

### 37. **Integration of container-based sanitation service provision in cities: influence of gender, religion and culture.**

**Ouko, Vera Adhiambo<sup>1</sup>; Riungu, Joy N.<sup>1</sup> and Kiogora, Domenic<sup>1</sup>**

<sup>1</sup>Meru University of Science and technology  
Corresponding author email: veraouko@gmail.com

**Subtheme:** Mining, Sanitation, Engineering, Biological and Physical Sciences

#### **Abstract**

The purpose of this study was to investigate the challenges and opportunities in container based sanitation service provision in cities. Container based sanitation is an innovative technology where waste is collected and captured in sealable containers transported and treated use and/or safe disposal. CBS and non-CBS users' perspectives were sought, to gain understanding on their experiences and perception about CBS services integration. Users were unpacked into three groups: households using CBS as pay per use, those running CBS as business and household with CBS installed in their residential. The study also sought to establish whether CBS suited sanitation needs of the users' in line with social factors surrounding latrine adoption and User toilet Preference .Further, the study sought to establish the CBS stakeholders perspectives; support and perception of CBS as a sanitation option for the high density low income settlements The study adopted descriptive survey research design that enabled collection and analysis of both quantitative and qualitative data. The study was conducted among household members of Mukuru Kwa Njenga. Semi-structured questionnaires were used as primary collection tools, collection technique included observation, questionnaires and interviews. Additionally, ten in-depth interviews were conducted, with community chairmen, public utility representative, service providers and a government official. Quantitative data was analyzed using Statistical Package for Social Sciences (SPSS) Version 20.0, qualitative data was thematically presented and reported in a verbatim prose. The study established that CBS service provision was rated as most preferred sanitation technology by 92% and 60% among CBS and non CBS household sampled. In addition CBS though most dominant option among the residents of Mukuru kwa Njenga, there some aspects of this innovative technology that needed to be upgraded including: Reevaluation on the CBS cost, structural improvement customized on the users sanitation preferences in line with socio-factors underpinning latrine usage, increased stakeholders involvement. The results from this study can be applied by container based service providers operating in low-income high density settlement for upscaling of CBS service provision ,this could be achieved through integration of CBS users preferences in the CBS technology upgrade. Additionally the results are also relevant to sanitation stakeholders including public and private institutions for strengthening of partnerships with an aim of creating an enabling platform for CBS operation for the betterment of CBS services especially in the informal area, where CBS has been demonstrated as viable.

**Keywords:** *Portable Sanitation; Gender and sanitation*