



Building adaptation solutions from IWRM and EbA

Marta Pérez de Madrid
Livelihoods and Climate Change
Officer
IUCN

Session 4. Adaptation planning and practices.

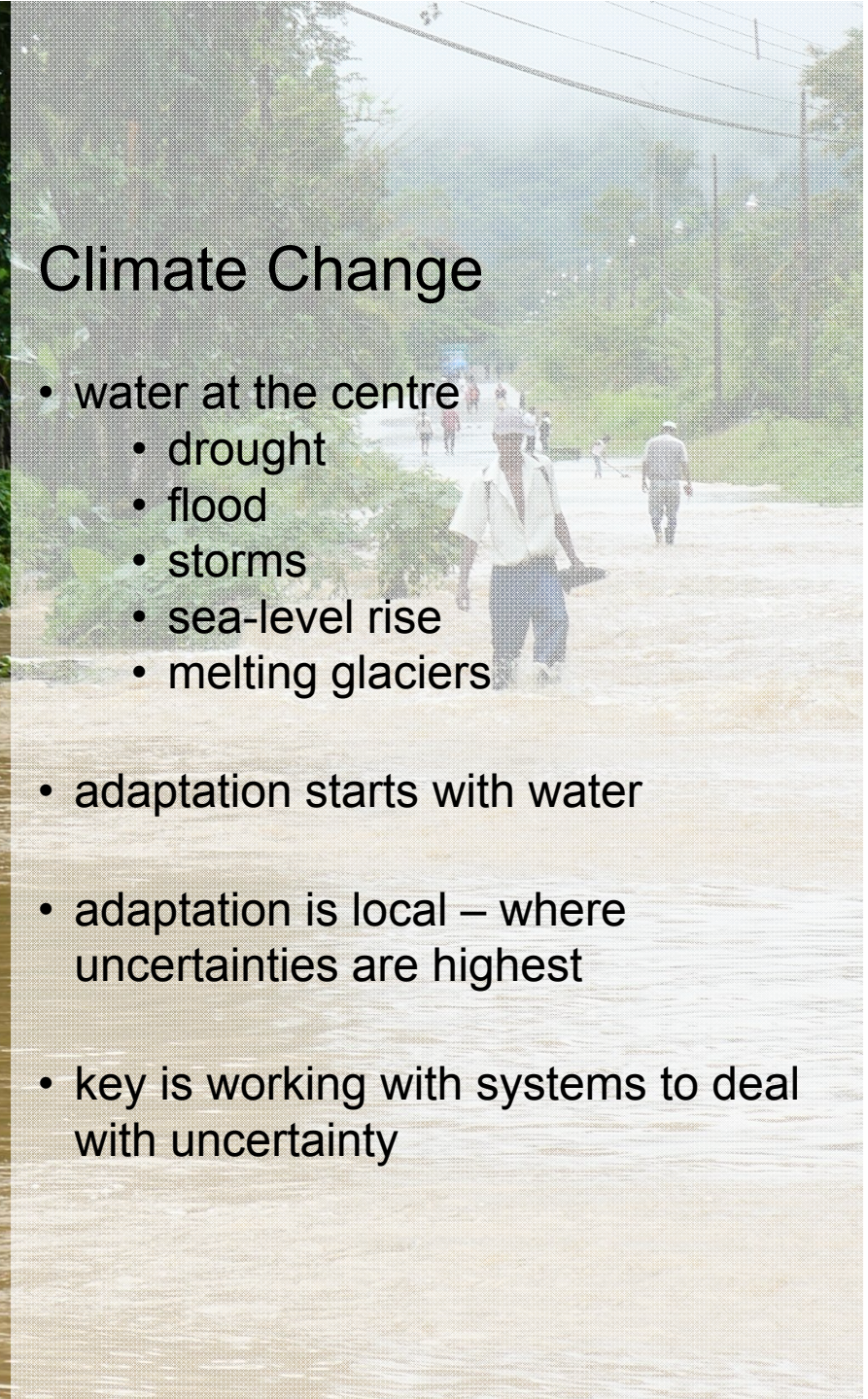
Technical Workshop on Water and Climate Change
Impacts and Adaptation Strategies

18-20 July, 2012



Climate Change

- water at the centre
 - drought
 - flood
 - storms
 - sea-level rise
 - melting glaciers
- adaptation starts with water
- adaptation is local – where uncertainties are highest
- key is working with systems to deal with uncertainty



Water, ecosystems & climate change

- Water is at the centre

<i>Impact</i>	<i>Infrastructure</i>	<i>Services</i>
<ul style="list-style-type: none">• drought• flood• storms• melting ice• sea-level rise	<ul style="list-style-type: none">• lakes & upland soils• floodplains• wetlands• groundwater• mangroves & sediments	<ul style="list-style-type: none">• storage• supply• flood control• disaster protection• coastal defence

- Ecosystems provide vital services... the 'natural infrastructure' for adaptation
- What has IWRM taught us about adaptation and the role of ecosystems?
 - *what* needs to be done
 - *how* it needs to be done
- Where does EbA fit into adaptation planning?



IWRM and adaptation strategies

Sustainable river basin management is implemented to strengthen equitable economic development, food security, climate resilience and protection of the environment

- Hydrology: appropriate observing pattern of change
- Appropriate scope for adaptation thinking
- Adaptation is learning by doing
- Platform of stakeholders

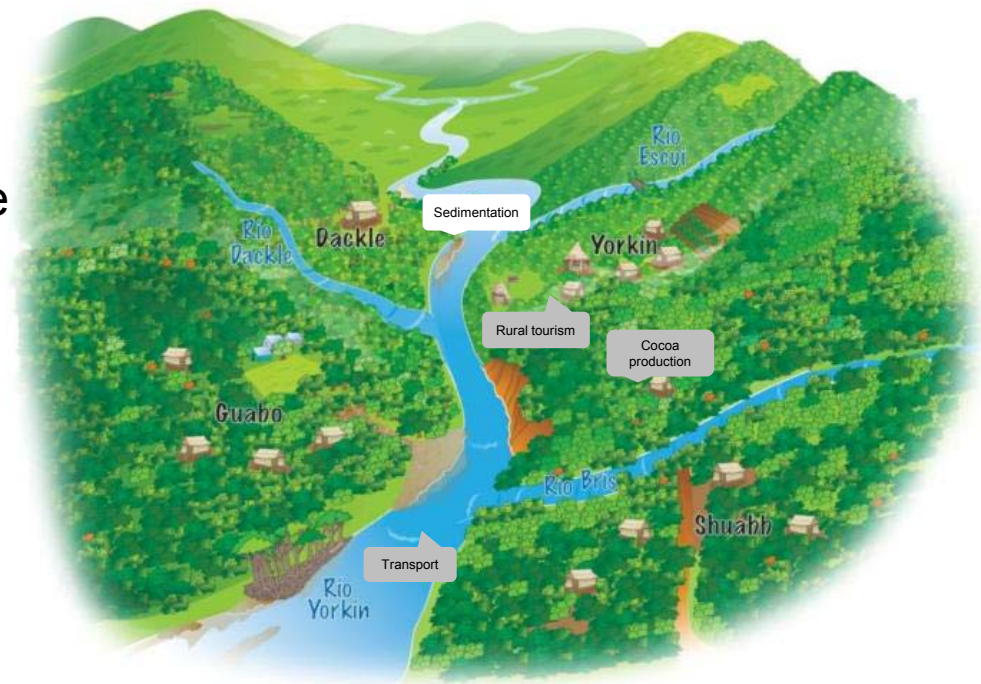




EbA builds adaptation solutions for water resources management

Ecosystem-based adaptation (EbA) is the use of biodiversity and ecosystem services as part of an overall adaptation strategy to help people to adapt to the adverse effects of climate change*.

- Assuring ecosystem services and natural infrastructure
- Reduces the vulnerability of local communities to climate change.



* CONNECTING BIODIVERSITY AND CLIMATE CHANGE MITIGATION AND ADAPTATION- Report of the Second Ad Hoc Technical Expert Group on Biodiversity and Climate Change under the Convention on Biological Diversity (CBD).



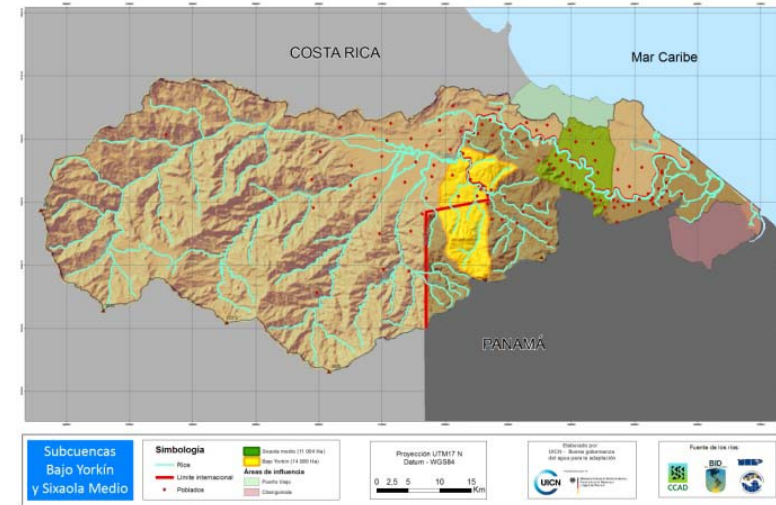
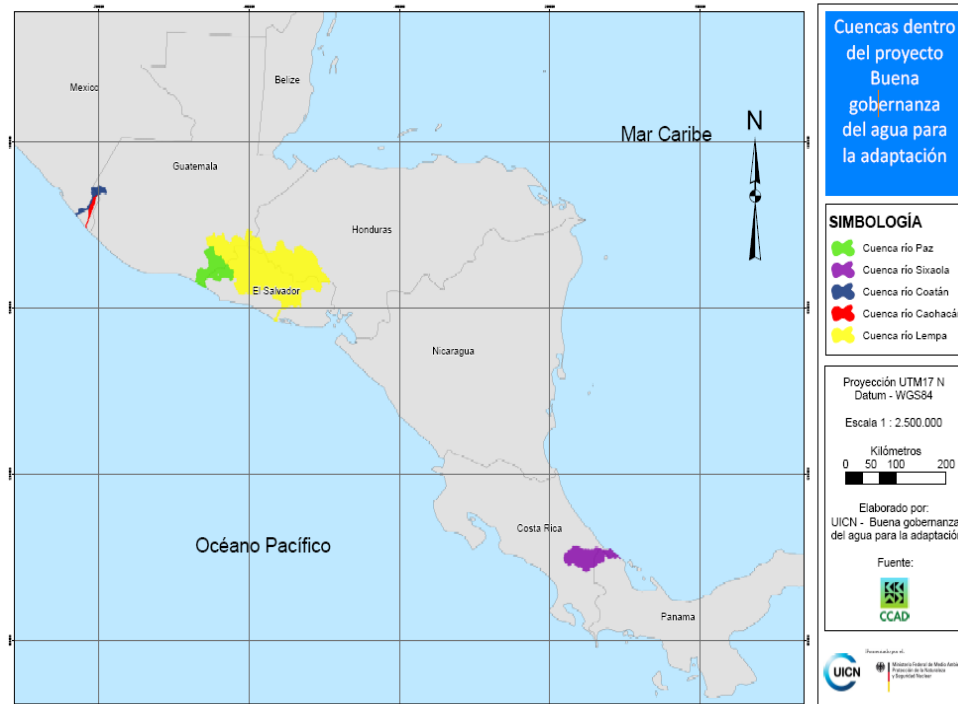
IUCN demonstration actions around the world

- From micro-basin to transboundary basins
- Learning by doing: action
- Building capacities for water governance
- Assuring environmental services



Action on the ground in a transboundary context

Sixaola River Basin

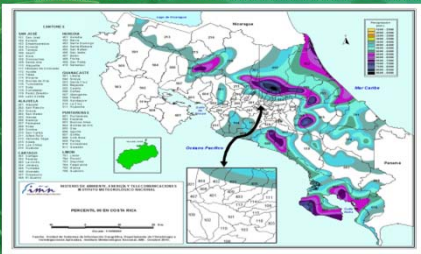


- Transboundary pilot sites
- Indigenous territory

- Intense rains, recurrent floods
- Livelihoods: mono agriculture banana plantations (affected by floods)
- One of the most vulnerable area



Expected severe drought



Expected severe flooding



DATA



Observational data



Flood model



Ecosystem Based adaptation strategy

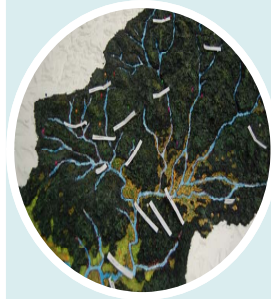
ACTION

Lessons

Recommendations for policy makers



Adaptation planning in action



Pilot sites identification



Stakeholder identification



**Capacity building
CRiSTAL application and validation with communities**



**Water and climate change governance mechanisms
Study & Climate SCENARIOS**



Elaboration of adaptation action plan



Implementation and bringing lessons to policy makers

Learning approach: learning by doing



Thanks

Ecosystem based solutions are our best option to cope with climate change

Marta Pérez de Madrid Utrilla - martaclaudia.perez@iucn.org