

Kainth, Devneet; Drexel University College of Medicine

Financial Barriers To Uptake of Water, Sanitation, and Hygiene (WASH) Services In the Karatu District of Tanzania

Inadequate water, sanitation, and hygiene (WASH) infrastructure remains a leading cause of illness and death worldwide, responsible for 1.4 million deaths in 2019 [1]. This is a critical issue in Tanzania, where more than half the population lacks access to sanitation services. Each year, 31,000 Tanzanians die from preventable WASH-related diseases, costing \$2.4 billion USD in healthcare and productivity expenses. Provision of WASH services, such as latrines, at the household level could have a transformative impact on Tanzania's development, while saving \$1.9 billion USD each year [2]. To achieve this change, there is a need to explore barriers to WASH services in underserved communities.

Through a partnership between the Dornsife Global Development Scholars Program and World Vision, a study was conducted on the financial barriers to uptake of WASH services in the Karatu District of northern Tanzania [3]. This assessment explored the relationship between household income and the installation of improved latrines (e.g., ventilated pit latrines vs. flush toilets). A total of 561 surveys were collected at the individual household level. Most households (N=531) reported having latrines, of which 10% (N=30) reported having improved latrines. Average yearly income was positively associated with having a latrine and self-reported affordability of installing a latrine ($R(516) = 0.46, p<0.001$). Income differed by 150,000 Tanzanian Shillings (\$60 USD) in households with a latrine versus those without ($F(9, 535) = 4.40, p<0.05$). In households without a latrine, all respondents reported knowledge that latrines reduce disease, yet the most significant barrier to construction was cost.

These findings highlight the need for WASH programs to mitigate financial barriers through strategies such as income generation, cost reduction, and/or co-investment. Ultimately, a focus on financial empowerment will help communities secure healthier and brighter futures.

1. [Water, sanitation and hygiene: burden of disease \(who.int\)](https://www.who.int/teams/water-sanitation-and-hygieneburden-of-disease)
2. [World Bank Document](#)
3. <https://drexel.edu/dornsife/global/global-health-training/dornsife-scholars/>

