

## **Abstract**

This paper examines problems of water quality degradation with a special focus on the different land uses in the sub-basins of the Nairobi River, namely the Kamiti, Ngong and Kasarani Rivers. A study was carried out within these sub-basins for 8 months between October 1990 and May 1991 which covered the distinctive dry and rainy seasons of the country. In general, the deterioration of water quality in the study rivers was related to riparian land use. The response of ionic concentration to changing flow was also similar between the rivers, but was more pronounced for the Ngong River at Embakasi and for the main Nairobi River at Dandora slums than for the Kamiti and Kasarani Rivers, which reflected different riparian land-use activities. The deterioration in water quality within the study area suggests harmful effects to human health, especially as it relates to domestic uses of water. An evaluation of the water quality status for different land uses within the study area is recommended, especially for surface and groundwater resources. Effects on the human health aspects should also be considered. Proper land-water conservation policies should be incorporated within the management of water resources, which must include issues of water quality and pollutant sources not only in the study basin but also in the country as a whole.