

## **Assessment of Suitability of Adaptation Strategies to Water Scarcity in Makindu Sub-County, Kenya.**

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### **ABSTRACT**

Water is a fundamental resource in achieving sustainable development in third world nations more so in Sub Saharan Africa where Kenya falls. The reason being, water scarcity has greatly affected these countries besides increasing rates of population and poverty. Water scarcity has led to encroachment of people near water resources negatively impacting them therefore; need to examine the adaptation strategies to water scarcity. A total of 370 households were selected using simple random sampling. Questionnaires, interview schedules, personal observation, photography were the methods used in obtaining data. This study assessed the suitability of adaptation strategies to water scarcity in Makindu Sub-County of Makueni County. The study established that rainwater harvesting and sinking boreholes were the most suitable adaptation strategies to address water scarcity with 25.87 percent and 25.95 percent on average of assessment. The study concluded that rural households should harness surface water, Sub-surface water and underground water to address the challenge of water scarcity. The study recommended that policy makers and all stakeholders should put up measures that strengthen the existing adaptation strategies and cushion the inhabitants against water scarcity by sensitization and educating inhabitants on use of local and innovative water conservation technologies for sustainable development.

**Keywords:** Assessment, Water Scarcity, Suitability, Adaptation Strategies, Sustainable Development, Poverty.