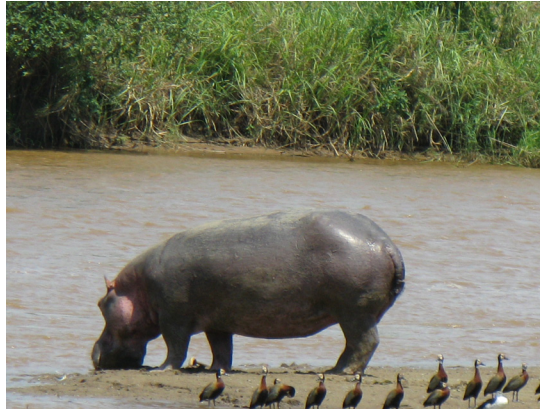


Conserving Biodiversity, Protecting Livelihoods on Inland Waters of Eastern Africa: **Rusizi Floodplain and Delta**

- Biodiversity in Eastern Africa inland water ecosystems has clear economic value, as it provides essential goods and services such as food, shelter, fuel, potable water, flood amelioration, all-round water flows and water filtration. The ecosystems concerned are populated by many types of animals and plants which maintain the ecosystem functions
- Rural and urban development objectives rarely integrate biodiversity considerations within their various planning processes for housing, industry, commerce, farming, etc.
- Without the integration of biodiversity considerations, ecosystem functions and resources are degraded or lost and so their contributions to economies and livelihoods dependent upon them
- Biodiversity information should be integrated within the development of environmental planning in all its forms to ensure that ecosystems are not degraded and can continue to offer support to people and their aspirations
- The status and trends of species in inland water ecosystems can be assessed and analysed to identify important areas of biodiversity that are compatible with national development so that they can be included in land-use planning

The floodplain of the Rusizi river stretches for 35km in the last reaches of the river until it ends at the Rusizi delta where the river spills into Lake Tanganyika. This fertile floodplain (in both Burundi and DRC) hosts many native plants which enhance its value as an important working ecosystem as well as a refuge and living area for many animals - from mites and insects to large mammals. The Rusizi delta is even more fertile due to the silt that is brought by annual floods and so has even greater assortment of species



diversity of many types of river-dwelling fish, reptiles, birds and hippos while the drier parts of the delta host abundant vegetation and another set of small and large animals. Together, the floodplain and delta hosts at least 193 plant species representing 55 families. The vegetation can broadly be divided into arborescent savanna forest, herbaceous savanna, riparian trees, shrubs and herbs and aquatic vegetation. Resident large mammals include: Bushbuck, Sitatunga, Hippopotamus, Civets and several cats. The Rusizi system supports an impressive resident terrestrial and aquatic bird fauna and in addition is visited seasonally by more than 90 migratory species transiting to/from Europe. More than 90 species of fish, the majority of them endemic, Crocodiles, monitor lizards and more than 12 species of snakes are also present.

What is the problem?

The attempt to meet national development objectives may impact negatively on freshwater biodiversity. Reviews have shown that loss and degradation of habitat, sedimentation due to deforestation, eutrophication, inappropriate introduction of invasive alien species, water withdrawal, overexploitation and pollution are the leading causes of fresh water species decline. These threats stem from the ever increasing demand for goods and services by the human population and for land to be converted to farming, livestock keeping, aquaculture, forestry and urban development. Furthermore, owing to civil insecurity in the region, refugees have put an enormous pressure on natural resources of the Rusizi protected area such that it was downgraded from a national park to a nature reserve (which allows some human activities within its boundaries). This has led to increasing demands for biological resources due to increasing population and economic development. If sustainable use of the resources is not encouraged and biodiversity conservation prioritized, the livelihoods of the target beneficiaries may be lost, biodiversity loss has serious economic and social costs.



What has been done?



The European Commission funded a project that was implemented by the International Union for Conservation of Nature (IUCN). This involved gathering species information and subjecting them to the IUCN Red Listing process to determine their threatened status. This has assisted in priority setting exercises for species conservation. The data has also demonstrated the great importance of the Rusizi River, its floodplain and delta as valuable and vulnerable ecosystems important for biodiversity conservation and human welfare. IUCN also assisted Burundi in developing a management plan for the Rusizi Delta Ramsar site (a wetland of international importance) and a national capacity for wetland management planning in order to conserve and promote sustainable use of freshwater biodiversity. At the same time, awareness on wetland issues amongst local people and within the government of Burundi was raised and similar recommendations made to the government of DRC concerning the remainder of the delta and the floodplain within that country..

What needs to be done? Possible policy issues



THE IUCN RED LIST
OF THREATENED SPECIES™

- The species listed as Critically Endangered, Endangered or Vulnerable in the IUCN Red List of Threatened Species need to be high on the conservation priority list if the risk of extinction is to be addressed
- The management plan that was drawn up for Rusizi Delta should be updated funded and implemented
- Land use planning i.e. the planning for new farming and livestock areas and new housing plots should consider the values of biodiversity and avoid conservation areas and areas of important wetlands and aquatic biodiversity
- Freshwater biodiversity data is no longer hard to find and this should be expanded and integrated within the development process (especially land-use planning) at selected sites and later at national level
- Management of the existing reserves and protection of the DRC side of the floodplain and delta should be revived - with extra funding and outside assistance if necessary



As stated in 'Global Biodiversity Assessment', published by the UNEP, "unless action is taken to protect biodiversity, we will lose forever the opportunity and the most precious assets of natural resources, available to the mankind." It is possible to plan to meet people's needs from biological resources while ensuring the long-term sustainability of Earth's biological capital – and at the same time not hold back development. This is integrated development planning with the values of biodiversity in mind.

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