Water resource management and biodiversity conservation in the Eastern Rift Valley Lakes, Northern Tanzania

Authors

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Abstract

The Eastern Rift Valley Lakes of East Africa and their watersheds have gone through significant anthropogenic changes over years. Several land use pressures and overexploitations of natural resources have eroded the biological and physical systems that support those resources. The principal objective of this study was to undertake a comprehensive water resource management problem analysis in the Eastern Rift Valley Lakes so as to highlight the current state of knowledge on key environmental and biodiversity problems, institutional capacities and needs to conserve biodiversity and water resources in the respective lakes. Two stages were be involved in data collection. The first stage involved literature search in libraries and documentation centres held in various institutions. Second stage involved the main fieldwork, which aimed at collecting secondary information from regional and districts offices situated within the basins in question. Findings from this study show that trends in the growth of human population, expansion of cropland and increase in livestock population in the Eastern Rift Valley Lakes zone indicate rapid increase over the next few decades. The pressure of this rapidly increasing population on the available resources will be too great to sustain desirable livelihood in the area. Even at the current rate of population increase, water resource utilisation in and around most Rift Valley Lakes is not sustainable. The intensification of agriculture through the application of fertilisers and pesticides will lead to the soil and water pollution, as is already happening in Mang'ola and Mto wa Mbu where irrigated farming is practised. Although a number of studies have been conducted in the Eastern Rift Valley Lakes and Wetlands in the Northern Tanzania, there are still a lot of issues which have not studied adequately.

Keywords

Rift Valley Lakes; Water management; Biodiversity conservation; Population pressure