

## EFFECTS OF ANTHROPOGENIC ACTIVITIES ON AVAILABILITY OF CLEAN AND SAFE WATER: A CASE OF ULUGURU FOREST CATCHMENT AREAS MOROGORO, TANZANIA

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### ABSTRACT

Forests offer a range of options for water provision, depending on their type, age, species of the trees, and amount of watershed under forest, soil, climate, location and prevailing human agricultural activities in Sub Saharan Africa (SSA). For example, the Uluguru forest catchment areas in Tanzania is the major source of river flows supplying water to major urban centers of Morogoro, Pwani and Dar es Salaam regions. The forest provides fuels, maintenance of humid climate suitable for agriculture, secure stable and good water supply and the main source of water for the urban and industrial uses in Tanzania's most populous city Dar es Salaam through the Ruvu River. The Catchment forest reserves are part of the life of the people living in the Uluguru slopes. The need to optimize the availability of clean and safe water use while minimizing environmental risks in Uluguru forest water catchment areas and sub-Saharan Africa (SSA) at large is behind schedule. The challenges related to managing Uluguru forest water catchment areas in Tanzania can be associated with a lack of awareness and unestimated values of the catchment function of the forest into monetary terms. However, as most of the economic activities depend on water from this forest, the value must be billions of dollars over the years. This jeopardized the loss of the forest cover, woodlands and other trees from the mountain. As results, the apparently clean and safe water is not protected and the springs are subject to sources of pollution and contamination. Water intakes are similarly contaminated due to farming and logging activities. Limited research has been conducted to improve availability of clean and safe water along the Uluguru forest catchment areas but the adoption remains low, mainly because farming is generally practiced by resource-poor smallholder farmers. This research gap must be addressed through putting supportive environmental policies operationalised, innovation platforms involving key stakeholders to realize the function of forest water catchment areas and address efficient use of existence of natural resources into the sustainable manner. Therefore, this review paper aims to discuss an overview of forest worldwide, access to clean and quality water, water catchment conservation in relation to clean and quality of water, anthropogenic activities that lead to the degradation of water catchment areas and impacts of water catchment degradation. This will help to suggest appropriate management strategies for restoration of Uluguru forest catchment areas.

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