Climate and Vegetation Dynamics in the Great Lakes Region of Western Uganda during the last two Millennia

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Abstract

A sediment core (7.5m long) obtained from the marginal sites of Lake Rwankenzi within an archaeological site in the vicinity provides evidence of vegetation dynamics in the crater Lake region of western Uganda during the last two millennia. The last ca. 4,000 - 3000 years BP is characterized by a phase of forest vegetation cover, with abundant Palmae taxa which characterize swamp forests, suggesting a period of wet and moist environmental conditions in the region. Diatom records also support a period of moist conditions with evidence of anthropogenic activities reflected by presence of high charcoal records. This phase was followed by a period of variable forest habitat ca. 3,000 - 1500 years BP with significant decline in diatom records possibly reflecting a reduction in moist environment conditions. The last ca. 1,000 years BP is characterized by episodes of increased grassland habitat and significant reduction in swamp forest indicating evidence of increased anthropogenic activities in the region. Generally, the last ca. 1000 years characterize variable anthropogenic activities reported in archaeological records that marked a significant impact on forest resources at Ntusi/Bigo starting around the 900 AD and ran until approximately 1600 AD at Munsa site. These phases occurred during episodes of enhanced precipitation from cal. 800 to 900 AD and from cal. 1100 to 1200 AD with periods of prolonged drought and famine in the later part of 1500s to 1600s AD and in the early part of 1800s AD and 1920s as register in River Nile water level records and also recounted in the oral rich traditions of western Uganda.