

Climate Change and Biodiversity

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Introduction

- Biodiversity and ecosystem-specific goods and services in Uganda are likely to be adversely affected by climate change in the future.
- According to projections, Uganda will continue to experience rising temperatures, which will increase by more than 2 °C by 2030 (Tetra Tech ARD, 2013).
- Additionally, the growing variability of inter-annual rainfall is projected to continue, including increased rainfall during the dry season.
- These new climate scenarios are expected to increase the frequency of floods, droughts, and fires.

Climate change and potential impacts on biodiversity

- Negative effect on the hydrological cycle.
- Shifting flora and fauna.
- Ecological conditions that favor colonization by invasive species.
- Conditions that trigger human-wildlife conflicts.
- Vulnerability of natural ecosystems to disasters (forest fires and pest and disease outbreaks).
- Severe floods.

Current adaptation initiatives

- Policies and strategies
- Climate Change Policy Coordination
- Institutional Strengthening
- Mainstreaming Climate Change in Macro-Economic and Sectoral Development Plans
- National REDD+ Process

Climate Change Impact/sensitivity on selected locations

Murchison Falls National Park: Increased sensitivity to oil prospecting and production

Queen Elizabeth National Park: Increased vulnerability to prevalence of invasive species (for example; Congress weed)

Kibale National Park: Increased vulnerability of endemic species

Kidepo Valley National Park: Increased vulnerability of keystone species (For example the cheetah)

Climate Change Impact/sensitivity on selected locations (Continued).

Pian-Upe Bisina/Opeta (PUBO) Complex:

Increased vulnerability to extreme wet (floods) or extreme dry conditions

Semliki National Park: Increased vulnerability of endemic species and indigenous forest people (Batwa)

Rwenzori Mountains National Park: Increased vulnerability of aquatic and protected species impacted by shrinking snow cover

Recommendations (1)

Knowledge generation

- Quantification of climate change impact.
- Comprehensively assess resilience and vulnerability of ecosystems and keystone species in each location.

Recommendations (2)

Strengthening capacity to design and implement adaptation interventions

- Conduct an assessment of capacity needs of mandated institutions.
- Develop and implement capacity building program based on this assessment.
- Support participation of Civil Society stakeholders and local communities.
- Support integration of biodiversity conservation priorities within the climate change policy framework.

Recommendations (3)

Build eco-system-level resilience to effects of climate change

- Establish and strengthen conservation corridors for endemic species.
- Invest in Ecosystem Based Adaptation (EBA).
- Improve Law Enforcement of high altitude protected areas
- Species vulnerability action plans for highly vulnerable species.

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FOR
LISTENING TO ME!**