

EbA tools, evidence-base and gaps in knowledge and activities

Session 4 – Methodological, technical and scientific aspects of EbA



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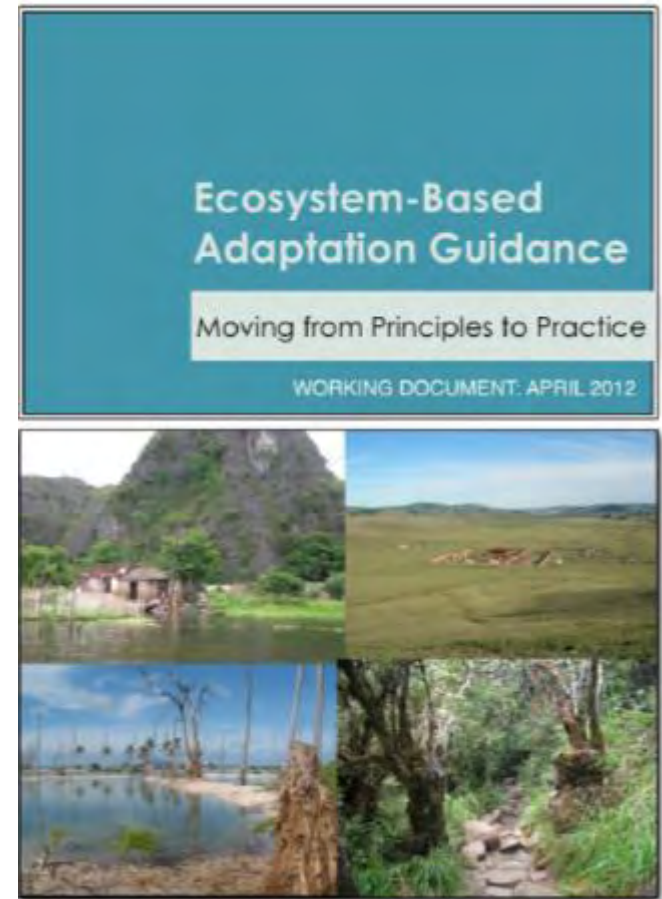
* - also representing BirdLife for this meeting only

Planning Tools

Travers et al. 2012 Ecosystem-based Adaptation Guidance: Moving from Principles to Practice / UNEP-led Decision Support Framework

Purpose

Organises wide-ranging information and advice to support planners and decision-makers compare, select, design and track context-specific EbA versus other adaptation measures



UNEP-led Decision Support Framework

A: Setting the Adaptive Context

What does your system look like?

How is it used?

Management concerns?

Adaptation goals?

D: Adaptive implementation

Monitor

Reflect and adapt

Contribute to evidence-base

Sound decision-making

B: Selecting Appropriate Options for Adaptation

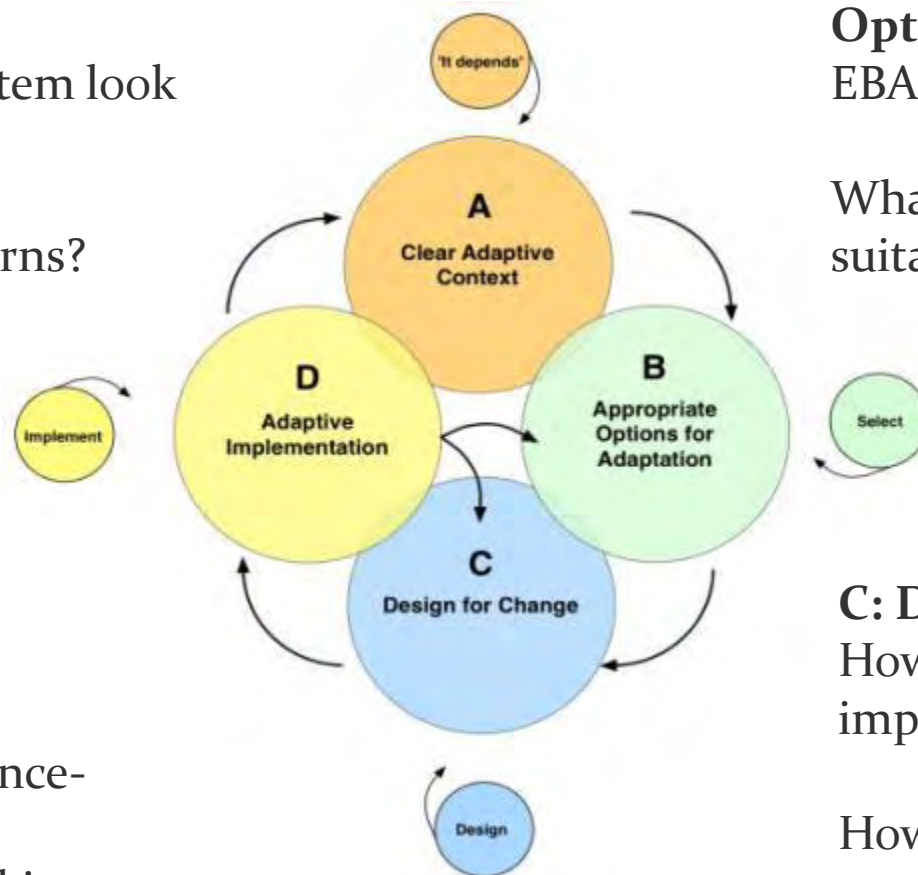
EBA approaches available?

What approaches are suitable for your context?

C: Design for Change

How will the measure be implemented?

How will you know if the measures are effective?

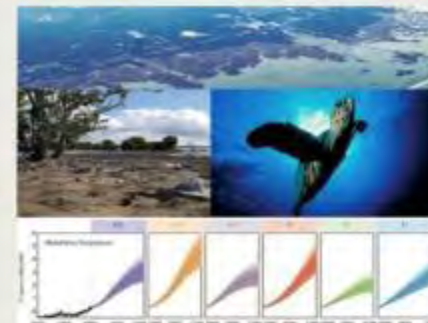


Next steps

- Pilot testing in variety of contexts – synthesis of practical learning
 - UNEP-EC ENRTP ‘Building Capacity for Coastal Ecosystem-based Adaptation in SIDS’;
 - GEF ‘Enhancing Capacity, Knowledge and Technology Support to Build Climate Resilience of Vulnerable Developing Countries’
- Adapted to support NAPs
- Developing CbA-EbA module
- Develop practical M&E module
- Develop practical cost-benefit analysis
- Adapted for specific ecosystems (coastal, mountain, etc.)
- Training modules

AT A GLANCE.....

Component A is intended to assist the user in defining a clear adaptive context for decision making at the outset of adaptation project design. Context setting is undertaken with an ecosystem lens.



Why should I use this guidance?

You want to establish clear context specific adaptation goals and objectives built around:

- Understanding of vulnerability.
- Understanding the role of ecosystem services within your area of interest.
- Vision of alternative future where adaptation has occurred.

What do I need to know to inform decision making process?

- Awareness of your vulnerability profile: sectors, locations.
- Projections for future change in climate for your area.
- Understanding of likely impacts on 'key elements' in your specific project context.
- Consensus from key stakeholders on what a preferred future would look like.

What activities do I undertake to help me make decisions?

- Select demonstration sites (Question A1).
- Compile information on system characteristics & ecosystem services (Question A2).
- Clearly define your problem statement (Question A3).
- Clearly define your adaptation goals (Question A4).

What should I expect to get at the end of the process?

A clear adaptive decision making context defined with a particular understanding of the role of ecosystems.

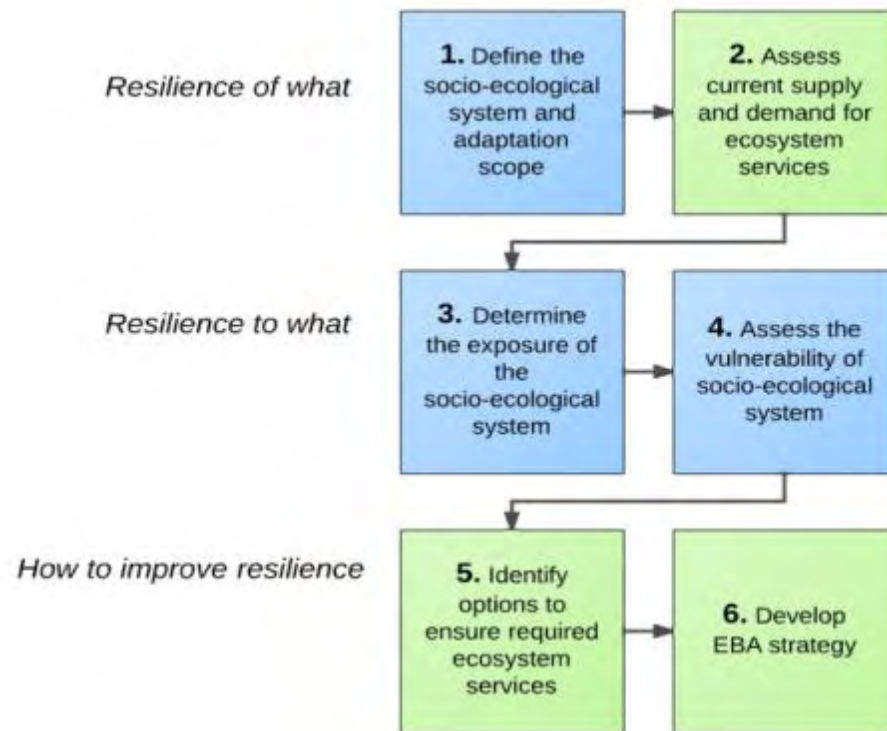
Vulnerability Assessment Tools

‘EbA – Adapting to climate change in mountain ecosystems’
UNEP, UNDP, IUCN, supported by BMU

Guidance for Vulnerability Impact Assessment – *in development*

Purpose

- Guide process for integration of ecosystem resilience in climate change vulnerability assessments
- Support pilot EbA activities in Nepal, Peru, Uganda



Evidence-base

Examining the state of the evidence-base for EbA

Need

- Lots of anecdotal case studies – few reviews
- Consolidate broad range of literature that makes up evidence-base
- Enable decision-making between alternatives

Method

- Systematic review methodology to describe extent of available evidence
- Peer-reviewed published literature (~7700 → 132) and sample of grey literature (32)
- Assessment framework (to ask questions of the evidence and identify knowledge gaps)

Munroe et al. (2012) 'Review of the evidence base for ecosystem-based approaches for adaptation to climate change', *Environmental Evidence*, 1: 13

Evidence-base

Results

- Lots of EbA-relevant literature – often not called EbA and widespread
- EbA/EbA-relevant interventions used to address broad range of climatic hazards and impacts
- Some discussion of thresholds and boundary conditions

Gaps in knowledge

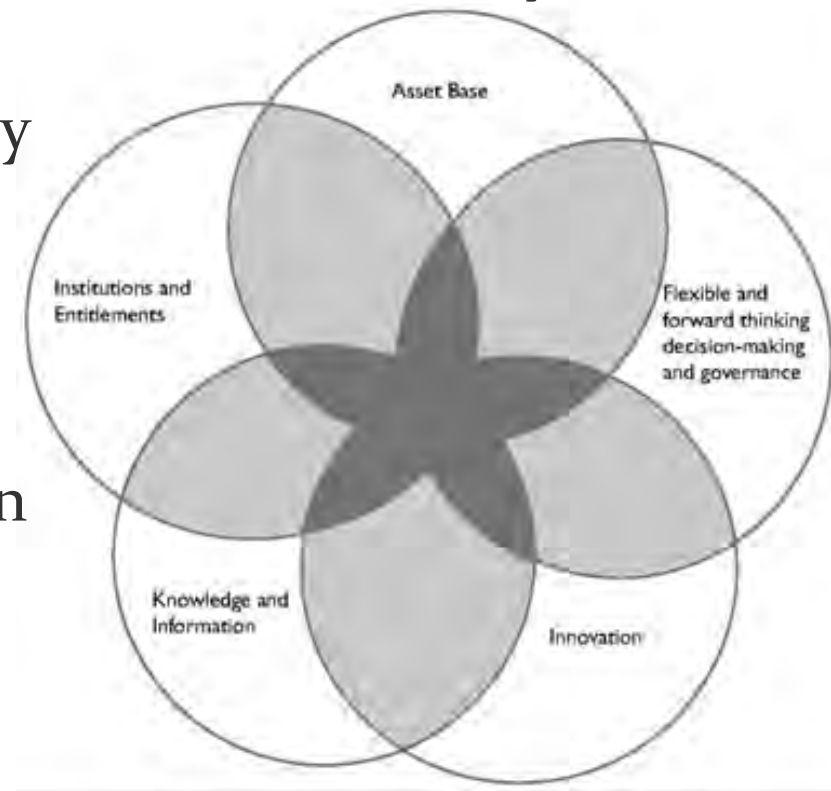
- Comparisons needed between EbA and alternatives
- Costs - economic (including operational, opportunity), social, environmental
- Whether EbA is supported by policies
- Temporal and spatial aspects of effectiveness

Munroe et al. (2011) *Does EbA Work? A review of the evidence on the effectiveness of ecosystem-based approaches to adaptation*; Policy Brief; UNEP-WCMC, BirdLife, IIED, University of Cambridge, ELAN; Cambridge <http://pubs.iied.org/Go3187.html>

Doswald et al. (in review) 'Effectiveness of ecosystem-based approaches for adaptation: review of the evidence-base', *Climate and Development*

Gaps in activities

- More on socio-ecological complexities in climate change vulnerability assessment tools
 - How social adaptive capacity elements relate to ecosystems / ecological resilience
- Greater linkage of participatory approaches of CbA into EbA
- M&E for EbA
- Cost-benefit analysis
- Hybrid / grey-green adaptation
- Produce tools that speak to multiple sectors



Jones, Ludi and Levine 2010, ODI

Thank You

With thanks to:

Musonda Mumba (UNEP)

Ole Vestergaard (UNEP)

Nathalie Doswald (UNEP-WCMC)