Peatland Overview in Uganda

Peatland Conservation and Wise use in the Context of Climate Change, Workshop

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1. Introduction

What is peat?

- Peat is a heterogeneous mixture of semi-decomposed plant (humus) material that has accumulated in a water-saturated environment in the absence of oxygen.
- Its structure ranges from semi decomposed plant remains to a fine amorphic, colloidal mass.
- The warmer the climate, the quicker the plant material will decompose.
- The rate of accumulating plant material is greatest in areas where the temperature is high enough for plant growth but too low for the vigorous microbial activity to break down the plant material.
- Such conditions are found more frequently in the northern hemisphere.
- Peat is sedentarily accumulated material consisting of at least 30% (dry mass) of dead organic material.
- A peatland is an area with or without vegetation with a naturally accumulated peat layer at the surface.

Values and Functions of Peat

- **Production functions:**
  - Peat extracted and used ex situ for:
  - humus and organic fertilizer in agriculture and substrate in horticulture, energy generation, provision of drinking water, building material, food, medicine etc
- **Carrier functions - providing space for**:
  - water reservoirs for hydro-electricity, irrigation, drinking and cooling water, and recreation and fish ponds
- **Regulation functions:**
  - regulation of global climate, regional and local climates
  - regulation of catchment hydrology and soil conditions
- **Informational functions:**
  - social-amenity and history functions
  - recreation and aesthetic functions
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Policy and Legal framework for Peat land

- Global Level:
- The Ramsar Convention is an intergovernmental treaty that provides for the framework for national action and international cooperation for the conservation and wise use of wetlands, including peat lands, and their resources.
- National Level:

- ✓ Constitution of Uganda 1995 National Objectives and Directive Principle of State Policy Chapter XIII provides for taking all possible measures to prevent or minimize damage and destruction of wetlands.
- ✓ The NEA Cap. 153 section 36(1) all expound on the State's duty to protect the wetlands and prohibits drainage of wetland without authority from regulating institutions.
- ✓ Wetland Policy 1995, prohibits drainage of wetlands.
- ✓ The NDP11 section 6.2 aims at restoring and maintaining coverage of wetlands from 10.9 to 12% and promoting the wise use.

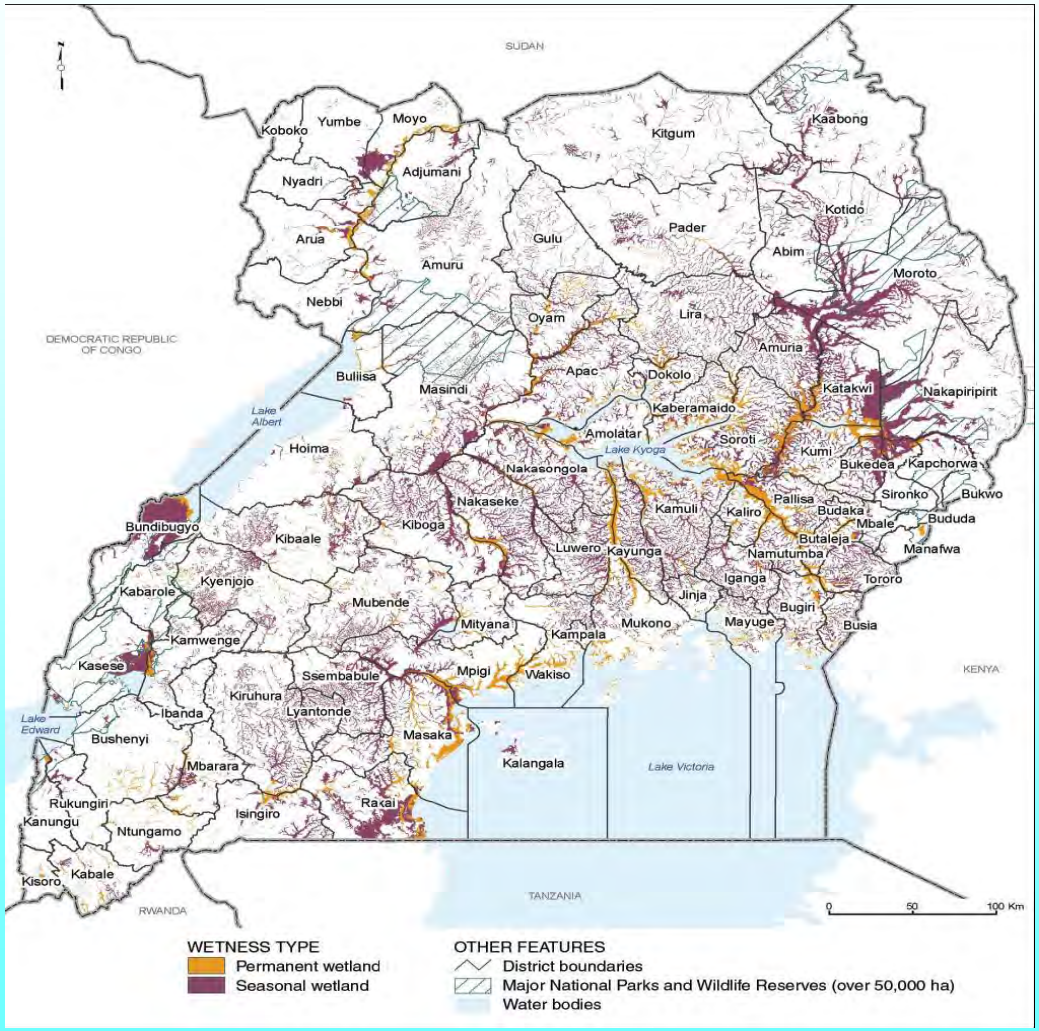
Institutional Arrangement

- At Central level:
  - Wetlands Management Department under Ministry of Water and Environment Affairs is the lead agency established to ensure sustainable management of wetlands country wide.
- At Local Government level:
  - Wetland management is implemented by the offices of DEOs/DWOs coordinated by District Environment Office and District Environment Committees.
- At super district levels
  - Regional Technical Support Unit established to set up and coordinate wetland management at regional level for inter-district wetland ecosystems.
- Global level:
  - Conference of Contracting Parties (COP), Standing Committee (SC), Scientific and Technical Review Panel (STRP) for ensuring compliance to the RAMSAR Convention provisions which Uganda is signatory.

Peat land Coverage

Peat land is widely distrusted in various quantities but mostly concentrated in SW, Kioga and lake Victoria basin.

Peat land cover 6% of the Uganda area and 38.6% of the wetland area (14,500Km2)



Functions and uses of Peat lands.

- Peat land is used for humus and organic fertilizer in agriculture and substrate in horticulture,
- Peat land is planned by Ministry of Enegry and Mineral Development for energy generation,
- Peat land is being used for the provision of building material, food, medicine etc

Impacts of wetland/Peat land degradation

- Reduced Co_2 sequestration capacity of wetlands release of GHG into atmosphere and global warming.
- As organic material is preserved under the waterlogged conditions it creates a significant stock of carbon.
- The carbon stock in organic/peat soils of Uganda is estimated at 1.3 Gt, giving it the 20th largest peat based carbon stock of all countries in the world (Joosten, 2009).
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Driver to Wetlands Degradation

- Human population pressure: at 35.9 %, targeting wetlands.
- Poverty index- Poor target peatland for unplanned settlements and cultivation.
- Over-exploitation- to satisfy an increasing appetite for peat land material goods.
- Agricultural expansion and intensification in peat land;
- Limited information about peat land, funding and technical capacity.
- Emerging new challenges: oil exploration, quest for option for alternative energy source, and climate change impact.

Strategy for Conserving Peat land in Uganda

- Study on peat land composition, uses and impact to Climate change is being undertaken by students. This will guide the policy and guideline on the use of peat land in Uganda.
- Demarcation and gazettement of peat land as part of wetland to raise the legal status and conservation interventions.
- Restoring degraded section to improve on the original integrity.
- Developing management plans and investment plans to monitor, regulate access, use
- Designation of Ramsar sites and wetland reserves.
- Policy, guideline and regulation formulation, implementation and governance

Moving Forward

- Continue with the demarcation of critical wetlands/peat lands boundaries up to 2880Kms and gazette them to raise their legal recognition in the next 5 years as mitigation effort to CC.
- Continue with the restoration of degraded section of critical wetlands (19480Ha) to maintain their integrity to store carbon in the peat soil and maintain water quantity and quality as mitigation effort to CC.
- Update District Inventory and assess wetland status to operationalize NWIS
- Develop and disseminate additional tools and guidelines for sustainable wetland management (adap

Conclusion

- Peat lands are important carbon sinks for sequestrating carbon dioxide from the atmosphere hence acting as mitigation and adaptation measure for Climate change and variability.
- Opening peat land for settlements, agriculture, energy generation is bound to will further exacerbate the impact of CC
- All efforts must taken to stop, regulate the sue of peat lands.

Work in Progress THANK you