

## **River Catchment's Demography and the Dynamics of Access to Clean Water in the Rural South Africa**

**Authors :** Yiseyon Sunday Hosu, Motebang Dominic Vincent Nakin, Elphina N. Cishe

**Abstract :** Universal access to clean and safe drinking water and basic sanitation is one of the targets of the 6th Sustainable Development Goals (SDGs). This paper explores the evidence-based indicators of Water Rights Acts (2013) among households in the rural communities in the Mthatha River catchment of OR Tambo District Municipality of South Africa. Daily access to minimum 25 litres/person and the factors influencing clean water access were investigated in the catchment. A total number of 420 households were surveyed in the upper, peri-urban, lower and coastal regions of Mthatha Rivier catchment. Descriptive and logistic regression analyses were conducted on the data collected from the households to elicit vital information on domestic water security among rural community dwellers. The results show that approximately 68 percent of total households surveyed have access to the required minimum 25 litre/person/day, with 66.3 percent in upper region, 76 per cent in the peri-urban, 1.1 percent in the lower and 2.3 percent in the coastal regions. Only 30 percent among the total surveyed households had access to piped water either in the house or public taps. The logistic regression showed that access to clean water was influenced by lack of water infrastructure, proximity to urban regions, daily flow of pipe-borne water, household size and distance to public taps. This paper recommends that viable integrated rural community-based water infrastructure provision strategies between NGOs and local authority and the promotion of point of use (POU) technologies to enhance better access to clean water.

**Keywords :** domestic water, household technology, water security, rural community

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