



## **Assessment of Potentials and Constraints to the Implementation of Integrated Water Resources Management (IWRM) in East Africa**

**Kimwaga, R. J.** and Mashauri, D. A

University of Dar es Salaam, Department of Water Resources Engineering, P. O .Box 35131,  
Dar es Salaam, Tanzania

Most countries in East Africa, the annual renewable water resource represents only a relatively small fraction of the total rainfall because a high proportion of rainfall is evaporated. In this region therefore, without careful management of water resources, the scarcity of water may increase in the future. Integrated Water Resources Management (IWRM) which is a holistic approach to water management that links land and water development within a catchment and links social and economic development with protection of natural ecosystems, appears to be the appropriate management approach to the water resources in East Africa. Though countries in this region have partly started the implementation of IWRM principles, a lot still needs to be investigated. This study was therefore conducted to assess the potentials and constraints of IWRM in East Africa. The methodology that was used in this study was literature review, person communications, reports, different fora (conferences, workshops and seminars). The information gathered were later on synthesized. The study has revealed that the potentials to the IWRM includes the reduced vulnerability to climatic variability, improved productivity, and reduced disputes over water supplies and a more rational and transparent approach to decision-making. However, there remain many constraints to the application of IWRM including lack of quantitative information pertaining to water use, lack of human resources capacity, there is **no universally accepted** method for applying the principles and there are a large number of impediments to practical application and a wide range of institutional and other socio-economic barriers. Furthermore an evaluation of changes required to introduce IWRM is also presented.