

POLICY BRIEF

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WETLANDS THE DYING ECOSYSTEMS.

Key Messages

- In Kenya wetland coverage has declined from 40% of total land mass in 1960 to 3-4% today.

The current rate of wetland loss in the country is estimated to be 1050km² per year, despite the comprehensive regulations to protect them.

- This has led to lose of household livelihood and key environmental benefits and services they offer

- Creation of public awareness on conservation of wetlands and adoption of appropriate management strategies are better approaches to protect these important ecosystems

Background information

Wetlands comprise some of the world's most productive ecosystems and offer ecosystem services leading to countless benefits (Russi et al., 2013), ranging from climate change mitigation to food security. However, the contributions they make to human well-being have often been overlooked or underappreciated. As a consequence, natural wetlands have declined worldwide both in area and quality (Gardner et al., 2015) and cover only a fraction of their original area (Gardner and Finlayson, 2018). Lack of appreciation of wetland values, their products, functions and attributes has led to conversion of wetlands for other purposes. About 50 % of the world's wetlands have been lost in the last century (Davidson, 2014).

In Kenya wetlands are estimated to cover 3-4% of the land mass (Kenya Wetlands Forum, 2012) compared to 40% in 1960 (Survey of Kenya, 1979). Although there are comprehensive regulations to protect these important ecosystems, there are emerging concerns on the alarming speed at which wetlands are disappearing in the country. Wetland loss in Kenya is estimated to be 1050km² per year (Mironga, 2005), which is approximately three times faster than forests. Many wetlands in the country are on their death bed. Strict measures need to be put in place to prevent their continued degradation.

What is the issue?

Numerous swamps are among the category of wetlands that have received little attention from environmentalists in Kenya. This is because they are small in size and therefore considered not important (Terer et al., 2012). Due to this, they are slowly disappearing and this has significantly contributed to loss of livelihood for communities depending directly or indirectly on the wetlands.

Currently, human impact on the wetlands in Uasin Gishu County is pronounced, potentially resulting in loss of all goods and services they offer. A study on selected swamps in the county (Figure 1) revealed relatively low conservation status (Figure 2) Mulei & Onkware (2018) and this was attributed to various factors (Figure 3). This calls for urgent action to safeguard and preserve the remaining ones.

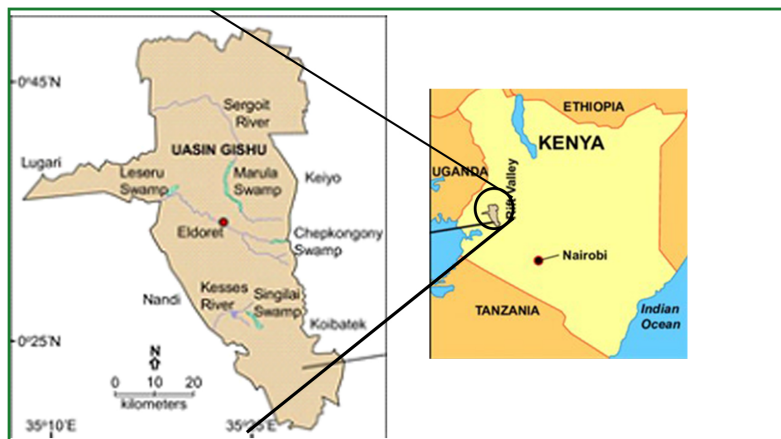


Figure 1: Uasin Gishu County Showing wetlands; Inset: Map of Kenya

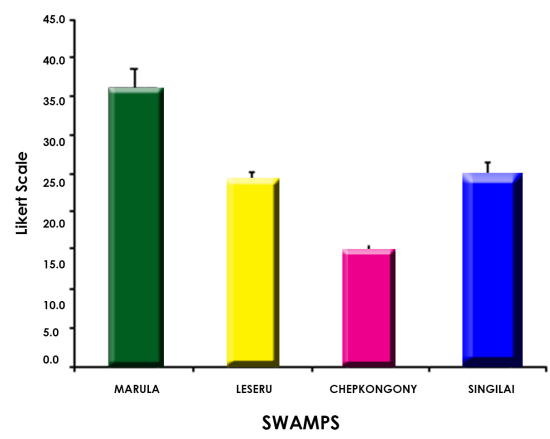
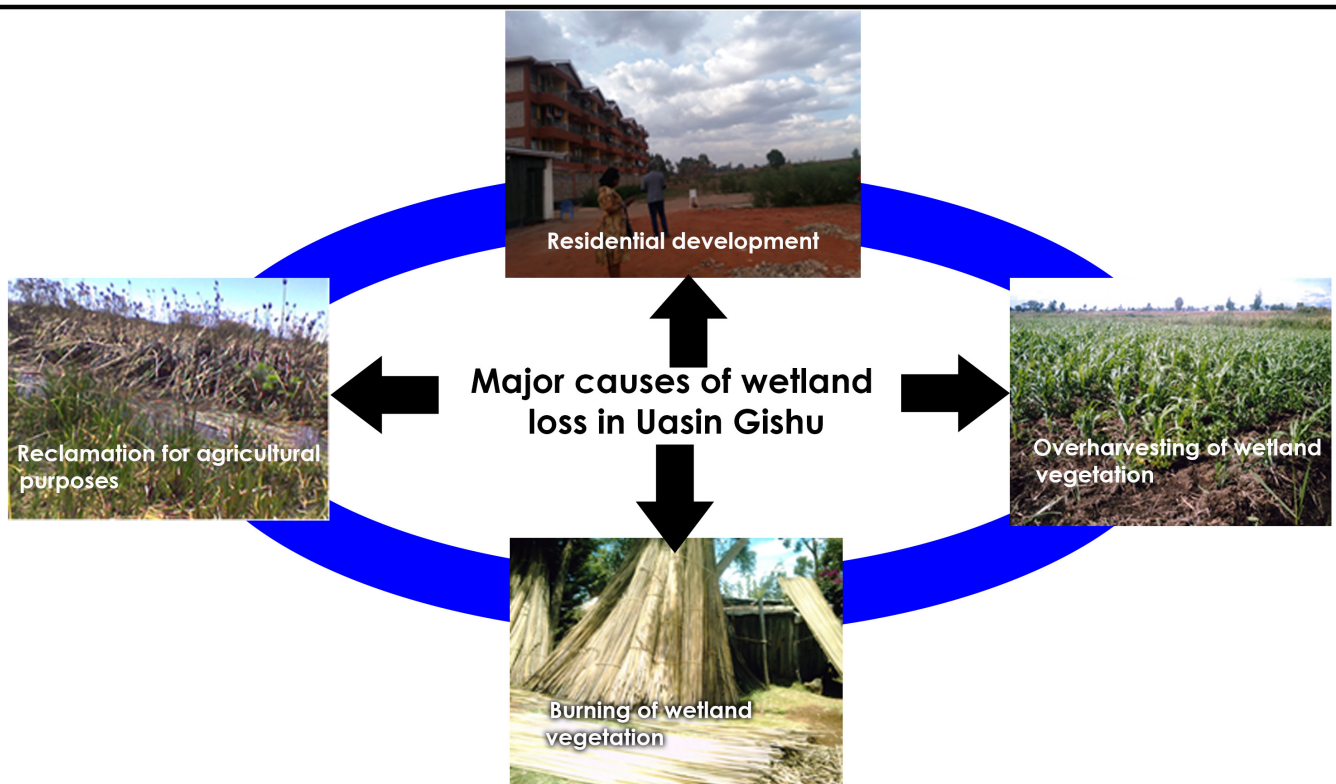


Figure 2: Conservation status of the selected swamps in Uasin Gishu based on the Likert score. Likert scale score of 46 represented high conservation status.



Main barriers to wetland conservation in Uasin Gishu County

1. Lack of protection thus subjecting them to uncontrolled exploitation
2. Limited knowledge of their indirect benefits by local communities
3. Lack of appropriate skills for sustainable utilization

Benefits of conserving wetlands

Sustainable utilization of the wetlands will continue to provide both direct and indirect benefits to the local community such as:

- * Provision of resources that can be harvested for personal as well as commercial use thus contributing to food security.
- * Improved water quality
- * Flood control
- * Pollution filter

Risks of losing or degrading wetlands

Unwise use of wetlands will have a negative impact on the ecological and socio-economic services they provide such as:

- * Loss of animal and plant biological diversity
- * Increased flooding
- * Deterioration of wetland water quality and reduction in water supply and water storage
- * Reduction in groundwater recharge, negatively impacting potential crop production
- * Loss of all other environmental and economic services they offer and this will partially increase food insecurity

Policy Recommendation

County Government

- * Develop policies at county level to prevent further degradation of wetlands
- * Map and list threatened wetlands in the county
- * Identify important wetlands to be designated as watersheds
- * Create public awareness on conservation of wetlands
- * Put in place a comprehensive monitoring programme and appropriate management strategy.

Community

- * Adopt alternative uses of wetlands through:
 - o Exploitation of the papyrus industry
 - o Aquaculture (e.g. cray fish farming)
- * Practice wetland edge farming with minimum impact on ecological functions and services ;

Papyrus products



Aquaculture



(Source: Magero & Torto, 2017)

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