

## Household Water Practices in a Rapidly Urbanizing City and Its Implications for the Future of Potable Water: A Case Study of Abuja Nigeria

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**Abstract :** Access to sufficiently good quality freshwater has been a global challenge, but more notably in low-income countries, particularly in the Sub-Saharan countries, which Nigeria is one. Urban population is soaring, especially in many low-income countries, the existing centralised water supply infrastructures are ageing and inadequate, moreover in households peoples' lifestyles have become more water-demanding. So, people mostly device coping strategies where municipal supply is perceived to have failed. This development threatens the futures of groundwater and calls for a review of management strategy and research approach. The various issues associated with water demand management in low-income countries and Nigeria, in particular, are well documented in the literature. However, the way people use water daily in households and the reasons they do so, and how the situation is constructing demand among the middle-class population in Abuja Nigeria is poorly understood. This is what this research aims to unpack. This is achieved by using the social practices research approach (which is based on the Theory of Practices) to understand how this situation impacts on the shared groundwater resource. A qualitative method was used for data gathering. This involved audio-recorded interviews of householders and water professionals in the private and public sectors. It also involved observation, note-taking, and document study. The data were analysed thematically using NVIVO software. The research reveals the major household practices that draw on the water on a domestic scale, and they include water sourcing, body hygiene and sanitation, laundry, kitchen, and outdoor practices (car washing, domestic livestock farming, and gardening). Among all the practices, water sourcing, body hygiene, kitchen, and laundry practices, are identified to impact most on groundwater, with impact scale varying with household peculiarities. Water sourcing practices involve people sourcing mostly from personal boreholes because the municipal water supply is perceived inadequate and unreliable in terms of service delivery and water quality, and people prefer easier and unlimited access and control using boreholes. Body hygiene practices reveal that every respondent prefers bucket bathing at least once daily, and the majority bathe twice or more every day. Frequency is determined by the feeling of hotness and dirt on the skin. Thus, people bathe to cool down, stay clean, and satisfy perceived social, religious, and hygiene demand. Kitchen practice consumes water significantly as people run the tap for vegetable washing in daily food preparation and dishwashing after each meal. Laundry practice reveals that most people wash clothes most frequently (twice in a week) during hot and dusty weather, and washing with hands in basins and buckets is the most prevalent and water wasting due to soap overdose. The research also reveals poor water governance as a major cause of current inadequate municipal water delivery. The implication poor governance and widespread use of boreholes is an uncontrolled abstraction of groundwater to satisfy desired household practices, thereby putting the future of the shared aquifer at great risk of total depletion with attendant multiplying effects on the people and the environment and population continues to soar.

**Keywords :** boreholes, groundwater, household water practices, self-supply

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