

Abstract

Averagely 80% of world's wastewater is released into the environment without adequate treatment. Effective management of wastewater is therefore essential to mitigate pollution and recover valuable resources such as water energy and nutrients. Despite the rapid population growth of Emali Town in Makueni County, Kenya, no concrete wastewater management system exists at the moment. The purpose of the study was to investigate wastewater management in a low-cost housing settlement in Emali Town. The study used survey research design. The target population for this study was the 11000 residents of Emali town and study sample size of 297 was selected using simple random sampling technique. Data was collected using a semi-structured questionnaire. The reported per capita water use in the study area was approximately 60 liters, three-quarters of which ends up as wastewater effluent, mainly directly to the effluent. The study found that 65.2% of households in Emali Town lacked access to a centralized sewerage system and that only 20% of households were connected to a wastewater collecting system. Insufficient wastewater management was the main cause of the town's declining water quality. The majority of the respondents (88.1%) indicated that they do not know the key existing policy and regulatory frameworks on wastewater management. The findings of the study indicate that implementation of a decentralized wastewater management system would enhance water management in low cost housing systems therefore offering a cost-effective solution to environmental pollution. The study recommends that in order to guarantee that wastewater generated is safely directed to a suitable disposal site sustainably, policies and institutional frameworks should be in place with the mandate that owners of any premises, whether temporary or permanent, residential or industrial, be connected to a wastewater collection system.