Flows: Filling up the Base of the Pyramid

Business and Finance Solutions to Scale up
Water Access for India's poor

FMO Finance for Development

Intellecap SHAPING OUTCOMES

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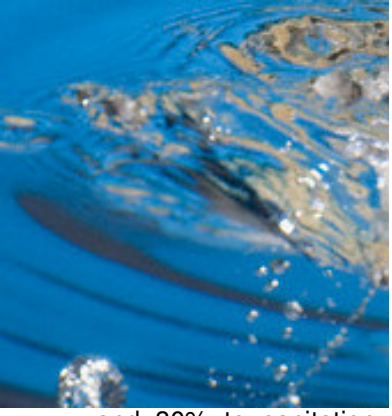
The Dutch development finance company FMO, the Indian development finance consultancy Intellecap and the Indo-Dutch social investment firm Goodwell announce the launch of a joint program to build scaleable business and finance solutions to meet the huge unmet water and sanitation needs of low income households, farmers and communities in India. Suitable finance and business solutions are often identified as missing inputs in creating large scale access to safe drinking water and sanitation, irrigation and water management. In the next 2-3 years, the Flows program will select proven water solutions and develop and implement demand-driven, financially sustainable, replicable and scalable businesses around these solutions. The Flows program will draw upon global best practices and leverage strategic partnerships across supply chains in the water, sanitation and finance sectors.



Background

In India there is a huge unmet need for safe drinking water and sanitation, irrigation solutions and water management at the household and community level. This need is acute in the case of low income segments who, due to the many market imperfections in the existing systems and solutions, are unable to access water and sanitation solutions.

While official statistics state that 84% of the population has access to water and 30% to sanitation, these numbers are said to be more indicative of the infrastructure that is built as opposed to the service delivery. Many low income segments do not have access despite extension of heavy state subsidies that often get usurped by intermediaries and the higher income segments. Estimates by Water Aid suggests that even in the year 2015, around 244 million people in rural India and 90 million in urban India will lack access to safe, sustainable water supply (D'Monte 2005). Many of those who do access safe drinking water do so at exorbitant prices. For instance, daily wage earners in the city of Pune are reported to pay up to 20 percent of their wage to buy water (Baput, M & Agarwal 2003). While data on the quality of water available to Indian households is not easy to come by, for many low income households especially those in urban slum settlements, 'clean water' is still a dream. Improving the access to safe drinking water and sanitation can have a substantial social impact, e.g. in reducing water-borne illnesses and disease.

Understanding the demand for water and sanitation services

- 1.1 billion people, or 18 per cent of the world's population, who lack access to safe drinking water (WHO/UNICEF 2005)
- 2.6 billion people, or 42 per cent of the total, lack access to basic sanitation (WHO/UNICEF 2005)
- Sanitation coverage levels are lowest in the Sub-Saharan Africa (36 per cent) and South Asia (37 per cent). (WHO/UNICEF 2005)
- Level of access to improved water source in India: 84% (*World Development Indicators, 2006)*
- Level of access to improved sanitation facilities in India: 30% (*World Development Indicators, 2006)*

"Factors holding back sanitation are widely understood; it is action that is needed" - **ADB (Aug 2007)**

Available statistics on water demand shows agriculture as one of the highest consumers of ground water. Irrigated area in India grew from 22 million hectares in 1947 to around 78.3 million hectares in 2003 (Narayanamoorthy 2006). Addressing the huge demand would require identification of new supply sources and improvement of efficiencies in existing distribution systems. According to UNDP Human Development Report 2006, about 13% of India's population has access to irrigation. Within this group, the richest one-third of farmers receive 73% of the subsidy. Improving water infrastructure such as irrigation systems at the community level can help increase agricultural productivity and health conditions for poor communities.

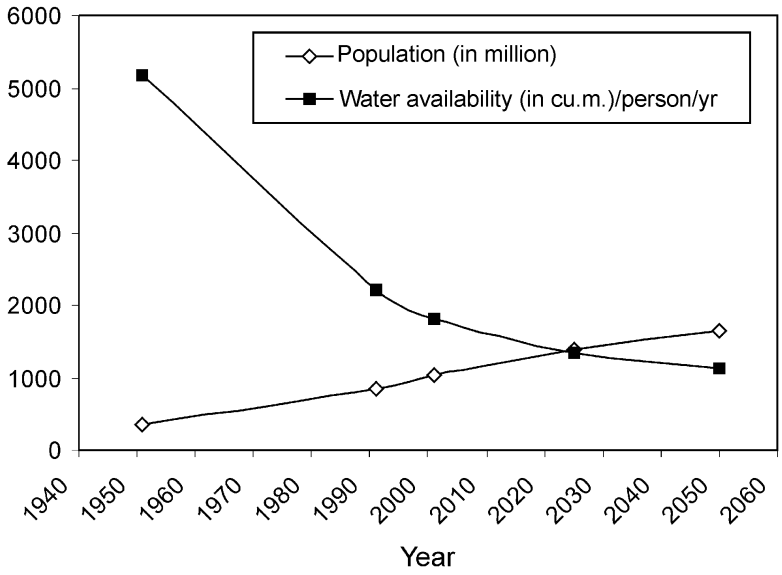


Figure: Projected decline in per capita average annual fresh water availability and growth in population in India

Given the overall threat to the availability of water, preventing losses and treatment of waste water become highly relevant strategies. Unfortunately, less than 35 percent of the cities in developing countries treat their waste water. (HABITAT 2001). The extent of waste water treatment in India was estimated to be around only 29 percent for Class 1 cities and 3.7 percent for Class 2 towns by 2004. (GTZ 2006), which leaves much to be done to conserve water and optimize availability.

A Role for (Micro) Finance?

Water is traditionally seen as a public good, but with the introduction of new technologies and products at household and community level, new business opportunities are emerging in the water sector. It is typically noted in comparable sectors that finance is often a constraint in creating access to such solutions especially for the low income segments.

Drawing a parallel to the demand for water, a large number of Indian poor lack access to affordable financial services. In the last 20 years, microfinance has emerged as a tool that creates access to the unbanked segments of the population. The pioneers in microfinance have developed effective distribution models to reach the poor. It is in this context that a potential synergy can be explored with microfinance in creating access to water and sanitation solutions.

The Challenge of 'Scale'

The opportunities to integrate water and microfinance solutions have been identified in a number of successful pilot programs around the world. However, only a few of these programs have been able to move beyond the pilot stage. Some of the constraints that these programs have experienced include a supply driven technology focus and the lack of a sustainable scaleable business model.

Scalable Business Solutions in Water: Key Success Factors

From a preliminary analysis of pilots trying to create access to water amongst low income segments, the following common factors emerge as key success factors:

- A proven need and demand for water solutions (drinking water/irrigation water/sanitation) amongst the low income clients
- Design of water solutions and delivery channels driven by demand rather than supply.
- 'Right' and 'timely' financing solutions to facilitate access to water solutions.
- Financially viable and sustainable models unlike subsidized donor programs (lessons to be learnt from public-private partnerships).
- Active involvement of communities and local governments to ensure quality service provision especially in community infrastructure programs.

Manila Water Company, Philippines runs *Tubig Para Sa Barangay*, a programme that creates access to safe drinking water to urban poor in the Philippines. A key lesson for MWC was the need for multiple financing models/schemes for different community types and operating environments. MWC runs three schemes – one, where each household/family avail of an individual water connection, two, each water meter/connection serves four to five families and three, a mother meter for a community. As of June 2007, the company had created access to 198,000 urban poor.

Microfinance and Water: Exploring Synergies

Synergy # 1: Lessons learnt from microfinance

Microfinance has a proven business model that has demonstrated scale in reaching out to low income clients.

- It responded to a clearly unmet demand so far not addressed by formal channels such as banks;
- It provided easy, flexible products as opposed to traditional rigid products of conventional banks;
- It has strong foundations in community mobilization, peer pressure to ensure quality loan repayments and institutional viability.

"It (partnership with complementary services) is an opportunity for us to create greater value for our clients without incurring too much additional cost"

– Padmaja Reddy, Founder-Executive, Spandana, a large Indian MFI

Water pilots could learn lessons from the microfinance business model and its success factors.

Synergy # 2: Partnering with microfinance

Microfinance NGOs can partner with actors in the water sector for needs identification, product design and development of awareness and capacity building amongst the low income clients. There are similar partnerships by MFIs in related areas such as energy, insurance and agri-business.

- SEWA Bank has partnered with the solar electric light company, SELCO for a program that creates access to lighting solutions and micro credit for low income households and street vendors
- *Sakhi Samudaya Kosh*, an MFI, based in Maharashtra, co-created a private limited company that distributes home energy solutions such as bio mass applications developed by British Petroleum.
- India's housing regulator, National Housing Bank, is working towards developing products for low income housing and foresees MFIs as partners in design and implementation.

MFIs : Suitable partners to reach low income markets in India

- The potential client base for micro finance is estimated to be as high as 250 million low income individuals.
- As of March 2007, microfinance loans extended by Microfinance Institutions (MFIs) and Banks (under the SHG-Bank Linkage Programme) is estimated to be USD 3.7 billion, only around 7 percent of estimated demand
- Microfinance Institutions (MFIs) are major players constituting 48 percent of the total supply of microfinance in India and growing at an attractive annual growth rate of over 80 percent.
- Indian MFIs fare impressively in efficiency and profitability when benchmarked against their global counterparts.
- Many MFIs are leveraging their established delivery infrastructure and diversifying their portfolios to include asset finance and supply chain finance.

Source: Inverting the Pyramid: The Changing Face of Indian Microfinance, Published by Intellecap, October 2007

Synergy # 3: Microfinance facilitating access to water solutions

Microfinance Institutions can design and extend demand driven and flexible financing solutions, both for individual clients and for water supply chain actors and hence facilitate outreach to the poor.

- *Financial Solutions for the End Users*
  - SEWA Bank in Ahmedabad, India provides loans for infrastructure facilities such as water connections and toilets;
  - Water Credit initiative has initiated a pilot with the Indian MFI BASIX and Gramalaya, its implementation partner to develop loan products and offer to communities helping them phase out their payment towards installation of community based water supply programs;
  - Institutions such as Aga Khan Rural Support Programme (AKRSP), State Bank of Mysore's special product named Varshavahini and many developmental programs such as that of the Asian Development Bank (ADB) extend loans for construction of rain water harvesting structures in India;
  - CMFL in Uganda provides loans for construction of wells;
  - PAPME in Benin provides loans to clients to buy pipes, water taps and hoses.

- *Financial Solutions for the Supply Chain Actors*
  - GRET, an international NGO has a rural infrastructure fund (RIF) which provides medium term loans to local commercial banks that finance investors of piped water systems (traditional products include short term loans). In addition, the fund provides a guarantee of 30 percent in case of default on such loans.

Synergy # 4: Micro entrepreneurship in water supply chains

Microfinance Institutions can stimulate enterprise activities amongst select clients and facilitate their participation in the water supply chain.

- Under the state run microfinance programme – *Kudumbashree* - in the state of Kerala, women groups are supported with bank loans to undertake enterprise activities such as construction of toilet facilities and solid waste management replacing private contractors.

Denis Todogledji is a water seller in the peri urban areas of Cotonou, Benin. 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/m3 and he resells it for FCFA 350–400/m3. In order to finance his operations, Denis borrows from a local MFI.

Source: Mehta, M & Virjee, K

Program Flows: Filling up the Base of the Pyramid

The Flows program seeks to create one or more long term business model(s) that integrate water and microfinance solutions at the household and/or community levels. Success of the program will be measured by the financial sustainability of the business models in the long run and their ability to create extensive impacts.

During Phase I of this program, the team will develop a clear understanding of the existing demand for water amongst low income segments in India. The supply side of the water and finance solutions will be selected from an extensive study of currently successful interventions in India and abroad. Additionally, the program intends to learn from comparable solutions integrating microfinance solutions in sectors other than water such as energy and healthcare. The success and failure factors related to the viability, sustainability and scalability of these business model(s) would be fundamental to the design elements of business model(s) incubated by the Flows program. The program will not look for a brand new model or technology, but rather a proven solution that has demonstrated promising results at the pilot stage. Phase 2 and 3 of the Flows program will involve design and implementation of viable business model(s) in select geographies in India.

For poor families around the world, access to affordable water and (micro) finance are necessary (but not sufficient) conditions for improving their lives. With this program we strive to find the synergies of these sectors to create a substantial social impact on the livelihoods of the poor communities.

Invitation to partners and sponsors

Collaboration with strategic partners and finding financial sponsors are imperative to the success of this program. We invite a broad range of technology, knowledge and finance partners to join us in our efforts through the different phases of the program. We seek partners who share our vision of creating for-profit solutions addressing the problem of inadequate access to water and sanitation solutions, while empowering communities and promoting livelihoods.

Technology partners will include those entities with solutions for water and sanitation, have initiated pilots and are exploring opportunities to take them to scale or replicate successes. Knowledge partners will include experts in the field of water and sanitation with knowledge of demand for such solutions and global initiatives and lessons and agencies with experience in design and implementation of projects in the space. Finance partners could get involved in any of the project phases as well as choose to participate in the capital structure of incubated business model(s).

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About the Project Partners

The Netherlands Development Finance Company (FMO N.V.) supports the private sector in developing countries and emerging markets in Asia, Africa, Latin America and Central and Eastern Europe with loans, participations, guarantees and other investment promotion activities. The goal is to contribute to the structural and sustainable economic growth in these countries and, together with the private sector, obtain healthy returns. These returns make FMO a valuable risk partner. FMO builds bridges between entrepreneurs and capital, locally as well as across frontiers, for sustainable development and healthy returns. FMO has a microfinance portfolio of € 160 million. For more information, please visit www.fmo.nl

Intellecap is a fast growing strategic services firm in the international development sector. Intellecap aims to build intellectual capital dedicated to facilitating investments into socially motivated businesses and to assist these businesses in becoming more profitable and achieving greater scale through advisory services. Working in both indirect strategic advisory roles and direct design and execution modes, Intellecap leverages its understanding of mainstream, profit-oriented business models to create unique solutions that generate sustainable financial, social, and environmental returns. Intellecap has undertaken pioneering initiatives in the microfinance sector, and seeks to leverage this experience to other areas that benefit social and economic development. For more information, please visit www.intellecap.net

Goodwell is a for-profit business development company that invests in entrepreneurial microfinance organizations on a socially and commercially sustainable basis. Goodwell aims to improve access to affordable financial services for millions of people in the 'Base of the Pyramid' in order to contribute to poverty alleviation and sustainable development. Goodwell does this by developing and scaling up entrepreneurial microfinance organizations and integrating them into the mainstream financial sector. Goodwell aims to realize "benefits of scale": a substantial social impact and an attractive financial return. Among its investors are FMO, IFC, Deutsche Bank, Dutch pension funds, family foundations and social investors. The first fund has India as investment area. New funds will have Latin America and Africa as investment areas. More information at www.goodwell.nl

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