Financing Small Water Supply and Sanitation Service Providers

Exploring the Microfinance Option in Sub-Saharan Africa

Meera Mehta and Kameel Virjee

Increasingly small water and sanitation service providers, such as community-based organizations and private sector suppliers, are being acknowledged as important suppliers within the African water and sanitation sector. One of the important constraints faced by these providers is finance and access to credit. This paper discusses the development of the microfinance sector and services in sub-Saharan Africa and the potential demand for financial services by small water and sanitation service providers. The role of governments and development partners in facilitating the finance and credit for small providers is also discussed.

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December 2003

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Introduction

It is increasingly recognized that a vital role is played in the provision of water and sanitation services in Sub-Saharan Africa by small service providers (SSPs). These come in many forms, including informal private sector suppliers, community-based organizations (CBOs), and households as self-providers. Recent studies suggest that their share in total services is high, especially when it comes to the services for the poor in both rural and urban areas. For example, there are an estimated 12,000 water schemes managed by communities in rural areas in Ethiopia; CBOs account for about 30 percent of serviced rural population in Kenya; and private informal providers account for 10 percent of the serviced population in urban areas in Kenya (WSP-AF 2003a).

As strategies to meet the Millennium Development Goals (MDGs) are explored, the role of these small providers needs to be better understood. While many different measures are necessary to strengthen their role in service delivery, one constraint emphasized in several studies is their lack of access to credit. To remedy this, it is necessary to understand the nature of their demand for finance and explore sustainable measures to improve their access to credit.

This paper discusses the possible role of microfinance in financing small water supply and sanitation (WSS) service providers. The importance of microfinance is often recognized, though generally not adequately explored in practice. For example, the Ministerial Declaration at the Bonn Conference on Freshwater mentioned community-based finance as one of the key sources to meet the gap between the funds needed for increased provision of WSS services and those available from governments and donors. The Recommendations for Action, however, did not specifically address related issues and constraints (Bonn Conference on Freshwater 2001a and 2001b). The recent report of the Camdessus panel emphasized that "microcredit schemes are also important in financing community water projects and small local producers" (Camdessus 2003). In Sub-Saharan Africa, this will need to be assessed in the context of a microfinance sector which is as yet less developed, though greater outreach and viability is possible in some countries.

The paper explores three central questions:

1. ***How does the level of development of the microfinance sector in Sub-Saharan Africa affect the potential for financing small WSS service providers?***

   Two main constraints face the microfinance sector in Sub-Saharan Africa: limited outreach and lack of market-linked product development, though there are some variations between countries, especially when viewed within the wider financial systems approach.

2. ***What is the nature of latent demand for finance from small WSS service providers?***

   The nature of demand varies across the three market segments of small WSS service provision: CBOs as providers, small private providers, and households as self-providers.

3. ***What role can governments and development partners play?***

   Such roles may include developing or revising WSS policies, supporting communities and other stakeholders, action research, and knowledge management.

1. The African Microfinance Sector and WSS Services Finance

The microfinance sector in Sub-Saharan Africa is still relatively young. The vast majority of MFIs in the region are still in the start-up and/or consolidation phase and are grappling with capacity, outreach, and viability issues. However, when viewed from a wider financial systems perspective there are some exceptions, as the experience from Kenya illustrates. Based on studies in selected countries in the region,[1] some key features are:

- ***Market size and penetration.*** Microfinance in Sub-Saharan Africa lags behind developments in Asia and Latin America. Though it has been estimated that there are over 1,000 providers/initiatives in the region, perhaps only 20 are on the way to sustainability. Market penetration is relatively low, estimated at 7 percent of all poor households in West Africa and at even lower levels in East and southern Africa (ICC 2002; World Council of Credit Unions 2000). However, Kenya may be an exception, with the total member outreach of all microfinance providers being about 1.8 million, suggesting about 30 percent penetration of the poor.

- ***Outreach.*** Level of outreach in terms of clients served is significantly lower than in Asia and Latin America. Compared to over 2 million clients for the Grameen Bank and BRI in Indonesia, or the 73,000 reached by Bancosol in Bolivia and 170,000 by the SEWA Bank in India, the largest MFI in Uganda reaches only 25,000 clients, ABA in Egypt just over 18,000, Mozambique's only operator about 4,000, and K-REP, regarded as one of Africa's most successful MFIs, just over 14,000 clients. Examples from countries in Sub-Saharan Africa suggest that the majority of MFIs have very limited outreach. Again, however, an exception in this regard is the cooperative sector in Kenya, which in 2001 had over 1.7 million clients and an outstanding loan portfolio of over Kshs 28 billion (US$0.4 billion).

- ***Financial performance.*** In general MFIs in Sub-Saharan Africa perform poorly, especially compared to the MFIs in South America and Asia, which perform better in terms of portfolio quality and operational and financial sustainability. Comparative statistics from the best performing MFIs in Africa clearly show that most have negative profit margins (measured as adjusted net operating income/operating income).[2] Assessment of the financial performance of other microfinance providers, such as the cooperative sector in Kenya or the banking sector in Senegal, is not readily available.

- ***Products.*** The introduction of new products is indicative of an awareness of the need to respond to market demands to increase outreach and performance. There is little product diversification in Sub-Saharan Africa. In general the majority of MFIs only offer one credit product: loans for income-generating activity. MFIs in Asia and Latin America have developed a wider range of products, which include consumer financing, housing loans, infrastructure loans (including those offered for water and sanitation),[3] and educational loans. While some MFIs in Africa have started to diversify their products the majority have simply increased the scope of loan usage without significantly changing the terms and conditions of their original working capital loan product.

- ***Donor support.*** In Sub-Saharan Africa donor support was previously characterized by the provision of grants and soft loans for start-up capital, operational losses, and portfolio growth, but now increasingly addresses MFI sustainability and the integration of microfinance into the wider financial system. The transactional relationship between donors and MFIs has also evolved. Donors are increasingly

[1] Mainly based on ICC 2002, with Virjee 2002 for inputs on Kenya.

[2] Based on Microbanking bulletin 1999 as reported in table 2 in ICC 2002, volume I.

[3] See WSP-SA n.d. and World Bank 2003 for a description of some examples from India.

behaving as financial investors, seeking to invest in high-potential, high-performing MFIs, as well as high-potential start-ups. Additionally donors are seeking opportunities to sponsor innovation and practices that will contribute to financial sector deepening and widening.

In this context of a weak microfinance sector and an emerging innovative outlook by the donor community towards financial sustainability, any WSS initiative that explores links with the microfinance sector must address capacity, outreach, and financial viability issues. Products, services, and programs must be aligned with microfinance in accordance with the good practice principles that underpin sustainability. The premise of this paper is that microfinance sector concern about outreach, sustainability, and product diversification provides opportunities to explore partnerships with WSS initiatives. While developing these opportunities, however, care has to be taken to ensure that:

- The provision of microfinance is not limited to conventional MFIs, but is used in a financial systems perspective and takes into account different financial institutions providing such services in any given country. In Kenya, for example, the cooperative sector has good outreach and efforts to start other intermediaries, such as financial services associations (FSAs), have also been initiated (Virjee 2002). Thus, reference to MFIs in this paper includes a wider set of financial institutions that provide microfinance services to their clients. These may be commercial banks, specialized microfinance banks or institutions, NGO-linked microcredit, licensed operators, specialized cooperative or public banks (as in Kenya and Tanzania), village banks, and other membership-based operations.[4]

- The emphasis is not put on 'forcing' MFIs or other financial institutions to lend to the WSS sector through directed credit, but on financially sustainable market development through the promotion of lending opportunities to different types of WSS-related SSPs, as discussed above.

MFI products in Africa must overcome two serious constraints: the short tenor of most credit, and very high interest rates. The issue of short tenor needs to be addressed in relation to the availability of medium- to long-term funds in order to avoid a term mismatch. The high cost of funds can be addressed at least partly through a greater focus on savings mobilization. Experience with community-based finance institutions suggests that they tend to build up savings rapidly and need to look for credit opportunities. This is true for several MFIs in India as well as the SACCOs in Kenya (World Bank 2003; Chao-Beroff and others 2000, p. 37). Thus if savings mobilization is strengthened, resources can be mobilized at more reasonable costs. With a high savings collection, opportunities for credit for WSS-related activities would help to address the problem of low credit-to-deposit ratios faced by those MFIs that successfully mobilize savings. MFIs need to also address the issue of their own costs and their impact on spreads. Some of these issues will need to be addressed within efforts for microfinance sector regulation, as discussed in section 3 below.

Two opportunities for MFIs to increase outreach and develop market-based products are here identified, along with some potential country-specific initiatives:

Enhancing MFI Outreach through WSS Initiatives

A key characteristic of the WSS sector is its potential to reach the entire population. In the context of the MDGs this becomes even more relevant, as plans to extend coverage and reinforce the sustainability of existing services are developed and implemented. However, this will require the development of rules for engagement that incorporate appropriate community cost-sharing arrangements. A second important characteristic is the very large number of ongoing WSS operations requiring financial services and periodic access to cash flow–backed credit to meet the costs of major repairs and investments for expansion and

[4] See table 1 in ICC 2002, volume II, for characteristics of different types of microfinance service providers.

Box 1: Market-Based Product Development for MFIs Supported by MicroSave-Africa

MicoSave-Africa is a project funded by CGAP, DFID, and UNDP. It promotes the development of savings and other client-responsive financial services among MFIs in 11 countries in East and Southern Africa. Its particular focus has been on savings mobilization, market research and product development for microfinance. Action research in different countries involves helping MFIs to listen better to clients and design appropriate financial products based on better market information.

Market research essentially involves a better understanding of the environment and client needs, which results in improved marketing and promotion, refining or developing new products and improving delivery systems. Market research will need to be adapted to the nature and maturity of the MFI, and include both ongoing and periodic activities. Based on these results and through consultative brainstorming, the next step is to develop a product concept. This is converted to a prototype for pilot testing. MicroSave-Africa has developed tools to support MFIs for such market research and pilot testing.
Sources: MicroSave-Africa 2001 and Wright 2001.

augmentation. These WSS characteristics are particularly important in view of the fact that "microfinance is a high-volume/low-margin business. MFIs must therefore develop products and systems that maximize outreach to achieve economies of scale" (ICC 2002:64). Two situations are likely to be relevant in the context of WSS:

- In areas where MFIs already have a presence, their involvement may be through (a) financial services for routing the capital investment funds for water schemes (refer to boxes 2 and 4); or (b) financial services during operations in the postimplementation phase, especially for depositing the proceeds from water sales in rural schemes and to provide credit for major repairs and expansion/augmentation (refer to boxes 3 and 4).

- In areas where MFIs have only a limited presence, their involvement would require widening the membership base linked to deposits from new members to pay the cash contributions. This would require some coordination with a planned WSS program operation.[5]

In both cases participation in a WSS-linked operation would enable the MFIs to extend outreach in a sustainable manner, provided that increased outreach grows from expressed demands rather than donor sponsored directives. Such services do not represent a one-off operation but provide opportunities for service provision and lending on an ongoing basis. As MFIs in Africa move to savings promotion among clients, opportunities for such lending will necessarily increase. In India, for example, the experience of several MFIs suggests that with successful savings mobilization, they face low credit-to-deposit ratios and therefore need to explore new lending opportunities. This, however, requires support from government policy for appropriate financing rules and a linked demand promotion program for household or community facilities.

Strengthening Market-Based Product Development Capacity through WSS

The development of WSS-linked products can strengthen MFI capacity through well-designed support. Two areas that may offer such an opportunity are:

- ***Financial services for CBO-managed schemes,*** where the CBO is involved in design, implementation, part funding, and complete managerial and financial responsibility for operation and maintenance. Two avenues are possible: (a) financial services to collect/deposit user charges and possible credit for repairs and expansion/augmentation of ongoing CBO schemes that are already collecting user charges; and (b) financial services for new CBO schemes in the form of management of

[5] A good example of this opportunity is from India, where the SEWA Bank has been involved with the slum improvement program of the local authority in Ahmedabad.

capital grants and later collection and deposit of user charges, leading to credit after a period of about two years. In the second case, a link up with the project/program financier may be essential.

- ***Credit for household facilities.*** As discussed above, credit for household facilities is one of the potential market segments. This may become an extension of a housing finance product, or may be developed independently. However, it would require close coordination with ongoing or proposed government or NGO programs to provide partial subsidy and technical support.

Box 1 illustrates the market-based product development for MFIs supported by MicroSave Africa, a donor-funded initiative based in Kenya. It has also worked with a number of MFIs to test these approaches. As a result, services and products are designed to meet client needs and have greater opportunity for expansion. Any exploration of opportunities to finance WSS-related market segments should use such market-driven methods.

2. The Nature of Latent Demand for Finance among Small Service Providers

There is an increasing recognition of the role of small WSS service providers, especially in improving access for the poor in rural and urban areas. Studies in a few countries in Sub-Saharan Africa suggest three WSS market segments:[6]

- Community-based small service providers (CSSPs): particularly for water schemes in rural areas
- Private small service providers (PSSPs): particularly for water and sanitation services in peri-urban areas
- Households as self-service providers (HSSPs): particularly for sanitation and household-level water facilities

Community-Based Small Service Providers (CSSPs)

In almost all the countries in the region governments have moved to CBOs for water services in rural areas. Small to medium-sized operations running into thousands of schemes are found in different countries. These include both point sources and piped schemes, either gravity-based or motorized. It is likely that motorized piped schemes would have greater need for credit and financial services. For most CSSPs, communities are involved in the design and implementation of new schemes, contribute to the capital investments, and have complete management and financial responsibility for operation and maintenance. Potential demand for finance from these CSSPs falls into two main categories:

For new investments: to meet the community share in capital contribution. Though most countries provide partial subsidies to meet the capital costs of rural water supply (RWS) schemes, within the demand-responsive approach, only a minimal community contribution to capital costs is required, generally ranging from 5 to 10 percent. The low share represents the perception of a lack of affordability. However, sustainable access to credit would enable an increase without any adverse impact on affordability, though this would require a clear government policy on community contribution and a ceiling on capital subsidy associated with some notion of basic service levels. However, for any government to introduce greater community contribution, a fair degree of outreach of microfinance is first necessary as a base condition. Even where outreach by microfinance institutions (MFIs) exists, the lack of a cash-flow history for a new CBO makes it difficult to assess the risks of such lending. This may, however, be resolved by MFIs lending to households to enable them to meet their share of contribution to the newly established CBOs, or where the MFI itself operates through groups (see box 2).

Box 2. Meeting the Demand for Partial Capital Investments through Microfinance

The Groupe de Recherche et d'Action pour la Promotion et Développement (GRAPAD) is a microfinance institution established in 1993 through support from the Catholic Relief Services. GRAPAD provides loans to clients organized in groups. A group in the peri-urban district of Hlazounto in Cotonou, Benin approached GRAPAD to finance the installation of a water pump, as the nearest water source is over a kilometer away. This group of women, known as FIFA, has had a 100 percent repayment rate on all its loans. The women in the group sell drinks, maize, *vin de palme*, soap, and firewood. FIFA has approached Initiatives au Développement (IAD) to finance 80 percent of the installation cost of the water pump, which is estimated at around FCFA 2 million (US$2,857). The remaining 20 percent would be sought from GRAPAD as a loan.
Source: ICC 2002.

In this regard, it would be also useful to identify the sources of funds used by communities in cases where communities are required to pay a higher share (as in many NGO projects), or when communities develop water schemes through their own efforts and funding. In Kenya, for example, a number of CBO-based RWS schemes have been developed through high levels of community shares, in some cases even being completely self-funded.

[6] Identification of these market segments is based on preliminary analysis for the Sub-Saharan Africa region using studies in three countries in ICC 2002; a study of Kenya in Virjee 2002; reviews in World Bank 2003 and Mehta 2003; and discussions with stakeholders in the region.

For investments in major repairs/ rehabilitation/augmentation. In most countries government subsidies are available for new investments but not for meeting the costs of repairs or for rehabilitation or augmentation of services. Latent demand for finance for these activities is explored in two contexts.

In some countries in Sub-Saharan Africa management of small RWS schemes is being transferred from centralized agencies, or departments in central ministries, to CBOs. Before such transfers, these schemes need to be rehabilitated and augmented to achieve improvements in services. Where there is a history of user charge payments and the possibility of linked service improvements, it is often possible to grant credit to the CBOs or households for this purpose. Box 3 provides examples of such opportunities.

It is important for the sustainability of CBO-based schemes to ensure that timely finance is available for major repairs, as the government does not take responsibility for these. Access to credit can help ensure that capital assets are not wasted. In addition, such schemes demonstrate to the community the benefits of doorstep water services, leading to an increase in demand for service provision and expansion, in turn resulting in potential demand for finance. Box 4 illustrates such demand from CBOs in Kenya. In Benin, savings generated from user charges are deposited with an MFI, providing funds and possible credit for major maintenance. The CBO managing the Kabuku scheme in Kenya has also generated a current account surplus and has explored credit for expansion. However, the lack of financial links with an MFI, and the difficulty of offering acceptable collateral, make it difficult for the CBO to access credit. Box 5 provides illustrations of the use of MFIs to respond to the demand for financial services. Similar findings are also evident from the experience in multivillage schemes in Senegal (WSP-AF 2003b).[7]

Box 3. Transfer of RWS Schemes to CBOs in Kenya: A Potential Opportunity

SIDA support to the transfer of RWS schemes. The Swedish government has been involved in aiding the Kenyan government with water projects since the 1970s. Recently, the Swedish International Development Agency (SIDA) has begun to fund the transfer of government-implemented schemes to communities. The beneficiary community is responsible for the initiation of the transfer proposal and bears the design costs. The community must be legally registered as a self-help group to make an application. The program favors low technology, such as gravity schemes and small systems. The water-related ministry provides assistance to applicants in the refinement of preliminary proposals and is responsible for the acceptance or rejection of proposals. SIDA requires that the beneficiaries make a significant contribution towards the capital cost of the rehabilitation of the system. The level of contribution has ranged from 10 to 50 percent. Operation and maintenance of the rehabilitated scheme then become the responsibility of the community. Though at present no effort has been made to link with credit for the community to meet its share, this is a potential opportunity, particularly given the improved outreach of microfinance in Kenya. This will, however, require a clear policy on community share in capital costs and efforts to link with MFIs and the cooperative sector.

Nderu water project is a community project operating two boreholes, which provide water for the community within the project area. The project dates back to 1926 when a settler sank one borehole to obtain water for his personal use. After independence, the county council of Kiambu took over the operation of the borehole and extended the distribution network. The council continued with the operation of the water facility but with great difficulty. In 1990, mainly due to financial difficulties, the facility broke down and the power supply was disconnected. In 1992 the community members approached the county council of Kiambu and were allowed to revive and manage the water project. Kshs 140,000 (US$4,500) was borrowed from two institutions in the community: Thairira Technical Institute and Mirithu Secondary School. The loan proceeds were used to rehabilitate the borehole and pay for an outstanding electricity bill. Normal water operations resumed later in 1992, and after only six months of operation the community had collected enough revenue to pay back the loan after meeting its operation costs. The project serves about 1,200 families and has been running smoothly since.

Sources: SIDA project from BG Associates 2002, and discussions with SIDA; Nderu project from WSP-AF 2001.

[7] Also see footnote 14.

Box 4. Unmet Demand for Expansion and Augmentation in Two CBO Schemes in Kenya

Kabuku project. The Kabuku water project was first instituted through ministerial efforts by the Kenyan government in the 1970s. Poor design, together with insufficient funds, led to the collapse of the scheme in the late 1980s. In 1990, a CBO was formed to rehabilitate and manage the rehabilitated scheme with initial funding from SIDA and a private company. Since then the scheme has been managed by the CBO independent of external support. Members, who own the CBO, elect a managing committee to ensure the efficient running of the scheme. Four technical staff are employed by the scheme in this effort. Revenues come primarily from user fees, which in turn are dependent upon the volume of water consumed by members. Kabuku has managed, since its rehabilitation, to collect sufficient revenues to meet its costs, and a major expansion, the construction of a storage tank, was financed through the use of the accumulated surplus generated from scheme revenues. However, efforts made by the CBO to raise additional funds to augment the total capacity for water production have not been successful, despite its healthy revenue base. The main constraint in this has been the inability of the CBO to offer acceptable collateral.

Gitaru self-help water project. The Gitaru self-help water project serves as an example of a successful community-run water supply project. The project was first developed in the 1970s when the area residents, without any donor or government aid, formed a self-help group. Today, the scheme delivers piped water to 600 households, as well as providing kiosk service to other households in the area. Extension of the service depends upon available capacity, and new users pay a connection fee and agree to adhere to the scheme's bylaws. The new user is also responsible for the installation of a water meter and the local pipes to his/her dwelling. The water is charged according to a rising block tariff. The scheme relies upon three boreholes, one of which is shared with a neighboring scheme, to meet the needs of its members. A private company provides the technical support for the boreholes and oversees water quality. Four full-time employees run the scheme, with an elected volunteer committee overseeing operations. The self-help group maintains a savings account at a local branch of the Kenya Commercial Bank, which used to also offer bill collection services. The main constraints facing the scheme are difficulties in financing large repairs, as collections are not sufficient to raise adequate surplus to meet these costs directly. The CBO therefore has to rely on informal finance routes, such as the use of *harambee* to finance major repairs and expansions. Funds generated in this manner can be unpredictable and irregular. In such circumstances the availability of credit finance could be of great benefit. Further, the scheme would benefit from renewed bill collection services offered by its banking outlet.

Sources: Kabuku from Gichuri 2000; Gitaru from Virjee 2002.

Private Small Service Providers (PSSPs)

Several recent studies have highlighted the important role being played by small private providers in the provision of WSS services, especially in urban areas. For example, Solo (1999) suggests that over half of the residents in urban areas of Africa depend upon nonutility sources of water, and 80 percent depend upon nonutility sanitation solutions; and Collignon and Vezina (2000) found that in Kayes, Mali, revenue collected by the independent providers of water is double that collected by the utility, and in Ouagadougou and Bobo-Dioulasso, Burkina Faso, independent providers collected revenues half those of the municipal utilities. These studies also highlight their demand for credit, which often remains unfulfilled.

Types of PSSPs. PSSPs are found mainly in urban areas and small towns for both water- and sanitation-related services, though more commonly for water. Box 6 illustrates the main categories found in African cities. In addition to these, other PSSPs provide services to support the delivery of water and sanitation services. This category of PSSP covers a large range of activities and varies considerably in potential cash flow, investment required, and legality of operation. These enterprises are involved in production and supply chains that produce, distribute, sell, and install water access, storage, and purification technologies. They include, for example, companies that produce or distribute spare parts, drill boreholes, sell pumps, build storage facilities, or provide design and management support to CBOs and small towns.

Box 5. Use of MFIs to Provide Financial Services for CBOs

Ethiopia. As a part of the Rural Water Supply and Environment Project (RWSEP, funded by the government of Finland) in Amhara Region in Ethiopia, effort has been made to involve the Amhara Credit and Savings Institute (ASCI), the local microfinance institution, in providing financial services to the CBO. Interestingly, of the community-based schemes supported through this project nearly 60 percent (727 schemes) collect user fees and about 65 percent (472 schemes) of these use the services of ASCI to deposit the fees collected. This uptake was aided by 'letters of comfort' from the program during the initial stages and some capacity-building support. Greater familiarity with the process means these measures are no longer needed. Regular saving with the MFI enables ready access to funds for repairs and maintenance. The program provides technical support and has devised simple rules enabling withdrawals without unnecessary bureaucracy. While so far this has not led to any loans, the cash flow history of a given CBO provides favorable conditions for the future. One constraint has been the lack of a firm legal status for the water committees of the CBOs. However, the regional water bureau is in the process of preparing a law giving legal recognition to these committees, which will make it easier for them to get loans for major repairs or expansion/augmentation of services. In Ethiopia the Ethiopian Social Rehabilitation and Development Fund (ESRDF), funded by the World Bank, has also used MFIs to channel project funds in one of the regions where there is no other financial institution to provide such services. It is likely that this can move to links during the operation phase, as in the RWSEP in Amhara Region, if appropriate support is provided at the initial stages.

Benin. GTZ/KfW are experimenting with microfinance and water programs in two villages in Benin: Allonkphon and Zian in the Oueme and Mono regions. Members of these two villages have created committees to manage and sell water sourced from a pump installed by a donor. The water is sold and revenues go into two bank accounts. Both villages have accounts with the largest rural MFI, CRCAM, and earn 3 percent interest on savings: 80 percent goes into a savings account (which is used for maintenance in case of breakdown) and the remaining 20 percent is used for on-lending to the village population for new connections.

Senegal. A study from Senegal also suggests that the ASUFORs (borehole users' associations) for rural multivillage water schemes use the well-developed banking network in rural areas in Senegal. "They are becoming major clients by virtue of the considerable proceeds from water sales that are deposited in their bank accounts. This situation should facilitate the ASUFORs' access to credit for the maintenance or replacement of water systems."

Sources: Ethiopia from Bekalu 2003, RWSEP 2001, and ESRDF 2002; Benin from ICC 2002; Senegal from WSP-AF 2003b.

Nature of demand for finance. Most PSSPs meet their working capital requirements through user charges. However, the lack of access to credit for capital investments is often one of the main constraints to new entry and expansion of service by small providers.[8] Thus, potential demand for finance from these different types of PSSPs is mainly for capital investments, either at entry level or for expansion and augmentation after an initial period of operation. Table 1 shows illustrative entry costs associated with different types of SSPs. Of particular note is the wide variation in investment levels, depending upon the level of technology. Manual latrine cleaners, for example, invest only US$20–50, which represents between 1 and 6 percent of annual revenue for those businesses. Suction tanker businesses require large capital investment, which represents up to 90 percent of annual revenue. Similar disparities exist in the water sector, but with wider variation between operators in different countries. This is due to different regulatory environments and different levels of utility development and coverage in African cities. In most cases the PSSPs rely on their own savings and borrowings from friends and relatives. Depending on the level of required initial investment, lack of access to credit inhibits new entry and can therefore limit competition. It must of course be recognized that access to credit is just one constraint and cannot be addressed in isolation from other constraints, such as the need for transparency in contracts with the PSSPs, efficiency in billing and collection systems used by the PSSPs, and regulation to ensure fair competition (Snell 1998).

[8] For example, see Snell 1998, where this is cited as a key constraint.

Box 6. Categories of Water and Sanitation PSSPs in African Cities

Water service providers. These include service providers in informal settlements, those catering to the special demands of the rich and commercial establishments, and emerging providers in small towns.

Water resellers: kiosks. These are widespread in cities in this region and often operate in informal settlements where it is difficult to provide private individual connections. Kiosks may include storage facilities or, when legal status is tenuous, simply consist of a lockable standpipe. They are responsible for the installation and maintenance of the infrastructure and may not be formally regulated, in terms of price or service quality. However, they are often licensed for connection from the utility, and there is often a special kiosk rate for water.

Water vendors. Water in African cities is also often delivered to the point of use. At the low end of the technology scale, water vendors carry containers of water to customers for a low fee using either handcarts or animal traction. Water is sourced from a standpipe, and priced in the range of US$ 2 to 6 per cubic meter, compared to US$ 0.6 to 1.5 from a standpipe. Due to the higher prices households tend to use water vendors where timesaving results in financial gain, and also tend to economize on volumes of water used from this source.

Water truckers. Water truckers tend to supply high-volume customers with water, including commercial and institutional customers, construction sites, and private villas. Water truckers exist in cities where the utility responsible for supply has an erratic and unreliable service. Though the investment required for water tankers is significant, it can be recouped within a short time, given the strong demand in many cities.

Borehole operators. Private operators also manage boreholes, often to supply water to truckers. In some cases they combine the borehole and trucking businesses into one operation in order to internalize the activities and benefits.

Small water networks. Some operators install small piped networks to supply their customers with water, using either utility connections or other private sources. In Nairobi (Kenya) and Abidjan (Côte d'Ivoire), for instance, private water networks supply water to areas where the utility responsible for water supply does not operate. In some countries such operators have been promoted in small towns through special programs, as in Mukono and Seguku in Uganda.

Sanitation service providers. These include service providers in informal settlements and small towns, and those catering to the special demands of the rich and commercial establishments.

Public toilet operators. In many African cities public toilet facilities, due to lack of maintenance, have fallen into disrepair. Municipal authorities often allow private operators to operate the toilet facilities on a pay-on-use basis. The arrangements vary from lease-type arrangements to full concessions, where the operator is required to invest his/her own funds in the rehabilitation effort.

Manual latrine-cleaning services. Due to minimal sewerage coverage in African cities many inhabitants rely on pit latrines for their sanitation needs, so the demand for latrine-cleaning services is quite significant. Manual exhausting of latrines entails the use of a shovel and bucket to periodically remove the excreta from the latrine. Due to the hygiene risks involved, the occupation tends to carry a significant social stigma. Such operators tend to work for people they know, in a very local area, and earn very small profits.

Suction truckers. Wealthier households employ mechanized suction truckers to empty their septic tanks. This system is preferable to manual exhaustion due to the shorter time required to empty the pits and the possibility of waste disposal at a distance. They operate in the formal sector, as vehicle registration is required. Their earnings can be quite high; some operators in Nairobi (Kenya) and Bamako (Mali) have daily earnings of over US$100.

Sources: Collignon and Vezina 2000 and Solo 1999.

The potential demand for finance from the PSSPs is likely to be affected by their location – in urban informal settlements a key aspect would be the legal and regulatory framework within which they operate, whereas in rural areas related policies and programs are influential; and by the size of investments needed – there is greater demand for finance from activities requiring larger investments.

Table 1. Entry Costs and Sources of Finance Used by PSSPs in Urban Areas in Africa

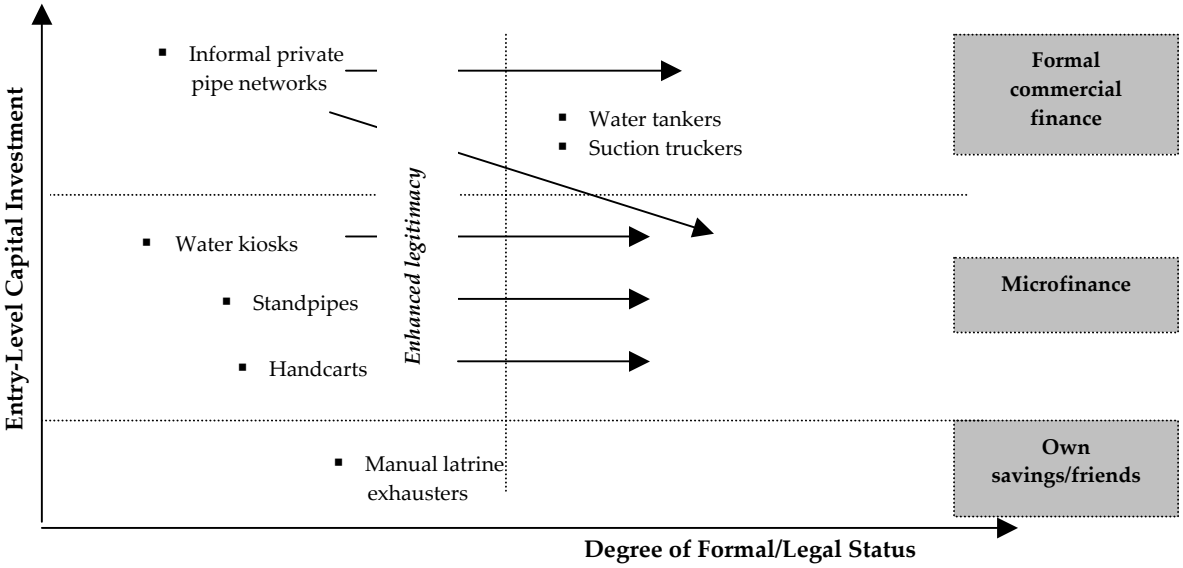
Type of Investment	Usual Source of Finance	Cities	Unit Cost (US$)
Sanitation Sector Operations			
Manual latrine-cleaning equipment	Own and family savings	Dakar (Senegal) Bamako (Mali) Nairobi (Kenya)	25 19 50
Secondhand suction truck	Formal or informal loan	Bamako Ouagadougou (Burkina Faso) Dakar Kampala (Uganda)	15,000 8,300 16,700 25,000
Public latrines and shower facilities	Formal or informal loan	Bamako Kampala	200 3,500
Sludge treatment plant using ponds	Own funds and bank loan	Cotonou (Benin)	200,000
Water Sector Operators			
Handcart	Own and family savings	Ouagadougou Bamako Nouakchott (Mauritania)	50 120 135
Water truck	Formal or informal loan and earning from other activities	Nouakchott Nairobi Kampala	15,000 13,000 7,500
Standpipe	Own and family savings	Ouagadougou Dakar Nouakchott	50 700 700
Overhead water tank to fill trucks	Own and family savings	Kampala	2,000
Private borehole + standpipe	Bank loan	Nairobi	37,400
Small network with standpipes	NGO loan Own and family savings	Conakry (Guinea) Cotonou	12,500 1,500
Small network w/metered household connections	User subscription fees	Guerou (Mauritania)	3,000 (per km)

Source: Collignon and Vezina 2000, table 3.3, p. 14.

Figure 1 illustrates the influence of the legal status of the PSSP (through a license or a franchise) and the scale of capital investment on selection of particular finance solutions. As legitimacy increases, potential for credit increases, using microfinance products for small investments; and as investment size also increases, formal sector commercial credit products become relevant. If the scale of investment is very small, however, there may not be demand for credit, as in the case of manual latrine exhaustion, which requires low capital investment. In such cases, own savings or help/borrowing from relatives/friends are sufficient. Figure 1 indicates that at some medium level of investment, with adequate legal status, there would be demand for microfinance products. As indicated, it is most likely that water kiosks and small private networks operate in this realm and represent potential microfinance clients.

Capital investments for expansion and augmentation. To achieve financial sustainability the PSSPs need to increase their service coverage, which in turn is often dependent on access to credit for the necessary capital investments. The size of such investments is likely to vary depending on the technology, level of expansion needed, and prevailing costs. However, it may be easier to provide credit for this, as a cash-flow history already exists; tenure-related issues can be assessed based on past experience, and demand for their services may be easier to assess. Thus, while legal and regulatory issues would still need to be addressed, credit may be structured on the basis of past history.

Figure 1: Possibilities for Meeting the Potential Demand for Finance by Various PSSPs



Are PSSPs in the region using credit? Studies in the region suggest that there has not been commercial credit offtake by PSSPs through either MFIs or the formal finance sector on any significant scale. However, several examples do exist from a number of countries of individual PSSP clients having borrowed to start or to expand their WSS-related businesses, as illustrated in box 7. These examples illustrate the potential for credit in the sector. However, to articulate this and develop it into a reasonable market more attention will need to be paid to enhancing legitimacy, as shown in the examples in box 10.

Box 7. Business Loans to PSSPs for Capital Investments: Some Illustrations

Benin. PAPME, a Beninois MFI, has a large number of clients that borrow money for purchasing pipes, taps, and hoses for the purpose of making a profitable business out of providing infrastructure to water and sanitation. With the privatization of the water utility, PAPME hopes to take advantage of this by extending its outreach to cover more water and sanitation clients.

Benin. Denis Todogledji is a water seller in the peri-urban areas of Cotonou. He transfers water from the peri-urban mains to the rural areas via a 2-kilometer pipe, which cost him FCFA 600,000 (US$857). There is a counter on the standpipe which the Société Béninoise d'Eau et de l'Electricité (SBEE) has installed (at a cost of FCFA 64,000). Denis employs two water sellers at this point. SBEE sells water to him at FCFA 290/m^3 and he resells it for FCFA 350–400/m^3. In order to finance his operations, Denis borrows from a local MFI.

Uganda. A Ugandan MFI, CMFL, had a client who took a loan to construct a well and on-sell water as a business venture. According to CMFL's chief operations officer the client's business was extremely profitable, resulting in a repeat loan to expand WSS activities. Another MFI in Uganda, UMU, provided a client with two loans to purchase water tanks.

Source: ICC 2002.

Households as Small Self-Service Providers (HSSPs)

Households are often their own service providers. They may use their own private water sources, or other natural sources such as wells or rivers, and their own latrines for sanitation. While many households in rural areas depend on shallow family wells for water, these are often not acceptable by public authorities as providing access to 'safe water'.[9] There are some exceptions, such as the Zimbabwean program described in box 8. In

[9] In Zimbabwe these wells are very common, and there has been a program, funded by SIDA, Rotary, and WaterAid, to support their upgradation (Morgan 1996).

this program, the family is expected to contribute about two-thirds of the total cost (about US$80 per family in 1992). In most sanitation-related programs the emphasis is also now shifting away from any household subsidies. The cost of a sanitary latrine is likely to range from about US$ 15 to 150 in different countries in the region, according to the type of technology used and rural/urban location. These are lumpy investments for most poor households, and access to credit would enable more households to install such household-level facilities. However, particularly in the case of sanitation, such efforts require support from the government and other stakeholders (NGOs) for demand promotion and adequate technical support in order to provide cost-effective solutions and quality control.[10]

A household may also require credit to pay the connection fees to gain access to an improved system, possibly a CBO-based system in rural areas (refer to box 5 for such credit in Benin) or through an urban utility. This has not been common in Africa, as in most cases the utilities have avoided providing private connections in poor neighborhoods or informal settlements. However, recent programs in India have utilized microcredit through individual borrowing to finance fees for new connections in slum settlements. This, however, does require readiness of the local utility to provide services to these customers, and possibly a program framework to support its implementation (World Bank 2003). Similar opportunities may arise in future programs aiming to improve services in urban informal settlements in this region, if the issues of tenure are addressed.

Box 8. Family Wells Program in Zimbabwe: Potential for Credit to Enhance Coverage

Many rural households in Zimbabwe live in areas where groundwater is relatively abundant. Given this, wells are often used to supply water to rural households. Many of these households rely upon family-owned hand-dug shallow wells, which offer the advantages of accessibility, clear ownership, inexpensive technology, and simple maintenance. Traditional hand-dug wells, however, are prone to contamination, making them scarcely better than unprotected, untreated, surface water sources. Simple technical improvements, such as lining the well and using a concrete cover and apron to ensure that water drawn from the well cannot spill back into it, allow for a significant improvement in water quality. The Zimbabwean government, through its family well program, offers a subsidy of cement and a windlass to families wishing to upgrade their wells. Families are required to contribute the required labor, bricks, buckets, and rope. In most cases, the capital contribution by the beneficiary amounts to over 60 percent of the total capital improvement cost, and the cost to government is about US$3 per person. Families wishing to obtain a subsidy for an improved well are required to show commitment to the improvement by deepening and lining their existing well (or constructing a new lined well), and are subsequently responsible for the entire maintenance cost associated with the improved well. By 2002 50,000 upgraded family wells had been built across Zimbabwe, serving a total of half a million people. Funding has acted as a constraint to increased installation of upgraded wells, despite the fact that most of the capital cost is borne by the recipient family. It is likely that if such an effort is linked with access to microfinance for households, and the government role is limited to demand promotion and technical support, it would result in increased coverage.

Sources: Morgan 1992 and 1996; Robinson 2002.

Responding to Country Contexts

While exploring such opportunities, it is essential to respond to the given country context by considering such factors as WSS policies and the status of the microfinance sector. Box 9 provides some illustrations of potential opportunities that may be explored within these contexts. To articulate these opportunities, it is essential to provide greater space for such linkages in WSS strategies and support them through action research where relevant.

[10] For example, in more densely populated rural areas and in urban informal settlements location of latrines needs to be planned to avoid pollution of water sources.

Box 9. Exploring Potential Opportunities in Selected Countries

Benin. The microfinance sector in Benin is well developed, with an outreach of over 350,000 members. It has reasonable penetration, as most MFIs are concentrated in urban areas in the southern region. Existing MFIs have been financing PSSPs in urban areas and see opportunities for further growth. Future opportunities exist both in consolidating the partnership between the utility and PSSPs, and in expanding microfinance outreach to rural areas. In both cases, market research to establish the nature of demand will be useful. From the perspective of the WSS sector, the focus needs to be on creating and supporting space for private/community finance, particularly for RWS.

Kenya. In 2002 Kenya passed a new Water Act, opening the sector to numerous institutional changes, including decentralized water provision. Under this act water service providers will enter into contracts with the water services boards, and be subject to regulation by the water services regulatory board. Kenya is endowed with a relatively well developed microfinance sector: the cooperative sector has an outreach of over 1.7 million clients and an outstanding portfolio of US$0.4 billion, and there are also some very effective MFIs such as K-REP. Opportunities in rural areas include working with existing CBOs to provide financial services and credit for repairs and augmentation; the provision of credit for rehabilitation linked to the transfer of existing public sector schemes to CBOs; and the initiation of project financial services in new schemes. This requires both a firm legal basis for the CBOs and appropriate technical support. In urban areas, the large number of PSSPs may present opportunities. Market research is necessary to understand their finance needs. It will also require clarification of the link between the utility (city councils or new city water companies) and the PSSPs. The possibility of using the SACCO model for both rural CBOs and PSSPs working in urban informal settlements needs to be explored.

Ethiopia. In rural Ethiopia CBOs are responsible for WSS. With decentralization this responsibility will increase. The microfinance sector is relatively new, and has so far been dominated by government-supported MFIs. Of the total coverage of about 0.6 million clients the share of the largest four MFIs is nearly 90 percent. In some regions, however, these MFIs are the only financial services in rural areas. Some donor programs are already using the MFIs for financial services in the implementation of rural water supply and sanitation projects, and to provide services to CBOs during operations. These show potential for improved financial management of CBOs and will possibly extend to credit for repairs and augmentation at a later stage. These opportunities need to be assessed and explored further, for example through action research. This would enable their effective incorporation into a countrywide RWS program. It would also be useful to explore the possibility of links with the proposed support program, funded by the International Fund for Agricultural Development (IFAD) and the European Union (EU), for strengthening the microfinance sector in Ethiopia.

Uganda. Uganda has a few relatively mature and financially viable MFIs, though their collective outreach is only about half a million clients. The emphasis in the microfinance sector thus needs to be on increasing the outreach of MFIs while maintaining their financial sustainability. The WSS strategy in Uganda envisages limited community shares, mainly through noncash contributions for rural water schemes, though for household sanitation there is generally limited or no subsidies. However, lack of effective functioning and sustainability seem to be problems faced by many existing schemes. Uganda, in its efforts to develop productive links between WSS and the microfinance sector, may learn something from the Ethiopia experience of using the MFIs to provide financial services to CBOs for scheme implementation and later operation (see box 4).

Zambia. In Zambia the potential need for credit exists in both rural and urban WSS sectors: in RWS the emphasis is on management by CBOs, and in peri-urban areas efforts are being made to evolve both CBO-based schemes and participation by PSSPs. However, the microfinance sector in Zambia requires further development before links with WSS can be usefully explored, though there may be some potential in current NGO initiatives to develop links between CBOs and MFIs through action research.

Sources: Based on the findings in ICC 2002, Virjee 2002, and preliminary inquiries in Ethiopia.

A Summary of Demand, Risks, and Support Requirements

The nature of demand, risks, and support requirements varies across the three types of SSPs discussed above. Table 2 provides a summary of potential demand among the three market segments of the small WSS service providers. Amongst these, the potential appears greater for the first two market segments in view of prevailing WSS policies. On the other hand, given the stronger links of the microfinance sector at retail level with

individuals and households, the third market segment is important and needs to be explored further, especially as achievement of the water and sanitation MDGs may be expedited by an emphasis on credit at household level.

Table 2. A Summary of Potential Demand from Small WSS Service Providers

Types of SSPs	Nature of Demand	Factors Affecting Potential Opportunities	Types of Risks
CSSPs	New schemes: to meet partial contributions in new investments Transfer of schemes to CBOs: to meet partial contributions for rehabilitation/augmentation Ongoing schemes: financial services, credit for major repairs, expansion, or augmentation	Larger community contributions are crowded out by the design of subsidy policies: especially relevant for high-cost schemes providing higher level of services Potentially large market in Africa with the emphasis on decentralization and demand-responsive approaches In transfer of schemes, likely problem of lack of incentives for CBOs to participate	Risk of new CBO without any credit or cash-flow history In some cases, lack of a clear legal status of the CBO is likely to be a problem In ongoing schemes, past cash-flow history through user charges can be assessed. Also, the risk is lowered, or can be better assessed, as the MFI establishes a relationship and cash-flow history with the CBO In new schemes or transfer of schemes, close coordination required with government/NGOs/donor programs
PSSPs	For capital investments in a new operation or to expand/augment services	For emerging systems in small towns potential private investments are often crowded out: use of minimum subsidy concessions may be useful High cost and short tenor of conventional microfinance products poses a constraint, as infrastructure lending requires medium- to long-term tenor	For PSSPs in urban informal settlements, lack of a firm legal basis and regulatory framework poses a significant risk
HSSPs	To meet full/partial contributions in family wells/water facilities To meet connection fees to CBO scheme or an urban utility system To meet full/partial contributions for household latrines	Generally not recognized in most publicly funded programs as an appropriate option Potentially large market in rural CBO-based schemes, but dependent on a program and technical support Needs to be linked to a demand promotion program as well as appropriate technical support Potentially large market	More amenable to microfinance lending due to the individual borrower For urban utility, the main problem is willingness to provide connections to the low-income customers in informal settlements due to the legal tenure issues Lack of easily perceived financial returns or savings for the household, making publicly funded demand promotion critical

The potential demand by CBOs in rural areas for finance to contribute towards capital costs is dependent on appropriate policy and finance rules that create a 'financing space' and do not crowd out community contributions. This requires a clear definition of which basic services need to be universally provided, and an appreciation of the ability and willingness to pay for these services. Additional factors relate to the legal basis of the CBOs, as this will influence the risk perception of the lenders. An appropriate regulatory framework for the operations of PSSPs is also critical in converting latent demand into a larger market for microfinance. These factors also affect the perennial problem faced by these potential borrowers of lack of collateral. A formal legal and regulatory basis would help to address the collateral issue to some extent. In addition, it would be through building cash-flow history that the SSPs can establish credibility for potential borrowing for major repairs, expansion, and augmentation. While in many cases there is potentially a large market for such credit, its realization and articulation requires an appropriate policy framework and technical support to the small providers and local finance institutions.

3. The Role of Governments and Development Partners

The main role of governments is to create an enabling environment for the small providers and for the institutions that provide microfinance services, both through policies and through specific support programs. Actions by development partners, be they donors, multilateral financial institutions, or large NGOs, need to be guided by ensuring microfinance institutions have space in which to operate, capacity building support, and access to medium-term capital. The resources of development partners should be targeted to support governments and institutions that have sustainable policies. This section outlines actions that may be taken by governments and development partners in this context. However, given the limitations of the microfinance sector, demand for financing needs to explore other avenues, such as suppliers' credit, leasing, and franchising.[11]

Some key aspects to be addressed by governments and development partners include:

Ensuring financing space through policy and programs. It is important to define and apply financing rules that create financing space without crowding out household, community, and private finance. This finance could be for new investments that provide a higher level than basic service, for rehabilitation under transfer programs, for repairs, and for expansion and augmentation. In addition countries need to have clear policies setting out basic service levels beyond which costs need to be met entirely by households/communities. However, this does require considerable planning related to defining appropriate and nationally affordable standards, the costs of achieving these standards in different regions of the country, and an understanding of willingness to pay for WSS services. For development partners it is necessary to work with governments to ensure that such financing space exists, and to include this in their funding by insisting on adequate community share for services above the basic service levels.

This is well illustrated by the findings of recent studies of small and medium enterprises (SMEs) for water in small towns in Ghana. As Gross (2003) reports, in the past donor "support was provided at little, or most often, no financial cost to the SMEs. While such schemes have helped (. . .) to meet project objectives, they have distorted the market in the long run. Further, they have discouraged firms establishing formal relations with banks or financial institutions that could potentially offer financial services on a more sustainable basis." It is suggested that "the future strategy should aim to link enterprises working in the water sector with such institutions rather than creating new support schemes. The CWSA has now started to do so by pursuing a partnership with Leaseafric, a commercial leasing company that has just developed a microleasing program with World Bank guidance. It is also holding a series of regional workshops on microfinance institutions and how to access credit for SMEs" (Gross 2003:7)

Appropriate regulatory framework and partnerships with SSPs. In many countries, public departments or utilities are mandated to provide water supply services in both urban and rural areas. However, often these utilities are not able to reach a vast majority of residents, who then need to rely on a variety of SSPs. It also forces these SSPs to operate without adequate legitimacy and face unpredictable policy regimes. The most recognizable case is that of the informal PSSPs that operate in many urban areas, especially in informal settlements. Although there is an emerging shift to CBO-managed schemes in rural areas, a lack of clarity often persists in the status of CBOs and ownership of assets (refer to box 3 on the experience in Kenya). A regulatory framework that recognizes the various SSPs and is backed by supporting policies and, preferably, a support program would enable the SSPs to operate in an environment that was more predictable and more conducive to accessing market-based resources from banks and MFIs.

[11] For example, see Toyoshima 2002 for ideas on the use of leasing for small providers, and Roche, Revels, and Amies 2001 for ideas on franchising.

Refer to box 10 on the experience of partnership between the local utility and the small private providers in Benin and Zambia.

Appropriate regulatory framework for microfinance.[12] It is important to develop a legal and regulatory framework that provides a favorable environment for the development of microfinance according to the best practices and standards. Increasingly, individual governments have issued decrees to regulate microcredit activities through registration. These have tended to differentiate between those MFIs that can mobilize savings for on-lending and those who are restricted to credit provision using only their own sources of capital. In most cases the legal framework has been developed to protect depositors and to ensure the security of transactions. Information dissemination and enforcement of legislation vary from country to country and from region to region. Such regulatory efforts should highlight the necessity of financial sustainability in microfinance operations.

"Although increased regulation of the sector has, on the whole, been welcomed by most sector representatives, many believe that the regulatory framework imposed by individual governments poses problems for the longer-term development of the microfinance sector. Given the emphasis in microfinance on

Box 10. Illustrations of Partnerships between the Utility and PSSPs

Benin: Société Beninoise d'Eau et de l'Electricité (SBEE). Benin provides a case where collaboration between the central utility, SBEE, and independent resellers has led to increased service coverage where government did not have the funding to expand service to the entire population. PSSPs enter into an agreement with SBEE, and fall into one of three categories: metered rural groups, urban groups, or urban resellers at standpipes. In order to become a supplier of water, a PSSP submits an application to SBEE for a connection. The new operator then pays a connection fee and a water tariff of US$0.5/m^3 for the water sold. Given the formal legitimacy of the SSP franchise, operators are able to access finance facilities. Microfinance institutions offer loans to operators to extend their networks or invest in other capital, and as their formal legitimacy decreases the risk of lending and the cost of lending are also lowered. L'Association de Revendeurs d'Eau du Benin (AREB) was formed in 1999 and has over 150 members operating in the Cotonou area. Members have over 20 years' experience in selling water. More cooperation is, however, required. Though each member has a base of over 500 clients many find it hard to survive on this business alone. They claim problems with high tariffs charged by the water utility, low water pressure causing time and water wastage, and poor quality of pipes causing leakages.

Zambia: Lusaka Water and Sewerage (LuWS). LuWS is the city's utility and was established in 1988. It sources water from both surface reservoirs and groundwater sources. Some of the utility's piped network exists in peri-urban areas and water from this source is administered through communal taps. LuWS has decided not to extend its network into these areas due to infrastructure constraints, cost, and level of water supply. It has instead developed a satellite system whereby water is pumped from on-site boreholes into elevated tanks, chlorinated, and distributed through communal standpipes. A network of 50 standpipes services eight areas within the settlement. The structure is managed and maintained in close collaboration with LuWS, who run it as a subbranch of their existing operations. The actual distribution of water is managed by a community-elected resident development committee (RDC), which appoints attendants to open the taps at certain times of the day and to monitor consumption using preinstalled water meters. Customers are charged a fixed monthly fee of K 3,000 (US$0.77) for water and K 1,500 (US$0.38) for maintenance. Those customers that are unable to pay monthly fees can access water at a cost of K 50 (US$0.013) per 20 liters. Money collected by the RDC is surrendered to the local LuWS branch that is responsible for maintaining the system. So far, these fees have not been sufficient to cover maintenance costs and the project continues to rely on donor support. The responsibility of overseeing the project has since been taken over by CARE International, who established a water trust to manage the project more effectively. This trust consists of representatives from the local council, LuWS, the RDC, and the community. It employs staff to manage operations and maintenance. Through a contract with LuWS the trust falls within the regulatory framework and thereby extends the utility's coverage in the city. The estimated coverage of this project is over 10 percent of Lusaka's residents.

Source: ICC 2002.

[12] This section is largely based on ICC 2002, volume II.

providing savings and on accessing funding from nondonor sources, most MFIs will need to move from the association or international NGO form to a more permanent form as some type of financial institution. Many believe that governments should make efforts to find suitable alternatives that, while satisfying the legitimate concerns of regulators, also allow MFIs to become commercially and financially viable. The creation of a legal framework specifically suited for MFIs, such as a 'microbank', with reduced capital and reporting requirements, or for credit unions, which would reduce the existing restrictions for many credit cooperatives and credit and savings associations, are alternatives that should be explored by stakeholders to foster the development of the sector" (ICC 2002, II:33–35). In the medium to long term these measures would help to increase the emphasis on savings for resource mobilization and reduce the cost of funds.

Support to communities and microfinance providers for articulating demand for finance. A recent study of sanitation in Kenya shows that communities listed inadequate financial ability as a major hindrance to improved sanitation, particularly for building a new latrine (BG Associates 2003). Similarly, existing CBOs are often unable to expand coverage or augment services despite demand from their members or adjoining neighbors (see the examples in box 4). In such cases, households and communities need assistance to articulate their demand for finance in a form that would attract the interest of relevant financial institutions. As many of the typical microfinance providers lack the necessary capacity to work with organizations, and lack experience in structuring and lending for infrastructure projects, support will be required for both communities and finance institutions. This may be through the efforts of an intermediary NGO or through a special support program.[13] This support should aim to provide an expression of demand for finance within the principles of sustainable microfinance, and so account for market realities in the microfinance sector.

[13] For example, see World Bank 2003 for the outline of a possible support program for sustainable private finance for community infrastructure in India.

Support action research through pilots. Despite the constraint of low development of the microfinance industry in Sub-Saharan Africa, it is possible to outline some potential opportunities for microfinance in the WSS sector that will also contribute to development of the microfinance sector. Some specific opportunities are also identified for the five countries that were reviewed in box 9. Donor support for action research through pilots would help to develop these ideas further and assess their potential for scaling up. Such measures are made more urgent by the importance of such financing in achieving the WSS-related MDGs. Particular emphasis is needed also on household-level finance, due to its suitability both for WSS and for microfinance providers.

Knowledge management. Globally a number of different approaches are emerging, and considerable innovation is taking place both in microfinance and in the financing of WSS sectors. While practical solutions have to be developed in local and specific contexts, the sharing of experience regionally and globally helps to develop and refine new ideas and fill knowledge gaps. Development partners who work in multiple countries and regions are well placed to support global knowledge management. Many regional programs already support WSS and microfinance sectors separately. Opportunities to transfer and exchange knowledge across these programs need to be strengthened.

Conclusion

The key point emerging from the above analysis is that there is emerging evidence of latent demand for finance among the SSPs in the WSS sector. However, articulation of this demand requires technical support and demand promotion, and realization at scale requires changes in government policy to provide financing space for communities, and regulatory environments that encourage the stability and predictability needed by SSPs. On the other hand, development of the microfinance sector in Africa is still evolving, and needs to extend its outreach, as well as its sustainability, to offer any significant support for financial services and credit. However, some countries, such as

Kenya, have relatively well developed financial systems in which significant outreach and penetration are available.

In this context pilot interventions would be relevant where the microfinance sector had some presence. This would need to be supported through appropriate partnerships between the WSS and microfinance sectors in order to reduce or overcome policy and regulatory risks. For a given country, the potential needs to be assessed in relation to the level of development of the microfinance industry and specific WSS opportunities. With a moderate/growing microfinance sector, as in Ethiopia, Kenya, or Senegal, action pilots may be taken up at a reasonable scale.

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Note: The word "processed" describes informally reproduced works that may not be commonly available through libraries.

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Abbreviations and Acronyms

AFCAP	:	Microfinance Capacity Building Program in Africa (Anglophone)
AFDB	:	African Development Bank
AREB	:	L'Association de Revendeurs d'Eau du Benin
ASCI	:	Amhara Credit and Savings Institute
CAPAF	:	Microfinance Capacity Building Program in Francophone Africa
CBO	:	community-based organization
CGAP	:	Consultative Group to Assist the Poorest
CSSP	:	community-based small service providers
DFID	:	Department for International Development
ESRDF	:	Ethiopian Social Rehabilitation and Development Fund
EU	:	European Union
FDCF	:	Financial Deepening Challenge Fund
FSA	:	financial services association
GRAPAD	:	Group de Recherche et d'Action pour la Promotion et Développement
HSSP	:	household as small self-service provider
IAD	:	Initiatives au Développpment
IFAD	:	International Fund for Agricultural Development
LuWS	:	Lusaka Water and Sewerage
MDG	:	Millennium Development Goal
MFI	:	microfinance institution
PSSP	:	private small service provider
RDC	:	resident development committee
RWS	:	rural water supply
RWSEP	:	Rural Water Supply and Environment Project
SBEE	:	Société Béninoise d'Eau et de l'Electricité
SIDA	:	Swedish International Development Agency
SSP	:	small service provider

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WSP FUNDING PARTNERS

The Governments of Australia, Austria, Belgium, Canada, Denmark, Germany, Italy, Japan, Luxembourg, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom, the United Nations Development Program and the World Bank.

ACKNOWLEDGMENTS

This paper has been prepared by Meera Mehta (WSP-Africa) and Kameel Virjee (Knowledge Intern), based on studies by the International Capital Corporation (ICC 2002), Kameel Virjee (Virjee 2002), and a review of available literature and information from WSP-Africa focus countries. Tesfyae Bekalu provided input for Ethiopia.

The paper has been peer reviewed by Robert Buckley and Caroline Van Den Berg. Their feedback has especially helped to improve the basic reasoning and structure of the paper. We have also benefited from feedback from Bharti Ramola Gupta, David Redhouse, V. Satyanarayana, Joseph Narkevic, Belete Muleneh and Maimuna Nalubega.

Copy Editor: John Dawson
Production Assistance: Sarah De Villiers Leach, Njeri Gicheru and Vandana Mehra
Photograph: WSP-Africa
Cover Layout and Design: Write Media

This document is available online at www.wsp.org

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