IRC

Financing Facilities for the Water Sector

Thematic Overview Paper 13

By: Rachel Cardone and Catarina Fonseca
Reviewed by: James Winpenny

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Edited by Peter McIntyre

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Each TOP consists of:

- An Overview Paper with all the latest thinking
- Case studies of best practice, if applicable
- TOP Resources:
    - links to books, papers, articles
    - links to web sites with additional information
    - links to contact details for resource centres, information networks or individual experts
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The TOPs are intended as dossiers to meet the needs of water, sanitation and health professionals in the South and the North, working for national and local government, NGOs, community-based organisations, resource centres, private sector firms, UN agencies and multilateral or bilateral support agencies.

1.2 How to make the most of this TOP

This TOP explores current thinking about project development and financing facilities, especially as they relate to the water supply and sanitation (WSS) sector[1]. It includes an overview of the main principles based on a scan of worldwide experiences and views of leading practitioners. The aim is to help readers to become acquainted with the issues, rather than to provide in-depth analysis. However, links throughout the document will take the reader to more detailed explanations and experiences and act as a guide to further reading for anyone who wants to know more about this topic.

Readers who just are interested in a specific area can find it in the table of contents or search for a specific keyword using the binocular icon in the PDF toolbar. Useful resources are the glossary of technical terms (Part 6) and the list of acronyms used, which can be found at the end of the TOP. Readers who are new to this topic might find it useful to print these out as an aide-memoire while reading the top.

Readers are free to download and print the PDF file, read it and share it with others. If you use the material extensively, for example in training sessions or to prepare projects or finance applications, or have comments about its use, we would very much like to know. Please send an e-mail to Sascha de Graaf (graaf@irc.nl).

1.3 Target audience

We wrote this TOP primarily for people working in the water and sanitation sector. These include individuals who want to understand more about project development and financing facilities; community groups, NGOs or governmental institutions which are developing projects to meet MDG Target 10; and donors or institutions seeking the best way to support the water and sanitation sector. The content is sufficiently generic, however, that it may be of use to people working in or with other sectors.

[1] The authors would like to thank Jeanette Baartman and Janice Gabucan of ERM for their insight and support in the preparation of this report.

2 Introduction

In recent years, finance has emerged as an important policy tool to support and stimulate water sector reform. Traditional grants and concessional loans have given way to 'innovative' finance solutions. Attention is increasingly paid to how finance mechanisms can be structured to increase funding flows. However, innovation in financing also requires, at a macro-level, attention to broader economic and governance functions as well as to financial sector capacity.

As part of this evolution, project development and financing facilities have been created to help develop and finance projects from the ground up. Largely funded by donor agencies and hosted through multi-lateral development banks, including the World Bank, the International Finance Corporation (IFC), and the African Development Bank (AFDB), these facilities aim to support domestic private finance for a range of sectors and issues, including water supply and sanitation (WSS). Because of the strong inter-linkages between accessing domestic private finance and public governance, most facilities rely on collaboration with domestic-based non-governmental organisations (NGOs), local business and government.

This Thematic Overview Paper (TOP) is intended to serve as an introduction to project development and financing facilities. It provides an initial look at these facilities, their intended role, and their relevance towards achieving the Millennium Development Goal (MDG) Target 10 for water supply and sanitation (to halve, by 2015, the proportion of people lacking sustainable access to safe water and basic sanitation).

This TOP is divided into two parts. Part 1 is a discussion paper that addresses:

- What are project development and financing facilities, and how can they meet the needs of the poor?
- How do project development and financing facilities work?
- Who are the different stakeholders in these facilities? Who can access finance, and for what purposes?
- What are the different opportunities and risks posed by these facilities?

Part 2 provides a resource guide to books, papers, features, websites, conferences and events, training courses, and a 'who's who' for further information.

3 Why are project development and financing facilities needed?

3.1 Background

The water sector faces significant financial constraints in achieving MDG Target 10. A number of studies were conducted between 2000 and 2004 to determine how much funding is needed globally to achieve the targets. The results vary tremendously – from US$7.5 to $70 billion for developing countries alone. (http://www.lboro.ac.uk/well/resources/Publications/Briefing%20Notes/BN%20Will%20it%20cost%20the%20earth.htm#Flow%20of%20Finance). The lower estimate assumes basic water supply and sanitation, while the US $70 billion assumes more high-tech solutions, including wastewater treatment.

Current funding flows are inadequate to meet this globally projected need. There is a considerable funding gap between needs and allocations in most countries (http://www.unmillenniumproject.org/documents/MainReportChapter17-lowres.pdf). Notably, global and country level estimates often fail to capture the cost of institutional reform and support required to achieve sustainable water supply and sanitation provision. Most estimates fail to include the long-term costs of operation and maintenance and rehabilitation.

In the 1990s, efforts to bridge the financing gap focused on private sector participation (PSP) and privatisation of state-owned water utilities. However, macro-level governance issues relating to public administration and financial management resulted in extensive regulatory, political, and currency risks to the companies. By 2005, private investment funding flows to water and sanitation fell to their second lowest level in 10 years. Private operators who bustled with enthusiasm at the potential for large concessions projects in the late 1990s appear to be chastened by their experiences throughout Asia, Africa, and Latin America.

Understanding the challenges with international participation, and capitalising on the growth in financial services in developing countries, domestic sources of finance emerged as a potential source of finance for water sector infrastructure. In particular, domestic finance can help to alleviate the currency risk that often constrained PSP. This line of thinking complements parallel trends in decentralisation and demand-led approaches to development. Sources of domestic finance, which can range from user-finance and micro-finance initiatives at a very local level, to capital markets, pension funds, and domestic banks in countries with stronger governance, have proven effective in many cases at leveraging additional funding flows to the sector. Recommendations by the Camdessus Panel (http://www.worldwaterforum4.org.mx/uploads/TBL_DOCS_35_17.pdf) and the EU Water Initiative (http://www.euwi.net/file_upload/Flo_tmpphpSuDj2z.pdf) call for leveraging such private finance into the water sector through such innovative financing schemes, including local currency lending, credit guarantees, and sub-sovereign lending. Sub-

sovereign refers to governmental bodies at the sub-national level, i.e. provincial, district or municipal level according to whatever names are used in each country.

Regardless of the source of finance to meet the gap, any discussion about adequacy of finance must also consider policy and governance issues. (http://www.unmillenniumproject.org/documents/WaterComplete-lowres.pdf). For example, additional finance to bridge the gap between current spending and projected needs may not be enough to achieve sustainable sector development, which is associated with complex localised issues. Overall planning processes, budgeting processes, commitments and disbursements, sector coherence, and decentralisation must be considered as part of finance. In many countries, public administration and financial management capacity at central and sub-sovereign levels of government are limited, affecting the timely transfer of funding as well as the capacity to absorb funds – that is the capacity to use funds effectively and efficiently and in a timely manner to meet policy objectives. An example of absorptive capacity issues from South Africa is provided in Box 1 below.

Box 1 Funding and absorptive capacity

In South Africa, the Department for Water Affairs and Forestry (DWAF) estimates that it will require approximately R5 billion (US$75 million) to provide basic access for the 3.7 million people who currently have no access to safe water, and R10 billion (US$1.5 billion) to increase service levels for the 5.4 million people who have access that is not considered safe. The projected cost to achieve basic sanitation for those without access is estimated at R13 billion (US$1.9 billion). Although South Africa was able to secure funding to address these needs, there are challenges in the capacity to absorb this finance to best effect.

South Africa created a Municipal Infrastructure Grant (MIG) to support municipalities' new responsibility for infrastructure, service provision and regulation. Using the MIG's allocations for 2005/06 as a baseline, the government forecasts that water supply funding needs will be met by 2014, and sanitation funding needs by 2017. While short-term funding through the MIG could be increased to expand service delivery in shorter periods of time, current allocations are going unspent, and the consensus from many organisations working in South Africa is that the municipalities often lack the capacity to implement programmes, and to monitor and evaluate performance.

This lack of absorptive capacity ranges from an inability to implement programmes at a local level to institutional blockages and political interference in the budget appropriation and allocation process. There are multiple reports of funding sitting in interest-bearing municipal accounts rather than being spent on schedule. In response, DWAF will work with local municipalities through Project Consolidate, to coordinate and target capacity building activities for local government, and specifically for the 136 municipalities that have been identified as lagging behind in service provision.
Source:
http://www.dwaf.gov.za/Communications/MinisterSpeeches/2005/MinMEC5Jul05.doc;
http://www.dplg.gov.za/speeches/21Sep2005PR_imbizo.doc

One of the ways in which water sector financing has been addressed in recent years can be seen in the proliferation of project development and financing facilities. These facilities largely aim to leverage domestic finance into the water sector, while addressing some of the capacity issues inherent with decentralised service provision. As more and more facilities emerge, with donor funding, it is important for practitioners and policy makers working in developing countries to understand what these are, and how they work. Although there are many different types of finance available to the water sector – from traditional grants and loans to commercial finance, including microfinance and commercial finance – this TOP focuses purely on project development and financing facilities.

3.2 Constraints that limit water sector finance

A common constraint identified by donors and the private sector when discussing the water sector in developing countries is the lack of projects that are bankable, or financially viable. A rebuttal from other stakeholders, including communities, NGOs, and would-be project sponsors, is that demands from donors and the private sector do not address practical realities, particularly regarding time, size, technology and disbursement. However, donors continue to fund non-viable projects even if they are not bankable, whether for political or other purposes. Where loans are concerned, this practice has resulted in an increased debt load, at country or utility level, without achieving progress towards development targets.

The roots of these apparent disconnects are at once complex and dynamic. Research by the EU Water Initiative Finance Working Group (FWG) identified various constraints to water sector finance as perceived by different stakeholders, under the following headings:

- Politics and governance;
- Project preparation;
- Technical, administrative, and financial capacity;
- Cooperation and coordination; and
- Financial risk.

The challenges of project preparation and financial risk are explored in this TOP. A full description of how these different categories of constraints are manifested, along with ideas to overcome these constraints, and examples, are provided in the FWG's final report (http://www.euwi.net/file_upload/Rachel%20Cardone_tmpphprFiXnR.pdf).

Project development constraints

Project development encompasses a range of activities from the origination of a concept to attracting partners and finance. Project preparation is a key element, including due diligence over issues such as cost recovery and whether the project is appropriate to meet demand, within a given governance and technical capacity. Project preparation is often not thorough, resulting in poorly designed projects that fail to achieve poverty reduction or

economic development. Some of common issues that constrain effective project development are highlighted in Figure 2 below.

As illustrated by the jigsaw puzzle, these constraints are often interlinked, and relate to both the public and private sectors. Within the public sector, poor coordination between donors, national and sub-national governments can lead to a lack of awareness or understanding of the different finance mechanisms which may be available, or applicable, to different types of projects. In a recent presentation (COWI Stockholm presentation: http://europa.eu.int/comm/europeaid/projects/water/documents/acp_wf_full_report_en.pdf) to the EU Water Facility, it was noted that many sub-sovereigns and stakeholder groups were not aware that there is an EU Water Initiative to leverage finance for local water and sanitation projects. Likewise, in some countries, knowledge of the MDGs themselves is scant at decentralised levels.

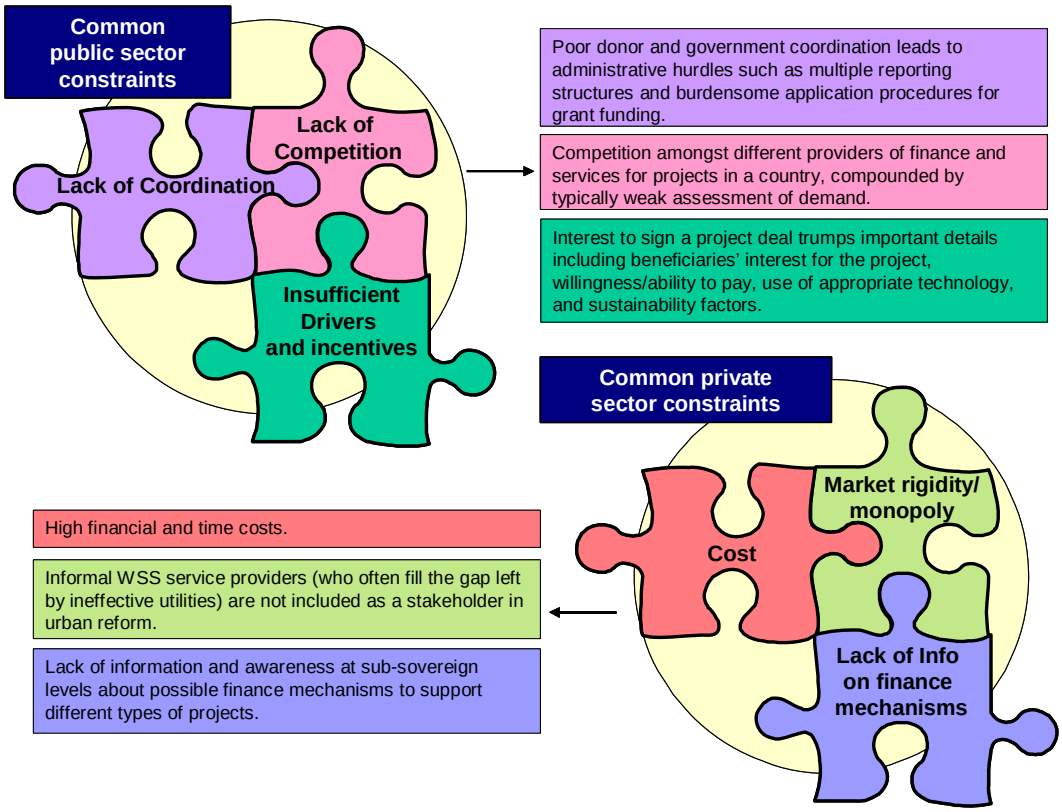

Figure 1 Constraints to project development

Many projects, whether private sector or community based, cannot proceed without funding to support the period of time between developing a project and attracting a loan or other form of market-based finance. Where regulations for service provision favour utilities, smaller service providers who often operate in peri-urban and poor areas are unable to develop plans for business expansion. Project development facilities are structured to provide capacity building as well as finance, to improve the bankability of a project (ideally within the context of broader capacity building for the sector), to a point where it could attract finance.

Financial risk constraints

In addition to the project development risks outlined above, the water sector poses significant financial risk for potential investors, compared with other types of infrastructure. These are outlined in Figure 3 below. These constraints are broadly relevant across urban and rural settings, and for the most part, across different countries and regions.

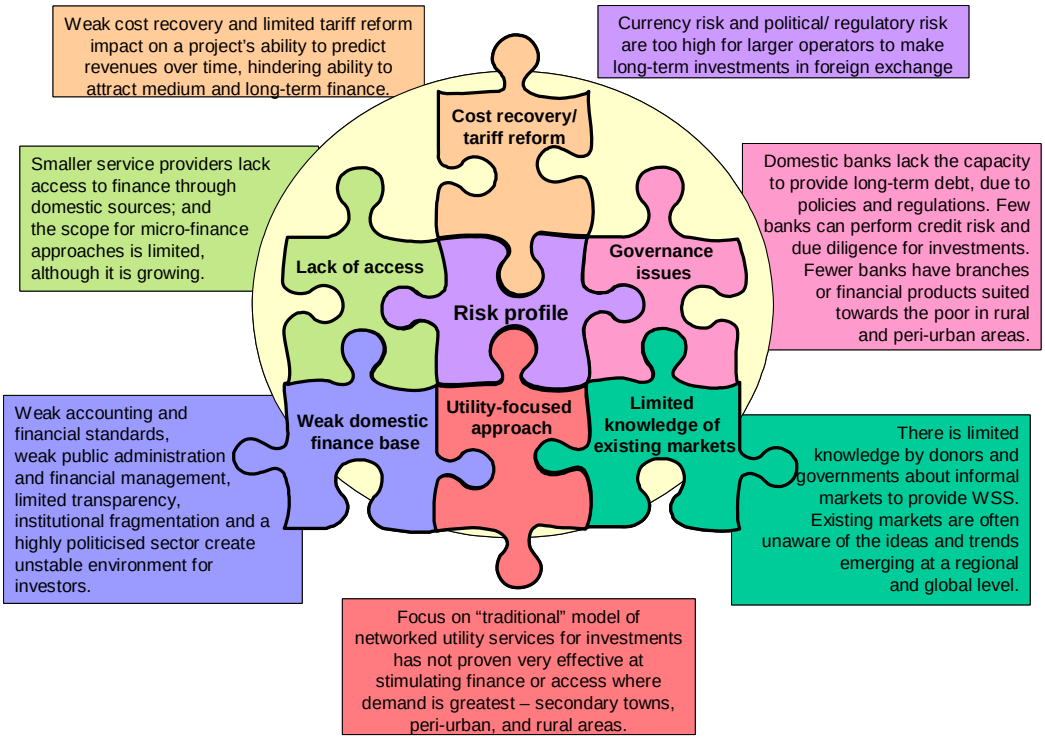

Figure 2 Constraints to financing water infrastructure

As with governance constraints, financial constraints are often inter-linked. For example, if domestic banks' capacity is weak to deliver financial products for the water services, smaller providers have limited potential to scale up their services. Likewise, traditional notions of a networked utility model, where the utility is the assumed service provider irrespective of service quality, hinders the potential to support and scale up existing informal markets that may be more effective at service delivery in marginalized, and poor, areas. The risk profile for water infrastructure projects – whether currency or regulatory risk for potential international investors, lack of longer-term finance for smaller and domestic private operators, or credit risk for bankers – contributes to the sector's poor performance in attracting funds through public or private channels. In practical terms, this hinders progress towards achieving MDG Target 10.

To address this, financing facilities aim to reduce the real and perceived risk of a project or programme, using a range of finance mechanisms to attract (donor or private sector) investors. In practice, a financing facility increases the potential for sub-sovereign and non-sovereign finance in the sector, and provide such finance without the bureaucratic measures often associated with traditional finance. (Non-sovereign funding is that from non-governmental sources such as the private sector or NGOs, or from international sources such as the World Bank or the EU financing mechanism.)

While project development and financing facilities may be an appropriate response for long-term change in the sector, suppliers of finance must be realistic about what they can achieve. Currently 1.6 billion people lack sustainable access to a safe water supply, and 2.6 billion people lack access to basic sanitation. MDG Target 10 aims to halve this, and achieve universal coverage by 2025. Given the often long lead time required for project development, and the recent emergence of project development and financing facilities, it will take time to start up new business and approaches, and to bring successful ventures to scale.

4 What are project development and financing facilities, and how can they meet the needs of the poor?

4.1 Overview of project development and financing facilities

Project development and financing facilities are relatively new ideas to help stimulate viable water infrastructure projects in developing countries that can attract finance and contribute to development goals, including the MDGs. Project development refers generally to all of the administrative, financial, and technical considerations necessary to develop a comprehensive and feasible project idea. In essence, project development is about turning planning exercises – such as those demand-led activities undertaken during the Poverty Reduction Strategy Paper (PRSP) and Sector Investment Plan (SIP) processes – into tangible projects that can attract finance, whether through public government budgets, or private sources. A project development facility is a programme or initiative whose core purpose is to support the creation of a project stream.

By contrast, a financing facility is a source of finance dedicated to particular types of projects, or sectors. It can fund specific projects, or sector investment programmes as identified through national planning processes. It is generally created through grant or loan funding from donors, as with a trust fund, but is meant to have more flexibility in its operating procedures and guidelines, and is managed autonomously. It also tends to be interested in supporting the development of commercially-based funding for infrastructure as a whole, understanding that many countries are unable to support more traditional forms of commercial finance, such as project finance.

A financing facility may have the objective of strengthening municipal capital markets for domestic borrowing. Or, it may seek to finance investments made by small-scale providers of water services. Financing facilities often use different mechanisms or combinations of mechanisms, including debt, guarantees and equity, to achieve their goals. In practice, project development facilities and financing facilities are often inter-linked. There is no point developing a project stream if sources of finance are unavailable; likewise financing facilities need well-planned projects to support.

Project development and financing facilities can be used to identify and finance projects in a range of sectors, not only water and sanitation. While some facilities are targeted at the water sector, others are multi-sectoral, looking to finance infrastructure in general, including water projects. There are pros and cons to these different structures. Multi-sector facilities can benefit from a broader portfolio of projects with different risk structures and returns, and can leverage experiences from different sectors, such as energy, power, telecom, roads, and WSS. However, the water portfolio within these broader infrastructure facilities tends to be small and the specific challenges in financing the water sector may be overlooked. By contrast, water sector-based facilities gain from their specific focus, but may lose in terms of their financial viability, at least in the short and medium term.

While some project development and financing facilities are intended for large-scale infrastructure, the concepts behind financing and project development facilities apply to a whole range of project sizes. The recent boom in micro-finance may open new channels for financing the sector (http://www.yearofmicrocredit.org/), since there are now many studies relating to how micro-finance can be applied to the water infrastructure (http://wedc.lboro.ac.uk/conferences/pdfs/30/Kouassi-Komlan.pdf). Some facilities target organisations and companies rather than individuals, and therefore target larger projects than is typical for micro-finance. However, the key concerns of project development (viable projects, appropriate technology, principles of cost recovery, governance) and the need to match finance to well-planned projects hold true regardless of project size.

Project development and financing facilities support a range of development actors, public and private, to develop viable projects and to help them to identify and work through constraints. Project development can help to cultivate ideas by bearing the bulk of the risks during the start-up stage, or by providing bridge finance so that a good idea can be tested and implemented to a point where commercial finance becomes interested. Figure 1 provides an illustration of general types of support needed, both for suppliers of finance, and for those seeking finance.

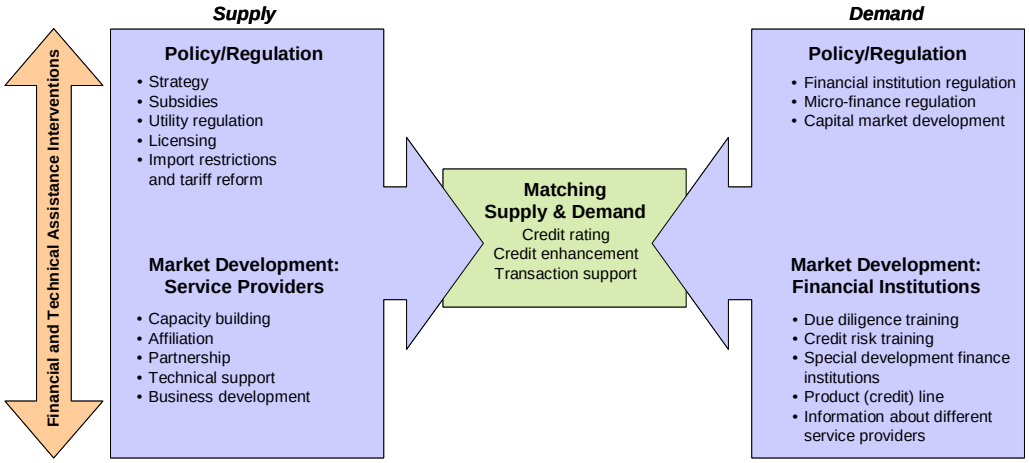

Figure 3 Mobilising domestic finance

Adapted from Mehta, M. 2005. "Mobilising Resources from the Private Domestic Market." Draft Background Paper for the Domestic Private Sector Participation Initiative Workshop held in Nairobi, 20-21 June 2005. WSP-Africa.

Project development and financing facilities support a range of activities for either public or private sector stakeholders. Support is dependant on the nature of the facility, and the stage of the project cycle. Stakeholders include municipalities, small or medium enterprises, larger private sector business, financial institutions, NGOs, or community based organisations (CBOs).

Activities often included as part of project development and financing facilities in different stages of the project cycle are illustrated in Figure 3 below.

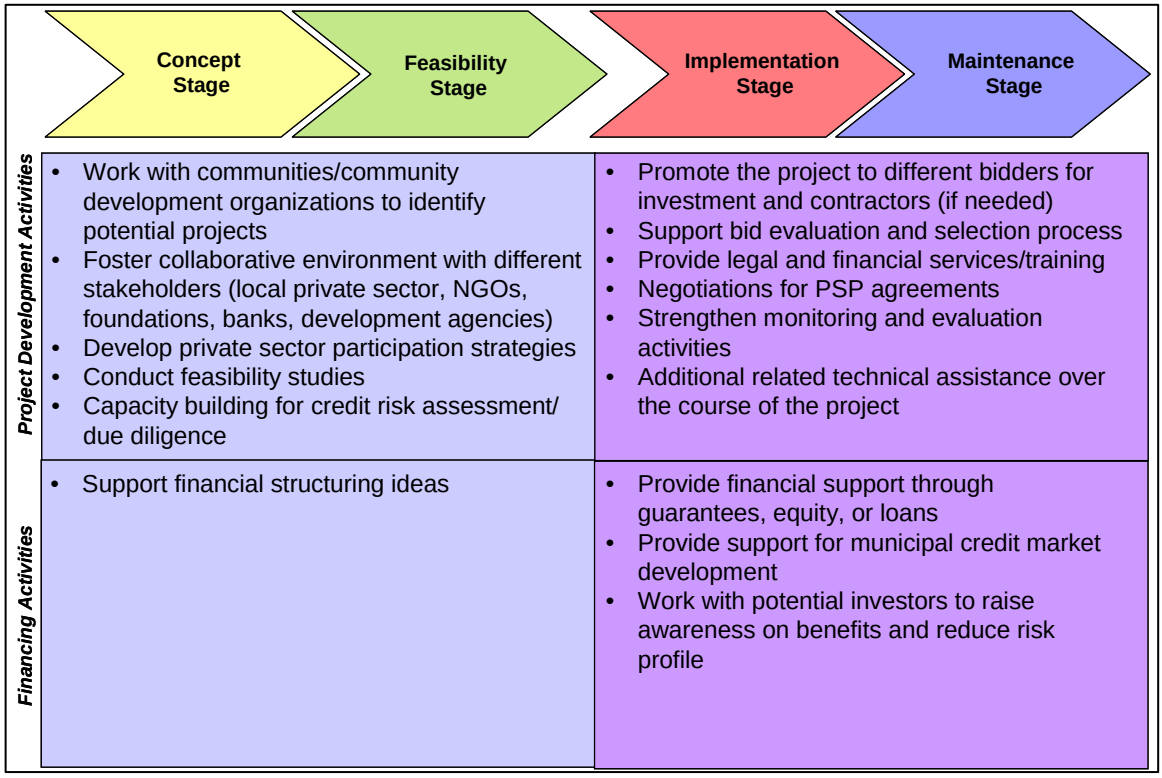

Figure 4 Activities for project development and financing facility through the project cycle

For example, project development facilities can provide initial finance in the form of a grant to work with communities to identify potential projects, and to develop a concept into a plan, with technical and financial due diligence. They can help design private sector participation strategies, and conduct financial structuring. Once a project idea has been formulated, a project development facility can help to promote the idea and develop a tender package for bidders. It can support evaluation of different offers, and selection of contractors. Once the project is underway, a project development facility can help to support due diligence efforts, provide legal and financial advice, and advise on negotiation processes, amongst other activities. With better and more reliable information, competition for more efficient and effective projects could occur, resulting in accrued benefits to consumers – and, where possible, a direct benefit to the poor. (http://www.bidfacility.com/PDF_Survey_Findings.pdf)

Financing facilities have the potential to provide a range of different finance mechanisms structured to meet the needs of individual projects. For example, water projects are suited for loans and support in local currency, because there are inherent risks if loans are provided in foreign currency, while tariffs are paid in local currency, since exchange rate changes may make debt repayment impossible. A financing facility can offset this currency risk by pooling together several projects, perhaps from different sectors within a country, and offering finance to water projects in local currency. It can also work with project

developers to establish triggers for releasing finance, to avoid delays in disbursement which often disrupt a project's success. These triggers could be outcome-based, for example based on the number or rate of connections to networked supply in poor areas. (http://www.gpoba.org/index.asp)

Many project development and financing facilities have been established in recent years to attract local finance in local currencies or to channel international finance through a pooled fund to minimise the risk to investors. Most are designed to promote varied forms of private sector participation (PSP) in infrastructure – including energy, roads, and telecom, as well as water supply and sanitation. They can be country-specific or operate at regional or global levels. They can be structured to support large scale as well as small and medium-sized projects.

Table 1 provides an overview of different types of initiatives supporting project development and financing facilities targeted at the water sector, and the activities and finance mechanisms they offer.

Table 1 Overview of project development and financing facilities focused on water supply and sanitation

		Activities			***Finance Mechanisms***				
Name	***Country***	Business development	Technical assistance design/ implementation assistance	Credit facilitation	Microfinance	Loans	Equity	Grants/ subsidies	Guarantees
New York Drinking Water State Revolving Fund*	USA			✓		✓		✓	✓
South Africa Municipal Infrastructure Investment Unit*	South Africa	✓	✓					✓	
Community Water and Sanitation Facility*	Global	✓	✓						✓
Acumen Fund*	Global	✓	✓	✓		✓	✓	✓	
Rural Infrastructure Development Fund	India				✓	✓			
Grameen Shakti	Bangladesh		✓		✓				
Mini Research d'eaux potable (MIREP)	Cambodia	✓	✓	✓				✓	✓
Mekong Project Development Facility	Cambodia/ Vietnam/ Laos	✓		✓					✓
Africa Project Development Facility	Africa-wide	✓							
K-Rep	Kenya	✓			✓				
INCA	South Africa	✓				✓		✓	
Emerging Africa Infrastructure Fund	Africa-wide					✓	✓		✓
Slum Upgrading Facility	Global	✓		✓					
DevCo	Global	✓							
GuarantCo	Global								✓
CLIFF	India/Kenya	✓	✓	✓		✓		✓	✓
Private Enterprise Partnership – Southeast Europe Infrastructure (PEP-SE)	Southeast Europe	✓	✓			✓		✓	
EU ACP Water Facility	ACP							✓	
African Water Facility	Africa							✓	

* Refer to section 6 for more information

Source: ERM

In recent years, greater attention has been paid to the role of small and medium-sized enterprise (SMEs) in infrastructure provision, for the water sector in particular. Box 2 below illustrates how project development and financing facilities are working to address the constraints facing these smaller service providers.

Box 2 IFC project development activities in Africa

As a multilateral development bank devoted to supporting private sector development throughout the world, the International Finance Corporation (IFC) is a major host for project development and financing facilities. It hosts 11 facilities globally, not all focused on infrastructure. Drawing on experiences in promoting large-scale, international private finance for the water sector, the agency has broadened its scope to include support for SMEs. PEP-Africa is a new vehicle for IFC's technical assistance programmes to promote private sector development in Africa. Understanding that Africa is unlikely to attract international private companies for infrastructure projects beyond capital cities, PEP-Africa is looking to support business development within the SME sector, including for water supply and sanitation. IFC hopes to help support businesspeople who play a significant role in service provision in support of MDGs, by working on the surrounding business environment. This includes easing restrictions on formal SMEs, creating a better environment to incentivise informal SMEs to become more formal, and creating demand for SME services with a range of partners.

Source: IFC

Sub-sovereign lending and the potential for municipal capital markets

Municipal finance, whereby a municipality borrows funds or issues debt (through bonds) to raise funds for water or sewerage infrastructure, is another area of finance that project development and financing facilities aim to support. Municipal debt is typically purchased by institutional investors, often pension and insurance funds. Municipal bonds are often exempt from tax, which makes them more attractive for investors. They are also often linked to long-term projects, including water and sanitation, which provide low, but steady returns. For larger investors, this type of investment can help to balance a broader portfolio of diverse holdings. In developing and transition countries, the scope for bond offerings to support sector projects has expanded in recent years, given successful offerings in Eastern Europe, India, Mexico, and South Africa. Recently, there are stronger efforts to expand the scope for municipal capital market development in countries that have demonstrated improved governance frameworks, such as Uganda and Senegal.

In theory, municipal capital markets can provide a means to attract private sources of finance for large scale projects without formal PSP. However, the municipality must demonstrate an ability to govern effectively, as illustrated in Box 3 below.

Box 3 Municipal capital markets for everyone?

Municipal capital markets require an advanced state of municipal governance to operate effectively. According to the study cited below, a healthy municipal system should have the following characteristics:

- Systems for long-term savings, as well as institutional investors (e.g., life insurance companies, pension funds) must exist at a national level.
- The legal framework at a national level must provide for securities issue and trading, as well as market supervision and a strong regulatory enforcement. Regulations are required for all aspects of the market, including underwriters, brokers, traders, etc.
- The legal framework must also accommodate municipal bankruptcy, particularly with regards to creditors' rights and priority of claims.
- The municipality must be able to collect taxes and manage funds in municipal accounts. These accounts must be audited, with transparent reporting and disclosure of financial status to the financial community as well as the public, in order to support credit analysis.
- Inter-governmental budgetary transfers need to be stable and predictable.
- Where water sector development is a national priority, and where municipalities cannot leverage finance from tax revenues alone, central government should have a mechanism to support water sector projects through targeted subsidies. The central government should detail the types of projects it will support, with clear directions on procedures for accessing those funds. In this way, cities and municipalities may be able to present enough revenues to attract the private sector.
- Local government must have a track record of good governance and abiding by contracts in order to reduce regulatory and contract risk.
- Water sector projects must be commercially viable and prepared to be 'bankable', with a detailed capital investment plan and budget. Ideally, projects should align with local planning efforts so that the local government can borrow at the same time that the project requires funding. The financing plan should detail how the project will be paid for over time.

Source: Peterson, 2003. http://www.oecd.org/dataoecd/16/42/22145238.pdf

Given the guidelines above, it is unlikely that municipal capital markets will be able to service the water sector in those countries with the greatest needs and financial constraints, at least in the short term. However, as governance and public financial management efforts lead to stronger controls and accountability, there may be potential for expanding the scope of these approaches.

Further, even where capacity exists to stimulate and support market-based mechanisms at a sub-sovereign level, there are still considerable risks to investors (http://www.imf.org/external/pubs/ft/wp/2005/wp05108.pdf). As a cautionary tale, the greatest successes with sub-sovereign capital market development and more mature forms of market-based mechanisms in developing countries occurred in Latin America

during the 1990s (http://www.iadb.org/regions/pdf/SNFSBG04.pdf). As a result of these successes, investors flooded the market with debt, in many cases leading to overborrowing, excessive liability at a national level, and subsequent defaults and near-defaults in the early 2000s. In addition to the challenges of currency and political risk (for international and domestic participants), sub-sovereign capital markets often face liquidity problems – meaning that there is not enough currency circulating in these local markets for investors to cash out when they choose. Information about investments and governance are also not always publicly available, which raises the risk profile for potential investors.

Although a sovereign guarantee is not required for a sub-sovereign entity to issue bonds or borrow funds, the national government is typically held responsible by the market. In other words, every time a sub-sovereign entity incurs debt, that debt often also 'counts' towards the national government's borrowing capacity, whether officially or not. This issue of contingent liability is significant for sub-sovereign market development. Given the limited success most developing countries have had in decentralising public finance, despite legal and other reforms to support local and provincial local government, caution and controls are necessary. Weak governance at a local level can impact on a country's positioning in the global markets for years. Box 4 below highlights some of the challenges with controlling sub-sovereign activity.

Despite the challenges of sub-sovereign finance, it is perhaps the most appropriate source of finance for the water sector, particularly as water services provision tends to be the responsibility of sub-sovereign entities, such as municipalities or district government. Recent experience has shown that project development and financing facilities may help to address some of the constraints discussed in Section 1.2 above. Project development facilities can support a new class of business people – slum dwellers, water user associations, independent service providers, entrepreneurs, and so forth – and help create and support the business environment where such businesses can thrive. Through training, and learning by doing, projects can materialise, providing access to water and sanitation services and, over time, improved service quality. Financing facilities are intended to help bridge the finance gap that exists throughout project development, and develop ways to mitigate project-related risk through different finance mechanisms. Importantly, while the ideas for these facilities can appear straightforward, implementation of these ideas has proven challenging in many cases. The reasons for this relate strongly to the strength of governance frameworks, clarity of institutional roles and responsibility, and legal and regulatory frameworks to support more 'innovative' approaches to water and sanitation service delivery. Still, these facilities have both direct and indirect impacts on meeting water and sanitation needs, and forging a path to achieve MDG Target 10. These are explored below.

Box 4 Controls on sub-sovereign lending

In a decentralised governance framework, local government should be able to collect revenues and allocate spending according to a municipality's needs. Central government budget transfers will still be necessary, as local governments typically do not generate enough revenues to meet their spending, particularly in poorer areas. This is typical in both developed and developing countries. In some countries, municipalities have been encouraged to borrow funding from non-government sources in order to meet their financing needs. In developed countries, for example in the United States, municipalities take advantage of their tax-exempt status to launch bonds, which are a form of debt, to pay for infrastructure (e.g., schools, hospitals, parks, and water and wastewater facilities).

Most countries that allow local governments to borrow, impose debt limits and controls, in order to prevent over-borrowing. For example, in Indonesia, the government has sought to develop revenue bonds to support water supply infrastructure expansion. To impose some control over municipal finance activities, local debt can only be for revenue-generating projects. For example, water supply projects where tariffs can repay the loan. The amount of debt allowed for projects is considered in the context of the municipality's overall outstanding debt, and how much of its revenues it must repay annually. As a further control, borrowing from foreign sources of finance must be approved by the Ministry of Finance. If loans are not repaid according to schedule, the central government can reduce its transfers and subsidies, as well as impose sanctions on the municipality.

Source: RTI International, 2005. Case Study on Participatory Planning in Local Capital Investment in Indonesia. Submitted to Municipal Finance Task Force. (http://www.mftf.org/resources/index.cfm?fuseaction=index&catID=70&cType=0&showall=YES

4.2 The role of project development and financing in poverty reduction

Potential for direct role in poverty reduction

Project development and financing facilities can have a direct impact on water and sanitation access for the poor, first and foremost by funding projects that provide access to services. Expanding beyond the installation of infrastructure, the process for project development is often highly demand-led, with considerable attention paid to administration and management functions, appropriate technology, and financial feasibility. Ideally, projects are planned within a broader framework of policy and governance reform, although the sequencing of projects and reform may vary. The Community Water and Sanitation Facility (CWSF) (http://www.citiesalliance.org/citiesalliancehomepage.nsf/Attachments/CommunityWater&SanitationFacility/$File/Community+Water+&+Sanitation+Facility.pdf) hosted by the Cities

Alliance and with initial funding from USAID, aims for community-led development of water services in slum areas. Through partnerships with a range of stakeholders, including foundations, multi-laterals, NGOs, and the private sector, CWSF aims to provide matching grants to domestic sources of finance, including national and city governments, local business, and communities themselves, for water and sanitation services. Through grants, CWSF supports the work of slum federations, Slum Dwellers International, and Cities Alliance to develop project ideas that contribute to the MDGs. To support market-based finance for the projects, the CWSF provides risk sharing mechanisms in the form of local currency guarantees to attract domestic private finance.

Other facilities target SMEs in countries where broader reform processes are underway, as mentioned above. These facilities provide business development services to the private sector, while also strengthening the financial sector to be able to provide finance to small business. The trend in development towards greater recognition of and support for SMEs, as well as small scale infrastructure providers (SSIPs) will have a direct impact on the level of capacity within the SME sector, whether in terms of negotiating power, accounting, recordkeeping, and business planning skills (http://www.ifc.org/sme).

The importance of indirect impact on poverty

In many ways, the indirect impact of project development and financing facilities is equally important as their direct role. Finance for the water sector is limited at the global, regional, national, and local levels. As donors and (some) country governments work to move away from subsidising the water sector, a more holistic view of water sector finance is needed. Urban utilities should be able to recover most of their costs, and should be managed so that they can obtain commercial loans and private equity to support rehabilitation and expansion, particularly into peri-urban areas. As experience in Africa and elsewhere has shown, a strong urban utility may be the best option for cross-subsidizing access in peri-urban and even rural areas. Without having to support non-performing urban utilities, the government should have more funds available to target access for the poorest. This is important at both a country level and a regional level. For example, as countries in Eastern Europe are better able to design guarantee mechanisms or open up capital markets for domestic borrowing, less traditional finance will be required, which could be channelled to other regions. At a country level, the success of a fully commercialized utility can yield positive spill-over effects in peri-urban and even rural areas, for example in Senegal (http://www.worldbank.org/html/fpd/water/pdf/WSS_Senegal.pdf).

More broadly, these efforts may also help to strengthen overall water sector reform. For example, at present, water and sanitation activities do not often emerge as a top priority within PRSPs and Medium Term Expenditure Frameworks (MTEFs) (http://www.wsp.org/publications/af_benchmarking.pdf), although this situation seems to be improving somewhat in the ‘second generation’ PRSPs. In countries where PRSP and MTEF processes are underway with multi-stakeholder support, project preparation and financing facilities may help to implement the pro-poor framework developed by stakeholders, in supporting broader water sector reform or separate water and sanitation

projects that fit into health, education, or broader infrastructure initiatives. Hence, project development and financing facilities may have a role in supporting PRSP and MTEF plans and budgets for poverty reduction activities. Successes resulting from these facilities, if scaled up, could trigger awareness and reform among policymakers. Project development and financing facilities can also bring together different stakeholders, including project sponsors, financiers, and government. Given their sources of funding and support – through multi- and bi-lateral agencies, which also support the PRSP and MTEF processes – there may be opportunities to enforce and strengthen national planning and demand-led strategies.

In a virtuous feedback cycle, successful project development may lead to more sustainable delivery as well as beneficial outcomes and impacts. In some areas, this could help increase funding for the water sector through the PRSP and other processes. This is a critical point: although studies have clearly shown the linkages between water and sanitation investments and economic growth (http://www.siwi.org/downloads/Reports/CSD_Economics.pdf), at a project level, the water sector has not emerged as a core government issue in many countries, relative to the benefits of health and education.

Currently, many of the project development and financing facilities are relatively new, and many donors are still working to determine what modalities and strategies are most effective. However, the use of more flexible financial mechanisms that match demand from communities themselves may help to reduce the transaction and administrative costs of ODA. For example, one of the strengths of USAID's Development Credit Authority (http://www.usaid.gov/our_work/economic_growth_and_trade/development_credit/overview.html) is the ability for its local offices to offer guarantees of up to 50% of a project's cost at their discretion. For an organisation with little discretionary funding (the agency's budget must be approved annually by Congress), the mechanism affords USAID staff with a means to reduce risks for private investors into different sectors, including water supply and sanitation. When the agency provides these guarantees, it also provides technical assistance in cash flow analysis, credit risk assessment, and due diligence.

5 How do project development and financing facilities work?

This section explores the nature and function of project development and financing for the water sector. Ideally, project development should lead to a viable project, which suggests that the finance element and the development element should be related. First, however, Section 5.1 below outlines the basic structures for project development and financing facilities.

5.1 Structures

Project development and financing facilities can take a number of different forms, and provide different instruments, including grants, loans, equity, seed finance, and guarantees. They can be structured to last over a course of several years (some facilities are scheduled for between 5 and 10 years) to stimulate a project stream, or can be structured to revolve, so that repayments of early loans are used to finance later loans. They can also be structured to attract commercial finance. Figure 5 illustrates the basic structures of all three.

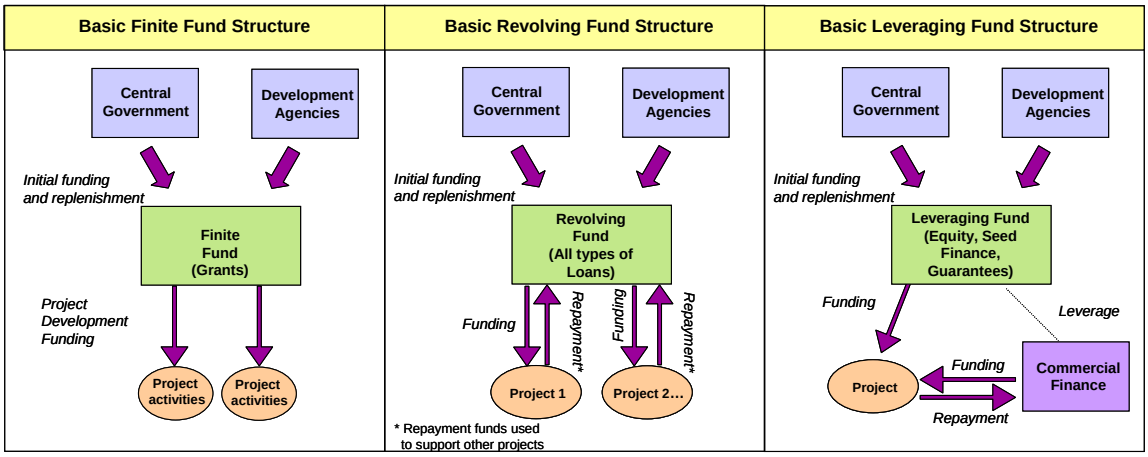

Figure 5 Basic structure for finite, revolving, and leveraging funds

Even though the activities of a project development facility and a financing facility are different, these structures can be used for both. For example, a finite project development fund may provide grant-based assistance to identify projects, coordinate stakeholders through project development and fund feasibility studies. The funding could be from donor agencies or central government, and for a set time period (for example, five years). The key difference between a finite fund and a revolving fund is repayment. In the example above, a fund can become a revolving fund if successful projects pay back preparation costs over time. These repayments can then support further project preparations.

Likewise, a financing facility can also be either finite or revolving, along the same lines as the example provided above. The intention is that project development and financing

facilities stimulate local sources of finance, from users, domestic banks, or pension funds, at commercial or near commercial terms, although the fund itself does not necessarily operate on these terms.

5.2 The nature and function of project development and financing facilities

To provide an overview of how projects work, a general framework is provided in Figure 4 below. The concept and feasibility stages are generally considered project development, while implementation is typically finance-related. Maintenance, which is often overlooked in project development is considered part of both preparation and financing.

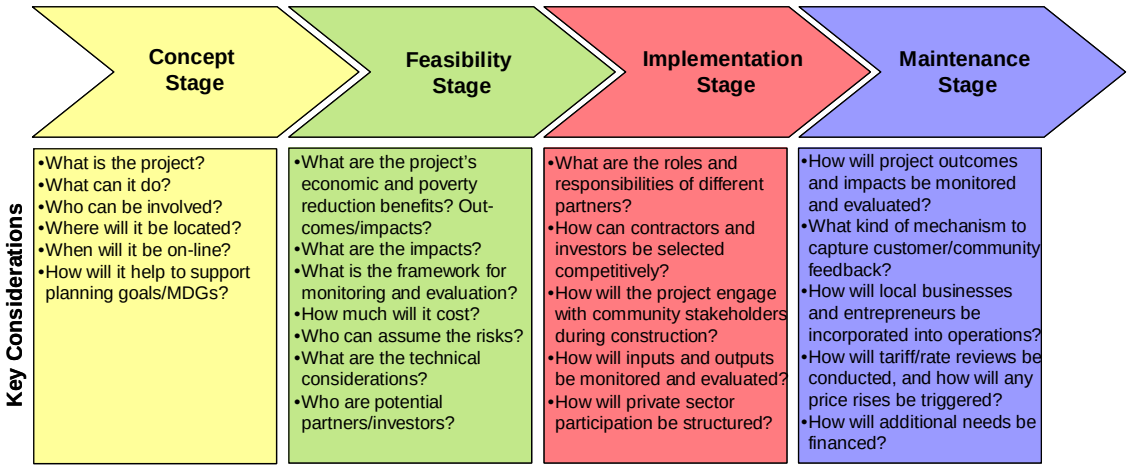

Figure 6 The four stages of a typical project

The following sections provide additional information on the four stages of a project. Each stage offers an overview and explores relevant stakeholders, how activities link with broader water sector reforms, the role of the facility and applicable finance mechanisms.

5.3 Concept Stage

Activity

The concept stage is about identifying a range of projects from a range of stakeholders to achieve sector or poverty reduction goals, or to support the domestic private sector. This stage should be as open as possible, allowing for innovation, and supporting entrepreneurship to meet the challenges faced by communities, whether in rural, small town, peri-urban, or urban areas.

Relevant stakeholders

Because the concept stage is meant to be visionary, innovative, and demand-led, all stakeholders, including national and sub-national levels of government, NGOs, civil society, labour unions, community-based groups, donor agencies, multi-lateral financing agencies, foundations, small-scale private sector, utilities, and other private sector organisations should be encouraged to be involved. However, the process of identifying projects or programmes requires championing, particularly by government and the service provider, to drive the process forward.

Linkage with reform process

Concepts should fit within broader policy frameworks, including water and sanitation sector reform, decentralisation, health policy, education, and/or poverty reduction efforts. However, pro-poor concepts should be demand-driven, emerging from the ideas and discussions of different stakeholder beneficiaries. Larger infrastructure projects may be more government-driven, particularly if they affect a broader portion of the population.

Role of a project development facility

A project development facility can help communities or agencies to identify projects at the conceptual stage, organise information about potential projects, and serve as an information centre for stakeholders to provide, and gather, ideas. At this stage, ideas for projects can be stimulated in a variety of ways. For example, the IFC, through its Devco/PEPAfrica facility, works with regulatory and local authorities to identify opportunities for local private companies, and supports the structuring and bidding processes for small town water systems. More broadly, sector ministries often maintain formal or informal lists of projects, based on their knowledge of sector needs. International and domestic NGOs operating in the sector often have a good idea of the local and regional areas in most need of water and sanitation activity. Existing processes such as community driven development (CDD) and participatory poverty assessments (PPAs) are also means through which individual projects or needs may be identified. However, this knowledge is hardly ever available in one place, nor is it maintained consistently enough to be a reliable source of information for potential funders.

A project development facility can help to identify and organise project ideas in a country or region, either in conjunction with other development activities (e.g., a sector wide approach, or SWAp), or independently (perhaps where a SWAp does not exist). Project ideas can include all types of service provision, large or small; rural or peri-urban, small town or rural; and public or private. As coordination between donors and other agencies in developing countries varies widely, this could be a valuable service.

Applicable finance mechanisms

Project identification can be supported through grants to support information and knowledge exchange, or to implement participatory poverty assessments (PPAs) and community driven development (CDD). Alternatively, individuals or organisations could be hired to seek out ideas and potential project sponsors, with a 'finders fee' for successful projects. In most countries, the former approach is likely to be more appropriate.

5.4 Feasibility Stage

Activity

Concepts are great things; whether they are feasible is another matter. The feasibility stage may vary widely, depending on the context in which the project is conceived. Project development includes preparing a business plan that considers legal, regulatory, financial, technical, and possibly socio-economic and environmental impact factors. The scale of project development varies with the size of the project. One objective of the feasibility stage is to identify and minimise, the risk of failure. This means developing a viable project that meets both the financial suppliers' criteria for supply and the community demand.

Many small-scale independent providers of water and sanitation services obtain funds through family and social networks to dig a borehole or lay PVC pipe from a bulk water source. In such a situation, the feasibility stage requires the entrepreneur to convince his or her family to provide the funding and to have confidence in their investment. Feasibility may also entail community consultations to specify technical, economic, and institutional options. For larger projects, a feasibility stage may require more detailed analysis, including an understanding of the economic, social, legal, financial, and environmental risks, as well as developing a framework for implementation, roles and responsibilities for different types of stakeholders, indicators for monitoring and evaluation, and so forth.

Relevant stakeholders

The feasibility stage requires input from a range of stakeholders, depending on the project and who will be the sponsor. Possible stakeholders include bodies who fund studies (donors, foundations, multi-lateral financing institutions, domestic finance institutions, etc.); NGOs, labour unions and civil society organisations to draw in stakeholders and conduct research and analysis; small scale private sector service providers or utilities; and government, particularly at local level, to link the project to broader governance issues.

Linkage with reform process

Project development is very similar to good governance, in helping to build public and private sector capacity for accountability and transparency. Some indirect benefits of social funds include raising the capacity of the citizens to understand and appreciate good governance (http://www.wsp.org/publications/af_socialfunds.pdf). This helps with the 'chain

of information command', and should help to clarify some of the issues facing the sector, including monitoring and evaluation.

Role of a project development facility

During the feasibility stage, information is developed to assess whether concepts are viable, given the degree of good governance and the levels of financial, technical, social, environmental and other constraints. Where responsibility for decision making rests with local government, funding to determine the feasibility of different options is often unavailable. Project development facilities often provide this support, through in-house staff or by contracting local consultants.

Applicable finance mechanisms

Grants and loans are the most appropriate mechanisms for this stage. It may be possible in some cases for grants and loans to be recovered if the project is eventually implemented (http://www.bidfacility.com/PDF_Survey_Findings.pdf). The advantage of grants over loans at this stage, particularly in developing countries, is that a percentage of projects are never implemented. To burden project sponsors (in many cases local municipalities or community water boards, or small-scale entrepreneurs) with debt for unsuccessful projects weakens their capacity to support successful projects in future.

5.5 Implementation Stage

Activities

During this stage, the methods, arrangements, and planning developed in the feasibility stage are put into action. Specific activities may include construction, technical, financial, and management training for the project sponsor and establishing appropriate networks to ensure communication and capacity building within different levels of government.

Relevant stakeholders

The key stakeholders during implementation are the providers and recipients of finance. A financing facility can be the source of finance, as can a domestic or international bank, or other financial intermediary. Recipients include utilities, small or medium scale private providers, NGOs that act as service providers, community water boards, and local government.

Linkage with reform process

The implementation stage of the project is, effectively, the activation of the sector and, potentially, achievement of the PRSP objectives. It is important to implement some form of monitoring and evaluation to ensure that the project objectives are met and that they continue to be aligned with sector objectives and broader policy goals for economic

development and poverty reduction. Importantly, during implementation, issues of transparency and corruption may arise from contracting procedures and increased funding flows. While corruption is widespread in the water sector, these issues are also highly sensitive, and must be addressed with care (http://www.siwi.org/downloads/WWW-Symp/Summary_of_presentations_an_discussions_Martinez.pdf).

Role for a project development or financing facility

Once the project has reached implementation point, the role of the project development facility wanes, while the role for a financing facility grows. During the feasibility stage, appropriate finance mechanisms should be identified, along with an appropriate finance partner. Implementation is the time for financial transactions to take place.

Applicable finance mechanisms

As the objective for market-based mechanisms is to increase the power of grant finance, the applicable mechanisms during implementation include a range of debt mechanisms, such as short and long term loans, micro or other forms of credit and guarantees.

5.6 Maintenance Stage

Activities

Although it is perhaps the most important stage for ensuring sustainability, the maintenance stage is often overlooked. This stage can last indefinitely, and requires that the methods and arrangements developed and agreed to during the feasibility stage are enacted. These mechanisms ensure that the technical aspects of a project are operated properly and maintained through regular check-ups, while the 'soft' aspects are monitored to ensure that they are working effectively. As with other stages, intensity and duration varies according to the size and nature of the project.

Relevant stakeholders

As explored above, the relevant stakeholders can include the project development and financing facility, project sponsors, national and local governments, donors, NGOs, foundations, local government, labour unions, community water boards, water user associations, users, and so forth.

Linkage with reform process

The PRSP is an ongoing process, that is intended to evolve based on experiences within the country. Successful use of project development facilities and innovative financing – as demonstrated by positive outcomes and impacts on both poverty reduction and economic development - may help to stimulate increased awareness of and attention towards the

water sector in future PRSPs and MTEFs. This highlights the importance of monitoring and evaluation projects over time, as part of regular maintenance.

Role for a project development or financing facility

Although the role of a project development or financing facility lessens following implementation, they are still important. If market-based mechanisms are in place, the financing facility will seek regular repayment, and work with the operator and/or owner or regulator to avoid default. The project development facility may support the project directly through additional technical assistance and capacity building, and work with government officials, donors and other stakeholders to scale up or replicate successful projects.

Applicable finance mechanisms

For project sponsors, mechanisms such as payments from users and subsidies from central and local government will be used to repay the financing facility. Should default occur, a guarantee may be triggered.

6 Case studies and experience

This section explores five case studies regarding either project development or financing facilities, drawn largely from publicly available information. They each illustrate different mechanisms or approaches. The case studies are as follows:

- **New York Drinking Water State Revolving Fund**
  Used to help municipalities finance water and wastewater infrastructure in a variety of different ways, from helping with launching bonds, to lowering interest rates for investors. The Fund is looked at as a model for developing and transition economies.
- **South Africa Municipal Infrastructure Investment Unit (MIIU)**
  A sinking fund created with support from USAID to help support private participation in infrastructure at a municipal level.
- **Community Water and Sanitation Facility (Cities Alliance)**
  A sinking fund that aims to address water and sanitation in slum areas. It aims to work with a range of stakeholders to develop proposals and attract different types of finance.
- **Community Led Infrastructure Financing Facility (CLIFF)**
  CLIFF works with Slum Dwellers International for projects that are strongly community led. By partnering with specific organisations in a country, CLIFF aims to support existing processes and scale up successes, and challenge policies and frameworks that disempower the poor.
- **Acumen Fund**
  A social venture capital fund based in the United States that looks to finance projects and technologies that are scalable by providing a range of technical assistance, and working to attract more commercial financing.

Websites for further information as well as contact information for relevant staff are provided at the end of each sub-section.

6.1 New York Drinking Water State Revolving Fund

In the United States, where most water service provision is the responsibility of the public sector, the private sector still provides financing for capital costs. This is accomplished through the creation of State Revolving Funds (SRFs), which were created about 15 years ago to address the financing gap between water infrastructure costs and available funds from public sources. Since their creation, SRFs have managed to provide billions of dollars for drinking water and wastewater treatment facilities.

In essence, an SRF pools finance from the federal and state levels (federal funds must be matched by state funding) into a fund that is dedicated to supporting public infrastructure. Since 1998, federal legislation (the Safe Drinking Water Act) has required that the Environmental Protection Agency also provides grant funding to each state, based on a formula that calculates the state's needs as reported in a regular survey of drinking water

infrastructure needs. At a minimum, a state will receive one percent of total funds available to the country's 50 states.

Municipalities and other water service providers can use, or leverage, these funds in a variety of ways. They can receive loans from the fund at lower interest rates than commercial finance will provide. They can access a credit enhancement guarantee from the fund, either to get a better rate for a longer period of time, or borrow more. Municipalities can also use the fund to support bond issues, to enhance its credit rating and thus receive cheaper finance.

As these finance mechanisms are repaid or mature, the funding recycles repayments back into the fund, allowing new financings to be made and sustaining the fund over time. Water and wastewater infrastructure investments are considered a very stable investment for investors, including larger institutional investors and pension funds. The existence of SRFs helps local government to minimise the risk to investors, which increases interest in financing water and wastewater in the United States.

Within the USA, there are four variations on structures of State Revolving Funds. These are explored in a paper by Martin Baker, Esq., "The Sustainable Fund Model For Financing Municipal Infrastructure: The USA Experience" (http://www.ficci.com/media-room/speeches-presentations/2004/nov/city/MartiBaker.ppt).

The New York State Drinking Water State Revolving Fund (DWSRF) was created in 1996, through a combination of state and federal legislation. Administered jointly by the New York State Department of Health and the New York State Environmental Facilities Corporation, the DWSRF has an objective of creating financial incentives for both public and private water service providers to finance water infrastructure improvements by providing subsidised, low interest rate financing as well as grants for construction costs.

The DWSRF seeks to provide funding for rehabilitation or development of new drinking water supplies; upgrading existing infrastructure to meet regulatory requirements; or to consolidate water supply services, in circumstances where water supply is not sustainable or may be contaminated. Project proposals are submitted to the Department of Health, which assesses whether the applicant has sufficient technical, managerial, or financial capacity to receive funding.

The DWSRF uses a variety of finance mechanisms. Leveraged loans are financed from the proceeds of bond issues from the Environmental Facilities Corporation, and are secured by both federal and state match dollars that are deposited into borrowers' reserve accounts (in case of financial difficulty with repayment, these reserve accounts will be triggered to ensure repayment). Reduced rate direct loans are provided to borrowers who do not qualify for leveraged loans or have financial hardship, covering applications for small scale systems, or from those who lack an investment grade credit rating. Funding to cover these reduced rate loans comes from interest earned in the reserve accounts created with federal and state matching funds. Financial hardship loans are loans with

even lower interest rates (as low as 0%) and extended loan terms (of up to 30 years) for qualified borrowers, while financial hardship grants of up to $2 million or 75% of the total project cost, whichever is less) are available to public water systems for projects costing less than US$10 million. These are intended for communities which otherwise would be unable to undertake water infrastructure projects.

The SRF models in the United States are increasingly referred to as models for developing countries. In many cases, several municipalities pool resources to raise money from bond issuances, with a guarantee from a donor agency. Some examples of water-related projects that have drawn on the US experience can be found in India (http://www.tn.gov.in/policynotes/municipal_administration-8to9.htm), the Philippines (http://www.devbankphil.com.ph/News/news_full.php?articleid=00123), and Mexico, (http://www.ifc.org/ifcext/lac.nsf/Content/SelectedProject?OpenDocument&UNID=FBB30043380F7DEF85256CA700802692), http://www.developmentfunds.org/pubs/Financing%20Mexican%20States.pdf), among others.

For additional information, see: http://www.nysefc.org/srf/DWSRF/DWSRFhome.htm, and http://www.epa.gov/safewater/dwsrf/index.html.

Contacts:
New York Drinking Water State Revolving Fund
David Morsemann
General Program Information
NYS Environmental Facilities Corporation
625 Broadway
Albany, NY 12207-2997
Tel: (518) 402-7433

EPA Drinking Water State Revolving Fund
Region II (NY, NJ, Puerto Rico) Regional Contact
Robert Gill
U.S. EPA
290 Broadway
New York, NY 10007-1866
Tel: (212) 637 3884

6.2 Municipal Infrastructure Investment Unit (MIIU), South Africa

The MIIU is an example of a sinking fund to support project development. Created in 1997 with support from USAID, the fund was originally intended to last for five years, to support private sector participation in local infrastructure and to support technical assistance for local authorities, private sector advisors and private sector investors and service providers.

Since 1997, the MIIU has engaged in a range of activities for technical assistance and support. MIIU supports a range of interventions to address constraints municipalities face in attracting private finance to their services such as roads and transport, solid waste, electricity, housing, water and sanitation, and ports. For example, the MIIU facilitates dialogue between the financial sector and municipalities to identify and structure projects in such a way that allocates risk appropriately. It provides technical assistance through grants to municipalities and ensures, for essential services, that project revenue streams meet debt service obligations, as well as replacement and operational costs – regardless of whether the service provider is public or private.

Grant finance to local authorities, provided on a cost-sharing basis, has been used to support the hiring of private sector expertise on project preparation issues ranging from developing concepts into proposals; procurement (e.g. proposal evaluation, negotiation, and contracting); and support during the initial implementation stage. MIIU has also provided advice to local authorities who seek support through the process of hiring private sector consultants, and subsequent contract management.

According to the MIIU's 2004-2006 Proposed Strategy, the organisation is working on both supply and demand sides to address constraints on municipal entities obtaining finance. The strategy notes the potential increase in demand driven by changes in the regulatory environment. In particular, new legislation should provide new opportunities for the financial sector to stimulate private capital flows. The combined effects of the Water Services Act and the Municipal Finance Management Act, which give local government authorities responsibility for local water services delivery and regulation, may increase standards for municipal budgeting and spending.

In 2004, with support from USAID, MIIU was given a role to facilitate and certify local government loan guarantees, as well as help municipalities attract commercial finance for this type of mechanism. USAID and other organisations are looking to develop this tool further in South Africa. In August 2002, a cabinet memorandum extended the life of the fund until 2006.

The MIIU's website is currently under construction. We will update the links to this organization once the site is operational. For your information, the homepage is http://www.miiu.org.za.

Asha Bassa
Business Development Manager
Municipal Infrastructure Investment Unit
PO Box 8151
Midrand, Halfway House
1685
South Africa
Tel: (011)313-3134
Email: Ashab@miiu.org.za

6.3 Community Water and Sanitation Facility (Global)

The Community Water and Sanitation Facility (CWSF) is an example of a sinking fund that focuses on leveraging finance into the sector, based on a single issue, rather than a particular region or country. Launched with seed funding of US$2 million from USAID and hosted by Cities Alliance, CWSF was created to address the challenge of providing access to water supply and sanitation to meet MDG Target 10 by 2015, and to improve the lives of 100 million slum dwellers by 2020 (MDG Target 11).

The challenge of providing access to water and sanitation services in slums is considerable. As of 2000, an estimated 409 million people lived in slums around the world, where lack of access to water supply and sanitation compound poverty. High population densities and unsanitary conditions lead to disease; while limited health care and education, uncertain land tenure and lack of recognition by government all contribute to lower life-spans and limited opportunity for slum dwellers. Cities Alliance estimates that 75% of future growth in cities will be in slum areas, exacerbating a dismal situation.

CWSF supports pro-poor approaches, leveraging private finance into slum areas to support basic services. From the initial seed funding and additional support from Cities Alliance members, foundations, and the private sector, an anticipated US$4 million-$10 million is expected to be raised between 2002 and 2007, with a goal to leverage an additional US$60 million from public and private partners.

This approach and mechanisms are grounded in a set of principles supported by Cities Alliance. In effect, the Cities Alliance Secretariat reaches out to a range of stakeholders, including foundations, NGOs, business, international networking organisations (e.g., Rotary or Chambers of Commerce), to gain interest in the CWSF. Proposal ideas are submitted to the CWSF, under a cost sharing arrangement. Grants over $250,000 and up to $500,000 must be matched on a one to one basis. Grants less than $250,000 must have at least 20% cost sharing, while funds used for infrastructure construction or “innovative finance” can only total up to a third of the total project cost. Applicants – whether slum dweller associations, or local government – are encouraged to be creative in how they use funding to improve access to water supply and sanitation.

Examples of CWSF activities include funding for local construction, through grants to community based organisations representing slum dwellers, creating risk-sharing guarantees for local currency investment to private financiers for water supply and sanitation projects, and technical assistance to service providers, local authorities, slum dweller associations, or private organisations to design effective public private partnerships,. CWSF also supports learning alliances, to strengthen learning networks and relationships among and between government, private sector, slum dweller associations and NGOs, around the issues of water and sanitation in slums.

Although the facility is open to all countries, at least two Cities Alliance members must co-sponsor applications. Cities Alliance is a coalition of donors including Canada, France,

Italy, Japan, Germany, the Netherlands, Norway, Sweden, the United Kingdom, the United States, Asian Development Bank, United Nations Environment Program, UN-Habitat, and the World Bank.

Sources:
http://www.makingcitieswork.org/www/files/docs/citiesAlliance/CWSF_Fact_Sheet_02-27-03.pdf)
http://www.makingcitieswork.org/www/files/docs/citiesAlliance/ProgramDescription.9.18.pdf
http://www.citiesalliance.org/work-with-ca/guidelines-submission-community-water-sanitation-facility-proposals.html

For additional information, see: www.citiesalliance.org

Cities Alliance
1818 H Street, N.W.
Mailstop: H5 – 505
Washington, D.C. 20433 U.S.A.
Telephone: (+1 202) 473-9233
Fax: (+1 202) 522-3224
Email: info@citiesalliance.org

6.4 Community Led Infrastructure Finance Facility (CLIFF)

The CLIFF is a financing facility that provides venture capital to help community organisations in slum areas gain access to land, infrastructure, finance, and housing. With funding from DFID and SIDA, CLIFF is implemented by the Cities Alliance, and hosted by Homeless International. At local level, the facility works in India and Kenya with local CBO-NGO alliances that are part of Slum Dwellers International.

CLIFF was created to address the fact that poverty reduction strategies often leave out slum dwellers, and instead rely on private contractors that have close and longstanding relationships with municipalities. As a result, CLIFF aims not to plan or implement projects conceived by municipalities or the private sector, but to work directly with communities to develop ideas that can be replicated and scaled up in other areas. Ideally, communities will have some experience with savings and credit schemes, often through micro-finance.

Using a range of finance mechanisms, including grants, loans, and guarantees, CLIFF is able to support experimental approaches to slum upgrading, and, in the process, identify and work to change policies that constrain or limit poverty eradication efforts. Project concepts that show promise for scalability are identified by the local federation of slum dwellers and further developed to a stage where commercial banks could become involved. Projects are designed to challenge the development process, which can lead to new policies, and gear policy implementation for slum upgrading towards community control. CLIFF provides its finance to the urban poor, rather than to local government,

although projects are ideally launched in partnership with city authorities. This is intended to help the city look beyond the project to broader, citywide issues.

To leverage additional finance, CLIFF's loan finance can be used to provide start up finance for large-scale slum upgrading, resettlement and infrastructure projects. Projects are planned on the basis of a project revenue stream, allowing loan finance to be repaid. This ensures that communities can begin work on a project, prior to securing project revenues from government or other sources. Projects can be used to initiate the release of subsidies or contracted payments from local, state, and central government. Without this finance, poor communities would find it difficult to access the level of loan finance required for this type of project and thus to leverage the various project revenues available. CLIFF can also be used by communities to leverage non-financial assets, such as land and infrastructure provision by the state or private sector.

In India, CLIFF works with two organisations, Mahila Milana (a network of women's collectives) and the National Slum Dweller's Federation (NSDF), who work with city authorities across India to develop potential project ideas. These organisations in turn work with the Society for the Promotion of Area Resources Centers (SPARC) and Nirman, a non-profit company set up by SPARC, NSDF, and Mahila Milan to support housing and infrastructure initiatives. They consider whether the project is viable and examine different cash flow options, as well as the viability of negotiating loan finance from commercial banks. For CLIFF finance, the project must undergo an analysis of project risks, allocation of risks, and how CLIFF can assist in the management and mitigation of these risks. It must include a management strategy, and long-term planning for sustainability and operations and maintenance.

CLIFF is used for a variety of purposes in India. For example, the Bombay Sewage Disposal Project (BSDP) is a large-scale sanitation programme in Mumbai, where a new model for sanitation provision in slums is being tested. In this process, the community has led in the design, construction, management, and maintenance of toilet blocks that are dedicated to a particular community. Under this arrangement, the municipality meets the capital costs, while families pay a fixed monthly fee to cover maintenance, which is also organised by the community.

BSDP highlights some of the constraints to project development. In the planning stage, there were delays in receiving permits and licenses from city and state authorities. After the municipality agreed to pay the capital costs, the project experienced a lag of 18 to 24 months between the costs being expended and receiving the money. This is a result of bureaucratic processes, as well as the amount of time required of the project to organise the paperwork required to receive the payments. Where subsidies from government were identified for the project, these were also delayed due to bureaucracy and corrupt demands for payments.

To keep the project running, CLIFF provided bridge finance while project developers negotiated with government. Although, the delays had a negative impact on the individual

project, they helped to clear the way for second-generation projects through their impact on the institutional frameworks that caused the delays in the first place.

CLIFF's support for community-led sanitation provision in India has had a positive impact on slum policy at a national level. As well as being a catalyst for community toilet blocks across India, the Indian Alliance gained credibility and is now considered a legitimate organisation to discuss slum sanitation policy. They are part of a national task force on sanitation. They have developed a partnership model that is replicable in other areas, and have helped to shape discussions about how to include community organisations to participate in sanitation provision. The Indian Alliance has also helped to counter vested interests and corruption. In Pune, community contractors were able to out-bid private contractors in a direct competition by eliminating corruption. CLIFF's sanitation projects have helped to create relationships between communities and municipal employees, which act as a starting point for discussion about other slum upgrading issues.

Building on its successes in India, in 2005 CLIFF launched a second facility in Kenya. For more information, see:
http://www.homeless-international.org/standard_1.aspx?id=0:27820&id=0:27813

Malcolm Jack
Homeless International
CLIFF
Queens House, 16 Queens Road, Coventry CV1 3DF, UK
Tel: +44 (0)24 7663 2802

6.5 Acumen Fund

The Acumen Fund is a non-profit, venture capital fund with a mission to alleviate poverty through entrepreneurship and market based solutions. Currently operating in five countries (India, Pakistan, Egypt, Tanzania, and Kenya), the Fund supports three thematic portfolios: health, housing, and water.

The key criteria for receiving funding from Acumen are that the venture is financially sustainable and can recover at least operations and maintenance costs; that the venture has strong leadership with an interest and ability to use the funding to grow the business; and that the venture has scalability to extend poverty reduction through market mechanisms. The goal is to support projects that can have a large impact. Monitoring effectiveness, sustainability and efficiency are also central to the Fund's activities.

Acumen's water portfolio was launched in December 2003, and has a focus on financially sustainable, scaleable innovations in water supply and sanitation. By spring 2005, it consisted of four key projects relating to water supply and sanitation. These included loans and technical assistance to entrepreneurs working on water supply issues including drip irrigation in India. It also made an equity investment in a US-based company, WaterHealth International (WHI), that has developed a model for providing clean drinking water in a

cost-effective way, through small filtration systems, with a franchising model for marketing and distributing these systems to the poor in rural and urban areas. By summer 2005, WHI had almost completed its second pilot programme in Andhra Pradesh, India.

As a non-profit organisation that behaves as a venture capital fund, Acumen is able to work with entrepreneurs and meet their standards through a somewhat long project development period (estimated at between 3-5 years). The organisation's investment in technical assistance, whether for business planning, administration, financial management, relationship development, legal advice, or other services means that potential projects are carefully screened. The anticipation is that over time, a strong project portfolio will allow the selected entrepreneurs greater access to other forms of finance, which will help them to scale up their services to reduce poverty while creating jobs and revenues.

For additional information, see: www.acumenfund.org

Yasmina Zaidman
Acumen Fund, Inc.
74 Trinity Place, 9th Floor, New York, NY 10006
Tel: 212.566.8821
Fax: 212.566.8817

7 Conclusions and lessons learned

7.1 Conclusions

- Firstly, despite the jargon about leveraging, catalysing, mobilising, unlocking or unleashing finance, the key principles for addressing financial constraints in the water sector can be distilled to:
  - strong governance environment at national and sub-national levels;
  - clear ideas and planning for projects;
  - a clear understanding of how the project fits within a broader framework of reform;
  - increased information and knowledge sharing; and
  - cooperation amongst different development actors.

- No amount of funding will lead to sustainable supply of safe water and basic sanitation without addressing the principles listed above, which are inherently complex and multi-dimensional. Project development and financing facilities work to address these constraints in a variety of ways, by a range of different stakeholders at local, national, and international levels working with some level of coordination.

- The shift away from grant and concessional loans to more innovative forms of finance for the water sector carries risks that should be identified and addressed as early as possible in both project and sector planning. Different countries, and different municipalities or communities within a country, may have varied ability to manage these risks. Best practice suggests that those parties with the greatest ability to absorb risk should assume it. In situations where the capacity to absorb a project's financial risk is very low, alternatives to market based mechanisms or a longer lead time for project development may be appropriate, adopting a learning-by-doing approach.

- There is no single model by which project development or financing facilities should be created or managed. As illustrated in this TOP, different facilities address infrastructure from a private or public sector perspective, or target SMEs (for example). Preliminary findings with these facilities suggest that they should have flexibility to respond to meeting different types of demand (whether policy/regulatory, or market development). At the same time, because these facilities are often funded by different donors, they need to be accountable to them, which may pose limitations on flexibility.

- Project development facilities and financing facilities have a strong and direct role to play in pro-poor water sector reform. Specifically, project development facilities can help to identify and develop a project stream in specific areas, while building administration and financial management capacity at a project level. Likewise, financing facilities can help to line up financing for well-planned projects and attract additional sources of finance to the water sector as a (social or financial) investment. It is important that organisations created with an objective of addressing issues of poverty, are accountable to the poor.

- In addition to their direct role, project development and financing facilities have an indirect role, given their traditional role supporting utilities and urban infrastructure. For example, in many countries, urban utilities are responsible for infrastructure in peri-urban areas as well as small towns. When capacity is built within the utility's management, increased finance from private sector investments may free up sector finance for initiatives targeted on water supply and sanitation/hygiene behaviour activities for poor communities.

- A range of finance mechanisms is required for successful innovative finance to work, including grants, loans, guarantees, seed capital, and bridge financing. When communities are introduced to market-based mechanisms, including debt and guarantees, capacity building to promote learning and replication is important.

- Finally, despite the direct and indirect benefits project development and financing facilities can have on poverty reduction, there is a risk that much-needed funding will only be applied to creating more new facilities, rather than learning from the different approaches and modalities used by existing facilities, and scaling up these successes.

7.2 Lessons Learned

- Lessons can be learned from experience in developed countries. In the United States, the Drinking Water State Revolving Fund has allowed even poor communities to finance the expensive capital costs required for infrastructure investment. The principles guiding these State Revolving Funds have been transferred with some success to India, South Africa, the Philippines, and Mexico (www.developmentfunds.org). Whether it is possible to create similar types of funds in developing countries that lack a strong governance framework is unclear; however the same guiding principles – using understandable and relatively simple finance mechanisms to support project preparation and financing for basic infrastructure – are universally applicable.

- The poor cannot typically access venture capital for large-scale projects, even if community groups, such as slum dwellers, have ideas and solutions for water supply and sanitation service delivery that could be scaled up and/or replicated. Financing facilities can help by providing loans and other finance to support the poor as they take greater control over their own development. It is important that facilities to support demand-led approaches are created in partnership with community organisations.

- Successful project development requires time, and may not fall within a typical funding cycle. Experience shows that project development can take up to five years, with another five years of learning by doing before an entity can borrow on commercial or near commercial terms. In India, the CLIFF project's experience relies strongly on community-led federations of slum dwellers that have been in existence for nearly 20

years. This timeline does not always work within a schedule expected by funders, who face their own pressures and timetables.

- New approaches for financing projects are often complex, requiring changes in institutional, regulatory, and legal frameworks as well as a change in mindset about the water and sanitation sector. This TOP demonstrates that the ability to access finance is interdependent with broader governance frameworks. Blockages to finance at local level can often be cleared through the process of developing the project, or the process of scaling up a successful project. However, levels of complexity, combined with bureaucracy and vested interests, can hinder a project's success in the short term. Project development and/or financing facilities can be particularly useful in this regard, providing consistent funds to dedicated project developers (NGOs, private sector operators, associations, etc.), while at the same time working to improve the process for future projects.

- A considerable challenge to the promotion and development of innovative finance for the water sector is the influx of cheap or free money from other development agencies or government bodies, without due diligence or similar expectations for cost recovery. This can reduce or halt the momentum towards the use of good mechanisms that stimulate long-term solutions. It can also foster a continuing cycle of donor dependency (at a national level), and dependency on government (at sub-national level). Many development agencies continue to act in their own self-interest, despite globally-agreed objectives to eradicate poverty. This includes linking aid flows to donor interests, whether for political or economic reasons.

8 Glossary

Absorption capacity	The ability to manage new funds effectively. There is often a perceived limit to “implementation” and funds are left unspent.
Contingent liability	Liability that is difficult to quantify, or which may or may not come to pass
Demand-led	Development process where beneficiaries are involved in, and ideally lead, decision making about technology, governance, and finance.
Domestic capital markets	Some larger countries have well established local capital markets (India, China, Brazil, South Africa…), able to satisfy a good part of local borrowing needs. Funds raised on local capital markets remove the risks to the borrower or investor to devaluation. These markets typically offer short-term loans, and need to evolve if they are to satisfy the needs of water sector.
Equity	In general, equity is ownership of an asset after all debts associated with that asset are paid off. For example, a car or house with no outstanding debt is considered the owner's equity since he or she can readily sell the items for cash. Stocks are equity because they represent ownership of a company, whereas bonds are classified as debt because they represent an obligation to pay and not ownership of assets.
Financing facilities	A financing facility is a source of finance dedicated to particular types of projects, or sectors. It can fund specific projects, or sector investment programmes as identified through national planning processes. It is generally created through grant or loan funding from donors, as with a trust fund, but is meant to have more flexibility in its operating procedures and guidelines, and be managed autonomously. It also tends to be interested in supporting the development of commercially-based funding for infrastructure as a whole, understanding that many countries are unable to support more traditional forms of commercial finance (e.g. project finance).
Financial intermediaries	Increasingly, donor agencies and International Finance Institutions (IFIs) do not support water sector investments through direct project-based lending, but rather through sector investment programmes. A financial intermediary is responsible for channelling funding to localised

	projects or programmes, and can be a microfinance organisation, a government body, a domestic or international bank, or other agency.
Finance mechanism	Any means through which finance is provide. This can include grants, loans, equity, guarantees, and insurance, structured in a variety of ways to suit the risk profile of the recipients.
Grant	Transfers made in cash, goods or services for which no repayment is required.
Guarantee	Contract by a third party C to underwrite a financial commitment entered into by A to B. Used by national governments to reduce the risks of borrowing and to increase confidence in bond issues by their sub-sovereign bodies, and by international agencies to increase the creditworthiness of developing country institutions and to support specific projects within them. Common types of guarantees are Political Risk Insurance, Partial Credit Guarantees, Partial Risk Guarantees and Participations.
Loan	When a lender gives money or property to a borrower, and the borrower agrees to return the property or repay the borrowed money along with interest, at a predetermined date in the future.
Project development	Project development refers to all administrative, financial, and technical considerations necessary to develop a comprehensive and feasible project idea. In essence, project development is about turning planning exercises – such as those demand-led activities undertaken during the Poverty Reduction Strategy Paper (PRSP) and Sector Investment Plan (SIP) processes – into tangible projects that can attract finance, whether through public government budgets, or private sources. A project development facility is a programme or initiative whose core purpose is to support the creation of a project stream.
PRSP process	Poverty Reduction Strategy Papers outline a country's economic and social initiatives for reducing poverty. PRSPs are prepared by developing country governments in collaboration with the World Bank and International Monetary Fund as well as civil society and development partners. These documents describe the country's macroeconomic, structural and social policies and programmes to promote growth and reduce poverty, as well as associated external financing needs and major sources of financing. A poor

	country must produce a PRSP before it can qualify for debt relief or concessional loans from the IMF and World Bank. PRSPs are supposedly formulated in consultation between country governments, civil society and the IMF and World Bank. However, PRSPs have to be endorsed by the IMF and World Bank, and typically follow the same macroeconomic policies seen throughout the period of structural adjustment.
Seed capital	Money for initial investment in a project, for proof-of-concept, market research, or initial product development.
Sub-sovereign	Sub-national level: provincial, district or municipal level
Venture capital	Typically, equity investments in start-up or existing companies with a high risk profile but potential for above-average growth. For the water sector, venture capital may be appropriate for technology or hardware-based companies.

This glossary drew partially on the definitions provided by the World Water Council's Financing Water for All website (http://www.worldwatercouncil.org/index.php?id=551&L=).

9 TOP Resources

9.1 TOP Books, papers, features

Conana, H. (2004). *Small piped water networks : helping local entrepreneurs to invest*. *(*Water for all series; no.13). Manila, Philippines, Asian Development Bank.
Internet: http://www.adb.org/Documents/Books/Water_for_All_Series/Small-Piped-Water-Networks/default.asp

This book provides an in-depth discussion of the relatively successful experiences of small scale water service providers (particularly of small piped water networks) in eight Asian cities,: Cebu; Delhi; Dhaka, Bangladesh, Ho Chi Minh City, Jakarta; Kathmandu, Shanghai and Ulaanbaatar. The author discusses aspects of various operators' successes and surveys the scope and scale of these markets to provide a compelling argument for greater involvement by municipal government and private banks in supporting these entrepreneurs. Using statistics derived from the survey, vignettes on individual operators and discussions of the commonalities in the markets created, the author provides an in-depth look into what underlies as well as limits the growth of these SSIPs. The author provides suggestions for developing technical standards, a supportive legal environment, and regulatory oversight and pricing in order to copy their successes.

WSP-EAP (2004).*Private sector engagement in rural water supply in the Mekong Region : tapping the market.* (WSP field notes). Jakarta, Indonesia, Water and Sanitation Program East Asia and the Pacific.
Internet: http://www.wsp.org/publications/eap_Mekong.pdf

This field note describes the financing arrangements that support projects in Cambodia and two areas of Vietnam. The discussion on Cambodia provides an overview of the Mini Reseaux d'eau Potable (MIREP), which facilitates contracts, provides technical support on design and operational management of water points, and distributes subsidies and subsidised credit. A discussion of operators in Vietnam highlights the role of market development (as opposed to capacity development) in stimulating demand for services. The paper discusses the benefits and limitations of rural water supply and offers critical ingredients for success as well as tips on what facilitates growth in the private sector.

Mahé, J.P. et al. (2003). 'MIREP : une approche novatrice de partenariat public- privé pour le développement de réseaux d'eau en milieu rural au Cambodge.' In: *La lettre du pS-Eau*, no. 43, p. 6-9.
Internet: http://www.gret.org/ressource/pdf/lettre_pS-Eau_43_article_Mirep.pdf

This short paper provides a brief overview of MIREP, a pilot project that uses local private investment to support rural water networks in 6 communes in Cambodia. MIREP organised the roles of the provincial authorities (targeting zones for coverage, supervision over

projects) and the private sector (which provides 60% of financing). Capital costs and financing arrangements are discussed.

Solo, T.M. (2003). *Independent water entrepreneurs in Latin America : the other private sector in water services.* Washington, DC, USA, World Bank.
Internet:
http://wbln0018.worldbank.org/lac/lac.nsf/0/2DCACD721793299785256DAA0071E435?Opendocument

This paper provides an overview of the success of small water networks, or aguateros, in Paraguay; over 400 aguateros have invested a total of US$30 million with full cost recovery. These operators worked outside the formal market, and this discussion largely focuses on the market risks and hazards they face as a result of being outside the legal and regulatory system. There is a good overview of the types of business constraints the aguateros face; these descriptions illustrate what legal and finance sector reforms are required to enhance the sustainability of these businesses over time.

Estamos Organisacao Comunitaria *(2003?). Small scale private sector participation in Niassa Province, Mozambique : a case study.* S.l., Estamos Organisacao Comunitaria.
Internet: http://rru.worldbank.org/Documents/PapersLinks/CASE%20STUDY%20-%20Mozambique.doc

This paper serves as a counterpoint to the successes in Asia described by WSP and ADB. The Niassa Province example illustrates a lack of success in private sector participation, which the authors attribute to unfavourable and difficult market conditions (infrastructure damaged by war, very low income and migrant customers, underdeveloped market for sanitation overall) and a wrongheaded focus on private sector participation rather than capacity building. In short, the PSP efforts supported entrepreneurs who were relatively inexperienced at running businesses and who responded to state directives rather than to customers' demands and specifications (i.e. the market). The case study offers a vignette of the pitfalls of government-directed or NGO-directed private sector involvement, which, in the Niassa province case, interfered with, rather than aided, the development of a self sustaining market for sanitation.

Winpenny, J.T. (2005). *Guaranteeing development? : the impact of financial guarantees.* Paris, France, OECD.
Internet:
http://www.oecd.org/document/22/0,2340,en_2649_33731_35516374_1_1_1_1,00.html

This paper tests the relevance and usefulness of guarantees to public and private actors in developing countries, especially for funding development projects. Guarantees from multilateral or bilateral agencies can encourage financial flows to increase or to go where they otherwise might not go. In this way, they can have a positive effect on the country's overall (sovereign) rating by international rating agencies, as well as their immediate direct effect on the local development environment. As a bonus, this study finds that

development guarantees can stimulate and stabilise local capital markets, providing benefits for both public and private investors.

Baietti, A. and Raymond, P. (2005). *Financing water supply and sanitation investments : utilizing risk mitigation instruments to bridge the financing gap.* (Water Supply and Sanitation Sector Board discussion paper series; no. 4). Washington, DC, USA, World Bank.
Internet:
http://wbln0018.worldbank.org/water/bnwp.nsf/files/WSS_Investments.pdf/$FILE/WSS_Investments.pdf

This paper explores the different risk mitigation instruments that could be used to leverage finance for the water sector, including output-based aid; 'hybrid' financial transactions; foreign exchange risk and liquidity support to address currency risk; and increased use of local banks and financial intermediaries to meet the needs of the poor, and those in remote areas. The paper notes that IFIs interested in developing risk mitigation instruments should assess the capacity within a country for financial sector development and sub-sovereign finance, and work to support and strengthen capacity where it is needed.

Freire, M.E.; Huertas, M. and Darche, B. (1998). *Sub-national access to the capital markets : the Latin American experience.* Paper presented at the First international conference on sub-national governments and capital markets, October 26-29, 1998. Washington, DC, USA, World Bank Institute.
Internet:
http://www1.worldbank.org/wbiep/decentralization/Courses/Atlanta%207.23.01/freire1998.PDF

This paper discusses the experience with sub-national capital market development through six case studies covering domestic and international bond offerings in Argentina, Brazil, and Colombia. It discusses macro-economic context, providing specifics of bond offerings, and presents lessons learnt with recommendations for further development of sub-national credit markets. Finally, the paper responds to some myths surrounding capital market development, using the findings and analysis drawn from the six case studies.

Peterson, G. 2003). *Innovations and solutions for financing water and sanitation : background paper*. Washington, DC, USA, Planning and Development Collaborative (PADCO).
Internet: http://www.oecd.org/dataoecd/16/42/22145238.pdf

This paper argues that commercial loans and government banks are not likely sources of finance for water projects in small and medium municipalities. This paper discusses how municipalities can attract and manage debt. The authors prescribe long term debt (i.e. municipal bonds) from capital markets, which have been successful in developing and developed countries. Reforms to the finance system to help lenders distinguish good risks from "poor risks" are said to be critical to success; the authors provide a checklist of types

of reform needed at macro and municipal levels. The paper also describes: the capital planning process, the project identification and development stage, and the structure of the bond issue. It also contains a useful glossary of finance terms.

Freedman, P.L.(2004). *Designing loan guarantees to spur growth in developing countries.* Washington, DC, USA, US Agency for International Development (USAID).
Internet:
http://www.usaid.gov/our_work/economic_growth_and_trade/development_credit/designing_loan_guarantees.pdf

This paper provides information on how USAID has implemented an effective loan guarantee programme (through its Development Credit Authority) and the potential impact of partial loan guarantees on small and medium enterprises, micro-enterprises, housing and infrastructure. In the latter section, the authors discuss how municipalities can impose user fees on a cost recovery basis to attract sustainable private sector financing. Partial loans guarantees are discussed as a means of increasing the liquidity of the banking system by providing a basis for upgrading a municipality's bond rating.

Cowen, P.B. and Tynan, N. (1999). *Reaching the urban poor with private infrastructure.* (Public policy for the private sector; no. 188)..
Internet: http://rru.worldbank.org/Documents/PublicPolicyJournal/188cowen.pdf

This paper provides a brief overview of what regulatory and legal elements need to be in place to ensure that private participation in infrastructure is pro-poor. These includes making sure concessions do not cut off other service options (e.g. SSIPs), re-designing regulations to encourage better quality of service, untying subsidy from single providers (or distributing subsidies to all providers if they are necessary) and creating the basis for micro-entrepreneurs to enter the market. The authors discuss the critical nature of correct policy sequencing to make sure that the order of regulatory and policy change does not itself cause exclusionary barriers to SSIPs and that coverage is expanded in a timely fashion.

Woodhouse, M.; Bauer, P. and Wakelin, O.(2004). *The legal, institutional, and financial framework to enable small scale service provision of rural water supplies in Africa.* AWRA International Specialty Conference 2004. Dundee, UK, IWLRI, University of Dundee
Internet:
http://www.ruralwaterpsp.org/files/internal/Woodhouse%20Baur%20and%20Wakelin.pdf

This note discusses some preliminary findings of a broader research programme looking at private sector participation (PSP) in the rural water sector. Focused on three African countries – Ghana, Tanzania, and Zambia – the authors raise questions such as the viability of rural PSP, given the legal framework, institutional situations, and availability of (and potential for) finance. Because it is focused on rural areas, the discussion centres on small scale providers, who are often unable to work within existing legal, institutional and financial frameworks.

Mehta, M.(2004). *Meeting the financing challenge for water supply and sanitation : incentives to promote reforms, leverage resources, and improve targeting*. Washington, DC, USA, Water and Sanitation Program.
Internet: http://www.wsp.org/publications/af_wspfinance.pdf

Achieving the MDGs requires additional funds. However, this report says that the true solution requires addressing several problems: institutions and financing policies often result in ineffective and inefficient use of resources; public resources are often unable to meet the costs of sustained coverage; existing services often fail to benefit the poor. With a full discussion of these issues, along with global experiences, this report provides a thorough overview to the financing challenges facing the sector.

Freire, M. and Peterson, J. (Eds). (2004). *Subnational capital markets in developing countries : from theory to practice.* Washington, DC, USA, World Bank.
Internet: http://www-wds.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&eid=000090341_20040205153947

Decentralisation places increased demands on local government for improved and increased service provision, but also offers increased prospects for local government to access alternative forms of finances, particularly in countries with a strong macro-economic regulatory framework. This book provides a handy framework to understanding sub-national lending and the range of credit markets that local governments can employ, given the strength of their governance systems. It provides a series of substantial case studies that provide lessons about financial and fiscal discipline, municipal debt, market development, along with recommendations to support credit market development.

9.2 TOP Websites

International Association of Development Funds (IADF).
Internet: http://www.developmentfunds.org

The IADF has a mission to bring together institutions working in local and regional level development banking in emerging economies to facilitate knowledge exchange and promote education and training activities; to strengthen local and regional finance institutions; and to help increase the availability of funds for urban infrastructure and regional development. IADF provides financial advisory services, capacity building services, and information sharing.

United States Agency for International Development (USAID) Water Finance Page
Internet:
http://www.usaid.gov/our_work/economic_growth_and_trade/development_credit/water_finance.htm

Over the past few years, USAID, and in particular their Development Credit Authority (DCA) has been at the forefront of applying credit risk analysis and guarantee mechanisms to support water and wastewater infrastructure development in developing countries at a sub-sovereign level. In South Africa, India, the Philippines, and Morocco, the agency has designed guarantees to support bank loans to municipalities or water authorities; bond issuances by water authorities or municipalities; and promote extension of loans for rehabilitation and expansion of existing water facilities. This website provides information about USAID's water-related programmes, and provides a listing of related water finance websites.

Municipal Finance Task Force.
Internet: http://www.mftf.org

The Municipal Finance Task Force (MFTF) aims to identify how domestic long-term private capital can be used to support slum upgrading and urban development. The Task Force, and the website, serves as a forum for gathering information and experience with municipal finance and use of private capital in new ways. The site provides updated news stories, resources relating to capital enhancement, asset management, public private partnerships, debt market development, capital investment planning, financing structures, financial management, and information for accountability. Users can search for information by country, and participate in online discussion fora about these topics.

World Water Council: Financing Water for All.
Internet: http://www.financingwaterforall.org/

This website, a joint activity of the World Water Council and the Global Water Partnership, aims to serve as a platform for sharing information and building knowledge based on the findings of the "World Panel on Financing Water Infrastructure" (AKA the Camdessus Report). The site aims to provide information about finance mechanisms, including case studies, a glossary of terms, and a very useful reference page (entitled "follow up") with additional papers, case studies, and contact information.

Water and Sanitation Program (WSP) Document Library.
Internet: http://www.wsp.org/08_Category_output.asp?Category=Finance

The WSP has developed a solid foundation of policy and research around sector finance issues – from the inclusion of water sector priorities in the poverty reduction strategy process and corresponding budgeting to leveraging finance (e.g. user, domestic private sector) to the sector, and developing finance mechanisms to support community or private sector programmes and projects The URL provided offers access to the library of information produced by the WSP in recent years relating to these issues, with links to the broader WSP activities.

World Bank Website on Pro-poor private infrastructure.
Internet: http://rru.worldbank.org/PapersLinks/Pro-Poor-Private-Infrastructure/
This World Bank webpage provides links to papers, other websites and case studies that cover various topics in pro-poor private infrastructure provision, such as: overviews, guidance on contract design, information on market structure and competition, financing and government subsidies, decentralisation, public private partnerships.

World Bank Website on Small and Medium Enterprise Development.
Internet: http://rru.worldbank.org/Themes/SmallMediumEnterprises/

This World Bank page provides links to features, news and publications in the area of small and medium enterprise development. Its user-friendly interface provides the beginner with resources such as useful sites, toolkits, as well as data. Its reading list provides a good introduction to small scale provision of infrastructure services.

Improving Lives by Creating Opportunities in Small Business, International Finance Corporation.
Internet: http://www.ifc.org/ifcext/sme.nsf/Content/home

This webpage provides information on how IFC supports small and medium enterprises through investment, technical assistance and advisory work.

9.3 TOP Past and Future Conferences/Events

4th World Water Forum Cross-cutting theme: "New Models for Financing Local Water Initiatives", Mexico City, March 2006
Internet: http://www.worldwaterforum4.org.mx/uploads/TBL_DOCS_104_14.pdf

International Association of Development Funds International Conference on Financing Municipalities and Sub-national Governments.
Internet: http://www.developmentfunds.org/intlconf.htm

9.4 TOP Training Courses

The Institute for Public Private Partnerships (IP3) Course on Municipal Finance and Management: Strategies to Strengthen Credit Worthiness.
Internet: http://www.ip3.org/t2005/t_workshops_1577.htm#ob

This course will teach participants the skills and techniques required to improve the financial performance, systems, and borrowing capacity of local units of government. Key topics include: building sound and sustainable financial operations in local government; developing the techniques used to increase revenues and reduce costs; and developing local capital markets sufficient to issue municipal bonds and other financial instruments.

(Note that the IP3 offers a range of courses every year that are somewhat related to this topic. More information can be found at: http://www.ip3.org/t2005/t_workshops_2005.htm#ppp)

Cranfield University course on Project and Financial Management for the Water Sector.

Internet: http://www.cranfield.ac.uk/sims/water/shortcourseprospectus.htm#project

This course will teach participants about the basics of project management, including the roles, responsibilities of a project manager, the roles and responsibilities of other professionals involved in a project from its inception to completion, and analysis of partnerships.

ReReP Environmental Financing workshop on Water Sector Investment Projects, held on November 11-12, 2004.

Internet: http://www.rec.org/REC/Programs/REREP/REREPEnvironmentalFinancing/PEIP-Workshop-Nov11.html

This workshop emphasised two aspects of the water sector investment challenge: making sure that investment planning in the water sector complies with EU directives at a national level, and addressing the challenge of formulating and developing individual investment projects at a local level.

9.5 Who's Who

Name & brief bio	Contact details
David Ashiagbor David Ashiagbor is an economist working at PEP-Africa, a project development facility targeting SMEs and SSIPs, and hosted by the IFC	Email: dashiagbor@ifc.org
Aldo Baietti Aldo Baietti is a Senior Finance Specialist, Water and Energy Department, The World Bank	Email: abaietti@worldbank.org
Rachel Cardone Rachel Cardone is an independent consultant focused on water economics and policy as relates to sustainable development	Email: Rachel.cardone@gmail.com

Jose Frade Jose Frade is an Associate Director and Head of Water and Sanitation Divisionat the European Investment Bank.	Email: FRADE@eib.org Water and Sanitation Division Projects Directorate, European Investment Bank Tel:+ 352 4379 2727 Fax: +352 4379 2860
Catarina Fonseca Catarina Fonseca is an economist focused on water sector finance, and coordinator of the Thematic Group on Financing and Cost Recovery at the IRC	Email: fonseca@irc.nl
Malcolm Jack Malcolm Jack is the International Grants Co-ordinator for Homeless International, which houses the Community Led Infrastructure Financing Facility. He is also currently the co-ordinator of the Urban Poverty Group network.	Homeless International Queens House, 16 Queens Road, Coventry CV1 3DF, UK Tel: +44 (0) 24 7663 2802 Fax: +44 (0) 24 7663 2911 Web: www.homeless-international.org & www.theinclusivecity.org
Evariste Kouassi-Komlan Evariste Kouassi-Komlan is the Director of Strategy and Research (ASPE) at Centre Regional pour l'Eau Potable et l'Assainissement a faible Cout (CREPA), Burkina Faso.	Email: kouassi.evariste@reseaucrepa.org eltos24@hotmail.com Web: www.resaurcrepa.org Tel: +226 50 36 62 10/11
Meera Mehta Meera Mehta Senior Financing Specialist, Water and Sanitation Program, Africa.	Email: mmehta@worldbank.org
Dr. K Rajivan Dr. K. Rajivan is currently Senior Urban Finance Specialist at the Cities Alliance, in Washington DC. From 1996-2004, he was CEO of Tamil Nadu Urban Development Fund, which provided debt market access for water and sanitation investments of small and medium cities.	1818 H Street, N.W. Mailstop: H5 – 505 Washington, D.C. 20433 U.S.A. Telephone: (+1 202) 473-9233 Fax: (+1 202) 522-3224 Email: krajivan@worldbank.org
Diego Rodriguez Mr. Rodriguez is an economist in the Inter-American Development Bank's Sustainable Development Department, focusing on sub-sovereign finance.	Inter-American Development Bank 1300 New York Ave., N.W. Stop W0500 Washington, D.C. 20577 Tel: +1 202 623 1771 Fax: +1 202 623 1786 E-mail: diegor@iadb.org

Kaarin Taipale Kaarin Taipale is an expert on decentralisation, governance, and urban issues.	Kesakatu 2 B 33 Fin – 00260 Helsinki, Finland. Email: kaarin@kaarintaipale.net; Web: www.kaarintaipale.net. Tel: GSM: +358 40 503 4766
James Winpenny James Winpenny is an independent consultant who works in the area of water economics and financing. He was the author of “Financing Water For All” commonly known as the Camdessus Report.	The Cross Taston Chipping Norton Oxfordshire OX7 3JL UK Tel: +44 (0)1608 810062 E-mail: Wychwood.consult@virgin.net

10 Acronyms

ACP	Africa, Caribbean, Pacific
CBO	Community Based Organisation
CDD	Community Driven Development
CWSF	Community Water and Sanitation Facility
DFID	UK Department for International Development
DWAF	Department of Water Affairs and Forestry
DWSRF	Drinking Water State Revolving Fund
IFC	International Finance Corporation
IFI	International Financing Institution
MDGs	Millennium Development Goals
MIG	Municipal Infrastructure Grant
MIIU	Municipal Infrastructure Investment Unit
MTEF	Medium Term Expenditure Framework
NGO	Non-Governmental Organisation
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
PPA	Participatory Poverty Assessment
PRSP	Poverty Reduction Strategy Paper
PSP	Private sector participation
SIDA	Swedish International Development Cooperation Agency
SIP	Sector Investment Plan
SME	Small and Medium Enterprise
SRF	State Revolving Fund
SSIP	Small Scale Independent Provider
SWAp	Sector Wide Approach
TOP	Thematic Overview Paper
USAID	United States Agency for International Development
WSS	Water Supply & Sanitation

11 About IRC

IRC facilitates 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. It does this by improving the information and knowledge base of the sector and by strengthening sector resource centres in the South.

As a gateway to quality information, the IRC maintains a Documentation Unit and a web site with a weekly news service, and produces publications in English, French, Spanish and Portuguese both in print and electronically. It also offers training and experience-based learning activities, advisory and evaluation services, applied research and learning projects in Asia, Africa and Latin America; and conducts advocacy activities for the sector as a whole. Topics include community management, gender and equity, institutional development, integrated water resources management, school sanitation, and hygiene promotion.

IRC staff work as facilitators in helping people make their own decisions; are equal partners with sector professionals from the South; stimulate dialogue among all parties to create trust and promote change; and create a learning environment to develop better alternatives.

IRC International Water and Sanitation Centre
P.O. Box 2869
2601 CW Delft
The Netherlands
Tel. +31 (0)15 219 29 39
Fax. +31 (0)15 219 09 55
E-mail: general@irc.nl
Internet http://www.irc.nl