

**ASSESSMENT OF FACTORS INFLUENCING THE ADOPTION OF DOMESTIC**

**RAINWATER HARVESTING: A CASE STUDY OF PERI-URBAN AREA IN**

**KAMPALA, UGANDA**

**BY**

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## **Abstract**

Rainwater is a natural resource that has been greatly underutilized in Kampala city. UN-Habitat, the United Nations Programme for Human Settlement, has recognized the need to promote fresh water augmentation, through increased application of rainwater harvesting techniques, as an important alternative source for domestic water supply. The adoption of such effective techniques is still limited in Uganda due lack of an organized adoption approach (Jonathan 2012). This study aimed at contributing to the understanding of current techniques used and factors influencing the adoption of effective domestic rainwater harvesting (DRWH) in the peri-urban areas of Kampala. The study applied both qualitative and quantitative approaches. Data was collected through focus group discussions, interviews, document reviews, and a household survey. Data collected was processed and analyzed in Statistical Package for the Social Science ver. 16. The findings showed that rooftop rainwater harvesting (70%). Open space harvest (21%) and surface run-off harvest (9%) were the main DRWH techniques adopted within the study area. However, these techniques were not uniformly adopted in the area due to the factors such as limited knowledge and maintenance/set up cost. The main factors influencing DRWH adoption were, household size ( $P < 0.0001$ ), cheaper/free harvested rainwater and limited storage facilities ( $P < 0.0001$ ). The

influence of some factors, however, deferred from one area to another. This partly explains why the same DRWH project implemented in different locations yields different results. To ensure sustainable and high adoption of DRWH, household size, cost and storage capacity, which are the most influential factors of DRWH adoption, need to be considered by agencies involved in planning for rational water use and supply.