

# IUCN Support for Climate Change Adaptation

Bastian Bomhard  
Protected Areas Programme

UNFCCC African Regional Workshop  
21-23 September 2006  
Accra, Ghana

# Outline

- Introduction
- IUCN Support for Climate Change Adaptation (especially in Africa)
  - Biodiversity, Protected Areas, World Heritage
  - Natural Resources: e.g. Water
  - People and Livelihoods
- Lessons Learned
- Conclusions

# Introduction

- IUCN Climate Change Policy:
  - 2003 WPC Recommendation V.5: “Climate change and protected areas”
  - 2004 WCC Resolution 3.057: “Adapting to climate change: a framework for conservation action”
  - 2005 IUCN Statement at UNFCCC COP11:  
“The management of ecosystems is an important component of any response to climate change.”
- IUCN Climate Change “Projects”

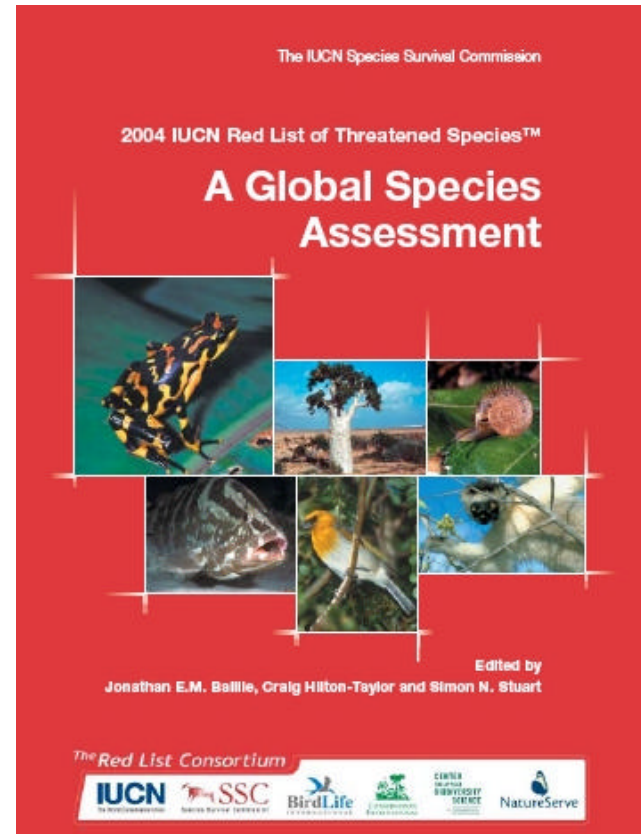
# Biodiversity

- McClean et al. 2005: The areas of suitable climate for 81%–97% of 5197 African plant species are projected to decrease in size and/or shift in location, many to higher altitudes, and 25%–42% are projected to lose all of their suitable area by 2085.
- Similar results for other species in Africa (e.g. proteas in CFR)



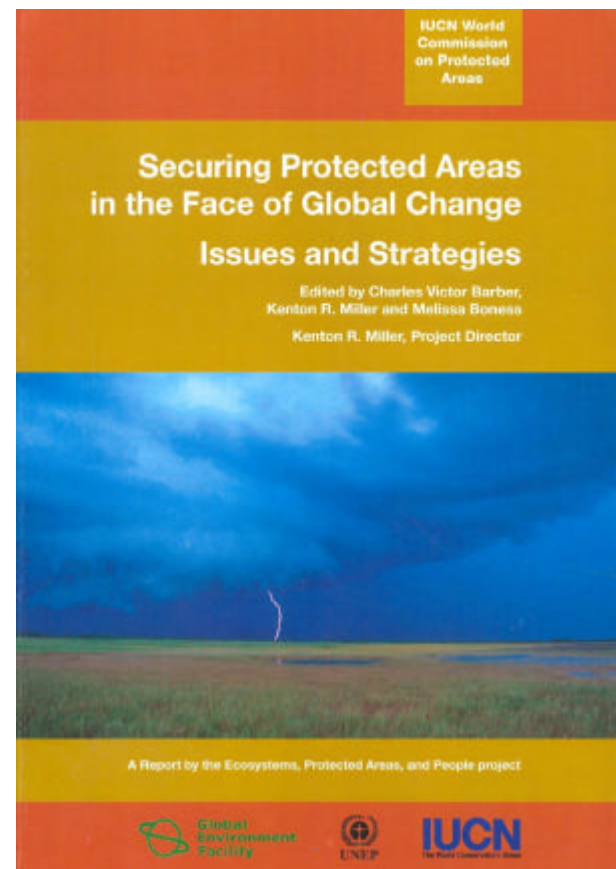
# Global Species Assessment

- Few species IUCN Red-Listed due to climate change (GSA 1)
- Problem: Species extinction risk cannot be inferred from bioclimatic models
- Solution: New tools needed to assess climate change impacts on species extinction risk
- Project proposal to MacArthur
- Plan: Special section in GSA 2 for WCC 2008 in Barcelona



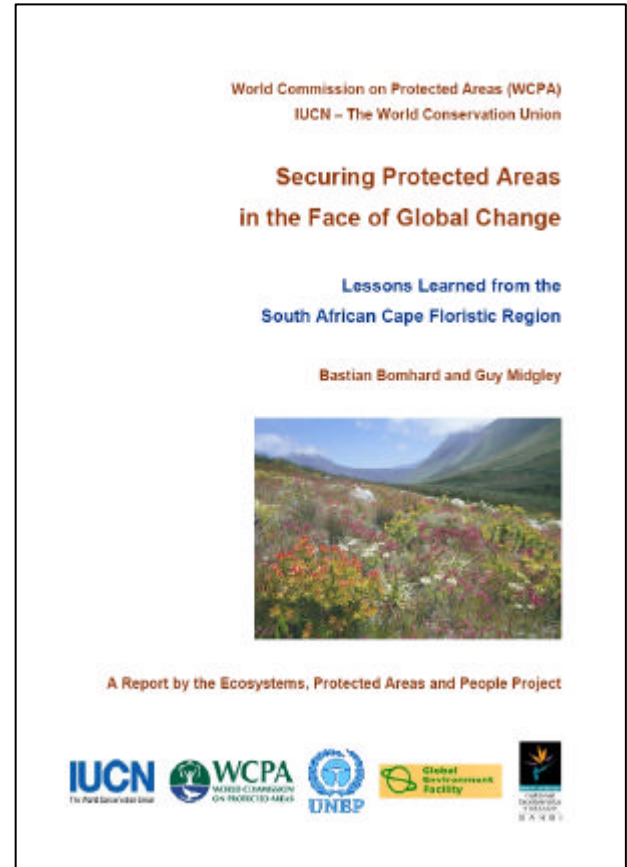
# Protected Areas

- Ecosystems, Protected Areas, and People Project
- Strengthening the capacity to manage protected areas in a world of global change
- Products: Report, Field Learning Sites, PALNet
- Partners: IUCN-WCPA, WRI, CI, TNC & UNEP/GEF



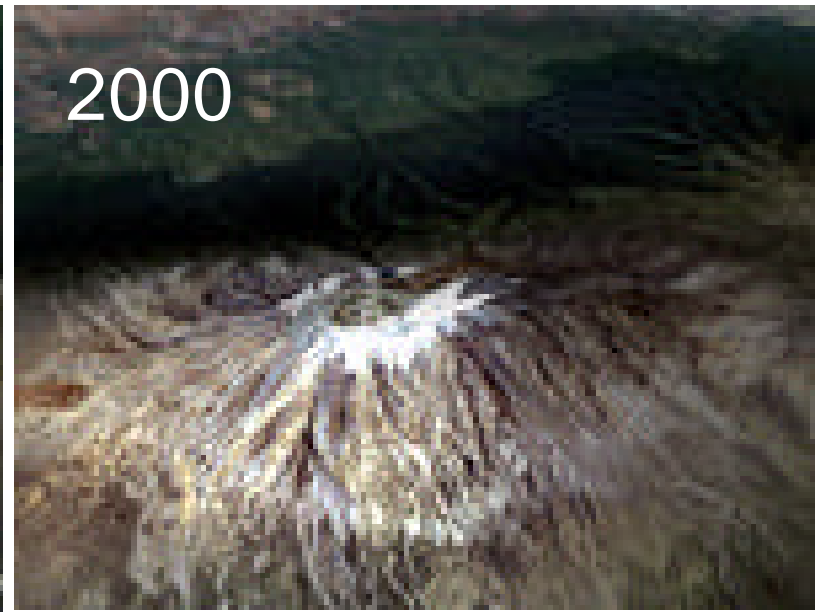
# PALNet Project

- Protected Areas Learning Network Project
- Interactive, web-based knowledge management tool
- Field Learning Sites e.g. in Cameroon (Congo Basin) and South Africa (CFR for climate change, Kruger)
- See: [www.parksnet.org](http://www.parksnet.org)



# World Heritage

- Climate change impacts already apparent
  - Affects both cultural and natural heritage
- At least 125 sites at risk (States Parties Survey )





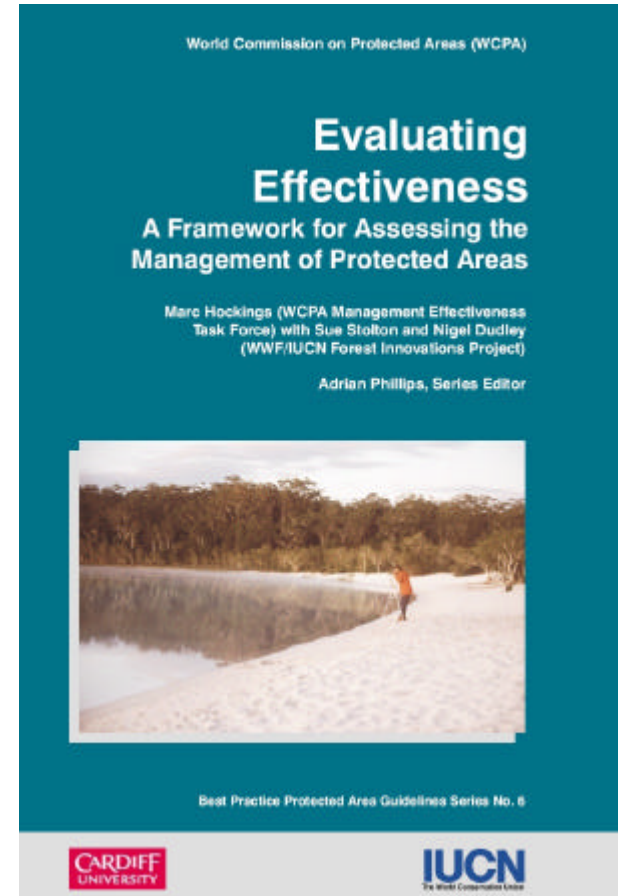
# Climate Change Strategy

- “Strategy to Assist States Parties to Implement Appropriate Management Responses”:
  - Monitoring & mitigation (preventive)
  - Management & adaptation (corrective)
  - Cooperation, communication, capacity building, raising awareness & developing / distributing best practices
- Project proposal to UNEP/GEF
- Plan: Support from IUCN RCOs to implementation of strategy



# Enhancing our Heritage Project

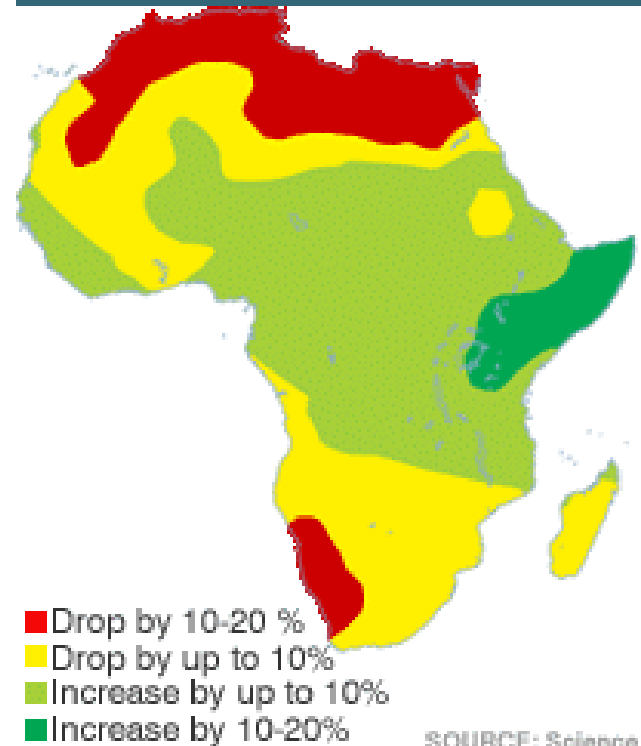
- “Monitoring and Managing for Success in Natural World Heritage Sites“
- Using the WCPA Framework
- Pilot sites e.g. in Uganda (Bwindi), Tanzania (Serengeti) and Seychelles (Aldabra)
- Partners: UNF, UNESCO, IUCN, UQ, TNC, WII & Equilibrium
- Contact: [m.hockings@uq.edu.au](mailto:m.hockings@uq.edu.au)
- See: [www.enhancingheritage.net](http://www.enhancingheritage.net)



# Natural Resources: e.g. Water

- de Wit & Stankiewicz 2006: 10% reduction in rainfall across Africa would reduce the surface water supply by 20% in regions with 1000mm rainfall per year and by 50% in regions with 500mm rainfall per year
- Lake Chad has now shrunk to 10% of its size in 1963.

PREDICTED CHANGE IN  
AFRICAN RAINFALL



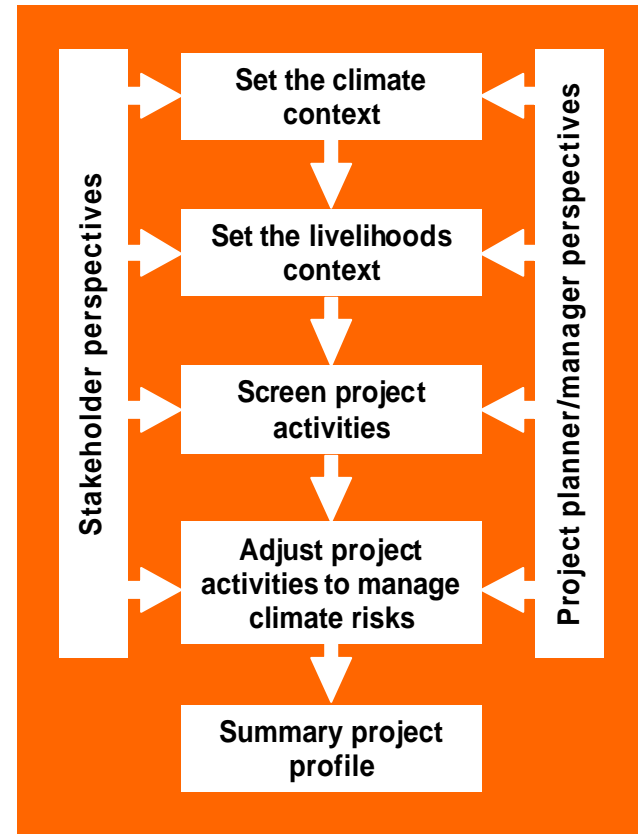
# Water and Nature Initiative

- “Mainstreaming an ecosystem approach into catchment policies, planning and management”
- A 5-year action plan of 80 partner organizations to improve water management for healthy rivers and healthy communities
- Demonstration of good management in ten basins is supported by the development of tools
- Demonstration sites: e.g. Komadugu-Yobe, Lake Tanganyika, Okavango, Pangani, Pungwe, Senegal and Volta River Basins
- See: [www.waterandnature.org](http://www.waterandnature.org)



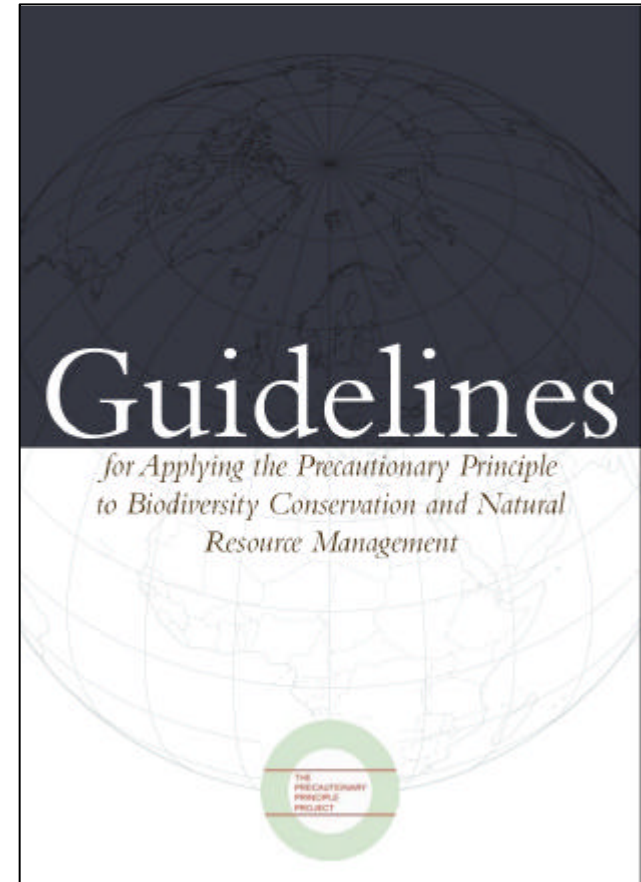
# People and Livelihoods

- “Community-based Risk Screening Tool - Adaptation and Livelihoods” (CRISTAL)
- Can reduce impacts of climate change on community livelihoods
- First tested in IUCN project in Mali (Inner Delta of the Niger River)
- To be made widely available after further tests (e.g. in Tanzania)
- Partners: IUCN, IISD, SEI-US & Intercooperation
- Contact: [Aliou.Faye@iucn.org](mailto:Aliou.Faye@iucn.org)



# Precautionary Principle Project

- “Guidelines for Applying the Precautionary Principle to Biodiversity Conservation and Natural Resource Management”
- Responding to uncertainty (also relevant to climate change)
- 27 case studies e.g. in E/S Africa
- Partners: IUCN, TRAFFIC, FFI & ResourceAfrica
- See: [www.pprinciple.net](http://www.pprinciple.net)



# Lessons Learned

Vulnerability = f (Exposure, Sensitivity, Adaptive Capacity)

- Decrease sensitivity – e.g. reducing other stressors
- Increase adaptive capacity – e.g. knowledge
- Implement early warning systems
- Improve adaptive management and management effectiveness (share best practices)
- Involve local stakeholders and traditional knowledge
- Incorporate uncertainty into decision-making
- Thereby increase resistance and resilience

# Conclusions

- Wise conservation and management of biodiversity, protected areas, World Heritage and natural resources must be an important component of any climate change adaptation
- IUCN is uniquely positioned, through its 18 Regional and Country Offices in Africa, to support climate change adaptation actions at all levels from local to regional to global