

# Promoting Actions on Ecosystem Based Adaptation



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## Outline

1. Simple typology of actions
2. Examples: Selected UNDP supported Project examples
3. What is new?
4. Issues

# EBA: Work in progress

## Typology of actions:

1. Ecosystem management:
  - For enhancement of benefits, even under context of CC: different ecosystems or even physical features – such as maintaining river boulders
  - Reducing risks from changes in ecosystems due to CC: fires/ invasive species / GLOF
2. Ecosystem restoring / rehabilitating in anticipation of climate change impacts: mangroves, wetlands, grasslands, forests, coral reefs
3. Using plants/ water features / animals for specific CC induced problems: maintaining coastal vegetation to reduce sea water sprays on crops; rooftop gardens to reduce temperatures/ crop diversity maintenance

# **Ecosystem Based Adaptation: Project Examples -1**

**1. Managing ecosystems for continued benefits** : most ecosystem management/ conservation projects

**2. Reducing risks from changes in ecosystems to reduce CC risks**

**a. Reducing Disaster Risk from Wildfire Hazards Associated with Climate Change In South Africa**

fire breaks, prescribed burning, invasive alien plant management, early fire detection and rapid response, and access to improved early warning weather information, risk and hazard mapping, communication, rapid response and collective support from a well functioning FPA

**b. Reduce Climate Change-induced Risks and Vulnerabilities from Glacial Lake Outbursts Floods in the Punakha-Wangdi and Chamkhar Valleys**

artificial lowering of Glacial lake levels

## **Ecosystem Based Adaptation: Project Example - 2**

### **Restoring / rehabilitating ecosystems in anticipation of climate change impacts**

#### **Ecosystem Based Adaptation to Climate Change in Seychelles**

Addressing water scarcity and flooding with increased but irregular rainfall and coastal flooding from rising sea surface levels, and increased cyclonic activity.

- *Increase water-soil infiltration and water storage capacities in soils, wetlands and aquifers* - Forest restoration; removal of invasive alien species and reduction in abstraction from wetlands.
- *Reduce coastal erosion and protection:* Mangrove reforestation, restoration, rehabilitation of sand dunes by planting local species in order to stabilize them, ; Coral reef (fringing) construction, rehabilitation, restoration and protection to reduce wave action and reduce coastal erosion.

# **Ecosystem Based Adaptation: Project Example 3**

**Using plants/ water features / animals for specific CC  
problems**

**Sustaining agricultural biodiversity in the face of climate change  
(Tajikistan)**

Includes: conservation of wild relatives of important crops (including walnut, pistachio, pomegranate, fig, mulberry, apricot, almond, other)

Homologue Approach implemented in 4 project areas to enable farmers to adapt their current production practices to current and future climate risks and variability;

# Ecosystem Based Adaptation:

## What is new?

### New Level of Adaptive Management:

Explicit recognition of , and planning ahead for, climate change impacts in ecosystem management and needs of people

- Ensuring that EBA is recognized for its values and limits: so that appropriate investment is made from different CC sources for mitigation and adaptation
- Additional institutional partners – working on climate forecasts/ modelling/ information
- Increasing and more explicit factoring of local needs from ecosystem services under context of climate change: though anticipating future needs of communities and societies is difficult
- Innovation: such as the homologue approach in Tajikistan agro biodiversity project

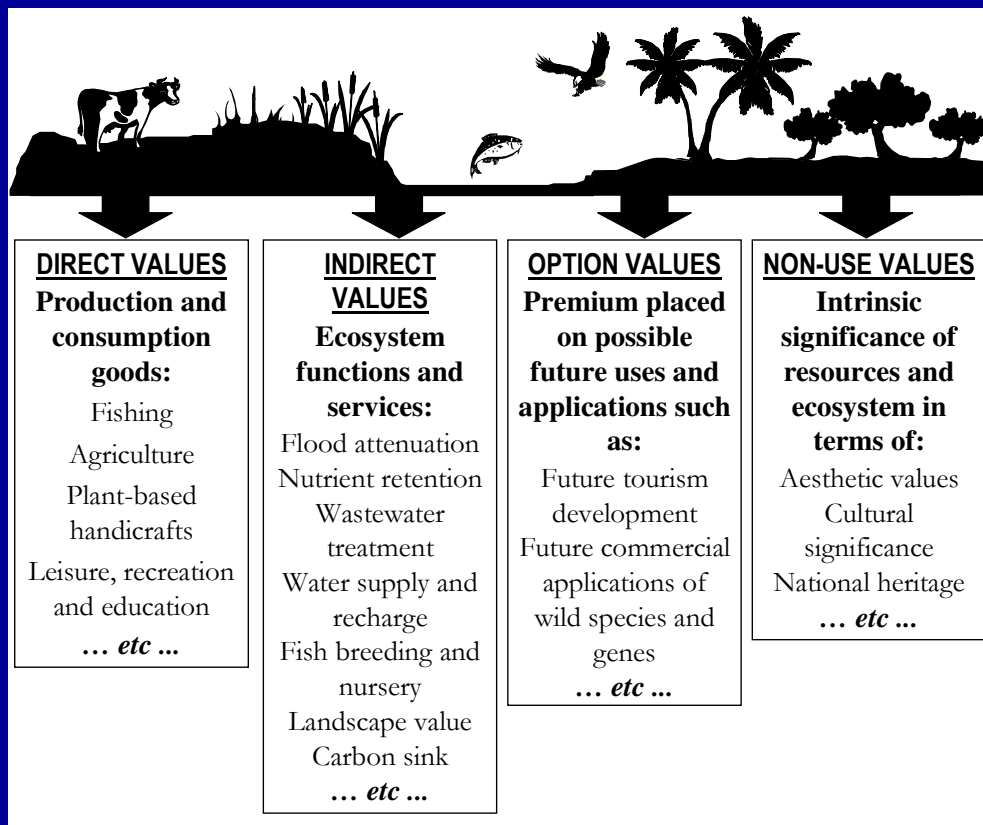
## **EBA: Issues**

- **EBA as only one of the several approaches –**
  - not always simple, replicable or possible
- **Still primarily conservation driven ?**
  - Not yet mainstreamed into most national adaptation plans or strategies – mostly DRR oriented
  - Criticized for being less people centred



# Framing Ecosystems and Adaptation

Natural ecosystems will continue to be important under any context for humans – including climate change



- EBA focuses only on the direct and indirect use values for now and future?

Whereas,

- given the uncertainties with CC, there should also be strong focus for **option values**
- And **non-use values** need adequate attention, too

Thank you

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