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## Indigenous knowledge on river health management: The case of river Mayanja, East Africa

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### Abstract

The increasing human population in the sub Saharan Africa has put enormous pressure on the tropical rivers catchments, threatening their functioning and ecological integrity. Despite the vast recognition of integrated water resources management approaches, there are still limitations in their adoption in the local settings due to over reliance on western backgrounds. Yet amidst the deteriorating of tropical river systems, the local communities can provide diverse information that preserved the rivers years back. Such indigenous knowledge should be associated with western science to promote local community involvement in river health management. A qualitative survey on river health status and governance approaches of River Mayanja catchment was done using oral history and local community engagements. From both data sources, there was a clear distinction between the degraded and non-degraded Mayanja river system based on the water physical and biodiversity characteristics. For elders, such knowledge was generated from their livelihoods, climatic and natural disaster experiences. Development needs, western ideologies and lack of understanding of the local knowledge might have influenced the younger generations' knowledge of river system and its governance dynamics. These characteristics agreed with the scientific phenomenon of rivers' dynamics despite the differences in their ontological backgrounds. The spiritual origin of River Mayanja myth contributed tremendously to many rituals and taboos that preserved the river health then. However, the outside interests and loss culture among the youth have led to disbelief of local knowledge and promoted science-based policies which were not fully implemented. These findings exhibit a fundamental connection of R. Mayanja communities and their river which can be tapped to promote acceptance of western knowledge for community river health management strategies with participatory approaches and deeper understanding of the worst-case scenarios to river resource exploitation.

**Keywords:** East Africa, indigenous knowledge, river health management