



## Financing sanitation and cost recovery in the slums of Dar es Salaam and Kampala



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### A B S T R A C T

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Improving sanitation for the poor requires better governance, more finance and mechanisms to generate revenue from sanitary facilities. There are a number of innovative approaches to sanitation in developing countries. Private pit latrines still provide 85% of the sanitation solutions for households in the slums of Dar es Salaam and Kampala. A distinction is made between household and shared toilets. Small scale entrepreneurs, Community Based Organizations (CBOs) and Nongovernmental organizations (NGOs) build maintain and sometimes empty usually shared sanitary facilities in a situation where the government is not able to provide sanitary services. Household level and private sector solutions are common in sanitation and can be encouraged. The repayment mechanisms in slums in the capitals of Tanzania and Uganda, the current mechanisms of financing sanitary facilities and recovering the cost using different governance structures are analyzed. Solutions are suggested based on the current practices. Governments could recognize the importance of what we call household level or private solutions and support them, for example by promoting more appropriate governance structures, cost recovery systems and reorganizing the emptying system to bring down the cost of emptying and involving small scale producers. It is recommended to promote more appropriate financing and governance mechanisms in the sanitation sector.

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### Introduction

The Millennium Development Goal (MDG) for sanitation is to halve, by 2015, the proportion of people who have no access to basic sanitation. Most of the two billion people currently lacking access to improved sanitation are poor and need a safe place to defecate. Giving the financial and institutional bottlenecks for the fulfillment of the Millennium Development Goals in the water and sanitation sector in Africa, Latin America and Asia necessary funds estimates it will cost more ranging from US\$ 2.1 to 23 billion per year and when going beyond the more basic definition of urban service provision will cost even more. The Camdesus report already ten years ago suggested that an additional US\$ 32 billion per year would be needed. If the broader definition of sanitation would be used (including treatment of all municipal and industrial waste water and solid waste) US\$ 100 billion a year would be necessary

(Winpenny, 2005). Financially the first option translates into a doubling of investments from \$15 billion to \$30 billion per year for water supply and sanitation alone. The required long term investments (50–100 years) are difficult to finance because in most developing countries a capital market for long term finance does not exist.

Gurria (2006) emphasizes the need for more financial means for the water and sanitation sector but also encourages developing countries to look at other ways of financing this sector. To achieve the MDGs and the Johannesburg Plan of Implementation with respect to sanitation, a different approach is required (Van Dijk, 2012a). Technological development, unbundling of activities and competition between different sanitary options are important steps in that direction (Schouten & Hes, 2009). There are major developments taking place in the sanitation sector and their effectiveness can be enhanced through more government support and appropriate financing mechanisms (WSP, 2011). Initiatives at the household level and private finance can be an alternative for inefficient public schemes to provide sanitary facilities in the slums of African capitals, which rarely achieve cost recovery (WSSCC, 2011).

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## Financial challenges in the case of sanitation

People should not live in filthy and unhealthy environments. The poor and vulnerable should be helped to obtain sanitation services in ways that are people-centered, participatory and affordable and promote social equity. According to [ADB \(2007\)](#) the financial challenges in the case of sanitation are:

1. Inadequate resources for sanitation
2. Low or non-existent tariffs for using sanitary facilities
3. Lack of financial sustainability of existing sanitary solutions.

A full fledged sewerage system in every African city would contribute to an even higher debt in foreign currency in many African countries, given the steel and cement to be imported. Different ways of financing sanitation for meeting sanitation and hygiene challenges are keys. It is often noted that it is more difficult to recover the cost in the case of sanitation than in the case of drinking water. However, facilitating the supply of finance is important for users as well as the small scale providers of these sanitary facilities and the different forms of finance always require some kind of cost recovery. For that reason we will first present the current ways of financing and cost recovery for sanitation in two African slums and then suggest how to improve them.

Usually the supply of tapped water and the presence of piped sewerage is limited to the center of Third World cities and some of the better off neighborhoods ([Isoke & Van Dijk, 2013](#)). This implies that in the slums and in the periphery of these cities people have to look for their own solutions. Given the specific nature of these often 'informal' solutions, they deserve special attention in our study of sanitary practices in African cities.<sup>1</sup> The households, Non-governmental organizations (NGOs), Community Based Organizations (CBOs), or Small-scale private individual providers or operators (SSIP) provide basic infrastructure services in slums in developing countries ([Collignon & Vezina, 2000](#)). [Table 1](#) gives an overview of the types of sanitary facilities, the ownership and governance structure and some other characteristics of toilets, which in slums are often not linked to the existing sewer system. Another distinction is between one, two, three and six pits latrines, but this is mainly important in the case of shared facilities, which were not very important in these slums.

The emphasis in this study is on the individual households and the toilets they share. Limited information has been collected about the importance of communal or public toilets. Once a decision has been taken what will be solved by the public sector and what will be left to individuals or their organizations, the private sector, including households, CBOs, NGOs and informal enterprises can execute a number of the required activities and will probably become more efficient than the government in supplying these services. In practice they are already responsible in most African capitals for the larger part of the supply of sanitation services.

Latrines need to be built, maintained and emptied. The final product can be used for composting, biogas or as fuel, but rarely the activity is considered as a value chain ([Van Dijk, 2012a](#)), where each stage built on the previous one and the advantages need to be distributed over the chain in case the chain is upgraded and where private actors play an important role ([WSP, 2004](#)). Upgrading means stimulating the local construction of certain types of toilets, facilitating emptying services and promoting the processing of sanitary products. There are places in the world where there is a whole economy around sanitation.

**Table 1**

Ownership, governance and other characteristics of toilets.

Ownership and governance structure	Type of toilet, payment and location	Characteristics: technology & condition
Households own and manage the facility	One stance, no payment, located nearby, in the backyard	Simple pit latrine, usually poorly maintained and not linked to sewer system
Shared toilets, still privately owned, used by several households operated by informal concord between a landlord or the households involved	Shared simple toilets, no daily payments, located at different places in the neighborhood	Simple and some improved toilets shared by several neighboring households, but usually poorly maintained ( <a href="#">Tumwebaze, Niwagaba, Gunther, &amp; Mosler, 2014</a> ), and not linked to sewer system
Shared, communal or community toilet, used by several households and managed by a community based organization (CBO)	Somewhat improved toilets, owned by NGO, CBO or the community, usually closer to the residential area of the community members, who should pay something	Open to a limited number of people being member of that community and contributing something to the community based organization (CBO) responsible for maintenance
Shared, owned by the government or a private firm, which everyone can assess with a publicly approved governance structure	Public toilets, close to a market or another public places (a roundabout or station), which require regular payment	Open to everyone, management may or may not take good care of cleanliness of toilets. Efforts are made to link facility to sewer system

There are some limits concerning the role of the private sector in relation to achieving the Millennium Development Goals in sanitation. The private sector can never take over the total responsibility of the government for sanitation. They can also not take the decision to go for large scale centralized or even for decentralized waste water treatment facilities. Government intervention is desirable in the case of a monopoly, market failure or externalities (such as improved health and more dignity and security for women and children). In case of important externalities, there is the need to assure investments in sanitation, over and above what private initiative is doing because the socioeconomic benefits are larger than the cost according to the cost benefit analysis. Externalities may lead to formulating clear aims for sanitary systems, such as being attractive and hygienic. The challenge is then to make them also affordable to the population and easy to maintain. In practice it boils down to the government investing in sewers and treatment plants, while in most cases slum dwellers have to rely on themselves, small enterprises or NGOs for their individual or collective sanitary facilities ([Mehta & Knapp, 2004](#)). The government may try to regulate and incidentally subsidize the private initiatives.

A subsidy from the government for sanitary systems raises the question is what are the principles used for the allocation of public funds? Subsidizing ([WSSCC, 2011](#)) may be unaffordable for most governments in the long run; hence designing appropriate schemes which would be self financing is much more relevant though challenging. The debate focuses mainly on one particular form of subsidy: hardware or infrastructure subsidy. It is important to get clarity on the many types of subsidies that are currently used in

<sup>1</sup> Informal in the sense of not complying with current legislation and regulation ([Van Dijk, 2006](#): 137).

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