

Microfinance for Water, Sanitation and Hygiene

An introduction



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1 An introduction to microfinance

Microfinance is topical because it can make an important contribution to the achievement of the Millennium Development Goals (MDGs). Used properly, it can help to reduce income poverty, lessen the vulnerability of the poorest and empower women. For the water & sanitation sector, it can help the poor to have access to water services.

In most developing countries, financial services such as bank loans, insurance, and pension funds are not accessible by the poor. When some forms of credit are available, these are often limited to either community savings groups or informal money-lenders that charge very high interest rates, reflecting the lack of a formal market.

Many argue that making profits from the poorest is ethically wrong, even if the interest rates provided by Microfinance Institutions (MFIs) are lower than those offered by informal money-lenders. However, for many donors, foundations and private investors, it is the notion of fairness that is appealing: the poor deserve to have access to financial services as much as those who have money.

2005 was the UN Year of Micro-credit and was instrumental in informing people about and advocating for microfinance. Mainstream banks such as Citigroup, Deutsche Bank, Credit Suisse, the Brazilian Unibanco and ICICI Indonesia have now found out that the poor, like everyone else, attach great value to being able to save in order to better be able to face unexpected expenses.



Micro-credit is the principle of giving small loans to the very poor to help them generate an income of their own (Wheat, 1997). Microfinance is broader and incorporates savings and insurances as well as credit. During the last couple of years, microfinance has become an even broader concept. “Building inclusive financial systems for the poor” is increasingly used as the financial institutions that provide financial services to the poor become more diversified and cannot be described as Microfinance Institutions (MFIs).

A brief modern history of micro-credit & microfinance

The idea of small loans to the very poor was first explored in Bangladesh in 1976, when the Grameen Bank was created. Their strategy was to get around the problem of a lack of borrower guarantee’s or collateral, by creating a solidarity group of five or so borrowers who could vouch for each others’ loans. Because the borrowers all know each other, there is increased peer pressure to repay. Grameen’s experience revealed a very low rate of default on solidarity loans and repayment rates are greater than 90%.

Over the last 15 years, the microfinance market has grown despite the absence of specific financial sector policies. Nobody knows how many microfinance institutions, formal or otherwise there are now, but mainstreaming into the financial sector has taken place since the mid-1990s. Leading microfinance institutions around the world (such as FINCA,



GLOBAL TRENDS

The Water Supply and Sanitation specific Millennium Development Goals, Targets & Indicators

Goal 7: Reduce by half the proportion of people without sustainable access to safe drinking water

Target 10: Halve, by 2015, the proportion of people (baseline year: 1990) without sustainable access to safe drinking water and basic sanitation

Indicator 30: Proportion of population with sustainable access to an improved water source, urban and rural

Indicator 31: Proportion of population with access to improved sanitation, urban and rural

ACCION, ProCredit, Opportunity International) worked together to build performance indicators and standards for the financial services provided and many of them now have credit ratings as good as the formal finance institutions.

Microfinance and water supply & sanitation services

Historically, microfinance has not been available for financing water supply and sanitation activities, because these are not usually perceived to be sufficiently attractive. A long term is normally required for repayment and the direct link with income generation is not always obvious. However, some microfinance institutions argue that the core blockage to increased microfinance in the water and sanitation sector is awareness of the business case for water supply and sanitation projects (CREPA/IRC, 2006).



QUICK FACTS

- **Micro-credit is the principle of giving small loans to the very poor to help them generate an income of their own**
- **Microfinance is broader and incorporates savings and insurances as well as credit.**
- **The idea of small loans to the very poor was first explored in Bangladesh in 1976, when the Grameen Bank, based on a strategy of creating a solidarity group of five or so borrowers who could vouch for each others' loans, was created by Nobel Prize winner Professor Muhammed Yunus.**

2 Microfinance for water services

Microfinance has been used for some time as an add-on to water projects. In watershed development programmes in India for example, a revolving fund for various activities is usually a first step to generate social buy-in, and for the productive uses such as backyard gardening and livestock. But more recently, linked to cost recovery policies aiming to increase user's contributions, microfinance is also being used to help pay for capital costs and to cover operation and maintenance costs.

2.1 Microfinance for households and communities

As a result of cost recovery strategies and the need for community ownership of water systems, an increasing number of poor communities need to pay 10-20% of capital investments in rural and small town water infrastructure, upfront, in cash. Usually, they need to save for a couple of years before they are able to pay for the required amount. Once the system is in place, funds are rarely available for paying for rehabilitations and major repairs.

To overcome the latter problem, both ASCI in Ethiopia and K-Rep in Kenya provide financial services to Community Based

In three neighbourhoods of Abidjan, CREPA Côte d'Ivoire, an NGO, partnered with SODECI, the public water utility, to enable 300 poor households to connect to the network by providing microfinance. With grant funding from UNDP, CREPA first pre-financed the full amount (US\$36 each) of connection fees as a loan for all 300 households. At the same time, CREPA provided a capacity building program aimed at mobilizing household savings to repay the loan and ongoing water bills. The micro loans were paid back in 17 months. This example is now being replicated in Ouagadougou where the credit/saving scheme is being managed by a microfinance institution (Kouassi-Komlan, E. and T. Gnagne, 2005)



Organisations (CBOs) for water in rural areas. The CBOs have a separate account for community investments and make regular savings deposits which enable them to access funds for larger repairs and maintenance.

Microfinance can also help households or communities to access water services when high lump sum costs have to be paid upfront. This is especially the case in (peri) urban areas, where utilities charge high connection costs.

2.2 Microfinance for small-scale water providers

Small-scale water providers, who play a very important role in water supply, especially in poor peri-urban areas, tend to lack access to credit, which would for example enable them to buy water storage facilities. Borehole operators need finance to drill boreholes or build small water networks. Without such access, most operators rely on family or informal loans, limiting their potential for growth.

In Lomé, the capital of the West African country Togo, microfinance is used to facilitate the implementation of household water points, using shallow boreholes and rainwater harvesting tanks. These cost US\$ 3,000 and US\$ 1,000 respectively, and households have demonstrated an ability to repay loans for these amounts in a relatively short period of time. This is possible because 90% of households

Definition of access to water supply

Access to safe drinking-water is the percentage of the population using “improved” water sources.

Improved

- household connection
- public standpipe
- borehole
- protected dug well
- protected spring
- rainwater collection

Not Improved

- unprotected well
- unprotected spring
- vendor provided water
- bottled water
- tanker truck water

Source: http://www.wssinfo.org/en/122_definitions.html

QUICK FACTS

Sustainable Access to Water – Some Global Figures

- One in five people in the developing world – 1.1 billion in all – lacks access to an improved water source.
- Access to water-supply services is defined as the availability of at least 20 litres per person per day from an “improved” source within 1 kilometre of the user’s dwelling.
- An “improved” source is one likely to provide “safe” water, such as a household connection, a borehole, etc. Current information does not allow us to establish a relationship between access to safe water and access to improved sources. WHO and UNICEF are examining this relationship.
- In India in 2004, 86% of the population (rural and urban), had sustainable access to an ‘improved’ water source (UNDP, 2006).

who have boreholes sell the water to repay their loans. Most of the time, water is sold in bulk or by bucket, generating revenues of US\$ 1 per m³ for bulk water, and 20 cents for a 10 litre bucket of water.

The microfinance market for the water sector started in 2001. By the start of 2007, over 1,200 households had their own water points. The market currently involves five private drilling companies, six MFIs, NGOs, CREPA (Centre Régional pour l'Eau Potable et l'Assainissement à faible coût), and the Water Ministry who has to give agreement for drilling.

The finance mechanism is premised on the fact that households – and even communities – apply to area MFIs for a loan to construct water points, and are approved if the application is supported (guaranteed) by two people who already hold accounts with the MFI. Upon approval, the entrepreneur who is in charge of construction undertakes and completes the work in instalments, and the total amount is paid by the MFI upon approval by the household. Households then repay the MFI directly for the full cost borrowed, in addition to 21% interest and 2% administrative fees.

Several factors are required for this mechanism to succeed. Household or community willingness to pay has to be demonstrated as the two community people who support an application must have been account holders in the MFI for at



least three months. Areas where the scheme is implemented must have serious water supply/access problems, where people have real difficulty obtaining safe water. In the case of Lomé, it is accepted that, despite a plan for city-wide water coverage, the utility will be unable to provide connections for at least the next decade, due to capacity constraints and population growth in poor and peri-urban areas. Further, even if the utility's water network were to reach those areas, many households would still need individual water points for other purposes (Kouassi-Komlan, 2007).

The following findings (Kouassi-Komlan, 2007) can be noted based on interviews with different users, water point owners and MFIs:

- Demand for increasing access to water using a range of appropriate technologies exists, even in the absence of a central provider or facilitating agency.
- Repayment of loans from US\$ 1,000-3,000 is possible for commercial households: 70% of the loans were repaid within six months.
- Water tariffs charged by commercial households are lower than the utility tariff meaning that many households are willing to have credit for their own water point.
- The MFI interest rate – at 23%, has not constituted a barrier to demand for credit.
- The mechanism increased access by 20%.
- Households express demand by applying for a loan with an



MFI and obtaining trustees signatures. Other households pay to use the water, on an ad hoc or regular basis.

- The MFI lends money through a product they have developed. They apply normal interest rates (21%) plus administrative fees (2%). Credit is given directly to the entrepreneur and in special cases to the households.
- Entrepreneurs install the infrastructure, and pre-finance construction.

2.3 Microfinance through municipalities

Besides small scale providers, municipalities often play a crucial role in providing water services. However, often municipalities are not allowed to access credit because of the legal framework or because they cannot obtain a credit rating (an independent assessment of the creditworthiness of a borrower), either because they are bankrupt or they do not have the resources to pay for the rating. This is a major constraint on their ability to provide water supply services.

As a result there is increasing interest from International Finance Institutions (IFIs) and bilaterals to support sub-sovereign lending and guarantees for the water sector. These need to be adapted to the local realities of countries with weak or non-existent financial markets.

The Butwal municipality in Nepal, has adopted a cost sharing approach for water supply whereby 80% of capital costs are paid by users and 20% is provided as a municipal grant. Users pay their 80% on an instalment basis (1US\$ per month per household), over a period of time, agreed by users themselves. The municipality manages a Drinking Water Management Fund in which the loan paid back by the community is deposited. Transparency in fund management proved to be critical for its sustainability (WaterAid Nepal, 2005).

QUICK FACTS

Some risks constraining sub-sovereign lending

- relatively weak accounting and financial skills within utilities;
- foreign exchange risks are high, as tariffs are collected in local currency while the loan is - all too often - in a foreign currency;
- most International Finance Institutions and donors are unable to provide funding in local currency;
- capital requirements, even for smaller utilities, are more intensive than for independent or community service provision and the reliance on user fees for recovering costs is high;
- the possibility of political interference in price setting since the issue of water tariffs is extremely sensitive.

3 Microfinance for hygiene and sanitation

So far, interventions in the sanitation sector have had relatively low impact considering the scale of the problem, i.e. 2.6 billion people without access to adequate sanitation. Very few programmes have reached more than 100,000 people. The low coverage can be explained partly because sanitation improvements and hygiene education components that go with it, start off as highly subsidised pilot projects and are unable to make the transition from pilot to mainstream programmes due to lack of proper financing plans.

Realising this, many organisations have started pulling away from household subsidies for sanitation facilities. Leveraging household and community resources for sanitation improvements has been reported in countries such as India, Lesotho, Vietnam, Bangladesh, Pakistan and Burkina Faso (Mehta and Knapp, 2004). Microfinance is playing a more and more important role in this. Potential clients of microfinance for sanitation or sanitation-related services include small scale private providers and households. Microfinance has been used for the construction of household latrines, construction of public toilets, manual latrine-cleaning services and suction truckers which are used to empty pit latrines.

Definition of access to sanitation

Access to adequate sanitation facilities is the percentage of the population using “improved” sanitation.

Improved

- connection to a public sewer
- connection to a septic system
- pour-flush latrine
- simple pit latrine
- ventilated improved pit latrine

Not Improved

- public or shared latrine
- open pit latrine
- vendor bucket latrines

Source: http://www.wssinfo.org/en/122_definitions.html

QUICK FACTS

Sustainable Sanitation Coverage – Some Figures

- 2.6 billion people do not have access to ‘adequate’ sanitation
- Excreta disposal systems are considered ‘adequate’ if they are private and if they separate human excreta from human contact.
- In 2004, 33% of India’s population (rural and urban) had sustainable access to ‘improved’ sanitation facilities (UNDP, 2006).

3.1 Microfinance for households

Instead of sinking aid into subsidised household latrines, there is a real opportunity to make better use of finance by developing revolving funds in rural areas for latrines or peri-urban areas for household sewerage connections. Microfinance and commercial project development can be linked to subsidised activities (mainly by NGOs), such as sanitation promotion and other technical support for cost-effective solutions, and quality control, e.g., taking steps to prevent contamination of water sources.

In Wogodogo, a low-income neighbourhood in the capital Ouagadougou, a saving-credit initiative has been set up for household management of domestic waste. The credit was provided by LAGEMYAM, a women's association working for improved sanitation. LAGEMYAM agreed to finance the initial 70% required to start up the credit system. The interest rate was set to cover mainly administrative costs. Additionally, LAGEMYAM thought that because the population was poor it would be difficult to ask for collateral. The credit was provided based on moral values i.e. the fact that the borrower should be known by the association before having access to the credit.

In a first phase, solid waste collection was organised and 28 households benefited from the loans to construct excreta and wastewater infrastructure such as VIP latrines, drainage and soak pits for domestic waste treatment. But only five households reimbursed the credit.



LAGEMYAM and CREPA (an NGO), had assumed that part of the revenue from the solid waste collection would finance the credit system for sanitation. But in reality this did not happen as the population was used to getting sanitation facilities for free and any revenues from solid waste collection were invested primarily in basic needs such as getting water and food rather than paying back the loan. During the second phase, 18 additional households constructed more sanitation facilities. The number of reimbursements improved slightly, because project animators from CREPA and the NGO EAST undertook an awareness campaign.

Participatory approaches, with the objective to help the population develop self confidence and commitment, took place in order to improve their attitude vis à vis the credit system. The beneficiaries then realised that if they didn't pay back, the system could not continue to run and the dynamic building sanitation facilities would stop in the neighbourhood. The system runs well now and the rate of reimbursement is more than 80% (Kouassi-Komlan and Fonseca, 2004).



3.2 Micro credit for small scale private sector
 Developing effective supply chains for sanitation products and promoting demand has proven more effective than household subsidies. The small scale private sector has the ability to tap markets for sanitation or hygiene related products such as soap, toilet construction, toilet parts, toilet cleaning and faecal sludge management.

Service providers are able to make a decent profit and as such there is an incentive to create demand and ensure supply. However, starting up activities requires credit. Micro credit can be used for starting up activities to improve the supply chain for sanitation products, such as providing materials for construction, emptying the pits and treating the sludge.



4 Strategic partnerships

Most micro credit loans are designed for income generating activities. However, because of its popularity, competition between MFIs has been increasing as they need to build new markets and expand the client base. However, when loans are extended to other areas such as housing or education, the initial conditions of the loans usually remain unchanged – i.e. loan repayment cycles are not adapted, risking greater burden for poor borrowers and increasing risks of re-payment default.

Water and sanitation is sometimes included in ‘improved housing’, but microfinance organisations have low levels of awareness and information about how to develop specific products for the water sector. The exception is for infrastructure, where loans are limited to capital investments such as water storage facilities which have a more certain short-term return. MFIs have capacities and experience in managing credit, but many have limited capacities for understanding the nature of demand for water sector-related finance, or helping poor communities prepare projects that do not have a straightforward income generation component. Closely monitoring loan use and impact is also not part of a typical MFI’s core competencies.



Institutions in the water sector such as NGOs and resource centres are not generally experts in credit provision, but are able to provide important inputs in support of finance. They can become financial intermediaries between MFIs and households or Community Based Organisations (CBOs) and help to improve processes and results by mobilising start-up funds for water and sanitation credit schemes, bringing in technical support for feasibility studies, training staff in participatory tools and helping with monitoring. They offer complementary skills to reach new markets and their support can result in lower running costs for the MFIs. Larger or regional NGOs are able to promote different finance mechanisms at rural level, increasing the potential outreach of MFIs through networks and associations of CBOs.



QUICK FACTS

Strategic opportunities & partnerships

- Innovative microfinancing arrangements traditionally include income generating activities and capital investments, BUT increasingly include micro-loans, credit/savings schemes, credit guarantees and other locally developed and tailored financing arrangements.
- Local NGOs and CBOs offer complementary skills to MFIs in terms of outreach to new markets and they increasingly act as financial intermediaries between MFIs and users.

STRATEGIC PARTNERSHIPS BETWEEN MFIS AND WATER SECTOR NGOS

Water Partners International (WPI) focuses on Strategic Partnerships to help bridge the MFIs and the traditional water sector NGOs. WPI provides financial support to MFIs to conduct pilot projects in the water sector and partners with them to equip them with expertise in the sector. WPI also provides NGOs with operations and credit training (by teaming them up with leading MFI banks in their region) in order for them to launch and manage microfinance operations.

WPI started a pilot water micro-credit project with Basix Bank (a MFI) in India, providing a grant and a loan on soft terms so that Basix Bank can conduct market research and develop its own water and sanitation credit products, and then micro loan in a few test sites. There is a potential for 900 households to benefit from this specific pilot project. The short-term objective is to test whether or not water and sanitation projects are a bankable lending product for Basix. If the pilot is financially successful, the ultimate goal of WPI's support is to enable Basix Bank to get commercial market funding to build its water and sanitation loan portfolio. This may come through credit guarantees from WPI or other financial methods to support Basix's lending in this sector. The goal for any MFI would be to achieve financial self sustainability in their water and sanitation portfolio. WPI also provides grants to NGOs to create the infrastructure to manage a revolving microfinance fund, and provides loans to these NGOs for on-lending to CBOs and individual households.

WPI believes that grants may be necessary for initial product development and capacity building, but eventually risk mitigation, credit enhancements and other bridge financing techniques will be employed to connect the formal private capital market to MFIs (and possibly to NGOs) to fund their WSS loan portfolios on commercial financing terms (WPI, 2005).

An example of a success story is S. Gandhamani, who lives in Ponnegampatti, India, who took out a WaterCredit loan to install a new water tap outside of her house. Today, she not only has easy access to safe water, but the wastewater that runs from the drainage area around her tap is channeled to a thriving garden where she grows banana trees to earn extra income for her family. A few months ago, the time and water it takes to tend these trees would have made this garden impossible. Now, each bunch of bananas she sells brings in an extra 150 rupees (\$3 US) for her family. By harvesting the bananas five times per year, Gandhamani has added the equivalent of five weeks of wages to her yearly income.

In general, access to water credit enables women in this village to get household connections, which saves them considerable amount of time fetching water. This time can be used for productive activities, like working in the garden. Also the time saving can have a positive impact on school attendance of children, especially girls.

5 Challenges

Just as traditional finance mechanisms contributed to high debt levels in developing countries without substantial poverty reduction, microfinance for the water sector should not be considered a panacea. Micro-credit loans will need to be repaid, with interest. If an effective collection system is not in place, their effectiveness is doomed from the start.

Limited outreach of microfinance

In 2000, there were an estimated 30 million families worldwide with access to microfinance, of which 19 million were identified as very poor. Only 9% of the poorest families had access to micro credit in Asia and in Sub-Saharan Africa this number was around 6% (Daley-Harris, 2002). The limited outreach of microfinance institutions to the poorest in Sub-Saharan Africa can be partly explained by the fact that MFIs are relatively new compared with Asia and Latin America. There are some exceptions, such as in Kenya, where MFIs are estimated to reach about 30% of the poor (1.8 million clients) mainly due to the cooperative credit sector. There remains a huge challenge therefore to scale up access to microfinance.

Financial sustainability

The costs of providing microfinance are not low, as the small size of loans and the increased need for follow-up during the loan cycles result in higher overheads. These costs are

QUICK FACTS

- **Limited outreach of microfinance** – it remains difficult to reach the very poor. In 2000, 9% of the poorest families had access to micro credit in Asia and in Sub-Saharan Africa this number was around 6% (Daley-Harris, 2002).
- **Financial sustainability** – costs of providing microfinance are not low, as small loan sizes and increased need for follow-up during loan cycles results in higher overheads. Longer time frames may also be required for newly established local MFIs to mature and become financially viable and sustainable.
- **Scalable solutions** – financial allocations need to be linked with activities such as training, counselling, and sensitisation, to achieve more sustainable solutions. Linking water and sanitation projects with empowerment, people’s involvement, productive activities and social marketing decreases the risk of non reimbursement of loans.



sometimes included in the loan, making interest rates very high. While many microfinance institutions claim they are sustainable and that loan losses are lower than the rate of defaults amongst customers of larger banks, many of these are non-governmental or not-for-profit organisations lacking transparent monitoring systems and with overheads that are highly subsidised by donors.

From a survey of 1,000 providers of microfinance and other initiatives in Sub-Saharan Africa, only 20 were estimated to be financially sustainable. Some of these organisations took five years to reach break-even point and up to that point they survived with donor support, including soft loans or grants. But donors are calling for greater effectiveness, which means they will only fund loans and not all the upstream work required to ensure the quality of the loans.

Scalable solutions

Given increasing competition and a need to build new markets and expand a client base, some MFIs have sought strategic alliances with NGOs and other financial intermediaries. These offer the possibility of complementary skills to reach these markets, with lower running costs for the MFIs since these are supported by the financial intermediaries.

It is important to cover the non-financial services required to make microfinance work in the water and sanitation sector. Activities such as training, counselling, and sensitisation,



that are not directly part of financing, are not often provided by the MFI. Financial allocations need to be linked with empowerment and people's involvement. Linking water and sanitation projects with productive activities and social marketing decreases the risk of non reimbursement of loans.

Although microfinance may be one means of enabling (poor) people to access water and sanitation services, non-financial measures are many times more critical than merely increasing finance. For instance, the illegal status of some peri-urban areas is a barrier for utilities to obtain credit and improve their services. Likewise, the requirement by most utilities for connection costs to be paid in one lump-sum remains a key barrier for increasing coverage to the poorest in urban areas.



6 A few pointers about microfinance in India

- There is a growing trend of expansion of urban microfinance: two urban MFIs in Bangalore, and one each in Ahmedabad, Kolkata and Mumbai, are negotiating with equity investors and lenders.
- One of the distinguishing features of Indian microfinance, has been the lack of savings which have proven so successful in reaching and empowering mainly poor women elsewhere.
- Indian MFIs have one of the lowest interest rates in the world. For small start-up MFIs and for new products, unit transactions costs are particularly high. There is a need for MFIs to have mechanisms in place to recover realistic interest rates if they are to survive and grow. This does not mean that the costs have to be all charged to the clients, but overheads and other transaction costs need to be taken properly into account.
- The microfinance sector in India in its broadest sense is highly decentralized, with no single agency responsible for its development. Some useful information resources already



exist but most information (bank lending to the MFI sector, investments by capital funds, information on new products, etc.) is very disperse.

- An enormous scope for developing the “younger” microfinancial service is emerging: money transfers within the country. There is an increasing need to develop a fast, low cost, convenient, safe, and widely accessible money transfer service.
- Human resource development has become perhaps the most important challenge facing the sector. The state of development of the training and capacity building sector is embryonic in relation to needs. While lending growth is expected to continue, the rate of growth is constrained by the fact that MFIs with adequate capacity and systems have already largely been covered (although these are being joined by start-ups with huge borrowing requirements). There is thus a great need for strengthened training and capacity building services.

Source: Ghate, 2006 and WB/DFID 2003.



7 Dutch innovations with microfinance for the water and sanitation sector

7.1 Micro Water Facility

The Micro Water Facility was established on 1 July 2007. It is a non-profit, service-providing initiative to help realise small-scale and innovative solutions to improve access to clean drinking water and sanitary water in poor countries in Africa and Asia. The Micro Water Facility (MWF) helps Dutch enterprises and project organisations to develop business plans and create partnerships with development organisations, investors and donors. In broad terms, the ultimate goal is to contribute to the realisation of the Millennium Development Goals (MDGs), partly by involving Southern partners in a sustainable and proactive manner whenever possible.

Reaching the bottom of the pyramid

The Millennium Development Goals aim to halve the proportion of people without sustainable access to safe drinking water and sanitation by 2015. Private initiatives and 'entrepreneurial development aid' can play a key role in this effort. It is becoming increasingly clear that Southern countries



Foto's: Water Pyramid

offer a potentially interesting market, also referred to as the 'bottom of the pyramid' (BOP). There are many examples in the Netherlands of innovative entrepreneurs and organisations that have developed affordable and sustainable products for this market. However, placing products on these markets has proved to be difficult, usually because this requires a fundamentally different approach to product development, sales and distribution, pricing, service and maintenance.

To be successful, products must be fully purpose-built/adapted to local needs and conditions. In other words, they must be 'appropriate technologies'. But it is not easy to meet these requirements and translate them into convincing business plans. Potential financiers and project partners tend to be reluctant to make funds available for working up ideas and developing prototypes, carrying out pilot projects, setting up production facilities and training local partners.

The Micro Water Facility (MWF) has been established to help entrepreneurs and businesses to break through these barriers. MWF helps Dutch enterprises and project organisations to develop business plans and create partnerships with development organisations, investors and donors.



QUICK FACTS

Three distinguishing characteristics of MFW:

- **Service provision with a focus on the initial stages of the business development process**
- **An independent and not-for-profit character**
- **Professional management deeply rooted in the Appropriate Technology community**

7.2 Akvo.org: The open source for water and sanitation

To accelerate change, Akvo harnesses the most open, adaptive and collaborative principles of modern times -- the open source technology movement.

Our mission: To provide free and open working knowledge, a collaborative community, micro finance solutions and a marketplace for the water and sanitation community. A Wikipedia and eBay for water, rolled into one, it is backed by some of the leading expert organizations in global water and sanitation development. The foundation will engage previously unreachable collaborators to help speed up the pace at which water and sanitation problems are addressed.

Today Akvo is working to expand its network of supporters while we embark on pilot projects in India. Information poverty may well be the single biggest roadblock to sustainable development. Yet where phones and Internet connections exist it is possible to build new kinds of collective, interconnected markets that unite the world's rich and poor in the quest for truly sustainable water and sanitation solutions. By using an open web community platform, new collaborators and new flows of money can be attracted to the water sector. Information exchange on cost effective and sustainable solutions can be drastically improved and an online marketplace for aid, matching funders with aid seekers, can be developed.

The team is working actively to recruit new finance and implementation partners. More at www.akvo.org



PARTNERS

- Netherlands Water Partnership (NWP)
- UNESCO-IHE, Institute for Water Education
- IRC International Water and Sanitation Centre (IRC)
- GreenOcean
- Movement Design Bureau
- Fountain Of Development, Research and Action (FODRA)

QUICK FACTS ABOUT AKVO

- Attracts new collaborators and new flows of money to the water sector
- Provides open access to comprehensive information about water and sanitation solutions
- An improved way to collaborate, so individuals and organisations can cooperate, exchange knowledge and invest
- Lowers barriers for small projects to acquire funding
- Provides funders with improved ability to monitor progress and returns on investment (ROI)

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9 Resource persons in India

The following organizations and individuals provided resource materials for the development of this booklet and are available for further contact.

Dr. Meera Mehta

Dr. Meera Mehta is a private consultant with extensive experience in infrastructure finance and urban development. She is also a Professor Emeritus at the CEPT University in India.

Dr. Mehta holds a doctoral degree in economics with background in finance, urban development, and water supply and sanitation studies. She has worked as the Director of the postgraduate School for Planning in Ahmedabad, India and with the World Bank's Water and Sanitation Program in Africa and its India program. Dr. Mehta has published widely and worked closely with, or consulted for, numerous international agencies as well as governments, NGOs and financial institutions, in both South Asia and Africa.

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Sidur, Hyderabad, India

Society for Integrated Development in Urban and Rural areas (SIDUR) is a non-profit, secular, charitable society based on the philosophy of empowering the oppressed to create an egalitarian society that is just and free established in 1990.

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Gramalaya NGO, Tiruchirappalli

Gramalaya was established in 1987 with a group of committed youths in the field of rural development. Gramalaya is a legally registered entity under the Indian Trust Act of 1882 (registration No. 72/87) with the ultimate goal of working for the amelioration of socially downtrodden people under the integrated rural development approach.

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BaSiX, Hyderabad

BASIX is a new generation livelihood promotion institution established in 1996, working with over 190,000 poor households in 44 districts and eight States to promote sustainable livelihoods, including for the rural poor and women, through the provision of financial services and technical assistance in an integrated manner.

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WaterPartners International (USA), India office, Tiruchirappalli

Since 1990, WaterPartners International has providing innovative clean water solutions that have a direct and immediate benefit in saving lives and dramatically improving the health of people in developing countries, including Ethiopia, Kenya, India, Bangladesh, Honduras, Guatemala, El Salvador and the Philippines.

One of the important projects of WaterPartners International is the WaterCredit where loans are provided to NGOs and MFIs for on-lending to through women self-help groups and Joint Liability Groups in the countries like Bangladesh, India and Kenya.

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About NWP

The Netherlands Water Partnership (NWP) is an independent body set up by the Dutch private and public sectors in the Netherlands to act as a national coordination and information centre for water-related issues abroad. The principal aims of the NWP are to harmonise the activities and initiatives of the Dutch water sector abroad and to promote Dutch expertise in water worldwide. The NWP is the channel through which government bodies, NGOs, knowledge institutes and private organizations in the water sector share information on their activities and services and has 160 members.

The mission of the NWP is to enhance the Netherlands' contribution towards achieving the Millennium Development Goals and to promote the Dutch water sector abroad. The NWP acts as a platform for promoting export, maintaining quality, improving sustainable development and contributing to international water policy. By representing the Dutch water sector in international forums, the NWP ensures closer collaboration among its partners and guarantees that Dutch knowledge and expertise are used to optimal effect.

Netherlands – India

On the 6th and 7th of February 2007 the Foundation for Critical Choices for India, the Netherlands India Chamber of Commerce and Trade and the NWP organized a water technology seminar in the Netherlands. Various delegates from the industry, government, knowledge institutes and non - governmental organisations from the Netherlands and India participated. Based on various presentations and discussions, the participants concluded that there is scope for a more structural cooperation between the two countries relating to all water issues. Various organisations support the idea of an Indian – Netherlands Water Platform that could have the objective to promote cooperation, improve information exchange and initiate partnerships to execute projects.

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About IRC

Since its foundation in 1968, the IRC International Water and Sanitation Centre (IRC) has facilitated the sharing, promotion and use of knowledge so that governments, professionals and organisations can better support poor men, women and children in developing countries to obtain water and sanitation services they will use and maintain. IRC is an autonomous, non-profit Foundation. Our work has three main foci:

Sector innovation

IRC focuses on strengthening decentralised service delivery in marginalised rural and peri-urban areas through supporting systems, tools and capacities for planning, implementing, monitoring and managing knowledge flows.

Identifying innovative approaches and methodologies is an IRC's trademark. Action research on topics including community management, transparency, gender, institutional development, innovative financing, integrated water resources management, school sanitation and hygiene promotion, take place within Learning Alliances – consisting of learning and sharing platforms at key institutional levels.

Information and Knowledge Management

With nearly 40 years experience in information brokering and knowledge management, IRC's activities include documenting processes and best practice; strengthening capacity to manage information; developing and sharing information products adapted to uses needs. We have a network of information outlets in developing countries, helping other institutions and networks by publishing and disseminating their information at low-cost, solidarity pricing principles.

Facilitating Resource Centres in developing countries

We help local Resource Centres develop their work and improve staff skills, to become effective centres of knowledge in their own countries, capable of conducting outreach work, advocacy and information sharing.

For more information please visit www.irc.nl

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Colofon

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