



Nile Eco-VWU

Nile Ecosystems Valuation for Wise-Use Research Project



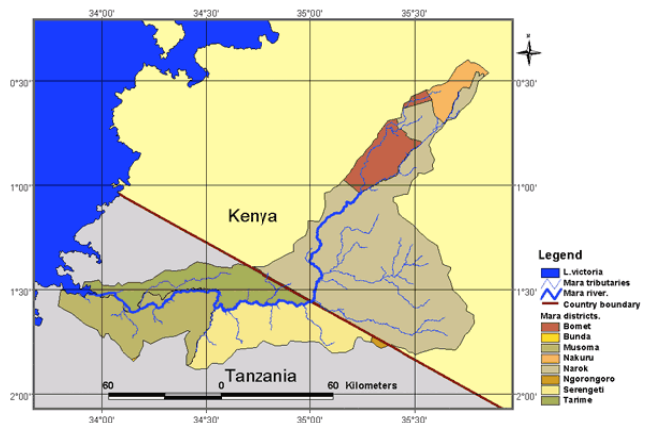
Case Study Brief

Mara Wetland. Kenya-Tanzania

BACKGROUND

The Masurua (or Mara) wetland is a floodplain wetland at the Mara Basin before discharging its waters into the Lake Victoria. The wetlands are fed by inflows of Mara River and Lake Victoria water. Accordingly, the wetlands expand to a maximum area during the long rains due to high inflows while extending to about 45 km off the lake shores and shrink to the minimum area during the dry season. It is said that the wetland has been expanding probably due hydro-geomorphic changes associated with sediment loads.

The Mara wetland covers a total area of approximately 204.46km² with a length of 36.8km and a maximum width of 12.9km. The wetland is located at longitudes of 34°00'E and 34°25'E, and between latitudes of 1°08'S and 1°39'S. Administratively, the wetland lies between Tarime and Musoma rural districts of Mara region in Tanzania.



CURRENT ECOSYSTEM SERVICES

Ecosystems services are benefits people derive from ecosystems. Natural wetlands sustain the livelihoods of many people both directly and indirectly by supplying provisioning, regulatory, supporting, and cultural services. In Mara wetlands, majority of the local communities depend directly on the ES obtained from the wetlands for livelihood support. The ES include provision of freshwater, food, fiber, genetic materials, recreational activities, tourism, and education among others. Apart from provisioning and cultural ES, the Mara wetlands are recipients of accumulated effects of all the upstream activities such as agriculture, gold mining and soil erosion among others. Thus, its capability to retain nutrients, heavy metals and sediments before water is discharged into Lake Victoria is highly valuable in enhancing water quality of the lake. However, quantitative information on such ecosystem services in the Mara wetlands is scanty and just like other wetlands in Lake Victoria Basin, there is a general decline in ES. The decline is due to population pressure,

lack of or weak implementation framework for ecosystem management plans. Quantification of ES derived from the Mara wetlands is important in making decisions towards sustainable utilization of the wetland.

CHALLENGES

Mara wetland is facing different problem and stress on its resources, and these resulted in the following challenges: Ecosystem degradation and declining ecosystem services (ES) due to: (i) Encroachment to the floodplain wetland, (ii) Expansion of wetlands into agricultural lands (iii) Soil erosion due to livestock keeping and encroachment of forest has been reported to be major soil erosion source. Soil erosion is also very common on steep slopes where there is vegetation clearing, intensive cultivation, and poor land management practices (iv) Land use changes due to conversion (v) Pollution- Point and diffuse (vi) water resources allocation i.e irrigation vs environmental flow requirements.

GENDER AND EQUITY

Wetland provisioning ES derived from the Mara wetland are accessible and utilized by all gender groups since there are no regulations restricting any gender group; whether women or men from the services. However, there is distinct division of labour in the acquisition of wetland based resources whereby women are engaged in water abstraction while men fishing activities. Most women only fish during rainy season when fish is abundant while men in both seasons; dry and rainy, probably due to the difference in fishing gears used. Men use fishing nets and canoes while women use fishing baskets. **It is**



found that only men who participated on decision making regarding community issues, BUT on the mean time women are more dependent on the wetland ES than men based on their daily activities, such as water abstraction for domestic use, firewood collection and papyrus mat making for both domestic and commercial purposes.

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