

# **The 2nd Huangshan Dialogue on UNESCO Sites and Sustainable Development**

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# Presentation Overview

- ✓ Key features of the Convention
- ✓ Climate Change and World Heritage
- ✓ Sustainability Issues & Challenges



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# Key World Heritage Statistics

- ✓ **1052** sites in **165** States Parties; 26 without sites
- ✓ **814** Cultural, **203** Natural, **35** Mixed
  - ❖ Africa - 90
  - ❖ Arab States - 81
  - ❖ Asia-Pacific - 247
  - ❖ Europe-North America – 499
  - ❖ Latin America & Caribbean - 137
- ✓ **55** on Danger List, with 17 in Africa



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# Rationale for World Heritage Designation

## World Heritage inscription:

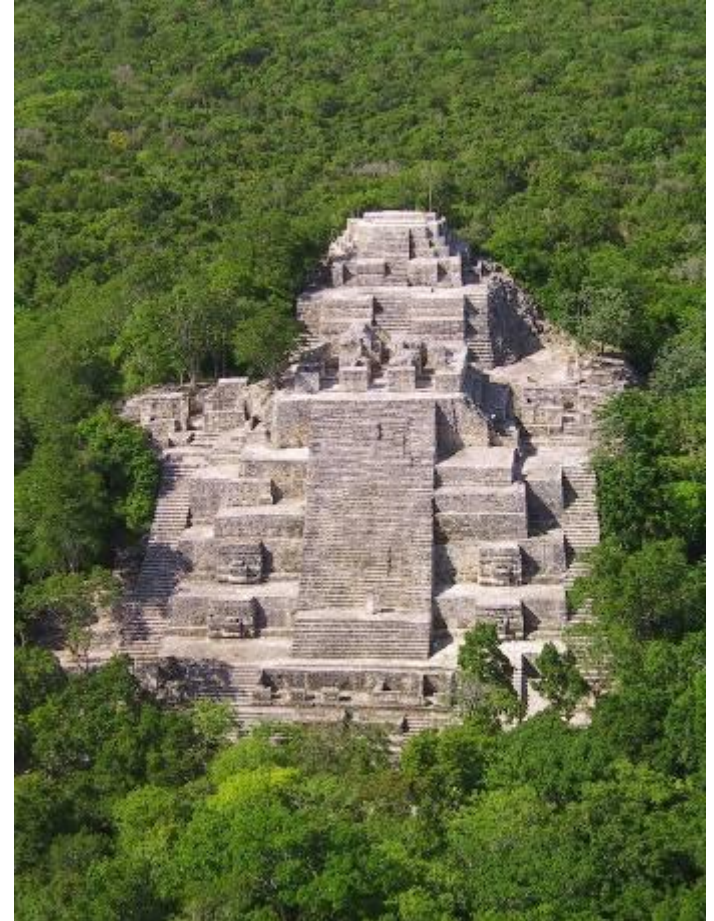
- ❖ Recognises Outstanding Universal Value (OUV)
- ❖ Provides opportunity to develop models of management excellence
- ❖ Demonstrates best practice in planning & management
- ❖ Influences better management of heritage as a whole



# Benefits of World Heritage Designation

World Heritage status leads to:

- ❖ Local and National pride
- ❖ Increased political/public awareness of the values
- ❖ Financial leveraging at Nat'l & Int'l levels
- ❖ Potential benefits from tourism & local community participation
- ❖ Greater monitoring efforts on state of conservation
- ❖ Effective defence against inappropriate developments



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# Climate Change

- ❖ Occupies political centre-stage
- ❖ 5 Assessment Reports by IPCC
- ❖ Landmark report on economic aspects of climate change
- ❖ UNESCO Executive Board  
Thematic debate topic; Strategy
- ❖ Recognition: Nobel Peace Prize



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# Climate Change

“— The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, sea level has risen, and the concentrations of greenhouse gases have increased — It is **extremely likely that human influence has been the dominant cause** of the observed warming since the mid-20th century.”

IPCC, 2013: Summary for Policymakers.

In: Climate Change 2013: The Physical Science Basis.

Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change



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# Climate Change & World Heritage

- ❖ Durban (2005): Committee mandates the World Heritage Center and Advisory Bodies to review the nature and scale of the risks
- ❖ Questionnaire **Survey** of States Parties
- ❖ Expert Group meeting convened to:
  - develop a **Strategy** to assist State Parties
  - prepare **Report** on predicting and managing the effects
- ❖ Vilnius (2006): Committee endorses the Report and the Strategy, requests a policy document
- ❖ General Assembly (2007): **Adopts Policy Document**



# 2008 Policy Document

- ❖ Synergies with international organisations & Conventions: cooperate with partners
- ❖ Research priorities: advocate and influence
- ❖ Legal issues: use of existing World Heritage tools & processes
- ❖ Awareness raising: pilot projects & best practices
- ❖ Mainstream strategy into various processes of the World Heritage Convention



# The Paris Agreement and Agenda 2030

- Transforming our World: The 2030 Agenda for Sustainable Development (SDGs, UN 2015)
- Paris Agreement on climate change (UNFCCC 2015)  
“ below 2 degree above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 degree”
- Sendai Framework for Disaster Risk Reduction 2015-2030 (UNISDR 2015)



# The role of the World Heritage Centre

- ❖ Technical and policy advice and capacity building to the States Parties in climate change mitigation/adaptation, including:
  - Climate change resources and publications on policy, carbon content of World Heritage Forests, vulnerability assessments of World Heritage sites and adaptation guidance.
  - Capacity building workshops for World Heritage site managers.
  - Site based adaptation/mitigation interventions.

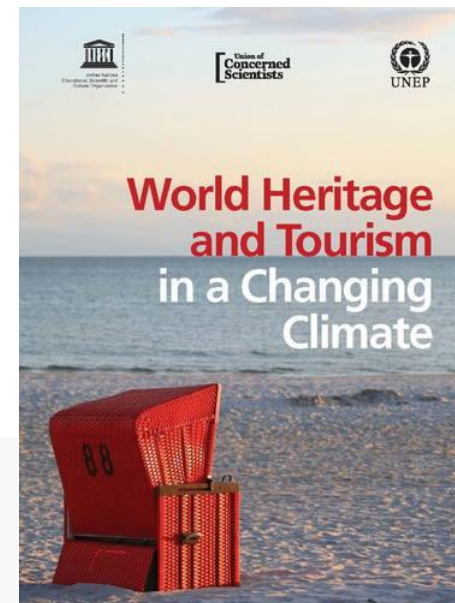
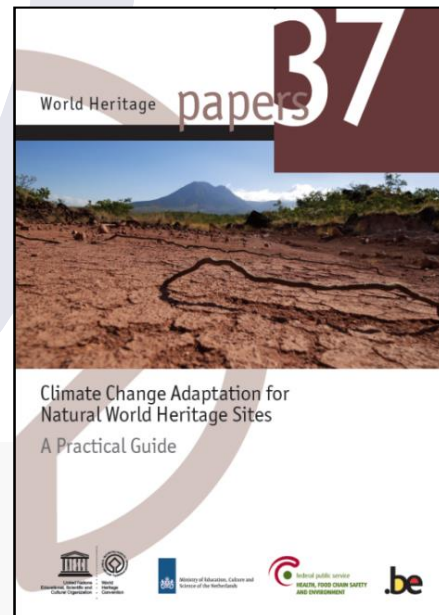
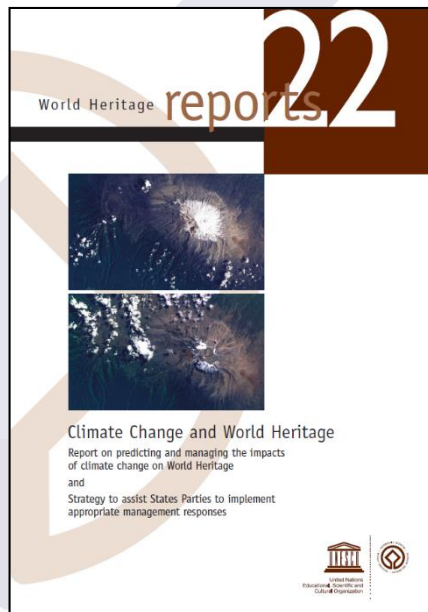
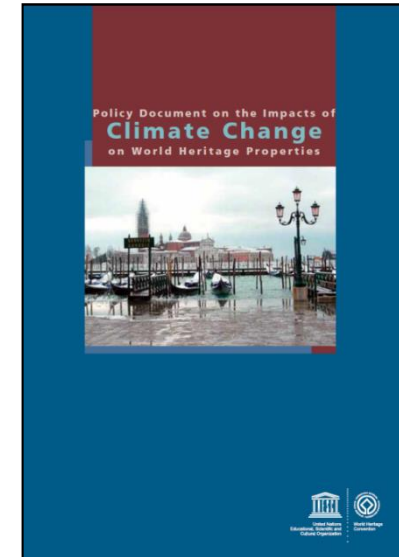
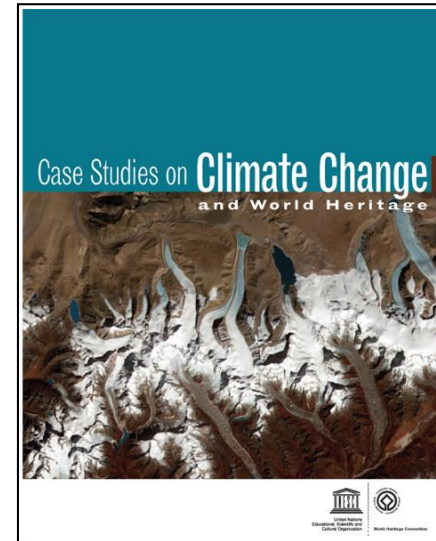
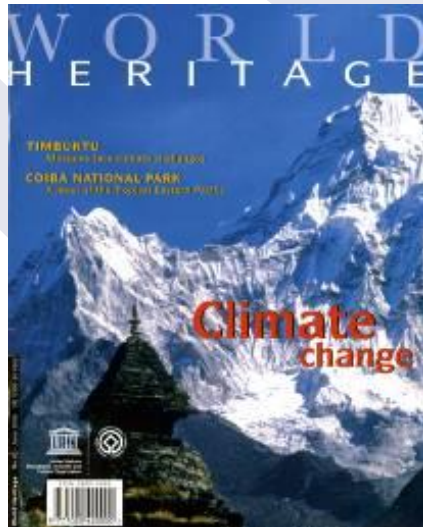


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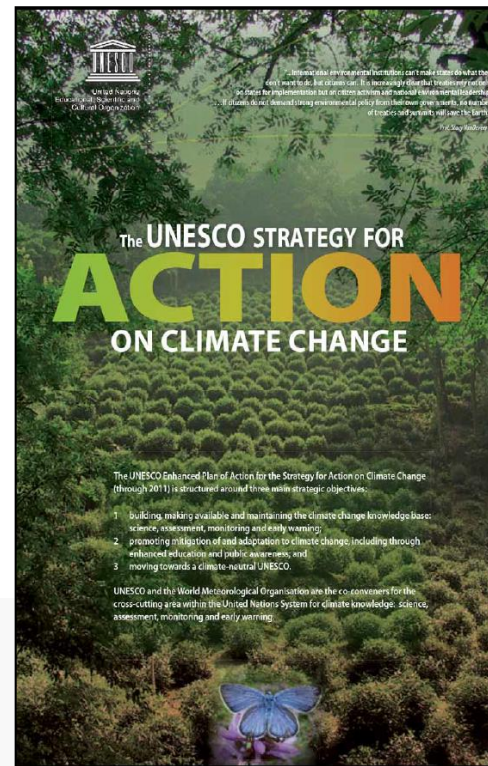
# World Heritage & Climate Change Publications





# UNESCO & Climate Change

- The UNESCO Inter-Sectoral Task Force on Global Climate Change 2007–2013
- UNESCO Intersectoral Platform for Action to Address Climate Change 2014–





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# Climate change impacts on mountain regions of the world

*Impacts du changement climatique  
sur les régions montagneuses à travers le monde*



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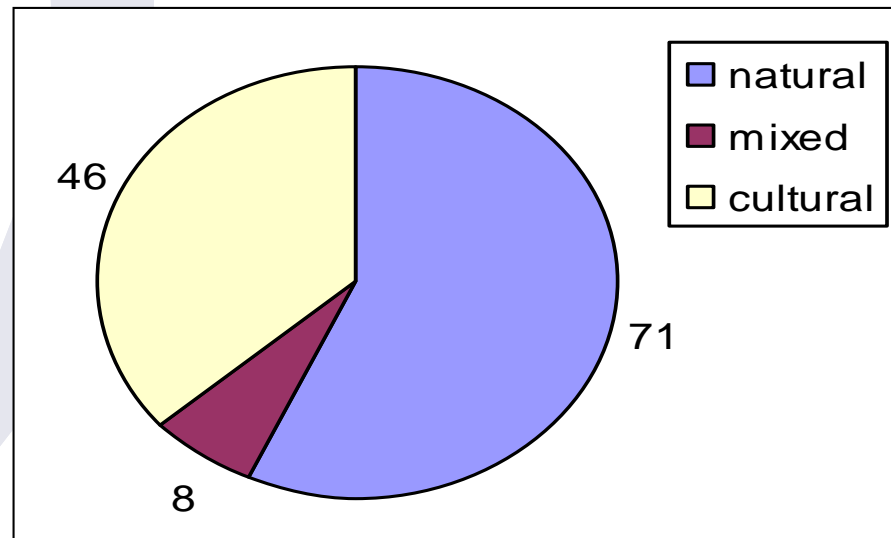


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# Questionnaire Survey

- 72% of State Parties surveyed reported climate change impacts on World Heritage
- 125 Sites in 59 countries

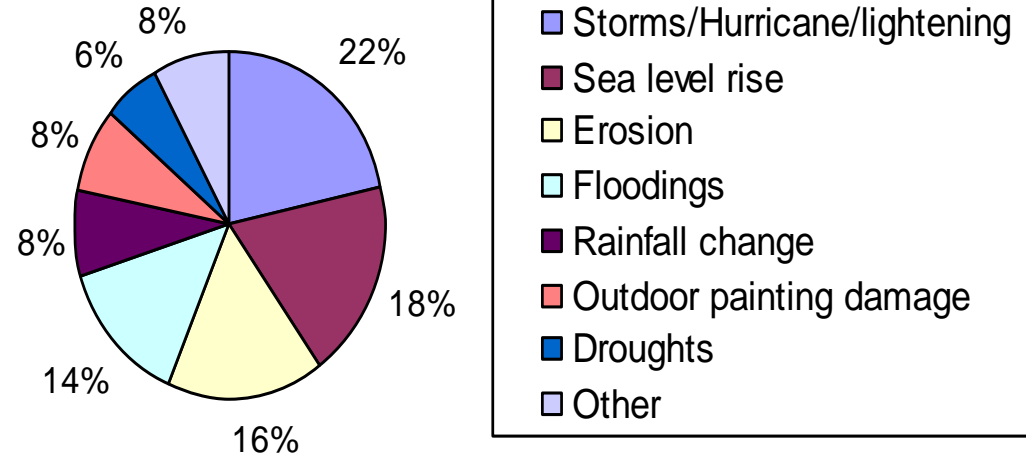


# Questionnaire Survey

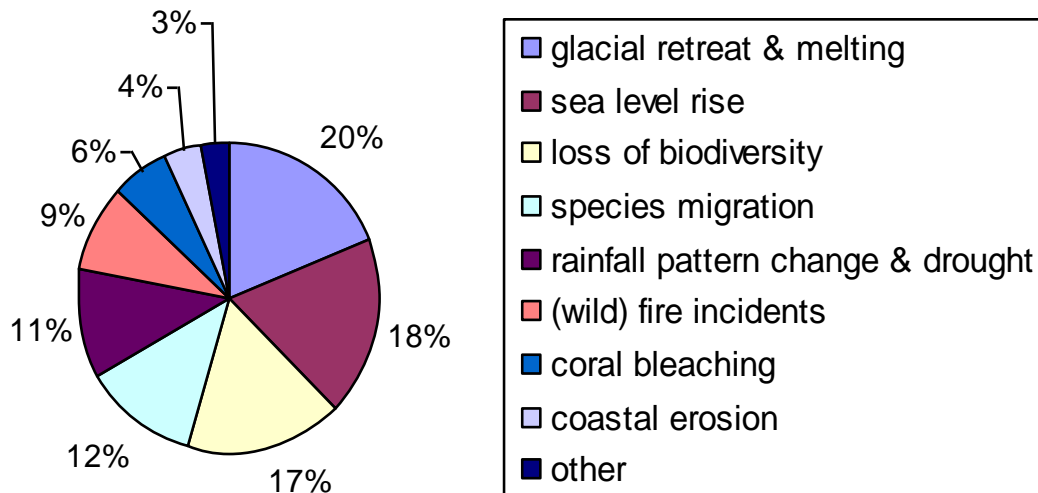
Types of climate change related threats to **Cultural Heritage Sites**



Threats to Cultural WH properties



Threats to Natural WH properties



Types of climate change related threats to **Natural Heritage Sites**

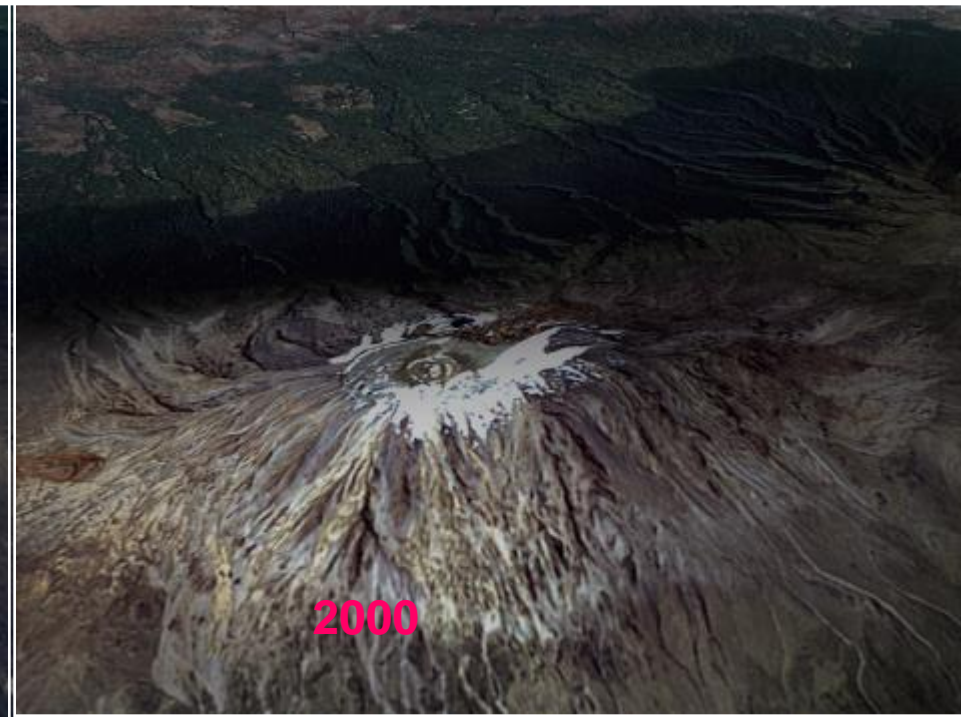
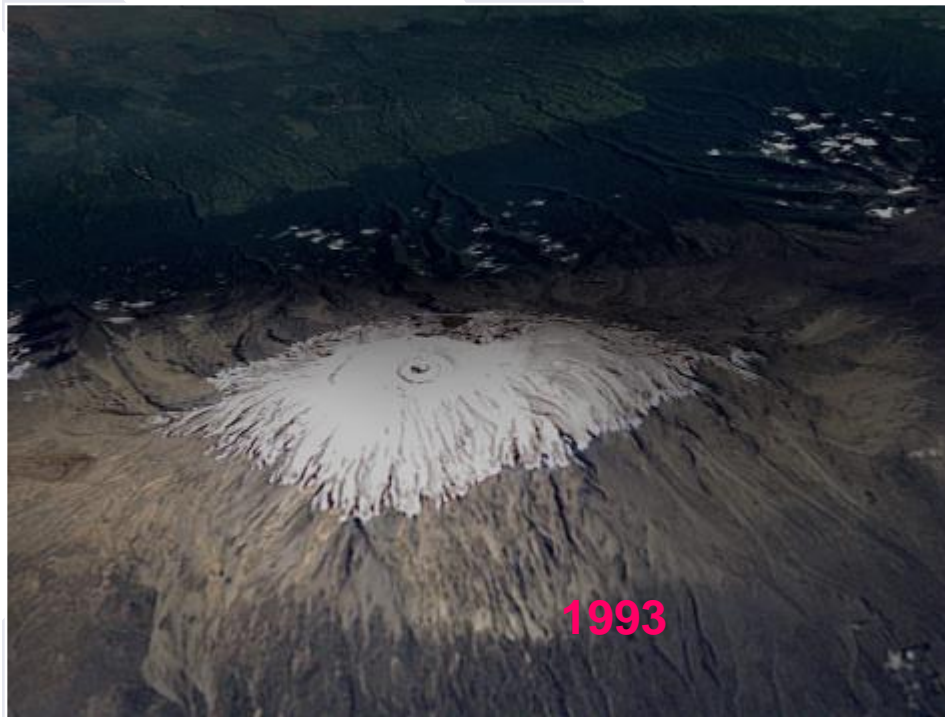


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# Glaciers: Mount Kilimanjaro (Tanzania)



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Arctic Region:

Ilulissat Icefjord (Denmark)



Sermeq Kujalleq Glaciar has receded 11 km since 1960



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# Marine Biodiversity: The Great Barrier Reef (Australia)



Coral bleaching & loss of marine biodiversity



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# Terrestrial Biodiversity: Cape Floral Region (South Africa)



Fynbos vegetation is moving out of protected areas



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# Archaeological Sites:

## Chan Chan (Peru)



Intense precipitation posing severe threat to earthen architecture



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# Historic Cities & Settlements:

## Venice and its Lagoon



More frequent flooding of Venice with projected  
severe loss of altitude



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# Other Examples:

## Herchel Islands, Timbuktu, Westminster Palace



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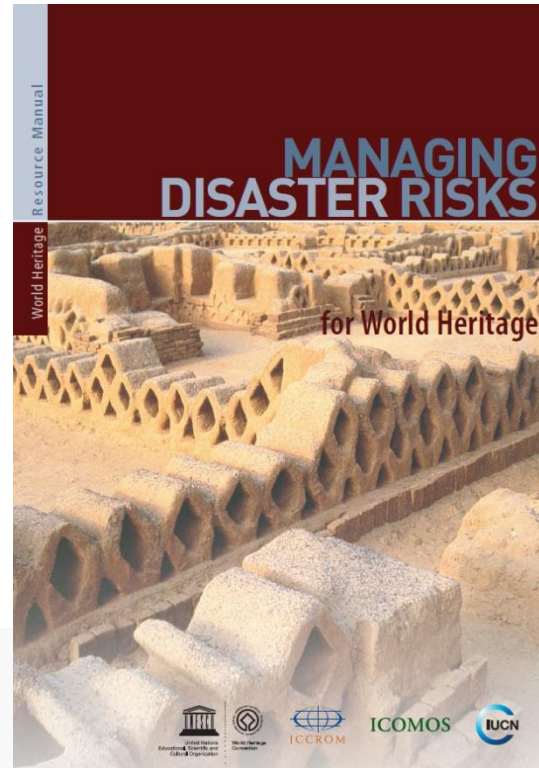
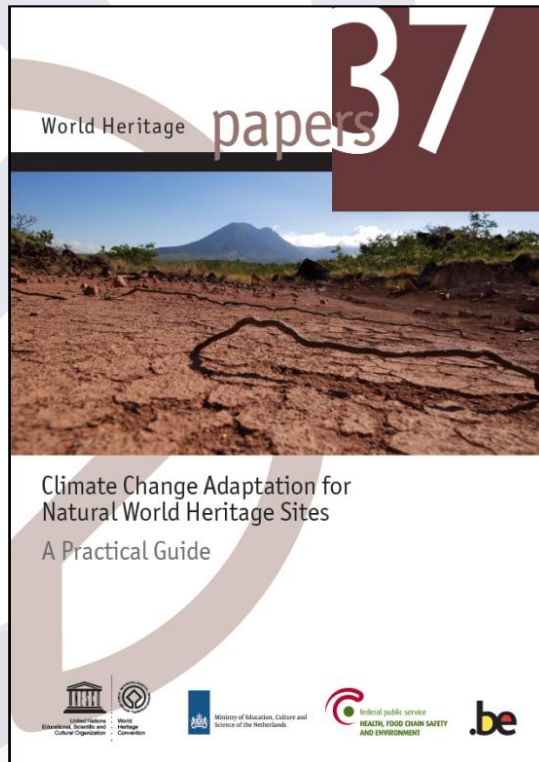
# Adaptation and Mitigation

- ❖ Adaptation is necessary to address impacts which are unavoidable, but capacity & potential is limited
- ❖ Need to address non-climatic stress factors
- ❖ Adaptation alone cannot cope with all the projected impacts of climate change
- ❖ Need for a mix of strategies including adaptation and mitigation of GHG emissions



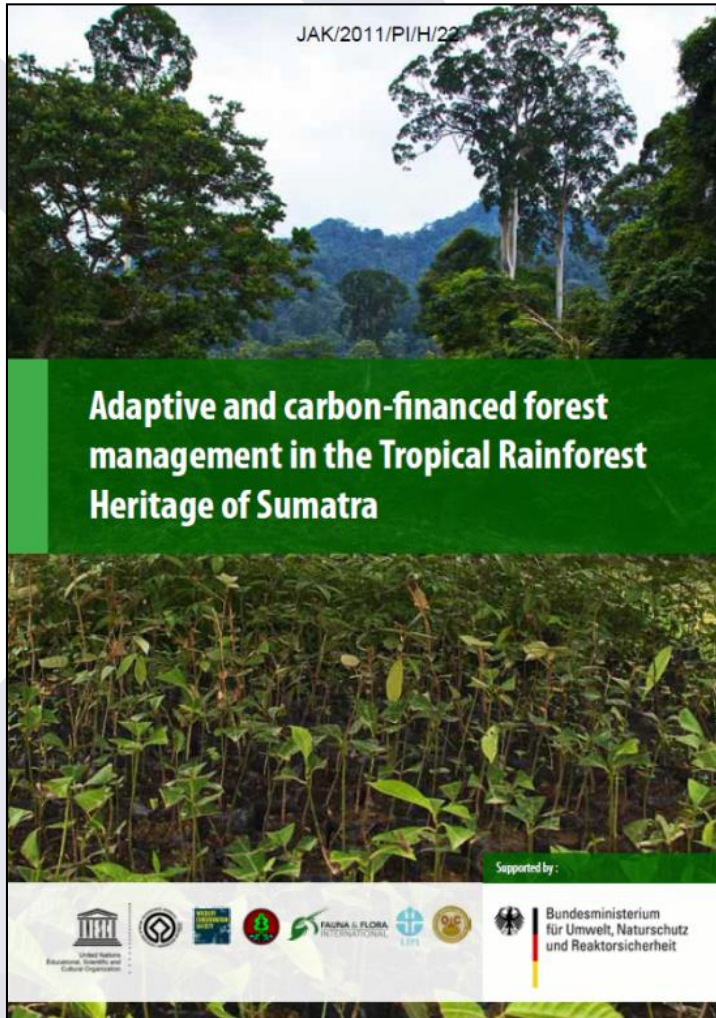
# Adaptation & World Heritage

- Project interventions and regional capacity building efforts on climate change adaptation for site managers in Latin America and Africa
- Capacity building on risk management





# Mitigation



- 10.5 billion tons of carbon stored in World Heritage forest sites
- Potential of the World Heritage Forests in climate change mitigation and forest conservation (e.g. REDD)

2009-2011



# Research needs (Natural Heritage)

- ❖ Understanding ecosystem responses and vulnerability to climate variables
- ❖ Development of tools to monitor change and validate conservation decisions
- ❖ Preventing damage through risk preparedness and adaptation strategies
- ❖ Understanding impacts causing changes in society i.e. displacement of communities, their practices, livelihoods, and their relation with their heritage
- ❖ Understanding importance of conservation of Natural Heritage (and biodiversity more broadly) in increasing resilience of natural systems and human societies



# Research needs (Cultural Heritage)

- ❖ Understanding material vulnerability (outdoor, indoor, buried) to climate variables
- ❖ Development of tools to monitor change and validate conservation decisions
- ❖ Preventing damage through risk preparedness and adaptation strategies
- ❖ Understanding impacts causing changes in society i.e. displacement of communities, their practices, livelihoods, and their relation with their heritage
- ❖ Importance of traditional and local knowledge (intangible heritage) in adapting to change



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# World Heritage and Tourism and Climate Change Study



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# Asia & Pacific: Rock Islands Southern Lagoon (Palau)



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# Africa: Bwindi Impenetrable National Park (Uganda)



Around half the world's mountain gorillas live in Bwindi Impenetrable Forest National Park.



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# Arab World: Holy Valley & Forest of the Cedars of God, Lebanon



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# North America: Yellowstone National Parks (USA)



*The whitebark pine is under severe threat from beetle infestations driven by a warming climate.*



*The highly calorific pine nuts of the whitebark pine are a critical food source for several Yellowstone species, including the grizzly bear.*



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# Europe: Venice and its Lagoon (Italy)



*The ever more frequent flooding events experienced by Venice in the last 60 years will be controllable when mobile barriers between the lagoon and the sea come into operation in 2017.*



*Venice's waters have risen by some 30 centimetres since the end of the 19th century.*



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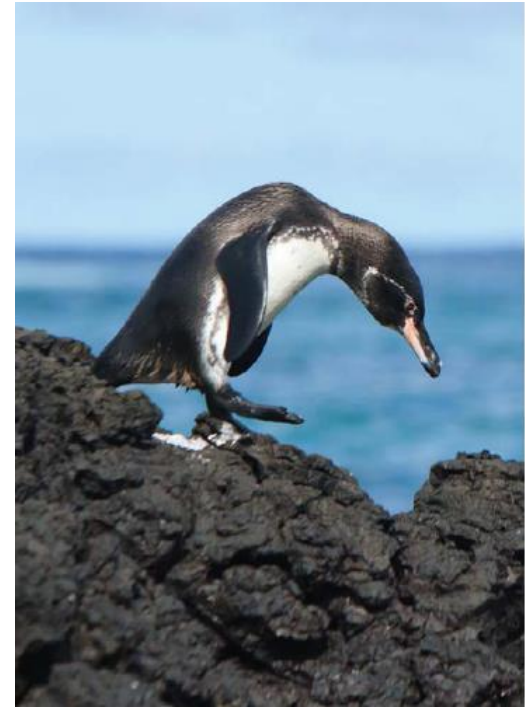


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# Latin America: Galapagos Islands (Ecuador)

*Giant tortoises and marine iguanas are among the 18 per cent of Galápagos species that are endemic, as well as being considered top attractions by tourists visiting the islands.*



*Galápagos penguin populations suffer very considerable declines during El Niño events.*



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**Many thanks!**



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