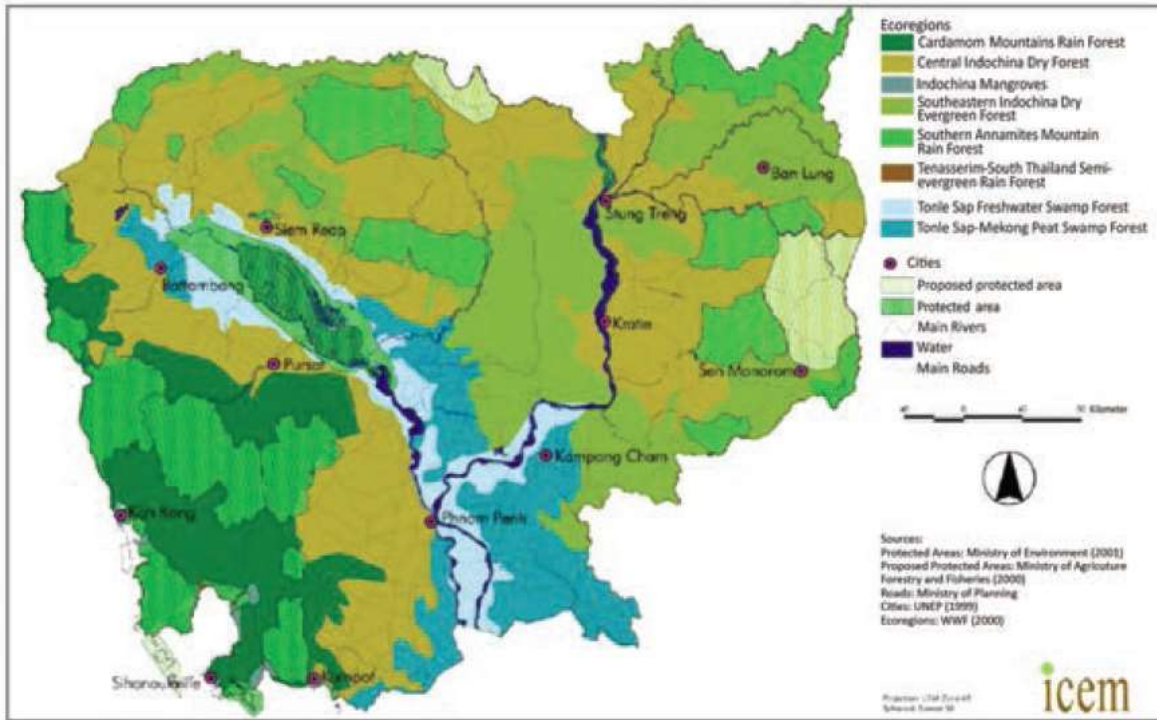


2007 Survey: 85% of respondents believed the climate was changing but only 52% knew about the term “climate change”

NC2 (2015): 10% of survey respondents in government, academia and media had a clear idea of their institutional mandate and climate change

NC2 (2015): Strong call for capacity development, resources and technology transfer

# Future Conditions (NC2 2015)



Source: MEF and MoE 2003

Figure 2.4: Forest types of Cambodia

Agriculture areas exposed to higher risk of drought, reduced rice production

Coastal inundation and associated hazards due to sea level rise

Increased risk of malaria transmission

• **Every bit of warming matters** •

• **Every year matters** •

• **Every choice matters** •

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# THANK YOU FOR YOUR ATTENTION!

## For more information:

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