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## Challenges and Constraints of Municipal Solid Waste Management in Kibuye, Makindye Division Kampala Uganda

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Abstract: The challenges of rapid urbanization have continued to threaten the governance of many urban centers, especially in developing countries. Poor solid waste management continues to not only constrain the delivery of services but also threatens the health and quality of life of people, especially urban dwellers. Addressing this challenge requires a comprehensive, coordinated approach informed by thorough investigation and research. While several studies have been carried out on solid waste management, most of these run short of comprehensive analysis to examine the challenges of solid waste management (SWM) in local and municipal governance settings. The study was carried out to assess the challenges and constraints of Municipal waste solid management, management mechanisms, and communities' knowledge about the dangers of poor solid waste management. It was carried out in Kibuye 1 Parish- one of the 21 parishes that make up Makindye Division. The study employed a descriptive design and was mainly qualitative, although some quantitative data was collected. It employed semi-structured in-depth interviews. In-depth interviews were carried out with city solid waste managers, managers of private sector companies in Solid Waste Management (SWM), political leaders, especially local councilors and opinion leaders. These respondents were purposely sampled. The sample size study was calculated using the Kish and Leslie formula for a single proportion, with a precision of 10%, at a confidence interval of 95%, with a prevalence of 49% representing the proportion of solid waste collected and disposed of by KCC and private companies. The households were the study units; 100 respondents were also purposively selected based on the population size of the 5 zones. Twenty respondents were purposively selected from each of the 5 Zones. A total of 10 key informants were also interviewed, with 5 selected from Makindye Division and another 5 from Kampala Capital City Authority. Regarding the composition of waste generated, the study findings revealed that the biggest percentage of the waste generated in Kibuye 1 Parish was biodegradable waste and mixed fines (85%), plastic (6%), Animal Waste (3%), Sanitary waste (2%), paper and cardboard (2%), textile (1%). In comparison, others were also (1%). The field findings also indicated that Kibuye 1 Parish employed various practices to control and minimize the solid waste generated, which included disposal in Municipal skips (35%), burning (20), open space dumping (15%), recycling (10%), compositing (6%), and burying (5%), others. Study findings reported that the major challenges facing solid waste management include failure to collect the waste on time, insufficient capital, weather vagaries, nature and composition of the waste, limited space and inadequate containers for waste collection and segregation. It was recommended that Makindye Municipality works with private sector actors such as recycling industries and energy generation companies to support waste management at source points, including separating waste and building broad-based support for composting and recycling through the 'garbage is money' programs. It was also noted that Makindye municipality/division develops a deliberate policy that encourages the community and various stakeholders to play an active role in managing waste, carrying out environmental education amongst the communities and establishing strong partnerships with private sector companies to provide services to the people. It was also recommended that the Division works with Non-Governmental organizations (NGOs), development partners, recycling companies, energy generation companies and community groups to develop economic incentives for community members to develop sustainable waste management initiatives. The study also highlighted a need to strengthen the capacity (financial, institutional, technological and infrastructural) to drive environmentally solid waste management practices for sustainable solid waste management.

Keywords: refuse, municipal, management, waste

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