

## 63. Social-Cultural factors influencing management of shared sanitation, in Nakuru Town West Slums, Nakuru County, Kenya

Kipngeno Aaron,<sup>1,\*</sup> Patrick Kubai<sup>2</sup> and Josephine Mutembei<sup>3</sup>

<sup>1</sup>Meru University of Science and Technology, School of Engineering and Architecture;

<sup>2</sup>Meru University of Science and Technology, School of Health Sciences

<sup>3</sup>Meru University of Science and Technology, School Pure and Applied Mathematics

\*Corresponding author email: aronkemboi01@gmail.com

**Subtheme:** Engineering - Sustainable Infrastructure Solutions for climate resilience; Sustainable Sanitation Systems for climate-responsive urban environments.

### Abstract

Sustainable Development Goal (SDG) target 6.2 calls for 'adequate and equitable sanitation for all.' However, rapid urbanization in developing countries has led to the growth of slums, where access to private toilets is impractical. Evident studies showed that shared toilets are more often poorly managed, thus consequential adverse harmful health risks such as diarrheal diseases, environmental pollution, and economic deprivations. The study investigated social-cultural factors influencing the management of shared sanitation in Nakuru Town's west slums, Nakuru County, Kenya. The study adopted a descriptive survey research design, involving 288 households' heads selected by cluster proportionate random sampling technique. Quantitative data was collected using structured questionnaire and interview guides for qualitative data. The reliability of the questionnaire for this study was performed with the index of internal consistency was calculated with Spearman Brown Coefficient of which gave a considerable value of 0.872. All data obtained were entered into and analyzed using Statistical Package for Social Sciences (SPSS) version 25 for descriptive statistics and logistic regression analysis. Qualitative findings were organized into themes and presented in narratives. A vast majority 74.7% of shared Sanitation were poorly managed. The study established statistically significant associations of secondary education ( $p=0.024$ ), marital status ( $p=0.025$ ), user satisfactions ( $p=0.001$ ), households sharing ( $p=0.000$ ), social norms ( $p=0.001$ ), cultural beliefs ( $p=0.002$ ), Rituals on use and cleaning toilet ( $p=0.038$ ), Privacy and modesty concerns ( $p=0.002$ ) and Management of Shared Sanitation. A large proportion of households in slums used poorly managed shared sanitation, thus endangers public health. We recommend that the Government and all other agencies implementing sanitation promotion interventions should properly understand the Social-cultural practices of the target communities and use this knowledge to tailor sanitation initiatives effectively. The Future studies should focus on implementing and assessing the effectiveness of behavioral interventions.

**Keywords:** Households; Management of Shared Sanitation; Shared Sanitation; Slums; Social-Cultural factors