

PERFORMANCE FACTORS AFFECTING SOLID WASTE MANAGEMENT SYSTEM IN DEVELOPING COUNTRIES

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Abstract

Solid waste management is a challenge for the cities' authorities in developing countries mainly due to the increasing generation of waste, the high costs associated to its management, the lack of understanding over a diversity of factors that affect the different stages of waste management, the linkages necessary to enable the entire handling system functioning and governance issues. The objective of a research done in 22 developing countries in 3 continents was to determine the stakeholders' action/behavior that have a role in the waste management process and to analyze influential factors that affect the performance of a waste management system. A combination of methods was used in this study in order to assess the stakeholders and the factors influencing the system in those cities. Data was collected from scientific literature, existing data bases, observations made during visits to urban areas, structured interviews with relevant professionals, exercises provided to participants in workshops and a questionnaire applied to stakeholders. Descriptive and inferential statistic methods were used to draw conclusions. The outcomes of the research are a comprehensive list of stakeholders that are relevant in the waste management systems and a set of factors that reveal the most important causes for the systems' failure. The information provided is very useful when planning, changing or implementing waste management systems in cities.

Keywords

Integrated solid waste, Management, Generation rate, Quality, Stakeholder, Influential factor, Developing countries