



Empowered lives.
Resilient nations.

Ecosystem Based Adaptation (EBA) in Mountain Ecosystems – case study on Uganda Project in Mt Elgon region *Paul Mafabi*

Supported by:



Federal Ministry for the
Environment, Nature Conservation
and Nuclear Safety

based on a decision of the Parliament
of the Federal Republic of Germany

Outline

- ▶ Situation analysis
- ▶ Climate Change Problem
- ▶ Climate Change Impacts and ecosystem degradation in Uganda
- ▶ EBA Relevance
- ▶ Interventions and Strategy
- ▶ The Results and Resources Framework
- ▶ Beneficiaries
- ▶ Management arrangements

Mt Elgon Ecosystem



Water tower, transboundary

Rich Natural resource base



High vulnerability



Big issue



High population density, limited land holdings, cultivation on steep slopes and river banks poverty amidst plenty resources



Situation analysis

- ▶ Many parts of Uganda are already experiencing CC impacts such as frequent droughts, famine, floods and landslides.
- ▶ International Climate Risk Report identified Uganda as one of the least prepared and most vulnerable countries.
- ▶ Uganda can reduce the rate and magnitude of CC and its impacts through adaptation initiatives
- ▶ CC adaptation requires robust investment in infrastructure, education, health, private sector, economic diversification
- ▶ CC Adaptation can also bring opportunities in terms of local development
- ▶ Uganda is highly vulnerable to CC and variability, given that its economy and the wellbeing of its people are tightly bound to climate

Climate Change Problem

- ▶ Change in climate attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods
- ▶ One of the greatest challenges facing the world's environment, society and economy
- ▶ Resilience of many ecosystems likely to be exceeded in the 21st century by:
 - flooding, famine, drought, wildfire, insects, and other global change drivers such as land use change, pollution, and over-exploitation of resources.

Climate Change Impacts and ecosystem degradation in Uganda

- ▶ **Glacial melting** – Loss of glacial cover of the Rwenzori Mountains.
- ▶ **Floods**:- 2007 Teso region, March 2010 Butaleja district
- ▶ **Landslides** – March 2010 Bududa, In 2011 District of Bulambuli, 2011 Kaabong, Kabale – Frequent
- ▶ Low agricultural production
- ▶ Declining Lake Victoria's levels
- ▶ **Droughts** – National Adaptation Programmes of Action (NAPA), drought is the most prominent – consecutive years of crop failure and low livestock productivity due to erratic weather conditions and below normal rainfall have had a strong and adverse impact on food security

Traditional Coping Strategies



EBA Relevance

- ▶ In such cases, the poor and vulnerable are more likely to feel these impacts hardest, given their limited capacity to put in place measures to overcome the likely effects.
- ▶ Through its adverse effects on livelihoods and agricultural productivity, CC is also set to increase food insecurity and consequently hunger and malnutrition.
- ▶ Increase in intensity and frequency of heavy rains and floods expose population to waterborne diseases such as cholera and diarrhea
- ▶ Uganda's ecosystems particularly vulnerable to climate change are dry lands, water basins and mountain areas.
 - EBA project to complement efforts by the Government of Uganda in implementing the different action plans, outlined in the NAPA,
 - Implementation of the action plans hampered by lack of tools and methodologies that suit the local conditions in Uganda.

KEY BARRIERS TO EBA

- Insufficient data and information on resilience
- Lack of land use plans
- Inadequate demonstrated experiences
- Weak institutional capacity and policy framework to promote EBA

- Hence
 - Need for tools and capacity development of government decision makers and the private sector
 - Management approaches to embrace ecosystem wide solutions
 - Promoting Public Private Partnerships

Goals and objective

GOAL:

"Strengthen Uganda's Capacity for promoting ecosystem based Adaptation (EBA) options and to reduce the vulnerability of communities to climate change with particular emphasis on mountain ecosystems"

Mainly local level

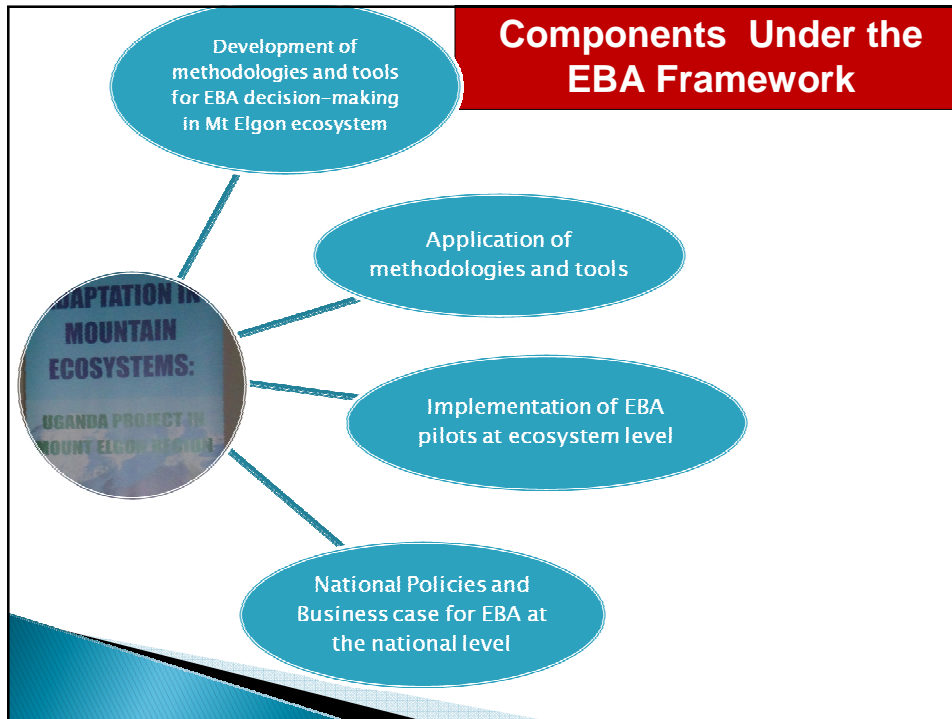
Mainly national level

Objective 1

"Strengthen Uganda's Capacity to promote ecosystem based adaptation to climate change and to reduce the vulnerability of communities on the Mt. Elgon ecosystem".

Component 1
Component 2
Component 3
Component 4

Components Under the EBA Framework



Interventions and Strategy

- ▶ Focus on Mt Elgon region in Eastern Uganda (Kapchorwa, Kween, Bulambuli, and Sironko Districts)
- ▶ Partnership by GoU, UNEP, UNDP and IUCN; lower level District Local Governments and CSOs
- ▶ Special emphasis on testing and piloting appropriate tools and methodologies, learning lessons and capturing experiences and practices that can be replicated in most parts of Uganda

Strategy and Approach

- ▶ Up scaling initiatives
- ▶ Working with disaster committees
- ▶ Government structures – local to central government
- ▶ Synergies with other programmes (MERECP, NAADS)



Strategy and approach



Emphasis on community involvement and appropriate technologies

PROJECT COMPONENTS	EXPECTED OUTCOMES	EXPECTED OUTPUTS
COMPONENT 1: DEVELOPMENT OF METHODOLOGIES AND TOOLS FOR EBA DECISION-MAKING IN TARGET DISTRICTS IN MT ELGON ECOSYSTEM	Methodologies and tools for EBA decision-making developed.	<p><u>Output 1.1:</u> Good practice EBA options identified and compiled.</p> <p><u>Output 1.2:</u> Improved methods and tools for Climate Change Vulnerability Impact Assessment (VIA) for EBA to support the design of EBA options developed.</p>
COMPONENT 2: APPLICATION OF METHODOLOGIES AND TOOLS IN TARGET DISTRICTS IN MT ELGON ECOSYSTEM	EBA methodologies and tools applied.	<p><u>Output 2.1:</u> Climate change Vulnerability and Impact Assessment undertaken.</p> <p><u>Output 2.2:</u> EBA strategy identified using decision-making tools, including an economic assessment of EBA options and land use plan.</p>

COMPONENT 3: IMPLEMENTATION OF EBA PILOTS IN TARGET DISTRICTS IN MT ELGON ECOSYSTEM	EBA pilot projects implemented and contributing towards ecosystem resilience and reduction of livelihood vulnerability in the face of climate change impacts.	<p><u>Output 3.1:</u> Institutional roles and responsibilities for EBA agreed by different stakeholders at all levels.</p> <p><u>Output 3.2:</u> Institutional capacity of local Governments and other key national institutions to plan, monitor and enforce EBA enhanced.</p> <p><u>Output 3.3:</u> Pilot projects focusing on water resources management and enhancement of soil conservation measures implemented.</p> <p><u>Output 3.4:</u> Market opportunities and access enhanced.</p> <p><u>Output 3.5:</u> Lessons learned from pilot projects captured and disseminated.</p>
COMPONENT 4: DEVELOPMENT OF A BUSINESS CASE FOR EBA AT THE NATIONAL LEVEL	Business case for EBA at the local and national levels developed.	<p><u>Output 4. 1:</u> Enabling environment for scaling-up EBA at national level as part of climate risk management strategy created.</p> <p><u>Output 4.2:</u> Key government stakeholders have the information available and capacities to integrate EBA into national development planning processes and climate change policies and strategies.</p>

Beneficiaries



- ✓Local resource users– farmers,
- ✓Local governments
- ✓CSOs
- ✓Youth and children

Lessons learnt from the process will be used for integrating climate change in the different development plans and programmes

Roles & responsibilities

Body	Institution
Global Steering Committee	<ul style="list-style-type: none">• to provide strategic guidance to the project at the global level.• provide input as regards up-scaling• Assist in resource mobilization
National Steering Committee	<ul style="list-style-type: none">• will provide guidance to project implementation in Uganda• ensure the high level support and participation of key stakeholders both at national and district levels
UNEP,	<ul style="list-style-type: none">• provide overall coordination of the project at the global level in close collaboration with UNDP and IUCN• through UNEP-WCMC shall implement project activities in components 1 and 2 of the project• provide the lead technical role for components 1 & 2
Civil Society Organisations	<ul style="list-style-type: none">• will work through coordination structures described in this section to ensure that project implementation proceeds in a coordinated manner.
IUCN and UNDP	<ul style="list-style-type: none">• will jointly provide the lead technical role on Component 3
UNDP	<ul style="list-style-type: none">• will provide the lead technical role on Component 4
National Coordination Team	<ul style="list-style-type: none">• provide leadership in the day to day management of the project in Uganda• directly supervise those activities contracted to consultants
District Local Government	<ul style="list-style-type: none">• Integrate lessons into the local district development plans

Conclusion

- ▶ Climate change is real, impacts visible
- ▶ Action is now, waiting will only make it worse
- ▶ EBA is an innovative process
- ▶ The ultimate success of Ecosystem Based Adaptation will be measured by the ability of ecosystems to continually provide critical services, including the abatement of land degradation and the regulation of water base flows.



*Empowered lives.
Resilient nations.*

For further information contact:



**Ministry of Water and Environment
Directorate of Environment Affairs**

P.O.Box 20026

Tel: +256 41 505945

E-mail: ps@mwe.go.ug

Website: www.mwe.go.ug