Abstract

This paper shows that sustainability of Lake Naivasha is threatened by the land use transformation in the watershed. Lake Naivasha is the only freshwater lake in the Kenyan Rift Valley. The basin extends 60 North from the equator and lies between 36007’ and 36047’ east of Greenwich Meridian. It is a shallow lake located at an altitude of about 1885m above sea level. Its watershed measures approximately 3400km2. The population in the area surrounding the lake has rapidly grown from 43,867 in 1969 to the current figure of about 250,000. The lake is located in a semi-arid environment and it is drained by only two perennial rivers - Malewa and Gilgil. Lake Naivasha area plays a very important role in national development. The area contributes to about 70% of Kenyan flower export, 15% of Kenyan electric power and is home to attractive tourist sites. Since independence in 1963 the area has witnessed rapid land use transformation from commercial ranching to a mixture of commercial ranching and rapidly growing smallholder (rural and urban) settlements. As a result the area has witnessed a high increase in demand for the hitherto scarce environmental resources and services (for example water, sanitation and forestry) leading to unsustainable utilisation of the lake. Although water is abstracted from both, the lake and underground sources, there is no metering. Sustainable management initiatives of the lake should focus on: institutional framework and human resources; monitoring of the abstraction of water resources; waste management, physical infrastructure; soil and forestry conservation and farming technologies.