



# Turning on The Tap

## *demand and supply at community level for financing of water and sanitation*

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### Key Points

- Up to 44% of some cities' water supply can come from small-scale providers such as street vendors
- Household income now underpins some projects for 100% sanitation coverage and, with \$93 billion of migrant annual remittances outstripping overseas aid worth \$58 billion, might be able to do more
- Government responsibility for ensuring access, especially of the poorest, to water and sanitation could be met in part by facilitating entrepreneurs and consumers' access to manageable credit. As many as 80% of developing country households lack this economic freedom
- Constraints on credit reflect risks — the lack of a legal operating basis for entrepreneurs, or the presence of free-riding neighbours for indebted households, or, the absence of land collateral or cash income opportunities in borrowing proposals being assessed by finance institutions
- Perceptions of risk and how to mitigate them need to be addressed in research. WaterAid is now doing this through work with the NGO Maji na Ufanisi in Kenya and through dialogue with the Water and Sanitation Program - Africa (WSP-AF) who are carrying out parallel work.

### Introduction

At first sight a Mozambiquan entrepreneur and an Indian housewife do not have much in common. But Mr Rosario's water business and Mrs Palaniyammal's latrine are actually part of a common trend (see Box 1). Against a background of institutional failure to expand access to water and sanitation, communities are thrown back on their own resources to finance and deliver these services. They have no alternative if they are to escape the poverty traps of time-consuming daily searches for water and of ill-health caused by lack of sanitation. Entrepreneurial activity however seems easier in other sectors — retail or mobile telecommunications — or in the widespread investments made with communities themselves in health or education facilities.<sup>1</sup> By contrast, in the water sector communities needing to repair or expand services often face a finance gap. It appears that this could

be closed by the provision of microfinance at community level which would leverage existing financial resources. We need to know why this is not routinely happening already and what would be required if it was to happen. The central issue could be risk:

- How is risk assessed by those who might demand finance for water and sanitation ?
- How is risk assessed by those who could supply such finance ?

This paper briefly reviews the general history of community-level access to finance - on credit terms in particular. It then turns to WaterAid's own project experience of this approach and finally indicates what it might mean to have a greater understanding of demand and supply side assessments of financial risk and how research might answer the questions above.

### WaterAid - water for life

The international NGO dedicated exclusively to the sustainable provision of safe domestic water, sanitation and hygiene education to the world's poorest people



WaterAid/David Redhouse

**Small-scale water service providers — can they get the finance to do more ?**

## Box 1: Case studies of trends in community-level water and sanitation provision

**Mr Rossario** recently set up a private company constructing wells and latrines in Niassa Province, Mozambique. In Niassa Province, which is well below the national average in access to safe drinking water and sanitation, prospects for business expansion are potentially high. However, Mr Rossario complains that he cannot profit from this opportunity because he cannot access the finance necessary to expand his business. To meet available loan conditions, he would either have to repay the loan before finishing the job or provide collateral, which he does not have, to get a loan for a longer period.

In the Cuddalore District of Tamil Nadu, India, **Mrs Palaniyammal** proudly presents her new latrine to a neighbour. Having collected the building materials and dug a pit, Mrs Palaniyammal had qualified to subscribe to a local Self-Help Group. Thanks to the loan that she could then take out, she was able to pay a local mason to lay the concrete slab and to build the superstructure of her latrine. With a second loan, she then replaced the gunny bags serving as a door with a permanent construction.

## Sector Financing

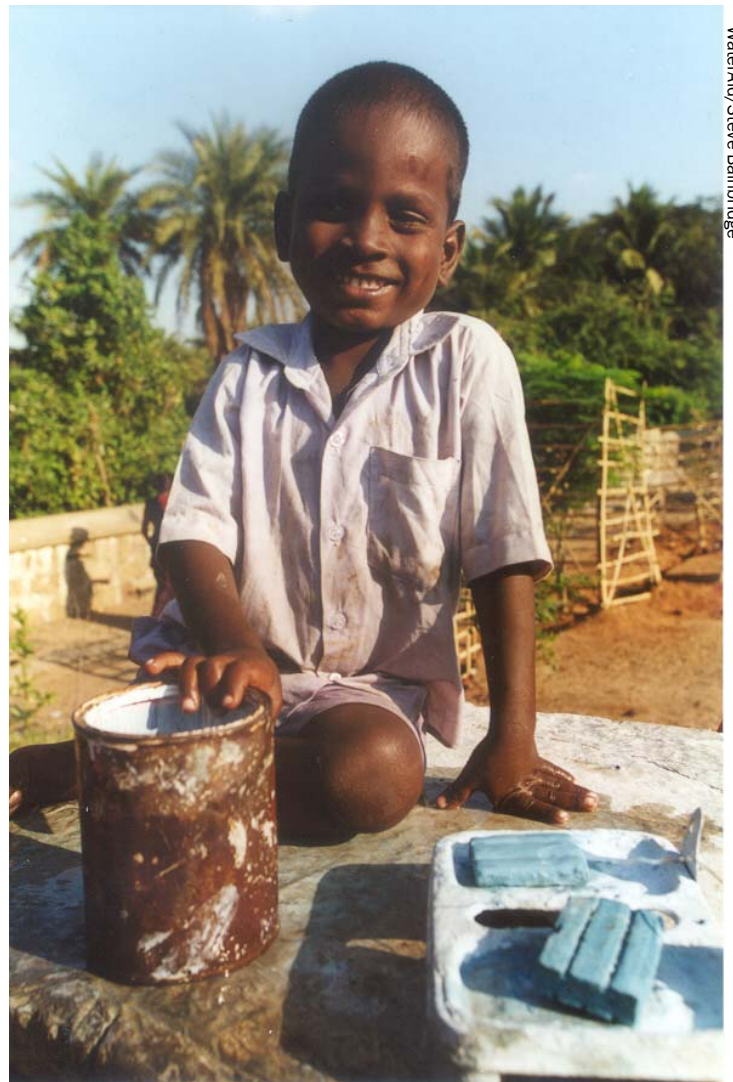
The finance needed to supply safe water and basic sanitation to all the world's population cannot be calculated precisely, not least because there is no complete and accurate data set of present coverage rates. The most commonly-used estimate is that from the Global Water Partnership's Framework For Action which suggested that current per annum spending levels of \$14 billion in 2000 needed to rise to \$30 billion (assuming at the same time that increased effectiveness would keep unit costs of provision at the lower end of the ranges in both rural and urban areas). This estimate was adopted by the 2003 World Panel on Financing Water Infrastructure which consequently called for the doubling of all sources of water finance.

Amongst those sources national governments are generally estimated to account for around 70% of the finance, donors for some 20% and international or domestic, private or community sources for the remaining 10% or so. Ultimately therefore there must be most potential in increasing governments' contributions. This has been seen in South Africa where the proportion of people without safe water has already been halved since 1994 and in Uganda whose Government increased its own water spending fivefold while donors doubled theirs leading to 2.2 million more people getting access to safe water between 1997 and 2001. Generally though Governments are failing to prioritise water and sanitation in either Poverty Reduction Strategy Papers (PRSPs) or associated national budgets while donors' water spending also is at best static.

At the same time the poorest countries do not benefit from international private finance – sub-Saharan Africa attracted just 0.01% of such funds going to the water sector between 1990 and 1997 since when there has been an overall decline in these investments.

The key change required is for water and sanitation to be prioritised in PRSPs so that governments - developing country and donors – then double their aid and spending on water in line with Monterrey commitments for delivery of the Millennium Development Goals. For these changes then to translate into action on the ground however it is also necessary to understand the factors which either enable or block access to finance at community level, including for the small-scale independent providers who are already central to some water supply and sanitation services, especially for the poorest urban residents.<sup>2</sup>

Although it made no detailed proposals, the 2003 World Panel did recommend expansions in the roles of these small and medium enterprises as well as in civil society service providers. As the case studies above show, the issue for all entrepreneurs seeking to provide water and sanitation services is access to credit.



Pride in a new household latrine slab

## Finance Sources for the Poor

The poor have always needed to organise themselves so that credit would be available, for example for the costs of social obligations such as death ceremonies. While families, friends and neighbours often remain the most readily available sources of finance, there has also been a trend (see Box 2), largely triggered by the development industry, to formalise these arrangements into micro-credit instruments for agricultural development and for supporting women business entrepreneurs. The resulting micro-finance institutions now often offer other services such as insurance and savings schemes while at the same time some commercial banks, attracted by the excellent repayment records of the poorest, have moved into microloans.

These developments notwithstanding, estimates<sup>3</sup> are that 80% of all households in developing countries remain without access to institutional finance. Unmet demand for microfinance may affect up to two and a half billion people in 500 million households. These are not evenly distributed, in Asia microfinance institutions may serve up to two million people but in Africa they typically have 25,000 customers or fewer resulting in market penetration rates of 7% or less.<sup>4</sup> Twenty-eight government and private organisations now comprise the Consultative Group to Assist the Poorest (CGAP<sup>5</sup>), which aims to extend microfinance services from their present 40m clients to the 200m poor people who need them most.

These donor-supported financial services however are geared towards income generation through the expansion of small businesses. Credit provision is therefore characterised by high interest rates and by short term loans sometimes of as little as 1-3 months.

These characteristics pose substantial obstacles for water investments in particular since these often generate returns only after a considerable period of time.

A further source of finance and one potentially free of these restrictions is the remittances of migrant workers. These have become increasingly valuable with greater labour mobility within and between countries. Their total annual worth is now estimated<sup>6</sup> at \$93 billion, considerably in excess of aid flows of \$56 billion. Remittances account for over 30% of the international finance going into low income countries and their levels are much more stable than those of private foreign direct investment. Although there is an argument that such migration strips developing economies of key workers, there is equally a case to be made that it aids development and instances have been found of the resulting income contributing to the funding of schools and clinics<sup>7</sup> as well as of places of worship. Fair trade arrangements can also provide some communities with the additional income needed for watsan investments.<sup>8</sup>

### Box 2: Traditional Sources of and Trends in Financing for the Poor

Some **informal** provision of microfinance has existed for centuries. These traditional providers include deposit collectors, money lenders or pawn shops. They lend small sums of money and although they do not require collateral, their services are very expensive.<sup>11</sup>

**Rotating Savings and Credit Associations (ROSCAs)** have a core membership who all make regular contributions to a fund, which is advanced, in whole or in part, to each contributor in rotation.<sup>12</sup> ROSCAs run for a fixed duration, which ends when every participant has taken advantage of the lump sum, but the cycles can be repeated indefinitely. ROSCAs are interest-free but they are short-term arrangements and limited to the cash available to the individual members.

**Accumulating Savings and Credit Associations (ASCAs)** differ from ROSCAs in that deposits are not directly redistributed but kept with a manager. This widens the possible range of services and extends the timeframe of the loan cycle.<sup>13</sup> Members have more freedom to decide upon the amount and timeframe for taking out a lump sum but this flexibility renders the service more prone to fraud.

Some **commercial banks** now provide loans to micro-enterprises amounting to up to US\$10,000.<sup>14</sup> Just over 50% of these commercial banks require collateral from micro-enterprise borrowers but they lend predominantly to trade, manufacturing and services sectors at market interest rates.<sup>15</sup> For example ICICI Bank recently securitised<sup>16</sup> US \$4.3 million of the outstanding loan portfolio of SHARE Microfin, a microfinance institution that operates in rural areas of Andhra Pradesh. Under this scheme, all the new loan portfolios of SHARE will be turned over to ICICI which will receive payments from borrowers directly, with SHARE acting as the collection agent.

In the **1950s**, 'microcredit' came to be seen as a means for poverty alleviation. The provision of **subsidised agricultural credit** for buying seeds, fertilizer and pesticides was expected to boost the income of peasants around the developing world. Rural development banks were set up but their credit services were dependent on external subsidies, which in turn discouraged the timely and full repayment of loans. As a result, many rural development banks collapsed.<sup>17</sup> In the **1980s** attention shifted towards women's empowerment, **NGO-supported microcredit** concentrated on female entrepreneurs investing in tiny businesses in order to raise their household income. Some existing ASCAs run by women were turned into more permanent institutions, the 'village banks'. Others were linked to a more regulated body such as a Federation or Credit Union whose legal status enabled them to loan additional funds and also to take surplus savings on deposit.<sup>18</sup>

Since the mid-**1990s** the complexity of poor people's livelihood strategies has been recognised by **diversified microfinance organisations**.<sup>19</sup> For example, the Grameen Bank, a famous village bank in Bangladesh, now offers flexible loan repayment rates, including a special scheme for borrowers experiencing cash-flow problems. They also offer housing and higher education loans at lower interest rates.

## WaterAid's Experience

WaterAid and its local partners have over 20 years of experience in water and sanitation-related projects in Africa and Asia. WaterAid has repeatedly found that poor people are willing to invest in safe water supply and sanitation services (though they may be more able to do so with labour/materials than with cash) and also that the sustainability of supply systems is enhanced when demand for water and sanitation is given such financial expression. However, the lack of access to credit and other financial services can cause a serious bottleneck for the poor in making those expressions of demand.

Mr Rossario, for example, belongs to a group of Mozambiquan empreiteiros who received training in improving their business skills from WaterAid. In Niassa province, where he operates, there are four micro-credit organisations, all of which are heavily biased towards agricultural development. The main obstacles that the local businessmen experience in obtaining loans include the following:

- Collateral requirements
- Highly restricted repayment schedules (three months)
- Very high interest rates (4.5% per month - equivalent to 70% per annum)
- Long response times following the submission of a request for a loan.

These conditions act as a strong disincentive for the businessmen who operate in a local economy where the amount of cash in circulation is very limited. Most of the empreiteiros therefore do not even try to secure a loan. Without a loan, however, they are unable to purchase basic construction equipment, vehicles or computers, all necessary to run a competent and sustainable business.<sup>9</sup>

By contrast, Mrs Palaniyammal, was assisted by the existence of viable credit facilities. Mrs Palaniyammal lives in the Cuddalore district of Tamil Nadu, India, where the Soozhal Initiative, a network of local Non-Governmental Organisations (NGOs), ran in parallel with a campaign launched by the Government of India to achieve total sanitation throughout the country. The Initiative, facilitated by WaterAid, comprises revolving Sanitation Funds managed by local Self Help Groups (SHGs). Borrowing from the Funds complements government subsidies for latrine construction and enables households like Mrs Palaniyammal's to bridge the remaining financial gap to complete their individual latrines. As a result of the SHGs' excellent credit history, the National Bank for Agricultural and Rural Development agreed to release loans via the Reserve Bank of India to commercial banks, which, in turn, lend to the SHGs. The end-borrowers are charged an interest rate of 24% per annum, a much lower rate than those demanded by local money lenders. The proportion of households with latrines in Cuddalore increased during the first three years of the initiative from below 6% to 52%, and is planned to reach 100% during 2004.<sup>10</sup>

### Box 3: Community-level financing – findings from other research

Research<sup>24</sup> for the **Asian Development Bank** found that small-scale private water providers always played a significant role in Asian cities with low water connection rates and/or service for less than 6 hours per day. These providers had generally invested their own capital in their businesses but had done this to a significant extent – totalling in Manila some \$350,000 over 5 years to serve 25,000 households – because they could be confident that their service matched users' expectations and so charges would be paid to produce the necessary returns on the investment. Investments increased further once the private providers were given a legal basis for their operations, from \$47 per illegal connection in Delhi to \$100 for legal connections in Cebu.

The **Water & Sanitation Program** found<sup>22</sup> that 1 in 4 of Kenya's urban residents depend on small scale independent providers. The value of these providers' investments was estimated to be in the range \$15 to 51 million despite the sector facing annual interest rates of up to 360% from some informal moneylenders. Total annual spending of urban African households on water and sanitation was estimated to range from \$5 to 40 million. Net daily profits for operators were proportionate to the size of the initial investment:

Investment	Daily profit
\$50 (water cart)	\$1
\$50 (manual latrine emptying kit)	\$2
\$700 (standpipe)	\$6
\$13,000 (water truck)	\$122
\$21,000 (suction truck)	\$137

Overall barriers to financing in Kenya and elsewhere have been found<sup>22</sup> to include the inconsistency and unreliability of community 'harambee' collections for major repairs to self help water schemes, bureaucratic difficulties in acquiring the legal status needed to own assets and enter into contracts, and, lack of land tenure amongst potential customers in informal urban settlements.

Similarly in the urban setting of the Pakistani city of Faisalabad, WaterAid has facilitated a local community-based organisation, ASB, in establishing revolving funds for microloans so that households and businesses in the katchi abadi squatter settlements can provide themselves with connections to the water mains and sewers of the Water and Sanitation Authority (WASA). WaterAid grants have enabled ASB to buy trucks and other maintenance equipment. Service users pay fees to ASB and defaulters are subject to legal action leading to disconnection. However these are very much the minority - the repayment rate for the loans is 88%.<sup>20</sup>

In Oju, Nigeria WaterAid supplied Ovari Okpani, a prominent

local businessman (commonly known as Iron Bender, the pidgin English for metal fabricator) who owned a welding and soft drinks store, with a stock of waterpump spares and toolkits. Once local communities<sup>24</sup> had grown accustomed to his role, they began to use Iron Bender as a bank, paying in their collected contributions gradually until they had put down the cost of a handpump. Iron Bender kept records of all these payments and issued special project receipts to the communities.

These WaterAid experiences of community-level investments being made in water and sanitation are also mirrored in the findings of other organisations (see Box 3 above).

#### **Box 4: Costs in Water and Sanitation**

The **hardware costs** in water and sanitation vary enormously with the technology employed but can be very low. WaterAid expects to provide water and sanitation projects at a per capita beneficiary cost of £15, around \$25. The 156 water points constructed by WaterAid's Mozambique partners in 2002 had a cost per beneficiary of \$13.50 but projects involving other donors cost some \$180 per head due to more complex system designs and the use of imported labour. In Nepal WaterAid's partner NEWAH has constructed water supply systems at an average per capita beneficiary cost of \$23 while other programmes' costs have been up to 126% greater. Moreover, 88% of NEWAH projects still function 5 to 15 years after completion.<sup>27</sup>

Construction costs for individual latrines range between \$15 and \$150 depending on the location and materials used.<sup>28</sup> With simple, low-cost building methods, the price for a basic latrine structure as in Tamil Nadu, India, can be as low as \$13 to \$18. A public latrine complex, which is a likely solution in densely populated urban areas, might require a more substantial investment. In Dhaka, for example, construction of a sanitation block required a loan of TK500,000 (\$9000) but even this is expected to be recovered within six years.

Recurrent sanitation costs also may be virtually zero for basic pit latrines. The production of compost from faeces through the technology of eco-sanitation even offers the prospect of an income. Simple water systems such as protected wells can also be very cheap to run since their maintenance may be limited to ropes and buckets.

For service providers, upfront **initial investment costs** can range from as little as \$25 borrowed from family and friends for manual latrine cleaning equipment through \$50 for a handcart or \$700 for a standpipe to \$10,000 to 25,000 for a water tanker for which formal commercial finance is needed.<sup>29</sup>

### **Understanding community-level demand and supply – towards a typology of financial risk assessments in water and sanitation projects**

Given this experience showing that poor people will invest in water and sanitation, there is inevitably a question of why water sector investment needs are not being matched with existing microfinancial services.

The central explanation for this apparent mismatch may be the perceptions of risk which different community-level stakeholders associate with water and sanitation investments.

Many factors will determine these perceptions but at root they translate into assessments of costs (see Box 4 above) and benefits.

The benefits of water and sanitation are major and wide-ranging. They include time savings, better health and access to education, new income opportunities, dignity, security, and, a better quality of life for women in particular.<sup>25</sup> Time savings alone have been estimated to justify most projects.<sup>26</sup>

To understand better how perceptions of risk are formed, it may be useful to construct a typology of the principal questions raised for supply and demand side actors in particular instances where they might interact. An initial outline, summarising the subsequent discussion, is on the next page. Several of the questions apply to multiple sources of supply or demand but for brevity have been listed just once.

## Outline Typology: Formation of community watsan capital financing risk perceptions

Supply		Household	Microfinance Institutions	Commercial Bank
<i>Demand</i>				
<i>Household Consumers</i>		<b>Is there a more urgent use for my money?</b>  <i>Is there something I want more than better watsan?</i>	<b>Will the household be getting a bigger income?</b>  <i>Am I certain to get the benefit or am I dependent on other households?</i>	<b>Would our returns be bigger lending for a different use?</b>  <i>Can I afford the terms of this loan?</i>
		<b>Can I trust the management of the Group?</b>  <i>Can all households afford to pay up-front their share of the full costs?</i>	<b>Do we have enough money to lend all at once?</b>  <i>Can we borrow enough for the full construction/ rehabilitation costs?</i>	<b>What is the basis of this group – does it have a legal identity?</b>  <i>Is our income stream reliable enough for making regular repayments?</i>
<i>Small scale entrepreneurs</i>		<b>Am I buying a single product for myself?</b>  <i>Are there enough households able and willing to buy this product?</i>	<b>Will customers pay up – is this the cheapest available technology?</b>  <i>Will I get the same flexible treatment as if I had borrowed from my family/ friends?</i>	<b>What collateral is there for this loan?</b>  <i>Will I earn money fast enough to pay back the large up-front loan?</i>
		<b>Am I losing out by providing the service myself?</b>  <i>Would I get and keep more customers if I provided a range of services rather than focusing on watsan?</i>	<b>Can we afford a long loan matching the entrepreneur's likely income profile?</b>  <i>Do I have a savings record which can act as collateral?</i>	<b>Is the business legal?</b>  <i>Might the authorities suddenly stop me operating?</i>

The risk which has bedevilled international investors but which is naturally absent at the community-level, is foreign exchange risk. Nonetheless any lender of finance will want to be assured that the finance (or a benefit of equal value) will be returned. And although the social mission of some microfinance institutions focuses their activities into particular sectors, other commercial lenders will be seeking assurances that their funds could not have been more profitably deployed elsewhere over that same period ie. that there is no opportunity cost.

That opportunity cost consideration may lead such commercial lenders away from drinking water and sanitation projects since – with some exceptions such as pastoralists' interest in water supply for the livestock with which they secure their livelihoods - these will generally be non-income-generating activities associated with higher levels of non-repayment risk.<sup>30</sup>

The situation might be different in relation to loans for small-scale independent providers who charge fees but even these could be crowded out (in the commercial lending sector at any rate) by the demand from operators in other, more immediately profitable sectors such as transport or telecoms. For larger projects at least, the World Bank for example has found project cash returns of just 13% for water and sanitation compared to 35% and 31% respectively for transport and telecoms projects.<sup>31</sup>

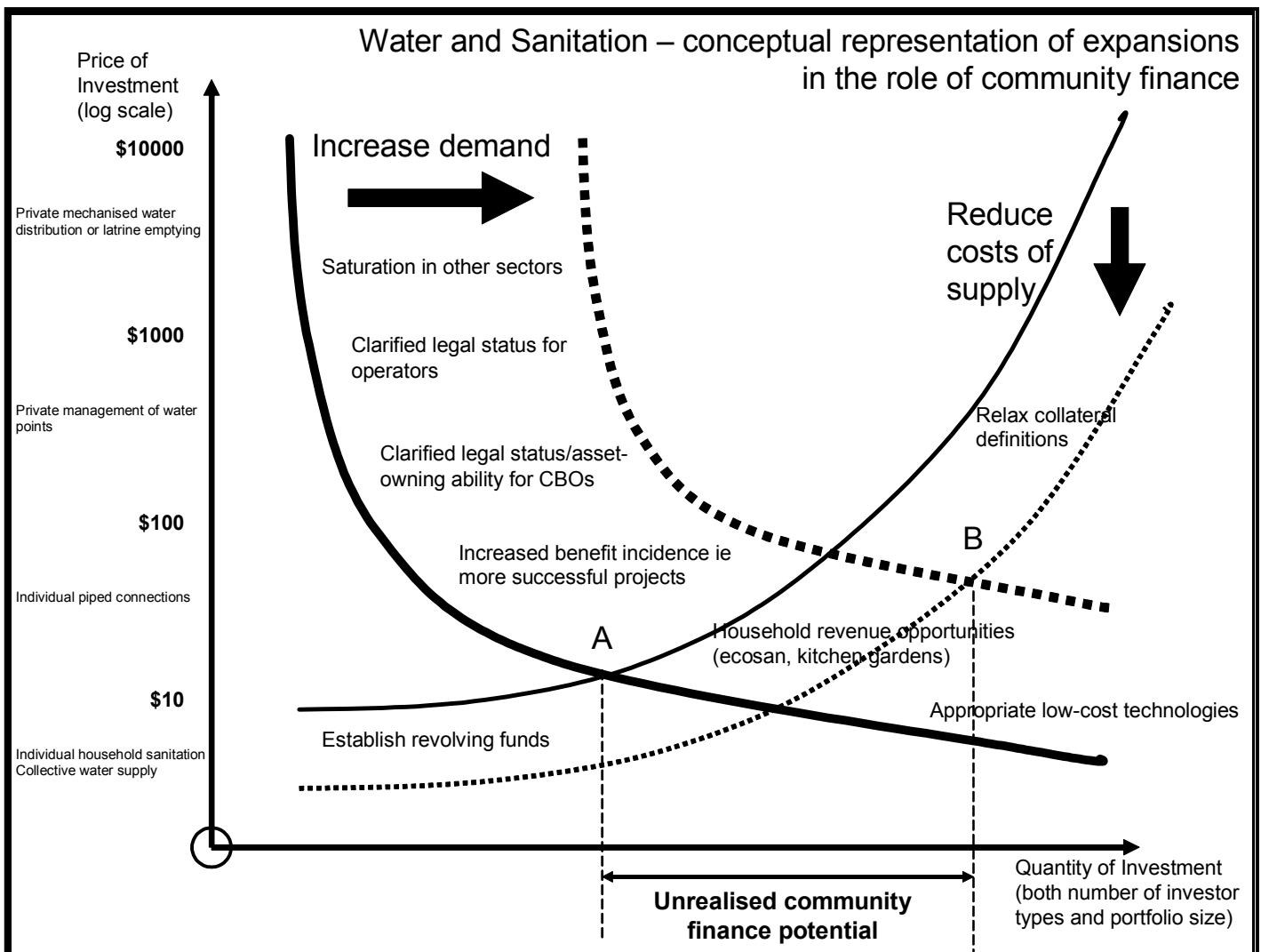
For communities or for households however it might well be that opportunity cost considerations could work the other way around. Not investing in water or sanitation could lead to continued greater costs either through income lost through having to spend time instead on water-hauling or simply through being ill or due to direct expenditure on medical treatment.

Assuming that the opportunity cost calculation does favour water and sanitation, it is still possible that the probability of the benefits is seen as too small. For example a commercial lender or enterprise might consider that where customers held no title to the land on which they lived and wanted the service provided or where independent service provision was not recognised as lawful, such deficiencies in the legal framework made the business too risky: there would be no remedy against non-paying customers or no safeguard against abolition of the business and confiscation of its assets.<sup>32</sup> Alternatively they might be less willing to lend for projects which would not produce a direct cash income stream: sanitation for example or water schemes with no prospect of any of the common spin-off livelihood opportunities such as kitchen gardens, brewing or brickmaking.

At the same time households or community organisations might feel that where their own resources were not sufficient to guarantee the benefits – for example a water supply project costing more than they individually could afford or requiring more labour than they could provide alone – the possibility that the other necessary resources would not become

available was making their own investment too risky. Alternatively they might have had previous bad experiences of people absconding with community savings. From this perspective it is likely that the success of sanitation projects - which are more conducive to being designed around individual provision (although the health benefits in particular of course require universal provision within the community) - would be seen as more within the individual's control and therefore less risky.<sup>33</sup>

Small-scale providers themselves could be wary of over-committing themselves in one sector instead of diversifying to spread risks across a range of micro-enterprise opportunities. Some of these issues are reflected in the chart below. This is a conceptual representation only of the challenges in community financing – clearly there are actually multiple demand and supply curves depending on which investment type is being considered. But what the chart can represent is that by acting on both supply and demand the intersection of these curves will move to the right (from A to B) so unlocking significant but presently unrealised community finance potential.



## Conclusions – Next Steps Research

Knowledge of what is happening on the ground is now necessary to identify which of these factors are the principal barriers to community finance expansions in any particular area. This work can then enable the design of projects which could address these blockages.

The increasing interest in community-level financing is reflected in a number of research projects several of which involve WaterAid. The Ghana, Tanzania and Zambia Country Programmes for example are participating in research projects for the UK Department of International Development aimed at identifying ways of increasing the involvement of small-scale independent providers in rural or in urban areas.

The questions of risk perception raised in this paper however are a particular focus of work being carried out initially in

## References

- <sup>1</sup>The *Human Development Report 2003* (UNDP 2003) for example reported that the private share of education reaches as much as 40% in some sub-Saharan African countries but at the cost of compromising universal access.
- <sup>2</sup>The Asian Development Bank's summary *The role of small scale providers in serving the poor* provided to the World Panel in January 2003 reported that the proportion of the population covered by these providers varies from 6% in Delhi, 10% in Dhaka, 19% in Ho Chi Minh City and 44% in Jakarta.
- <sup>3</sup>Wright G and Dondo A. *Are you poor enough? – client selection by microfinance institutions in Microfinance: Evolution, Achievements and Challenges* ed. Harper M (ITDG 2003)
- <sup>4</sup>*Financing small-scale water and sanitation providers: exploring the Microfinance Option in Sub-Saharan Africa* WSP-Africa Working Paper (December 2003)
- <sup>5</sup>CGAP's website [www.cgap.org](http://www.cgap.org) describes the Group as a consortium of 28 public and private development agencies working together to expand access to financial services for the poor in developing countries. CGAP gives support to new ideas, innovative products, cutting-edge technology, novel mechanisms for delivering financial services, and concrete solutions to the challenges of expanding microfinance
- <sup>6</sup>*Global Development Finance-Harnessing Cyclical Gains for Development* World Bank April 2004
- <sup>7</sup>Bracking S. *Sending Money Home: Are Remittances Always Beneficial To Those Who Stay Behind?* *Journal of International Development* 15 633-644 (2003)
- <sup>8</sup>Example of water supply and sanitation investments by Dominican fair trade banana suppliers at [www.fairtrade.org.uk/about\\_benefits\\_water.htm](http://www.fairtrade.org.uk/about_benefits_water.htm) and at [www.fairtrade.org.uk/about\\_benefits\\_health.htm](http://www.fairtrade.org.uk/about_benefits_health.htm) accessed on 1 April 2004
- <sup>9</sup>Private communication with WaterAid Mozambique
- <sup>10</sup>Sakthivel S.R. and Fitzgerald R. *The Soozhal Initiative: a model for achieving total sanitation in low-income rural areas* (WaterAid 2002) and private communication with WaterAid India.
- <sup>11</sup>Rutherford S *The Poor and Their Money* (Oxford University Press 2000)
- <sup>12</sup>ibid
- <sup>13</sup>Matin I. et al *Financial Services for the Poor and Poorest: Deepening Understanding to Improve Provision* (Finance and Development Research Programme Working Paper No.9 IDPM University of Manchester 1999)
- <sup>14</sup>This service has become more attractive since an increased international competition in the banking sector following financial liberalisation in the 1980s and 1990s. The repayment period can extend from three months to six years but, on average, loans are fully recovered in less than two years time.
- <sup>15</sup>Jenkins H. *Commercial Bank Behaviour in Micro and Small Enterprise Finance* Development Discussion Paper No.741 (Harvard Institute for International Development 2000)
- <sup>16</sup>Report in India's *Economic and Political Weekly* (Mumbai, 6 March 2004). Securitising a loan essentially means converting a financial claim into a marketable security that can be traded as an asset in capital markets.

Kenya. Parallel efforts have been initiated. The NGO Maji na Ufanisi is undertaking structured interviews with both potential users and suppliers of finance in samples of urban areas while the Water & Sanitation Program - Africa Region is focusing on facilitating links between these stakeholders in rural areas of the country.

Within each area the objectives are:

- to identify water and sanitation needs and the possibilities within the community for financing services which would meet these needs;
- to understand how the risks of this finance are seen from demand and supply perspectives and how this explains where progress has or has not been made; and,
- to draw conclusions about what action might be taken to ensure the balance of these perceptions is in favour of action.

<sup>17</sup>Seibel H.D. & Parhusip U. *Financial Innovations for Micro-enterprises – linking formal and informal financial institutions* in *Microfinance: Evolution, Achievements and Challenges* ed. Harper M (ITDG 2003)

<sup>18</sup>Rutherford S op.cit.

<sup>19</sup>Matin I. et al op.cit.

<sup>20</sup>Hall D *Water Finance – A Discussion Note* PSIRU (2004)

<sup>21</sup>Conan H & Paniagua M *The Role of Small Scale Private Water Providers in Serving the Poor* ADB Regional Technical Assistance 6031 (2003)

<sup>22</sup>Colligan B. & Vezina M. *Independent Water and Sanitation Providers in African Cities* (WSP April 2000)

<sup>23</sup>WSP-Africa op.cit

<sup>24</sup>*Small scale private sector partnerships* (WaterAid Nigeria, February 2002)

<sup>25</sup>The range of impacts of WaterAid projects across Sub-Saharan Africa and South Asia was documented in *Looking Back: the long term impacts of water and sanitation projects* (WaterAid 2001). WaterAid is now undertaking further work to quantify and value these benefits.

<sup>26</sup>Churchill A.A. et al *Rural Water Supply and Sanitation – Time for a Change* World Bank Discussion Paper No.18 (World Bank 1987)

<sup>27</sup>*Aid Under Stress - Water, Forests & Finnish Support in Nepal* ed. S.Sharma et al

<sup>28</sup>Mehta M *Meeting the Financing Challenge for Water Supply and Sanitation* (World Bank 2003)

<sup>29</sup>WSP-Africa op.cit

<sup>30</sup>For small-scale providers, where a credit would be linked to an income-generating activity, the lender may nonetheless simply see the same risk relocated in the relationship between those providers and their community and household customers who may at the very least delay making their payments.

<sup>31</sup>Goldin I. et al *A Case for Aid* World Bank (2002) Fig.4.1 p122

<sup>32</sup>In Kenya for example all water assets are owned under the law by the Government while CBOs registered as Self Help Groups can neither sue nor be sued and, equally, are not obliged to be audited. This creates real risks for potential lenders since the viability of their lending depends on good management of the scheme and with a Self Help Group there is not much leverage for enforcing this.

<sup>33</sup>Indeed for sanitation the likely obstacle is not so much lack of supply of finance but lack of demand when sanitation can be seen as unnecessary or undesirable in hot, dry climates, where there is no easy access to water for anal cleansing, or where there are cultural prohibitions on housing excreta or on family members sharing a latrine.

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