29th WEDC International Conference Abuja, Nigeria, 2003

TOWARDS THE MILLENNIUM DEVELOPMENT GOALS

# Improving water services: utility-small water enterprise partnerships

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Key words: Partnerships; Water Utilities; Small Water Enterprises; Informal urban settlements

THIS PAPER IS based on current WEDC research on small water enterprises (SWEs), whose purpose is to identify and test constraints, opportunities and strategies for enabling small water-providing enterprises to deliver an acceptable water service to poor urban consumers. The paper provides some background and brief information on utilities and SWEs, and outlines typical constraints faced by SWEs in their operations. The paper then looks at the rationale for developing viable mechanisms through which water utilities could form mutually beneficial partnerships with SWEs for the benefit of customers, and explores potential opportunities and interventions that can enable SWEs to provide affordable good quality water services to customers while at the same time providing benefit to the water utilities. The aim of the proposed Utility-SWE partnerships is to improve water services to customers in informal urban settlements of developing countries, while meeting the objectives of water utilities and SWEs.

## Background

African cities are growing exponentially at an average of over 5 percent per annum, and over 9 percent per annum in some cities. Residential population growth is occurring by an increase in density of existing settlements and expansion at the peri-urban fringe, often referred to as informal settlements. Many informal settlements (sometimes also referred to as slums) are located within city boundaries. They lack conventional utility water supply infrastructure, despite being home to substantial proportions of the total urban population. Indeed, surveys suggest that between 40 and 50% of the population in many cities of developing countries live in such settlements (UNCHS, 1996).

## Utility water services

Water utilities are public or private organisations set up to provide water and sanitation services to customers. Water utilities typically provide water and sanitation services to customers through conventional water distribution networks, terminating with connections at the customers' premises. Due to a variety of factors, both public and private urban water utilities have not been able to keep up with the water requirements of all urban dwellers. In addition, the costs of providing conventional utility water services to the increasing population living in informal urban settlements are prohibitive. In some African cities (such as Mombasa in Kenya), over 75% of the urban poor obtain domestic water from a range of small water enterprises (SWEs) rather than direct from the main utility service, mainly due to capacity constraints of the utility's infrastructure (Albu and Njiru, 2002; Njiru, 2002).

Considering the number of people involved, the financial outlay required, and the prevailing economic situation, it is unlikely that urban water utilities in developing countries can, on their own, keep up with the water requirements of the rising urban population using conventional water supply infrastructure. There is need for both public and private water utilities to form partnerships with others such as the informal small scale private sector, in order to improve water services to all including the poor.

## Small Water Enterprises (SWEs) and their role in service provision

"Small water enterprises" (SWEs) are small scale informal private operators, also referred to as vendors, who have moved to fill the supply gap left by water utilities. SWEs may be dependent on water utilities for their source of water, or they may be independent of utilities and have their own sources of water. Different types of SWEs exist in the non-utility urban water market. The operations in the urban water sector involves a variety of several different supply chains, depending on local conditions and sources (Albu and Njiru, 2002):

- Wholesale vendors (such as tanker operators): obtain water from a source and sell the water on to consumers and also to distributing vendors.
- Distributing vendors; obtain water from a source or from a wholesale vendor, and sell the water directly to consumers, via door-to-door sales.
- Direct vendors; sell water direct to consumers, who come to collect and pay for water at the source. This includes household resellers, more often women than for the other categories above.

Studies show that SWEs are often the main suppliers of water to people living in informal urban settlements (Njiru, 2002). Indeed, SWEs make a significant contribution to supplying water to people in developing countries who lack access to safe water, estimated by the United Nations to be over one billion. The role of SWEs has been confirmed by recent studies (Forrest, 1999; Wegelin-Schuringa, 1999;

Collignon, 2000; Njiru and Smith, 2002) which suggest that SWEs often provide useful services valued by poor consumers. More-over, the charges for water provided by SWEs are not necessarily excessive for the service provided. In addition, SWEs often extend water services to informal settlements that have little prospect of being supplied with piped water by the utility (Albu and Njiru, 2002). Exploratory research in Africa show that SWEs are to be found in many African cities such as Accra, Dar es Salaam, Mombasa, Nairobi and Khartoum.

## Typical constraints faced by SWEs

Despite the significant role played by SWEs in providing water services, they face numerous constraints, and are usually not recognised by utilities and policy makers. SWEs often operate within a hostile environment, and this undermines their potential to make a more significant contribution to provision of good quality affordable water services to their customers. The key constraints faced by SWEs in their operation are related to numerous factors including:

- Unclear regulation and other state policies that hinder SWE operation and investment
- Barriers to entry: difficulties in obtaining licences to operate the water business, or harassment by local power brokers (cartels);
- Unfair competition through sale of low quality water, or through vandalism of installations by competitors
- Technical skills and capacity related to transportation
- Financial resources, particularly due to lack of recognition of SWE as a legitimate business
- Social discrimination
- Access to good quality water

Preliminary research in Accra, Dar es salaam and Nairobi show that many of the constraints faced by SWEs can be overcome by developing mutually beneficial partnerships among the stakeholders. The key categories of stakeholders comprise of (Njiru and Smith, 2002):

- SWEs
- Water utilities and authorities
- Water users

## The rationale for Utility-SWE Partnerships

Both public and private water utilities exist (and have the mandate) to serve all urban customers, in a financially sustainable manner. Indeed, a key objective for progressive public and private water utilities should be to provide services to all urban dwellers, including the poor, in a financially sustainable manner. To achieve this objective, water utility managers need innovative methods, including reaching out to SWEs (who are already providing water services to those not reached by the utility) with a view to forming mutually beneficial partnerships.

From the perspective of SWEs, it can be argued that SWEs exist to generate a reasonable return for the entrepreneur (or the operators), for the resources they employ to deliver water services to customers.

From the perspective of customers in informal urban settlements, it can be argued that their need is to receive a "reasonable" water service. In the eyes of the customer, what is "reasonable water service" is represented by a combination of service characteristics such as quantity, quality, reliability, frequency, payment system, convenience and price. The potential therefore exists for utilities and SWEs to form partnerships in order to meet the requirements of customers, while meeting the objectives of the utility and SWEs. In addition, there are a number of advantages for encouraging and developing such utility-SWE partnerships, these being:

- Improvement of revenue collection (for the water utility);
- Improvement in water services to customers in informal settlements. There is a growing recognition that the pace of urbanisation is outstripping the capacity of water utilities to service even the existing customers. Utility - SWEs partnerships may therefore be one of the few realistic options for water delivery in informal settlements for some time to come;
- Employment generation through entrepreneurship, particularly among the poor;
- Encouraging the use of local resources, skills and appropriate technology (Sohail et al 2002);
- Promote the growth of economic opportunities for the poor, in order to build upon their existing endowments of human and social capital (NPEP, 1999);
- Reduce the level of investment needed in water distribution, by permitting and facilitating informal water providers to sell water in areas without a conventional distribution system;
- SWEs can be efficient – providing water when and where people need it, in quantities they can afford, while creating local employment opportunities that keep cash within the local economy (Albu and Njiru, 2002);
- Reduce unaccounted for water by reducing vandalism of water distribution pipes, that are often broken to create illegal sources.

## Opportunities for interventions

By identifying and confirming the key constraints faced by SWEs in a particular location, opportunities and strategies can be developed to enable SWEs provide an acceptable water service to consumers in informal urban settlements. It is expected that in many locations, a number of opportunities exist for utilities and relevant authorities to form or facilitate mutually beneficial partnerships with SWEs. Interventions should be developed that build upon the business incentives and the market opportunities within the location. Due to their informal small scale nature, SWEs are

likely to benefit from both policy and operational interventions such as:

- Political recognition and acceptance of SWEs and other small businesses as viable and potentially significant contributors to service provision, especially in informal urban settlements
- Enabling water regulation policy that recognises all stakeholders, including SWEs;
- Enabling informal settlement regulation, that would remove potential barriers such as planning or building regulations, land law and tenancy rights. Recognition of informal settlements are likely to influence the opportunities for (or favour) water service initiatives;
- Enabling policy toward small scale informal enterprises. SWEs could be enabled to play a more significant role in provision of water services to informal urban settlements, through resolution of policy bottlenecks that inhibit SWE operation;
- Enabling private sector participation policy, for instance policy that recognises the existence of local small scale informal private sector for water services, or favours inclusion of SWEs in PSP arrangements;
- Limited extensions of the distribution network to informal settlements, in collaboration and partnership with SWEs;
- Support and information for accessing micro-credit for SWEs;
- Leasing of equipment for transporting water and or vending facilities;
- Development of appropriate containers for water vending;
- Provision or rental of secure premises for storing equipment; and
- Provision of security in informal urban settlements.

The above interventions may be applicable to different extents, depending on the prevailing constraints in each location. For instance, as part of the current WEDC research, in-country research in Nairobi, Accra, Dar es Salaam and Khartoum is designed to look into specific constraints and opportunities for interventions to improve the operating environment of SWEs, while meeting the objectives of customers and utilities in those locations. This is expected to be followed by action research to test the potential of some of these interventions to reduce identified constraints, in the locations where specific constraints have been confirmed. The lessons learnt from the four research locations can contribute to formulation of generic interventions that can contribute to improvement of water services to the large population of in-adequately served people living in informal urban settlements.

## Summary

SWEs are already playing a significant role in providing water services to customers in informal urban settlements, particularly those who do not receive adequate services from conventional water utilities. SWEs however face considerable constraints in their operation, and many of which are location specific but can be overcome by acceptance of SWEs as legitimate contributors to provision of water services. Acceptance of SWEs can lead to development of mutually beneficial win-win partnerships between utilities and SWEs, for the benefit of all including customers in un-served areas. A number of policy and operational interventions are necessary to facilitate implementation of Utility-SWE partnerships, which have the potential to improve water services in urban areas of developing countries.

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## Acknowledgements

This paper is an interim output from a project funded by the UK Department for International Development (DFID) for the benefit of developing countries. The views expressed are not necessarily those of the DFID. The author wishes to thank the DFID for providing financial support for the research.

This paper draws from a research project entitled "Better access to water in informal urban settlements through support to water providing enterprises". The author gratefully acknowledges the contribution of all members of the research team, particularly Mike Smith at WEDC, Mike Albu of ITDG and Diana Mitlin of IDPM and IIED, and for their important role in the project. The contribution of all the project partners who have contributed ideas that have helped to shape the research is greatly appreciated.

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