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Community-based urban water management in fringe neighbourhoods: the case of Dar es Salaam, Tanzania

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Abstract

Diminishing state resources coupled with inadequate urban management capacity and insufficiency of conventional approaches have rendered it impossible to provide basic infrastructure in urban areas in developing countries such as in the city of Dar es Salaam. In that situation fringe neighbourhoods are mostly hit. However, a notable phenomenon has emerged in informal and formal settlements where the communities, through self-help and local governance in their own neighbourhood associations, have organised to fill the gaps in infrastructure services left by the centralised institutions. Among other things, community groups mobilise and organise fund-raising, mutual self-help and external technical assistance to provide water supply and sanitation, roads and drainage channels within the immediate area. This seems to be a trend in infrastructure improvement in poor neighbourhoods including fringe settlements. Actors observed to be participating in the process of providing the basic services and facilities in some of the fringe settlements include Dar es Salaam City Council (DCC), the civil societies including political party organisations and private individuals as well as youth and women groups, and the donor community. This paper discusses the potentials and constraints existing in the provision of basic infrastructure to fringe settlements taking water management as an example. Potable water was chosen to explain the case because these settlements are not connected to the Dar es Salaam Water and Sanitation Authority (DAWASA—a centralised institution) water supply system and are remotely located. The purpose is to inform policy makers, researchers and practitioners including water providers and managers and water users on potentials and constraints existing in the provision and management of water supply in remote poor communities. Potable water as an essential need plays a major role in health development and if water is not easily accessible much time is wasted to search for it. One of the questions to be answered is how the residents, most of them being poor, are coping up with the deficiency of water supply in their fringe areas.

Keywords: Water supply; Self-help; Neighbourhood associations; Tanzania

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1. Introduction: increasing infrastructure needs under poverty

In recent literature it has been demonstrated that the provision of safe drinking water and sanitation in low-income neighbourhoods is fundamental to meeting the basic needs of an urban population (Choguill, Franceys, & Cotton, 1993; Arrossi et al., 1994; UNCHS, 1996; Kyessi, 2002). The goal of the period in the 1990s and beyond was that all people should have access to adequate water supply and good sanitation. Despite major efforts made by World Development agencies, national governments, parastatal organisations and urban authorities during the past two decades, many millions of people in the developing world still remain unserved with the basic services. Considerable evidence of the limited coverage exists. Un-Habitat (UNCHS, 1996, p. 265) reports that in Africa urban areas only one-third of the inhabitants have piped water to their houses while the proportion in Asia and the Pacific is two-thirds. The same source estimates that one-third of the urban population in the developing world lack hygienic means of excreta. Again, according to Choguill (1999), only 50 per cent of households in Dhaka, Bangladesh had household connections for water, while 15 per cent were served by the municipal sewerage system.

Inadequate water and sanitation are primary cause of diseases such as malaria, cholera, dysentery, schistosomiasis, infectious hepatitis and diarrhoea. These are associated with more than three million deaths each year. Inadequate water and sanitation are also a major cause of poverty and the growing disparity between the rich and the poor. In general, a reliable supply of water is crucial for urban livelihood (URT, 2002).

Many constraints have hindered the efforts of the various institutions to provide adequate water supply and sanitation. They include: firstly, institutional capacity and insufficiency of conventional approaches which hindered stakeholders (beneficiaries) participation and informal institutions in infrastructure provision and management (Stren, 1989; Fekade, 1997; UNCHS, 1996; Arrossi et al., 1994; Kyessi, 2002). Secondly, supply driven infrastructure provision sticking to rigid planning/design standards and regulations thus failing to bridge the growing gap in services especially for low-income communities. Thirdly, high cost of conventional systems that did not recognise progressive improvement of infrastructure (Choguill, 1996, 1999). The progressive improvement model may seem to favour the majority of households in developing countries that has less than US$500 per year (Aligula, 1999) and spends more than 50 per cent of that on food (Kironde, 1999; Kyessi, 2002).

The ensuing sections describe a case of two fringe informal settlements in Dar es Salaam where water supply may not be provided through the Municipal system in the near future. The author was interested to understand and to document how the two fringe settlements were supplied with water, what system was evolving, who were involved and their input therein. These two settlements in the fringe of Dar es Salaam, away from the municipal supplies, were similar cases in the sense that they were unplanned (informal) settlements, they had local government leadership and water was provided in the both of them. Local leaders as well as water providers and operators were interviewed. Water users or community members were selected randomly in the settlement for interviews. Questions centred on local organisation and management, technology adopted and resources for water supply, operation and maintenance, self-help input and sustainability and poverty reduction elements such as level of satisfaction, willingness to pay for water supply, water quality and common diseases. In depth analysis of the two sub-cases revealed similarities and differences as explained herein.