Convention on Biological Diversity

Regional Workshop for the Middle East and North Africa on Updating and Revising NBSAPs

Mainstreaming Biodiversity – Global Overview
Approaches and Tools

CBD Secretariat
28th August 2012

United Nations Decade on Biodiversity

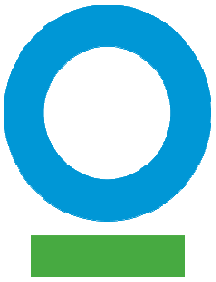
UNEP

Linking Climate Change Adaptation into the NBSAP Review Process in the Pacific

Terry Hills

7th August 2012

CONSERVATION INTERNATIONAL



Linking Climate Change Adaptation into the NBSAP Review Process

Characteristics of most vulnerable SPECIES

High vulnerability context and conditions
• Dependent on other species / ecosystems vulnerable to climate changes
• Threatened / endangered
• Small populations
• Limited geographic range
• Located on remote islands or mountain peaks
• Narrow climatic tolerance
• Highly specialised
• Low competitive capability
• **Are exploited for use / already under stress from human use**

Characteristics of most vulnerable ECOSYSTEMS

Ecosystem	High vulnerability context and conditions
Mangrove	• No external source of sedimentation; are isolated; • Have no capacity to migrate; • **Already under stress from human disturbance**.
Coral reef	• Have narrow climatic, thermal and physiological tolerances; • Are situated at the mouth of watersheds (exposure to silt and pollution); • **Are already under stress from human disturbance**.
Seagrass	• Located in isolated areas or on submerged banks; • **Are already under stress from human disturbance**.

Characteristics of most vulnerable

Ecosystem	High vulnerability context and conditions
Coastal	• Exposed to SLR, increased storm activity and storm surge; • Are already under stress from human use disturbance.
Montane/ cloud	• Limited/no potential to migrate upslope; • Are already under stress from human disturbance.
Dryland	• Susceptible to fire and insects as a result of increasing summer temperatures and precipitation declines; • Are already under stress from human disturbance.
Freshwater	• Close to coastal area (salt water intrusion from SLR); • Are already under stress from external disturbances (disruption/diversion of flow from dams/irrigation, barriers to species movement, or pollution).

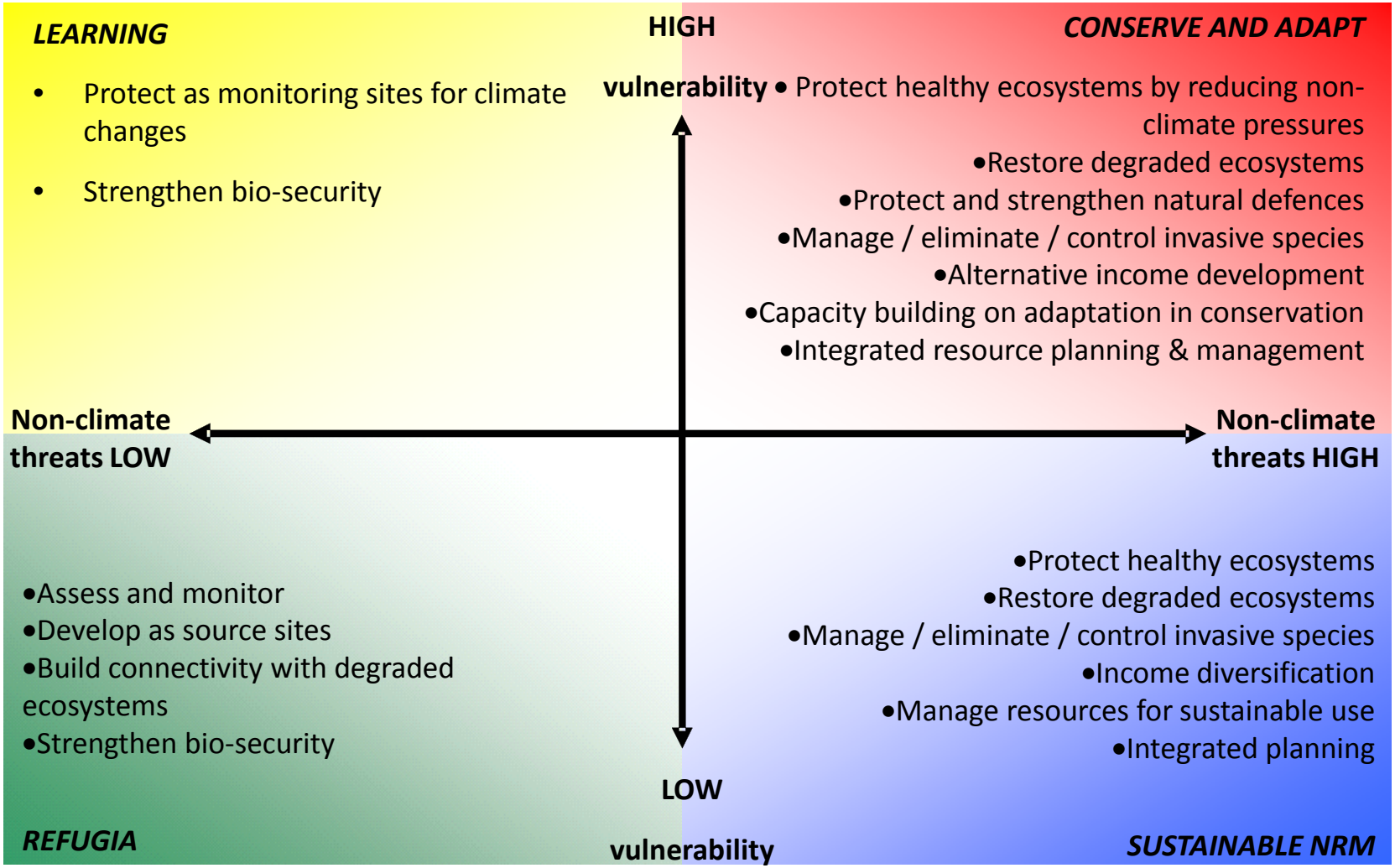
2. What are the options for supporting biodiversity to adapt to climate change?

Options:

A. Addressing climate risk within conservation planning → Aichi Target Number 10

B. Ecosystem-based Approaches to Adaptation (EbA) → Aichi Target Number 15

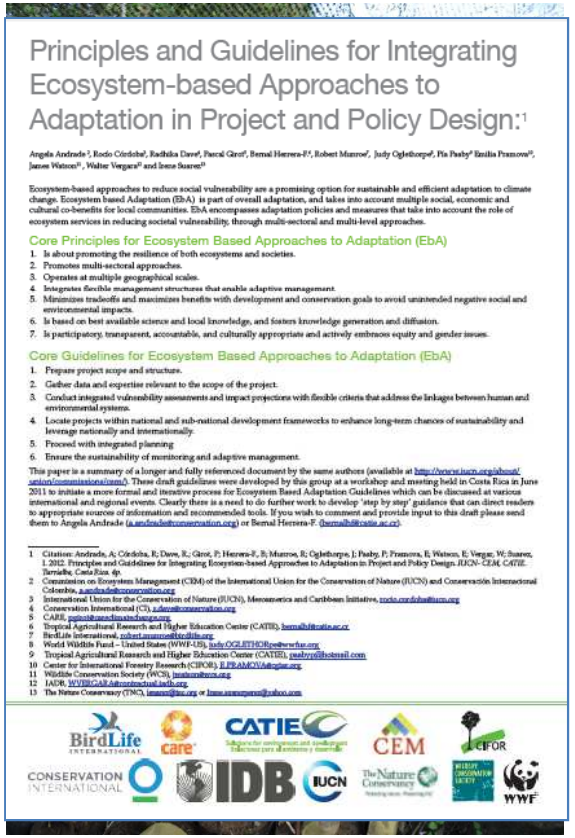
Option A: Framework for managing climate risk within biodiversity conservation planning



Option B: What is Ecosystem-based Adaptation(EbA)?

Adaptation that integrates the use of biodiversity and ecosystem services into an overall strategy to help people adapt to the adverse impacts of climate change

(CBD, 2009)



Principles and Guidelines for Integrating Ecosystem-based Approaches to Adaptation in Project and Policy Design:[1]

Angela Andrade[2], Rocío Córdoba[3], Radhika Dave[4], Pascal Girot[5], Bernal Herrera-F.[6], Robert Munroe[7], Judy Oglethorpe[8], Pia Paaby[9] Emilia Pramova[10], James Watson[11] , Walter Vergara[12] and Irene Suarez[13]

Ecosystem-based approaches to reduce social vulnerability are a promising option for sustainable and efficient adaptation to climate change. Ecosystem based Adaptation (EbA) is part of overall adaptation, and takes into account multiple social, economic and cultural co-benefits for local communities. EbA encompasses adaptation policies and measures that take into account the role of ecosystem services in reducing societal vulnerability, through multi-sectoral and multi-level approaches.

Core Principles for Ecosystem Based Approaches to Adaptation (EbA)

1. Is about promoting the resilience of both ecosystems and societies.
2. Promotes multi-sectoral approaches.
3. Operates at multiple geographical scales.
4. Integrates flexible management structures that enable adaptive management.
5. Minimizes tradeoffs and maximizes benefits with development and conservation goals to avoid unintended negative social and environmental impacts.
6. Is based on best available science and local knowledge, and fosters knowledge generation and diffusion.
7. Is participatory, transparent, accountable, and culturally appropriate and actively embraces equity and gender issues.

Core Guidelines for Ecosystem Based Approaches to Adaptation (EbA)

1. Prepare project scope and structure.
2. Gather data and expertise relevant to the scope of the project.
3. Conduct integrated vulnerability assessments and impact projections with flexible criteria that address the linkages between human and environmental systems.
4. Locate projects within national and sub-national development frameworks to enhance long-term chances of sustainability and leverage nationally and internationally.
5. Proceed with integrated planning
6. Ensure the sustainability of monitoring and adaptive management.

This paper is a summary of a longer and fully referenced document by the same authors (available at http://www.iucn.org/about/union/commissions/cem/). These draft guidelines were developed by this group at a workshop and meeting held in Costa Rica in June 2011 to initiate a more formal and iterative process for Ecosystem Based Adaptation Guidelines which can be discussed at various international and regional events. Clearly there is a need to do further work to develop 'step by step' guidance that can direct readers to appropriate sources of information and recommended tools. If you wish to comment and provide input to this draft please send them to Angela Andrade (a.andrade@conservation.org) or Bernal Herrera-F. (bernalh@catie.ac.cr).

1 Citation: Andrade, A; Córdoba, R; Dave, R.; Girot, P; Herrera-F., B; Munroe, R; Oglethorpe, J; Paaby, P; Pramova, E; Watson, E; Vergar, W; Suarez, I. 2012. Principles and Guidelines for Integrating Ecosystem-based Approaches to Adaptation in Project and Policy Design. IUCN- CEM, CATIE. Turrialba, Costa Rica. 69.

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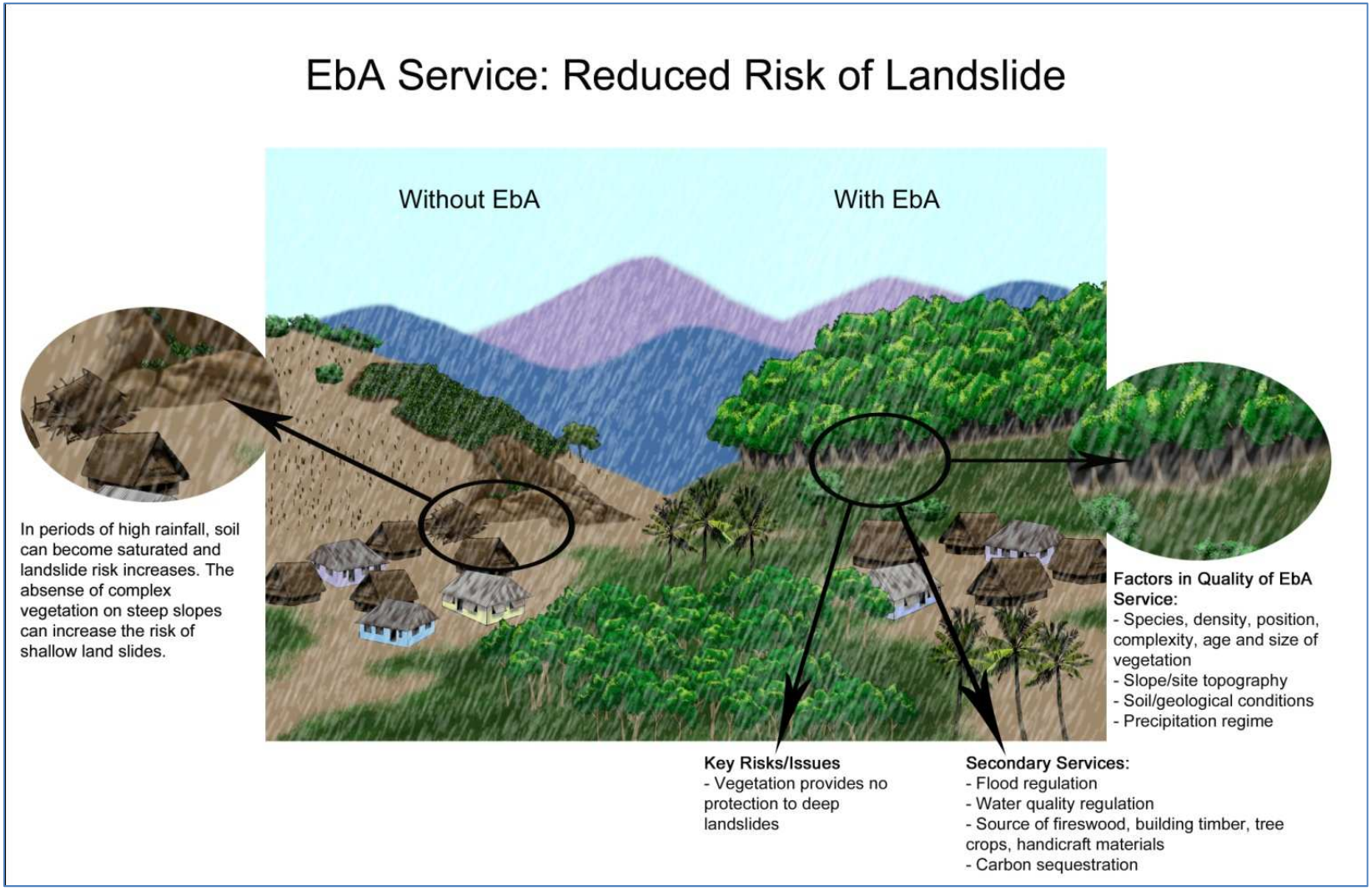
Option B: An example of EbA

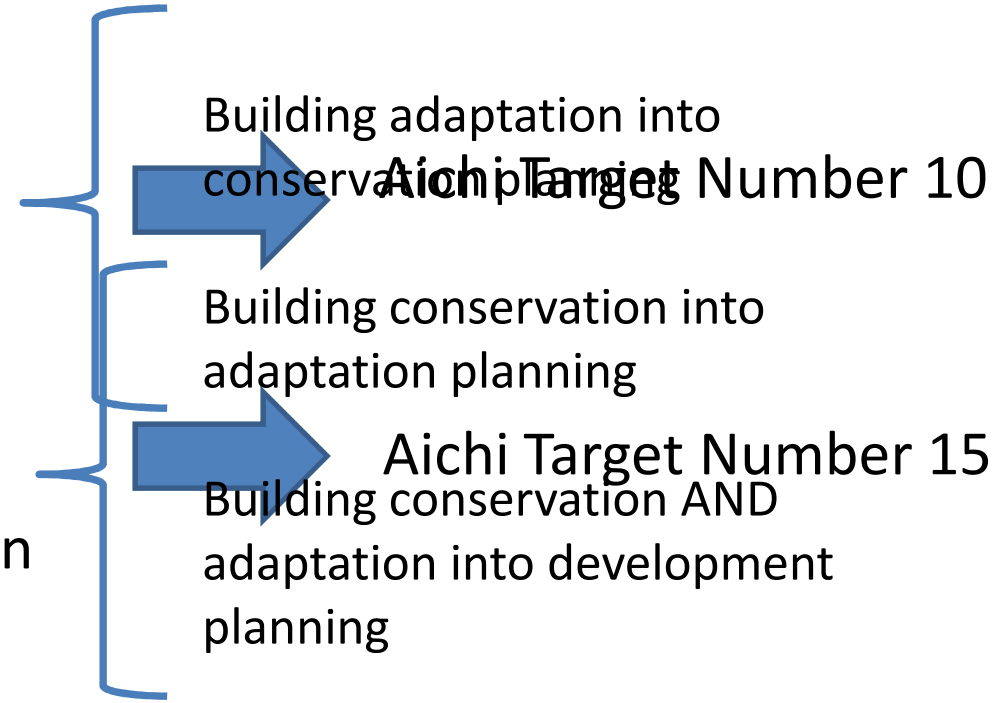


3,4,5 - Linking with Planning Processes

Options:

A. Addressing climate risk within conservation planning

B. Ecosystem-based Approaches to Adaptation (EbA)



3,4,5 - Linking with Planning Processes

Options:

A. Addressing climate risk within conservation planning

B. Ecosystem-based Approaches to Adaptation (EbA)

Target Examples:

- By 20??, ecosystems highly vulnerable to climate change have been identified/mapped
- By 20??, baselines of key non-climate pressures on ecosystems highly vulnerable to climate change have been established
- By 20??, key non-climate pressures on ecosystems highly vulnerable to climate change have been reduced by ?%

3,4,5 - Linking with Planning Processes

Options:

A. Addressing climate risk within conservation planning

B. Ecosystem-based Approaches to Adaptation (EbA)

Target Examples:

- By 20??, ecosystem services that reduce human vulnerability to climate change in location ‘x’ have been quantified/mapped.
- By 20??, ecosystem services that reduce human vulnerability to climate change in location ‘x’ have been protected/restored according to approved adaptation plan.

3 - How can countries mainstream climate change considerations into biodiversity planning?

Options:

- Develop/utilise a basic scanning tool and apply to NBSAPs and other planning documents
- Join existing vulnerability assessment exercises and ensure biodiversity considerations are included.
- Undertake a detailed vulnerability assessment on NBSAP (*i.e. How does expected climate change undermine the objectives of the NBSAP?*)

4 - How can biodiversity conservation, sustainable use and livelihoods be mainstreamed into adaptation planning?

Options:

- Learn about national adaptation planning studies, processes and fora.
- Align objectives – particularly relating to ecosystem services.
- Capacity building on EbA for adaptation and conservation practitioners.
- Learn lessons from other countries on multi-jurisdictional efforts.
- Quantification and mapping of ecosystem services.