Lake Bunyonyi

Ramsar Convention and Ecotourism
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Lake Bunyonyi Background

- Lake Bunyonyi covers nearly 175 square km of southwestern Uganda near the Rwandan border at an altitude of 1,962 m, home to 29 islands, and surrounded by mountains on all sides.
  - The mean annual rainfall of the Lake Bunyonyi region is 34 inches.
  - Surrounded by areas of densely cultivated hilltops and valleys, including streambanks and lower terrace boundaries, growing the major crops of potato, beans, maize, sorghum, barley, and wheat.

- The true depth of the lake remains unknown, with some areas measured to a depth of 44m, while others are rumored to reach 900m.
  - Believed to be the 2nd deepest lake in Africa.
  - Known as *The Place of Many Little Birds*, Lake Bunyonyi is a popular bird-watching location, supporting over 200 native bird species.

- The central 29 islands are frequented by tourists year round, and the Bakiga and Batwa tribes live in the Bufka village on the lake.
  - The lake is located between Kisoro and Kabale districts, both economically reliant revenue generated from visitors to the region.
Lake Bunyonyi Background cont...

- The Kabale and Rubanda districts within the Lake Bunyonyi catchment are also home to some of Uganda’s last surviving Batwa communities, 90% of whom are landless.
  - The original indigenous people of this region, the Batwa experience some of the highest levels of poverty in Uganda.
    - Discrimination and social exclusion restrict their access to already scarce job opportunities.
- The wetlands of Lake Bunyonyi are a further barrier to inclusion, with 75% of arable land held under ‘customary tenure’.
  - Women, young people, and the Batwa have been excluded from accessing resources and extension support, pushing subsistence agriculture deeper into previously undeveloped areas.
- The stunning environment around one of Africa’s deepest and most beautiful lakes has made life more difficult for locals, as the region struggles to strike a balance between the needs for economic growth and the desire to conserve the natural habitat.
Ramsar Background

- The Convention on Wetlands is an intergovernmental treaty adopted on February 2\textsuperscript{nd}, 1971 in the Iranian city of Ramsar (Ramsar Convention) signed by representatives of 18 nations.
  - The Ramsar Convention was the first modern policy mechanism seeking to conserve natural resources on a global scale.
    - Today, the Ramsar Convention is a fully operational organization with a well-staffed secretariat, the Convention Bureau, based in Gland, Switzerland funded through the subscriptions of the Convention’s Parties.
- The Ramsar Convention (RC) is the oldest international treaty for wetland and water bird conservation.
  - The world’s largest network of protected areas.
    - The RC is a voluntary commitment to promote conservation and sustainable use of water-based ecosystems through international engagement and collaboration.
      1. There are 169 member countries containing more than 2,227 Ramsar Sites totaling more than 215,000,000 hectares globally.
        a. Achieving Ramsar designation for Lake Bunyonyi would have substantial socioeconomic and ecological impacts for both the surrounding communities and the greater region.
The Ramsar Convention has adopted a very inclusive definition for wetlands:

- “...wetlands are areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres.”

Similarly, the definition of ‘wise-use’ is intentionally all-encompassing:

- “...wise use of wetlands is the maintenance of their ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development.”

The concept implies wetland conservation cannot exclude the human element, instead making anthropogenic use a supporting factor in the sustainable management of wetlands.

- Applied to all wetlands and water resources and not just sites designated as Wetlands of International Importance.
  - This application is crucial to ensuring wetlands will continue serving their vital role in supporting biological diversity and socioeconomic security.
A Ramsar designation would provide unique opportunities and challenges for creating sustainable business, educational, and lifestyle alternatives that maximize potential while maintaining compliance within the accord.

The nomination process for inclusion in the List of Wetlands of International Importance can be initiated by any local government, group, community, private organization, or landowner.
  - However, a written agreement is required from all landowners and a government official representing the geographic area.
    - The amount of resources and personnel required necessitates coordination through an organization with the capacity and authority to execute a comprehensive and intensive development process.

The Ministry of Water and Environment (MWE) in Uganda is a cabinet-level department with responsibility for the development, management, and regulation of water and the environment in the country.
  - Its roles include developing legislation, policy, and standards by providing planning, coordination, and management mechanisms for sustainable administration of the country’s natural resources.
The Ramsar Process

- A Ramsar designation is a lengthy process dependent on resource capacity - For a site to receive designation, it must meet at least 1 of 9 criteria.
  - To prove criterion requirements, significant supporting data is collected over extended periods of time.
    - Collection of data often requires 3rd party experts hired by organizational committee.
  - Petitioning for Ramsar designation is a collaborative effort.
    - Stakeholders must be engaged throughout designation plan before the site is assessed.
  - After assessment site must be properly managed by a committee while more data is collected.
    - Included in regular reviews and final petition to Ramsar convention.
The Ramsar Process

- One of the major reasons for conservation effort failures is a lack of, or significantly diminished, participation by local stakeholders.
  - The identification and selection of stakeholders is conducted on an ad hoc basis that neglects key local participants and compromises intended objectives.
    - Especially in multilateral environmental agreement (MEA) negotiations in the international arena like Ramsar.
- The Ramsar Convention recognizes that participatory environmental management is critical to ensure the sustainable use and management of wetlands.
  - Ramsar recognized the need to raise public awareness about wetlands and their functions - Encourages local stewardship and created the communication, capacity building, education, participation, and awareness (CEPA) program in 1999.
- The most recent program (2016–2024) incorporates cultural sensitivity by encouraging participation in wetland management of stakeholder groups with cultural, spiritual, customary, traditional, historical, and socio-economic links to wetlands.
  - Emphasizes implementing parties give high priority to communities dependent on wetlands for their livelihoods, and urges local communities and private sectors to participate in the management of wetlands.
Lake Bunyonyi Needs a Ramsar Designation

- Winston Churchill famously described the forests of Uganda in his book *My African Journey* as the most luxurious he’d ever visited; “… birds are as bright as butterflies; butterflies are as big as birds... the air hums with flying creatures; the earth crawls beneath your foot...”.
  - More than 110 years later, Uganda ranks among the top 10 most biodiverse countries in the world, with 18,783 plant and animal species recorded to date.
    - More than 50% of the planet’s remaining mountain gorillas are found in south-western Uganda in the Albertine Rift, also noted for its astonishing number of endemic species (162 endemic terrestrial vertebrates and plants).

- Unfortunately, Uganda’s invaluable and irreplaceable natural habitats, particularly forests and wetlands, are being lost at an alarming rate. Further, the discovery of oil and gas within the Albertine Graben biodiversity hotspot, and the compounding impacts of climate change, have the potential to permanently destroy Uganda’s critically essential natural environment.
Nearly 15% of Uganda is wetland, accounting for more than $232 million of the country’s annual GDP, providing an extensive array of tangible and intangible benefits to the surrounding communities.

○ Tangible wetland services:
  ▪ Domestic and livestock use, dry season agricultural support, building materials, pharmaceuticals, and most importantly food resources.

○ Intangible services:
  ▪ Flood control, water purification, microclimate moderation, storm protection, and tourism. Societal benefits of flora and fauna habitation, aesthetic and cultural values, and biodiversity exclusive to Uganda.

● Uganda’s wetlands are increasingly threatened by interrelated factors:
  ▪ Population growth, economic reforms, urban encroachment, transport networking, agricultural development, and over-harvesting.

● Over the past 2 decades Uganda has lost almost 570,000 hectares of wetlands, amounting to more than $500,000 annually in lost productivity, and increasing water treatment costs from contamination by $900,000.
  ▪ These factors compound the loss of viable wetlands, contributing towards an uncertain future of rapidly expanding populations dependent upon precipitously decreasing material and immaterial assets.
Secondary Research Findings - Ramsar
Ramsar Research Findings

- Despite a framework spanning decades, comprising millions of hectares around the world, contemporary researchers are only just beginning to unravel the contribution of international conservation tools like Ramsar in halting the biodiversity decline.
  - Morocco’s inclusion into Ramsar, launched in 1980, witnessed an after-designation species richness increase of 84% in Ramsar sites compared to 33% in non-designated sites.
    - Further, water-bird abundance increased more rapidly in Ramsar sites, reaching 108%, than in non-designated wetlands at 27%.
  - Meanwhile, of the 131.4 million water birds counted in the Mediterranean Basin from 1991 to 2012 more than 43% were recorded within Ramsar sites - With species of ‘higher conservation concern’ approximately 5x more abundant in Ramsar sites than in non-Ramsar sites.
    - These results underscore the conservation initiatives, taken after designation, are effective in enhancing habitat conditions for water-birds in Ramsar sites, relative to unprotected sites, and that a Ramsar designation produced quantifiable conservation benefits.
A Ramsar designation is the first step in the process of recognizing the power of tourism in popularizing nature protection for local stakeholders and government officials alike.

- Directs economic development towards tourism
- Diverts local community attention and activities away from degrading actions:
  - Intensive agriculture, overharvesting, and urban encroachment.

The reciprocity of a Ramsar designation and ecotourism services creates positive connections by encouraging administration of protected nature areas through prioritization of the ecotourism industry.

- Facilitates stronger networks between nature values and tourism through educational activities like identification of keystone species, habitats, and ecosystems in local tours.

Fosters the development of an ethical code for tourists through awareness of natural and environmental conservation that is supported and reinforced by the local community.

- Historically high levels of wetland bird poaching and illegal fishing were ameliorated by a Ramsar designation through the subsequent increases in tourism. Higher levels of tourism and research in protected areas reduced the presence of traps and hunting squads by 25-50%.
Protected areas present significant tools toward the fulfillment and maximization of sustainable tourism goals by supporting a country’s natural assets of wetlands through tourism activities.

- Actions that benefit the environment:
  - Waste reduction
  - Support of government and non-government sectors in protection
  - Raising tourists’ awareness on nature protection through marketing activities
    1. Concurrently benefits the ecotourism sector through positive reinforcement

- The link between Ramsar nature conservation and Entusi Resort ecotourism opportunities is educational tours and ecological trails surrounding Lake Bunyonyi.
  - The natural phenomena exclusive and endemic throughout Lake Bunyonyi is not only its most important asset, it is the resource most at risk by activities prohibited in the Ramsar convention.
    - The degradation of the Lake’s natural environment will be followed by an irreversible loss of tourism development in southwest Uganda.
03
Ecotourism
Ecotourism and Ramsar

- Ecotourism at Ramsar sites around the world have shown positive impacts:
  - The Tsomoriri wetlands of Ladakh, India - Households earned $700–1200 during the summer season from increased visitors.
    - Of 11 protected areas in India, wetlands reported the highest average growth rate of nearly 15%, with 80% comprised of domestic visitors.
  - In Argentina, the Ibera Marshes Ramsar site employs 90% of the surrounding population through the nature-based tourism sector - A viable alternative source of livelihood for the resource-poor of the region.
  - In South Korea between 2007-2012 more than 21 million visitors entered 4 Ramsar wetlands, with the inland wetlands of Junam and Upo accounting for 32% of the total.
  - Tourism in Nepal accounts for the second most important source of foreign revenue - Nearly 60% of international tourists visiting protected areas.
    - The Government of Nepal identified ecotourism as a critical industry due to its contribution to environmental conservation, local employment, and community development.
Ecotourism and Ramsar cont...

- Ecotourism stimulates a heightened awareness of natural environments and environmental education through visitor and local exposure to nature and conservation.
  - Ecotourism parallels the tenets of sustainability with an emphasis on development that meets the needs of the current generation without compromising the needs and abilities of future generations (World Commission on Environment and Development).

- When properly developed, ecotourism can be a comparatively sustainable path to economic development while avoiding direct destruction of the natural environment.
  - Unlike other types of conventional tourism, ecotourism does not require an extensive tourism infrastructure traditionally responsible for direct habitat destruction.

- In China, more than 30 wetlands have been designated as Ramsar sites, providing habitats for many types of wildlife, with an emphasis on water birds.
  - These protected areas have become ecotourism and nature-based tourism destinations that draw millions of visitors annually for bird watching and learning about wetland ecosystems.
Ecotourism and Ramsar cont...

- The benefits and resources associated with ecotourism filtering through local businesses is substantially higher compared to mass tourism.
  - Standard ‘all-inclusive’ tour packages typically provide less than 20% of revenue to local companies with airlines, hotels, and tour companies capturing the largest share.
    - Locally owned and operated ecotourism operations have been found to return as much as 95% of intra-country expenses to the local economy.
- Of the 59 certification programs evaluated by researchers, 20 were led by government agencies while a further 18 had government involvement through:
  - Direct financial support
  - Marketing support
  - Verification procedures
  - Surveillance of procedures being followed by the certification body.
    - While many of the programs involved both government agencies and tourism boards, more than 50% relied on government financial support through grants and loans.
Ecotourism Activities in Lake Bunyonyi

The majority of ecotourism activities around Lake Bunyonyi are oriented outdoors.
- Gorilla and Chimpanzee tracking
- Birding
- Boat safaris
- Forest and Nature Walks
- Cultural trails
- Island tours
- Biking and Cycling
An ecotourism attraction like Lake Bunyonyi can be the strongest pull-factor for southwest Uganda, a key destination resource for widespread marketing and timely development.
  ○ Similar landmarks are often defined as flagship and iconic objects that draw large numbers of visitors to the region.

Ecotourism from a Ramsar designation can be a catalyst for sustainable economic and environmental development paralleling one of the largest and fastest growing sectors of the global social economy.
  ○ It can be one of the primary sources of foreign exchange and local job creation, eclipsing any presently degradative practice including agriculture and urban displacement.

Ecotourism has massive macro and micro level economic potential, enabling conservation of landscape resources and fostering international peace and cooperation between neighboring nations.
  ○ The ecotourism sector contributes positive externalities in the form of products and facilities that attract tourists and repeat visits, supporting continuous and sustainable local business and community growth.
Ecotourism increases local business ownership and control over regional resources through enhanced local participation in development.

- It also has outsized benefits for rural areas including:
  - Economic growth, diversification, and stabilization
  - Job creation
  - Expansion of local services
  - Opportunity for integration of regional development strategies
  - Decrease in emigration and depopulation
  - Public services and infrastructure maintenance and improvement
  - Local culture and identity revitalization
  - Community empowerment
  - Natural and built environment protection and improvement
  - Increased local pride
  - Increased awareness of rural primacy
  - Increased development capacity by policy-makers and economic planners
• Unspoiled and protected natural environments are increasing in consumer demand for recreation.
  ○ Ramsar sites are internationally recognized types of tourist attractions that are more heavily promoted and sold as destination attractions by the tourism industry.
• These protected areas have developed into substantial tools in the realization of sustainable tourism goals.
  ○ Countries with a larger percentage of their territories under protection are implicitly recognized as being more developed compared to their neighboring countries.
• The observation of birds dependent on aquatic ecosystems was the most represented tourism segment at Ramsar sites around the world.
  ○ Birdwatchers are interested in the presence of indigenous birds, natural features, habitat attractiveness, the presence of non-avian wildlife and native plants, and escape from urban areas.
Ecotourism and Lake Bunyonyi cont...

- Travel motivations of tourists have been established as a predictive indicator of pro-environmental attitudes.
  - Tourists motivated by novelty-seeking activities demonstrated stronger pro-environmental attitudes compared to others motivated by escaping their urban environment.
  - Self-determined motivation is also a predictor of individual behaviors including:
    i. Learning attitudes
    ii. Commitment to activities
    iii. Ecological responsibility.

- With increased popularity in traditional nature-based tourism, visitor impacts on ecologically sensitive destinations hold the potential for irreversible damage to wildlife habitats.
  - Visitors participate in nature-based recreational activities for the purpose of visiting destinations with high ecological value, negative impacts to the environment can be averted if the attitudes and behaviors of visitors are appropriately framed through an ecotourism lens.
Ecotourism and Entusi Resort

- The largest obstacle for tourists pursuing a sustainable travel experience is distinguishing between hotels and tours that are, or are not, sustainable.
  - Ecotourism tools including indicators, certification programs, and accreditation systems have been developed to address the information asymmetry.

- Ecotourism certification is a voluntary process that uses audits to guarantee that a facility, product, process, or service meets specific standards using a marketable logo.
  - Evaluative standards include socioeconomic, cultural, and environmental criteria typically audited annually by a 3rd party entity to provide a quality product to tourists and prevent greenwashing.

- Benefits of certification include:
  - Improved efficiency and reduced operating costs through installation of new technologies and adapting operational practices.
  - Increased and credible independent recognition of commitment to sustainable tourism.
  - Identification of internal management processes to evaluate a hotel’s environmental, social, and economic impact.

  - There are also increased sales by engaging environmentally conscious customers, acquiring no-cost or subsidized participation in trade shows or tax benefits, and gaining tools and booking platforms to help travelers find and book trips.
Accommodation supply has been targeted as an environmental sustainability performance issue needing improvement.

- Accommodation is the 2nd largest source of tourism greenhouse gas emissions after travel.
  - The attitude of the proprietor towards environmental sustainability is an important factor in the adoption of appropriate practices, in addition to the personal beliefs of employees.

The scale of an establishment is also important:

- Studies identified lack of engagement with environmental management in smaller enterprises - predominately the tourism industry.
  - Specifically, a lack of knowledge and awareness, resources, capacity, and willingness of smaller establishments to voluntarily address environmental performance.

It remains one of the most addressable issues in ecotourism because its financial bottom-line benefits are indisputable:

- On average certified members save 20%–25% of their operational costs in the first year through improved efficiency in the program (Dunk, 2015).
There are currently 9 African certification programs and 9 international certification programs in operation.

- The African schemes include:
  - Government-initiated programs - Seychelles Sustainable Tourism Label and Botswana Ecotourism Certification System
  - For-profit programs - Heritage Environmental Management Company
  - NGO/NP organizations - Fair Trade Tourism, EcoAwards Namibia, Responsible Tourism Tanzania, and Ecotourism Kenya.

- The Global Sustainable Tourism Council (GSTC) has recognized and approved some of the certification standards used in Africa paralleling the GSTC’s criteria.
  - Collectively, they have certified more than 715 accommodation facilities in 19 African countries against their environmental, social, and economic criteria (Spenceley, 2019).
Interview with Achilles Byaruhanga

- Mr. Byaruhanga has worked with NatureUganda for over 25 years.
  - Executive director position since 2001.
  - Also a member of BirdLife International NGO.
- NatureUganda is a branch of the East Africa Natural History Society.
  - Oldest conservation group in East Africa
    - Principal organization spearheading efforts for Lake Bunyonyi Ramsar designation.
- Also working on an initiative to protect the Grey Crowned Crane, an endangered species of Crane that lives in Lake Bunyonyi
Current Status of Ramsar

- Mr. Byaruhanga - NatureUganda has “...finalised the inventory process for all biodiversity elements, water quality analysis, and peat stock and upland soils assessments…”

- Assessment Findings:
  - Poor diversity of water macroinvertebrates - indicative of poor water quality
  - Endemic and endangered fauna including swamp antelope and the Zenopus frog in surrounding wetlands. Also the Papyrus Yellow Warbler and the Grey Crowned Crane.
  - Endemic flora in wetlands and adjacent properties.
  - Peat depth up to 1000 cm deep: one of the densest in the world (peat protects from climate change).
    - Peat exposed due to drainage decreases wetland protection and increases excess carbon emission.

- Assessments were funded by the Secure Wetland Ecosystems Initiative - developed to improve livelihoods through Community Conservation Agreements.
  - Currently finishing final reports.
    - Next step requires a Stakeholders meeting.
Follow Up

- NatureUganda has initiated the preliminary steps toward inducting Lake Bunyonyi into the Wetlands of International Importance.
  - Including the fieldwork and research into establishing which of the 9 criteria the Lake fulfills for consideration.
- Mr. Byaruhanga expressed interest in working with GLI and agreed to communicate on their progress pursuing a Ramsar designation.
  - We were unable to collaborate with Mr. Byaruhanga for the purposes of our research, but will advance future communication through GLI’s efforts in assisting the NGO to gain Lake Bunynoyi’s inclusion into Ramsar.
- There are multiple ways GLI can facilitate and expedite the process:
  - GLI can facilitate NatureUganda’s campaign through stakeholder engagement, community outreach, facility coordination, professional and 3rd party networking, and research through future cohorts.
Next Steps for GLI...

- “Listen” when it comes to the designation...
  - This project is in the hands of a capable and organized group.
    - The first priority should be to meet with a representative of NatureUganda and ask what we can do to take part and support this project.

- “Think” designation is not the end...
  - Conservation is continuous - As local stakeholders, GLI can take steps to preserve Lake Bunyonyi independently or under the recommendations of environmentalists/ NatureUganda regardless of the acquisition of the designation.
    - Take responsibility: Ensure the ecotourism GLI is involved in is sustainable.

- “Act” on ecotourism...
  - Entusi Resort Survey
Entusi Resort Ecotourism Certification

- We developed a 50-point audit and assessment survey for the staff of Entusi:
  - To aid in differentiating and selecting from the array of ecotourism certifications available.
  - At a general level, we have several recommendations based on our research and the intersectionality of Lake Bunyonyi’s Ramsar designation and Entusi’s ecotourism certification.
    1. The need to identify, inventory, and map ecotourism attractions both onsite, at Entusi’s campus, and offsite within the wildlife conservation protected areas of Lake Bunyonyi.
    2. Better and more meaningful community involvement for both Ramsar stakeholders and ecotourism partnerships.
    3. Greater economic analyses including product pricing studies, activity practicalities, and enhanced local business collaboration.
    4. The recognition and marketable emphasis of ecotourism as a distinct segment of ‘nature-based’ (traditional) tourism
- Requiring pragmatic policy, strategy, guidelines, standards, and certification procedures.
The Entusi Resort Ecotourism Framework:

- **Facilities - Accommodations as part of, and facilitator for, the visitor’s experiences of Lake Bunyonyi**
  - Accommodation as an extension of the conservation ethos.

- **Service - Total experience of the guests**
  - Anticipating, understanding, guiding, and facilitating visitor’s activities throughout their stay.

- **Amenities – Total environmental immersion within reach and available to guests**
  - Balancing education, appreciation, satisfaction, and aesthetic of a locally unique, authentic, and personalized visitor experience.

- **Marketing – Targeting the specialty market niches of nature, adventure, culture, and education**
  - Wilderness ethic, environmental stewardship, ecological and cultural enlightenment by highlighting the benefits and responsibilities of their stay (eco-ethnic).

- **Programming - On-site experiences the highlight and provide enduring off-site benefits**
  - Interaction and education pre-, peri-, and post-vacation through interlinked activities and experiences.

- **Metrics of Success – Number of repeat visits, increased word of mouth and social media presence**
  - Measurable visitor awareness and contact, increased quality of life for community and staff, increased cultural renewal and pride, diffused visitation season, quantifiable economic impacts for resort, diversified business model, and true resource conservation.
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