

IMCG excursion 2026 Rwanda/Uganda

Additional information to the sites and route

The systems we visit in our excursion are mostly highland valley bottom peatlands (1,200–2,500 m) or lake margin papyrus swamps (~1,100–1,200 m). Vegetation is typically dominated by *Cyperus papyrus* (papyrus), sedges (*Carex*, *Cyperus* spp.) and occasionally *Sphagnum* moss (in higher altitude peat bogs). They are widely used for agriculture (drainage, seasonal cultivation), grazing, water supply & hydropower regulation, papyrus harvesting and fishing. Here is a short description of each site, arranged by elevation:

1. Muchuya (Echuya Forest Reserve, Important Bird Area/Uganda)

- Elevation: ~2,300 m
- Vegetation: Sedge-dominated peat (*Carex*), tussock grasses, giant lobelias
- Type: High-altitude valley peat swamp
- Current use: Biosphere reserve *forest oriented*

Reference:

Ellison, M. 2009. A survey of Echuya Central Forest Reserve, Uganda, for the breeding population of Grauer's Swamp Warbler *Bradypterus graueri*. *Scopus*: 7-10.

https://bigodiafricaexpeditions.com/2023/09/21/echuya-forest-reserve/?utm_source=chatgpt.com

2. Rugezi (Rwanda)

- Elevation: ~2,000 m
- Vegetation: sphagnum mosses, *Miscanthus*, *Cyperus* spp., papyrus stands
- Wetland type: peat depth expected to reach 15-20 meters
- Current use:
 - Conservation/restoration focus: RAMSAR site in the process to become a National Park.
 - Hydropower regulation
 - Former agriculture: tea plantation, raised beds & grazing (now restricted)
- Reference:

Grundling, P.-L., Grootjans, A. P., & Linstrom, A. (2016). *Rugezi Marsh: a high-altitude tropical peatland in Rwanda*. In: Finlayson, C.M. et al. (eds.), *The Wetlands Book*. Springer, Dordrecht.



a)



b)



c)

Figure. a) A picture of Rugezi's southern (upstream) transitional bog systems, where the sphagnum peat is limited to the top 30-50 cm indicating the "recent" succession to a bog system limited to the upstream areas, b) close up of Rugezi in the southwestern section of the peatland, which was not converted at any point, c) Middle sections of Rugezi with fen conditions and relic drainage channels (source: Samer Elsnehawi)

3. Mulindi: transboundary peatland between Uganda and Rwanda

- Elevation: ~1,500–1,800 m (estimated highland wetland range)
- Vegetation: Papyrus, grasses, sedges (typical Rwandan marsh vegetation)
- Wetland type: Valley bottom peatland
- Current use: Agriculture tea plantation, grasslands for grazing



Figure. left) Tea harvesting in Mulindi peatland, Rwanda (Source: BBC link below), right) website article on tea quality based on the growing medium(area) (source: <https://coopthemulindi.com/#>)

Reference:

Ge, J., Mupenzi, J. de la Paix, Habiyaemye, G., & Bazimenyera, J. de D. (2010). *The Environmental Impact of Industrial Agriculture: The Case of Mulindi Tea Plantations in Rwanda*. *Journal of American Science*, 6(12), 1578–1590.

HYCOGEC Consults (2020). Consultancy service for feasibility and technical design study for the development of Mulindi marshland in Gicumbi district.

<https://greenfund.rw/greengicumbi/sites/default/files/2021-12/Consultancy%20design%20for%20Mulindi%20Marshland.pdf>

BBC article: <https://www.bbc.com/news/uk-scotland-scotland-business-60914807>

4. Kabale (Uganda)

- Elevation: ~1,800–2,000 m
- Vegetation: n/a
- Wetland type: Valley bottom peatland
- Current use:
 - Intensive agriculture (Irish potatoes, vegetables)
 - Drainage and terracing common

Reference: Langan, C., Farmer, J., Rivington, M., Novo, P., & Smith, J. U. (2019). A wetland ecosystem service assessment tool: Development and application in a tropical peatland in Uganda. *Ecological Indicators*, 103, 434–445.



Figure. Raised bed agriculture in Kabale (credit: Jenny Farmer, <https://drfarmerjen.wordpress.com/wp-content/uploads/2017/09/kabale-wetlands-site-description-june-2014.pdf>)

5. Nyamuriro (Rubanda/Uganda)

- Elevation: ~1,800–2,000 m (Rubanda highlands)
- Vegetation: Formerly papyrus dominated
- Type: Valley bottom peatlands
- Current use:
 - Intensive agriculture, mining, construction pressures
 - Ongoing conservation efforts (GCF project)

[https://mwe.go.ug/projects/GCF-Wetlands#:~:text=Project%20Overview-,GCF-Wetlands,NDCs\)%20and%20sustainable%20development%20goals.](https://mwe.go.ug/projects/GCF-Wetlands#:~:text=Project%20Overview-,GCF-Wetlands,NDCs)%20and%20sustainable%20development%20goals.)

6. Akanyaru–Cyohoha–Rweru system (Rwanda)

- Elevation: ~1,300–1,500 m
- Vegetation: Extensive papyrus swamps, floodplain grasses
- Type: large peatland complex with interconnected valley bottoms and floodplains. Peat depth reaches up to 30 meters in the middle sections of Akanyaru
- Current use:
 - Agriculture (major conversion pressure)

- Peat extraction for energy production
- Fishing and transboundary water management

Reference: Pajunen, H. (1996). *Peatlands in Burundi, their extent, development and use*. Geological Survey of Finland / International Peat Society.



Figure. **Top:** Rucahabi tributary peatland to Akanyaru system with raised bed subsistence farming areas (Samer Elskehawi), **Bottom:** Satellite image of Rwabusoro in Akanyaru: Former peat extraction holes (up to 8 meters). Current extraction below the road (lower side of the picture). Extraction commissioned for Gishoma peat power plant. Other areas are used as raised beds agriculture and infrastructure (new road).

7. Nyandungu Eco-park (Kigali/Rwanda)

- Elevation: ~1,300–1,400 m
- Vegetation: Papyrus, Typha, grasses
- Type: Urban wetland / marsh (Kigali Wetland Rehabilitation projects)
- Current use:
 - Eco-park (rehabilitation project)
 - Flood control and recreation

Information:

<https://www.rema.gov.rw/our-work-1/projects/ldcf-iii-5>

https://arcosnetwork.org/wp-content/uploads/2025/11/City-of-Kigali-Wetland-Master-Plan_Final-Vol-2_2019.pdf

<https://ggi.org/wp-content/uploads/2022/02/Nyandungu-Wetland-Eco-park-13-compressed.pdf>

8. Nabajuzi (Masaka Ramsar City/Uganda)

- Elevation: ~1,200–1,300 m
- Vegetation: Cyperus papyrus dominated in the main downstream valleys, Cyperus spp. in the upstream sections
- Type: Valley bottom peatland
- Current use:
 - Protected RAMSAR site
 - Subsistence farming, Infrastructure (Roads), clay extraction
 - Water purification, biodiversity conservation

Information:

<https://rsis.ramsar.org/fr/ris/1639>

https://www.newvision.co.ug/category/agriculture/masaka-becomes-east-africas-first-ramsar-city-NV_126261_032026



Figure. Nabajjuzi is currently a demonstration site to building technical capacity and baseline information on peatlands in Uganda under Peat4People project. The picture is taken during setting up one of the peat mapping activities.

9. Mabamba Bay (Lake Victoria/Uganda)

- Elevation: ~1,130 m
- Vegetation: Dense papyrus swamp
- Type: Lake margin floating mats
- Current use:
 - Fishing
 - Ecotourism (birding, shoebill habitat)
- Information: <https://rsis Ramsar.org/fr/ris/1638>



Figure. Bird-watching ecotourism is an important part of the community livelihood around Mabamba Bay (Photo: Samer Elskehawi)

10. Munyonyo (Lake Victoria shore)

- Elevation: ~1,130 m
- Vegetation: Papyrus, aquatic plants
- Type: Lake margin floating mats
- Current use:
 - Urban development (hotels, recreation)
 - Floating gardens
- Relevant reference: Saunders, Matthew J., Kansiime, F. & Jones, M. B. (2012). Agricultural encroachment: Implications for carbon sequestration in tropical African wetlands. *Global Change Biology*, 18, 1312–1321.



Figure. The picture is taken during one of the policy awareness workshops on peatlands role in climate change mitigation on a pathway between the floating gardens in Munyonyo.

11. Lubigi (Uganda)

- Elevation: ~1,130–1,200 m
- Vegetation: Papyrus, Typha, grasses
- Wetland type: Large urban wetland (Kampala)
- Current use:
 - Wastewater filtration
 - Agriculture encroachment
 - Flood buffering

Relevant reference: John K. Kayima, Aloyce W. Mayo, Joel Nobert (2018). Ecological Characteristics and Morphological Features of the Lubigi Wetland in Uganda. *Environment and Ecology Research*, 6(4), 218 - 228. DOI: 10.13189/eer.2018.060402.

12. Mpologoma (eastern Uganda floodplain)

- Elevation: ~1,100–1,200 m
- Vegetation: Papyrus, floodplain grasses

- Wetland type: Riverine floodplain wetland
- Current use:
 - Rice cultivation
 - Grazing
 - Seasonal flooding control

Note: The peatland has one of the Eddy covariance towers within the TropeaCC of Exeter University

<https://sites.exeter.ac.uk/tropeacc/sites/mpologoma-wetland/>

Route to the excursion can be followed here: <https://maps.app.goo.gl/Rfgp3VVM1JCUEJz37>

Please note that due to Google Maps limit on 10 points that Lubigi is also in Kampala (after Munyonyo site):