

MEETING THE FINANCING CHALLENGE FOR WATER AND SANITATION
Incentives to Promote Reforms, Leverage Resources, and Improve Targeting

Draft Final Report

Water and Sanitation Program

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ABBREVIATIONS

ACSI	Amhara Credit and Savings Institute (Ethiopia)
ALGAK	Association of Local Government Authorities of Kenya
APL	Adaptable Program Loan
APUSP	Andhra Pradesh Urban Services for the Poor (India)
ARWSP	Accelerated Rural Water Supply Project (India)
ASUS	Ahmedabad Slum Upgrading Society
BNWP	Bank Netherlands Water Partnership
CAA	Constitutional Amendment Act (India)
CBFI	Community-Based Financial Institution
CBO	Community-Based Organization
CCF	City Challenge Fund (India)
CDD	Community-Driven Development
CDF	Community Development Fund
CDMA	Commissioner and Director of Municipal Administration (Andhra Pradesh)
CGAP	Consultative Group to Assist the Poorest
CLF	Crédit Local de France
CLGDP	Community and Local Government Development Project (Nigeria)
CLIFF	Community-Led Infrastructure Finance Facility (India)
CODI	Community Organization Development Institute (Thailand)
CPB	County Price Bureau (China)
CSCF	Civil Society Challenge Fund
CSG	Community Saving Group
CSO	Civil Service Organization
CWSA	Community Water and Sanitation Agency
CWSP	Community Water and Sanitation Project
DANCED	Danish Cooperation for Environment and Development
DCA	Development Credit Authority
DFI	Development Financial Institution
DFID	Department for International Development
DINT	Decentralized Infrastructure and New Technologies (India)
DMAWS	Department of Municipal Administration and Water Supply (Tamil Nadu)
DRA	Demand-Responsive Approach
DWD	Directorate of Water Development (Uganda)
EAIIF	Emerging Africa Infrastructure Fund
ECA	Europe and Central Asia
ESRDF	Ethiopian Social Rehabilitation Development Fund (Ethiopia)
FCC	Federal Communications Commission (United States)
FFI	Formal Financial Institution
FI	Financial Institution
FOP	Finance and Operating Plan
GDP	Gross Domestic Product
GEF	Global Environment Facility
GoAP	Government of Andhra Pradesh
GoI	Government of India
GoK	Government of Kenya
GoTN	Government of Tamil Nadu
GoU	Government of Uganda
GWCL	Ghana Water Company Limited
HDFC	Housing Development Finance Corporation (India)
HIPC	Highly Indebted Poor Country
IASC	Indian Association of Savings and Credit
IBT	Increasing Block Tariff
ICIP	India Community Infrastructure Project
ICPAK	Institute of Certified Public Accountants of Kenya

IDA	International Development Association
IDFC	Infrastructure Development Finance Company
IFC	International Finance Corporation
IFI	International Financial Institution
IL&FS	Infrastructure Leasing and Financial Services
INCA	Infrastructure Finance Corporation Limited
LA	Local Authority
LASDAP	Local Authority Service Delivery Action Plan
LATF	Local Authority Transfer Fund (Kenya)
LG	Local Government
LGA	Local Government Authority
LGBFP	Local Government Budget Framework Paper (Uganda)
LGU	Local Government Unit
LIL	Learning and Innovation Loan
M&E	Monitoring and Evaluation
MAPP	Municipal Action Plan For Poverty Reduction (Andhra Pradesh)
MDF	Municipal Development Fund
MDG	Millennium Development Goal
MF	Microfinance
MFI	Microfinance Institution
MFPEd	Ministry of Finance, Planning and Economic Development
MIGA	Multilateral Investment Guarantee Agency
MIU	Municipal Infrastructure Investment Unit (South Africa)
MMRDA	Mumbai Metropolitan Regional Development Authority (India)
MoU	Memorandum of Understanding
MSP	Municipal Service Partnership (South Africa)
MTEF	Medium-Term Expenditure Framework
MUDF	Municipal Urban Development Fund (Tamil Nadu)
MWLE	Ministry of Water, Land and Environment (Uganda)
MWSI	Mayniland Water Services, Inc (Philippines)
MWSS	Metro Manila Waterworks and Sewerage Service (Philippines)
NESDB	National Economic Social Development Board (Thailand)
NHA	National Housing Authority (Thailand)
NHC	Neighborhood Committee
NSDF	National Slum Dwellers Federation (India)
O&M	Operations and Maintenance
OBA:	Output-Based Aid
ODI	Overseas Development Institute
OFWAT	Office of Water Services (England)
OPIC	Overseas Private Investment Corporation
PAF	Poverty Action Fund (Uganda)
PCD	Project Concept Document
PCG	Partial Credit Guarantee
PEAP	Poverty Eradication Action Plan
PER	Public Expenditure Review
PMU	Project Management Unit
PPA	Participatory Poverty Assessment
PPIAF	Public-Private Infrastructure Advisory Facility
PPP	Public-Private Partnership
PREM	Poverty Reduction and Economic Management (World Bank)
PRG	Partial Risk Guarantee
PRSC	Poverty Reduction Support Credit
PRSP	Poverty Reduction Strategy Paper
PSAL	Programmatic Structural Adjustment Loan
PSM	Public Sector Management
PSP	Private Sector Participation

RWS	Rural Water Supply
RWSS	Rural Water Supply and Sanitation
SCG	Savings and Credit Group
SECAL	Sector Adjustment Loan
SF	Social Fund
SFC	State Finance Commission
SFI	Specialized Financial Intermediary
SFI	Subnational Financing Intermediary (box 3.6)
SGP	Small Grants Program
SHG	Self-Help Group
SIDA	Swedish International Development Agency
SIF	Social Investment Fund
SIM	Sector Investment and Maintenance Loan
SLPFS	State-Level Pooled Finance Structure (India)
SSIP	Small-Scale Independent Provider
STAP	Scientific and Technical Advisory Panel
SWAp	Sector-Wide Approach
TNUDF	Tamil Nadu Urban Development Fund (India)
TNUDP	Tamil Nadu Urban Development Project (India)
TNUIFS	Tamil Nadu Urban Infrastructure Financial Service
UCDO	Urban Community Development Office (Thailand)
ULB	Urban Local Body
UPR	Uniform Price with Rebate
URIF	Urban Reform Incentive Fund (India)
USAC	Universal Service Administrative Company
USAID	United States Agency for International Development
USF	Universal Service Fund
UWSS	Urban Water Supply and Sanitation
WDF	Water Development Fund
WHO	World Health Organization
WMERD	Water, Mines and Energy Resources Development (Uganda)
WRM	Water Resource Management (Ethiopia)
WSS	Water Supply and Sanitation
WSSD	World Summit for Sustainable Development
WSUC	Water and Sanitation Users Committee
WTP	Willingness to Pay
WU	Women's Union
WUP	Water Utility Partnership

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We do see this as an evolving piece of work that will benefit from further feedback, ongoing documentation of financing mechanisms in different institutional contexts and further research. Experience in mechanisms such as programmatic approaches and output-based aid is rapidly emerging and several new insights were being continuously gained as we worked on this review, strengthening the case for an ongoing documentation of experiences in a living document.

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EXECUTIVE SUMMARY

In recent years, several countries have come together to identify and agree on development goals that need to be achieved to reduce poverty and increase welfare. These are reflected in the Millennium Development Goals (MDGs), which also include targets that need to be achieved for sustainable access to safe water and sanitation services. Achievement of these goals will require considerable resources, which are far beyond those flowing to the sector today. For the WSS sector, even after the major achievements in the past two decades, it is estimated that about 1.2 billion people lack access to an adequate supply of water, and about 2.5 billion people do not have adequate sanitation facilities.

In this context finance has increasingly emerged as an important concern in the water and sanitation sector, though an important change in approach has occurred. During the 1990s most discussion on the financing of water and sanitation focused on how the actual service provision was to be financed, in particular assessing how much of the cost of service provision was to be met through public versus other resources. Within this approach it was often assumed that private sector investments would carry the burden of investments in the sector. However, this has not generally happened, with a resulting increase in financing gaps. It is now well recognized that financing water and sanitation is not just an issue of the required volume of investment and from where this is likely to be mobilized. The issue is equally to have appropriate institutional arrangements and develop related capacity, and to target expenditure in such a way that the resources reach the intended beneficiaries without undue leakages. It is also a question of using the limited public resources to promote sector reform, thereby attracting community and market-linked resources. And it is critically important to use the resources effectively, efficiently, and in a transparent manner. This is the financing challenge facing the water and sanitation sector in the new millennium.

1 Objectives of the Review Paper

This review paper on financing strategies and mechanisms for the water and sanitation sector looks at ways of responding to this financing challenge. Its main objectives are:

- *Develop a framework for financing strategies for water supply and sanitation (WSS).* To develop a framework for reviewing reform-linked financing mechanisms, focusing especially on the changing notion of service providers, the nature of activities to be financed through public resources, and the concepts of better leveraging and targeting.
- *Provide a global review of financing mechanisms.* To review the available global experience on the development and use of innovative financing mechanisms, and to use available secondary sources to identify critical issues in their use.
- *Identify the directions for further research.* To identify directions for further research based on an identification of issues in the use of different sets of finance mechanisms as well as the possible variations in their use in different generic contexts.

Improved access to WSS services is an important component of poverty reduction strategy in most countries. However, increased financial allocations to the WSS sector will not have the desired impact unless these are made within the context of critical sector reforms. One of the key constraints in the introduction of sector reforms and their sustainable scaling up has been inadequate attention to the development of appropriate and sustainable incentives and financing mechanisms.

Three problems characterize the sector agenda for improved coverage: (a) the WSS sector is often bedeviled by inappropriate institutional frameworks and financing policies that result in ineffective and inefficient use of existing resources; (b) the available public resources are often inadequate to meet the costs of sustained enhanced coverage; and (c) the poor often do not benefit from increased coverage and existing WSS services.

Addressing these problems requires consideration of three strategic issues which are central to the financing challenge facing the water and sanitation sector and are addressed in this review paper.

2 Financing Strategies and Mechanisms to Promote WSS Sector Reforms

Improved access to water supply and sanitation (WSS) services is recognized as an important component of poverty reduction strategy, which implies possible increases in public finance allocated to these services. However, enhanced financial allocations to the WSS sector will not have the desired impact unless these are made within the context of critical sector reforms. This suggests that financing strategies are needed for countries, bilateral donors, and development finance institutions to promote sustainable introduction and scaling up of key sector reforms through mechanisms that provide appropriate incentives and support.

Based on the broad principles related to the institutional and financing dimensions of sector reform, three areas have emerged as important in the sector though their nature and interpretation vary across regions and countries: decentralization of service delivery, community-driven development, and the possibility of private sector participation. Based on a review of experiences, three sets of options are identified and discussed in chapter 2:

- *Decentralization-linked fiscal mechanisms*, largely through the traditional public finance systems linked to budget allocations and fiscal transfers
- The use of *special fund mechanisms*, often developed independently of the regular government financing arrangements, at local, regional, national, and global levels
- More recent approaches in funding mechanisms structured within *programmatic approaches*, including a variety of program-linked financing arrangements as well as output-based aid.

Within the devolution-based decentralization framework, many national (and regional) governments use grants and transfers to promote, support, and scale up reforms through local governments in rural and urban areas. The review of different finance mechanisms suggests that these mechanisms are able to enhance the finances and capacity of local governments and to enable them to develop more demand-responsive approaches. However, the relevant institutional reforms required in the WSS sector, such as those related to setting up autonomous utilities or further delegation of management to the private sector, are difficult to promote with these mechanisms. This may be due the fact that these reforms take time, beyond the impact of annual or subannual allocations, and also because there are significant transaction and political costs which may need to be met through special funds during the transition period. These are likely to require other mechanisms such as special funds or programmatic approaches, both of which are also discussed in chapter 2. Table 1 provides a summary of financing mechanisms reviewed for promoting sector reforms.

The use of different financing mechanisms to promote reforms has been quite common, as illustrated in table 1. These mechanisms are varied and range from those linked to fiscal decentralization and the use of special funds or special projects, to more programmatic

approaches within sector-wide approach frameworks. Each of these represents a very different approach, with varying reliance on existing public finance mechanisms. When these are weak or the countrywide reform commitment does not exist, the use of special fund mechanisms becomes especially necessary and appropriate.

Table 1. Financing Mechanisms that Promote Sector Reforms

Financing Mechanism	Relevant Contexts	Illustrative Examples
a. Decentralization-Linked Mechanisms		
Fiscal framework for Decentralization	Countries with emerging decentralization policies with clear policy and legislation for local mandates	Constitutional Amendment Acts in India for fiscal powers of local authorities (box 2.1)
Intergovernmental transfers to promote reforms		
Conditional grants	Countries with strong national government priorities to achieve sectoral targets in the context of decentralization and good monitoring capacity	Conditional RWSS grants in Uganda to district governments (box 2.2)
Discretionary transfers for local reform	Countries with need for introducing local government reforms to enhance local finances and governance, with possibility of nonpolitical decisionmaking	Local authority transfer fund in Kenya (box 2.3)
Conditional grants with asymmetric decentralization	Where different local authorities are at varying capacity and performance levels	Nigeria local governance scorecards (box 2.4); India Urban Services for the Poor Project (box 2.5)
b. Special Fund Mechanisms		
Social investment funds	Where decentralization reforms are not forthcoming or community-driven development for infrastructure services is not accepted readily	WSS in Ethiopia Social Rehabilitation and Development Fund (box 2.6); Kerala RWSS Project, India (box 2.7)
Community development funds	In urban areas where the poor and low-income groups need support in negotiating with LAs and local control of funds is possible	Community Organization Development Institute (CODI) in Thailand (box 2.8)
Institutional reform-linked challenge funds	Where high transaction and political costs are likely to be a deterrent to institutional reforms	City Restructuring Grant in South Africa and, City Challenge Fund (CCF) and Urban Reform Initiative Fund in India (box 2.9)
c. Programmatic Approaches: Lending Instruments		
SWAp and MTEFs	Where there is a general agreement on sector reforms and the national government has adopted broader reforms for public expenditure management and budgeting. Strong leadership of sector ministry is essential	Use of SWAp and MTEF in several African countries (box 2.10)
Sector investment and maintenance loan (SIM) or adaptable program loan (APL)	Where there is general agreement on sector reforms; phased instrument appropriate where implementation of specific reforms need time to develop. Strong leadership of sector ministry is essential	Adaptable program loan for rural water supply and sanitation in Ghana (box 2.11)
Sector adjustment loan (SECAL) or poverty reduction support credit (PRSC)	Where appropriate public expenditure management systems are available, commitment to sector reforms exists, and institutional reforms are possible in medium term. Strong leadership of sector ministry is essential	WSS component in poverty reduction support credit (PRSC) in Uganda (box 2.12)

3 Financing Strategies and Mechanisms for Leveraging Resources

In the world of manifold development needs, water and sanitation investments have to compete with other sectors for limited public funds. Available evidence suggests that during the coming

years, public investments are going to fall short of the resources required to meet the internationally agreed development goals. Chapter 3 focuses on approaches and financing mechanisms that enable the WSS sector to leverage market-based and community resources to meet the WSS-related development goals in a sustainable manner.

In recent years, several sector analysts and practitioners have emphasized that the means to meet these goals are beyond the capacity of the developing world alone. Global efforts must therefore be made to increase aid flows to developing countries, and measures taken to enhance the incomes of developing countries through improved trade and finance flows. Despite the potential importance of these fund flows, further discussion of the nature of measures needed to achieve these is beyond the scope of this review.

It is anticipated that even with enhanced resource allocations, for most countries and local governments public sector resources are not likely to be sufficient to meet the WSS development targets. However, if leveraged, these limited resources will enable mobilization of additional market and community resources. The review focuses on potential measures to leverage resources for the WSS sector through more innovative use of public and external aid resources. Along with their relevance for leveraging resources, the measures discussed in this review also contribute to enhanced sustainability of investments by introducing the twin concepts of market rigor along with greater community control.

Based on a review of experiences, three sets of options are identified for leveraging resources:

- Those linked to *attracting private sector participation (PSP)* for both investments and efficiency improvements that result in enhanced internal cash generation, such as tariff reforms, regulatory framework to clearly define the contractual obligations, partial guarantees for risk mitigation, and project development facilities.
- Those linked to *promoting local investments through domestic credit markets* for local governments or other water and sanitation service providers, such as building the creditworthiness of local borrowers, establishing the fiscal and regulatory building blocks for the local credit market, and instruments for pooled financing or bond banks.
- Those linked to *enhancing community contributions* for water and sanitation services, such as improving the sector framework to mobilize community contributions and sustainable access to credit for facilities at household and community levels.

Table 2 provides a summary of the financing mechanisms reviewed for leveraging resources for the sector. The review of financing mechanisms suggests a few common elements across leveraging both private and community resources while developing domestic credit markets:

- The need for an appropriate sector framework that will enable resources to flow in.
- Emphasis on risk management and possible need for a partial risk guarantee framework.
- Support for project development and implementation through appropriate project development support. Appropriate institutional arrangements for these are likely to vary in different contexts. It is also clear that to leverage resources on any significant scale, all the three issues will need to be addressed in a consistent manner.
- The need for a good information base and its dissemination to enhance transparency and reduce risk perceptions.
- Ensuring market linkages so that the resources do represent additionality and are sustainable.

Table 2. Financing Mechanisms to Leverage Resources

Financing Mechanism	Relevant Contexts	Illustrative Examples
a. Private Sector Participation and Investments		
Enabling reform framework and FI interest	Countries where an overall reform climate for liberalization in infrastructure sectors exists Cities in most developing countries with a large number of existing small-scale informal providers	Credit for gradual tariff reforms in Guinea (box 3.2); sector framework for small private providers (box 3.3); focus on small providers by financial institutions (box 3.4)
Partial guarantees for risk mitigation	Contexts where transactions are well developed but the borrowing entities lack credit history, difficulties in covering policy risks, or where lack of long-term debt adversely affects project financial viability	Partial guarantee for a private sector transaction for a water concession in Ecuador (box 3.5) and a framework for using partial guarantees for municipal infrastructure (box 3.6)
Project development support	In contexts where there are some creditworthy borrowers and possible opportunity for good transactions, but a lack of capacity for project development potential among borrowers	MIU, a project support facility for municipalities in South Africa (box 3.7), and project development facilities in India (box 3.8)
B. Local Investments through Local Credit Markets		
Municipal development fund and specialized financial intermediary	In countries which have reasonable level of existing or emerging municipal capacity but low level of financial sector development or a lack of interest among the FIs in the municipal sector	TNUDF in India and FINDETER in Colombia as examples of MDF/SFI with efforts at market integration (boxes 3.9 and 3.10)
Municipal bonds and credit rating	Contexts where there is high financial sector and capital market development with a reasonable level of creditworthiness for borrowers for municipal infrastructure	Emerging municipal bond system in India (box 3.11)
Pooled finance mechanisms	Same as above	Pooling of credit for small municipalities and local borrowers through state bond banks in the US and the proposed pooling facility in India (box 3.12)
C. Enhancing Household and Community Resources		
Enabling sector framework for cost recovery and regulation in community WSS	Would be relevant in all contexts where there is some level of ability and willingness to pay for WSS services	Sector framework for RWSS through small public utilities in China (box 3.13)
Credit for household/community infrastructure	Interest among CBOs, CBFIs, or FIs available to pursue credit-based approaches for household/community infrastructure	Credit for household and community infrastructure in Vietnam and India (box 3.14)
Scaling up community infrastructure finance	Government policy enables community share in infrastructure finance and a good base and outreach available of strong CBOs, CBFIs, and interest among domestic financial institutions	Community-Led Infrastructure Finance Facility and India Community Infrastructure Project (box 3.15)

4 Pro-poor Subsidies to Enhance Access for the Poor

The main rationale for subsidies in the water and sanitation sector is often linked to the notion of universal service. Such policies are justified on a number of grounds: the consideration of water and sanitation as merit goods (most recently exemplified by the Millennium Development Goals), the positive externalities that WSS may generate through, for example, sanitation and sewerage services, and political concerns for equity across consumers and regions. However, the traditional system of subsidies often fails to meet such objectives. Such subsidies tend to be hidden in nature and are neither explicit nor clearly targeted. To overcome such problems, recent approaches have focused on improving the targeting of subsidies to achieve the main objective of ensuring or enhancing access for the poor while addressing other principles related to appropriate incentives

and simplicity in design. Based on a review of these, chapter 4 identifies key principles for the design of “good” subsidies, and the potential subsidy instruments and issues that need to be addressed in their application in a given context.

Three sets of options for pro-poor subsidy mechanisms are identified and discussed in chapter 4:

- Use of *access subsidies* for either water or sanitation, as well as for demand promotion and hygiene awareness, either given directly to consumers or through the service providers
- *Improving the cross-subsidies* that are used widely throughout the world, and which provide subsidies for access, consumption, or more generally for both through specific rules or mechanisms such as a universal service fund (USF) or auctions for minimum subsidies
- The more recent use of incentive-linked subsidies within the *output-based aid (OBA)* framework, including direct subsidies for access or consumption to consumers and minimum subsidy concessions targeted to reach the poor.

Table 3 provides a summary of financing mechanisms reviewed for improved pro-poor subsidies. The review suggests the importance of context-specific choice and design of subsidy mechanisms. This necessitates that the subsidy mechanism is developed and structured in relation to the real situation in a given context for aspects such as coverage for access to the utility networks, extent and functionality of metering, administrative capacity and costs for identifying and reaching the poor and low-income groups, and existence of or potential for using private service providers. A particularly important dimension, especially for the design of subsidy instruments, is the political and economic context that defines the framework within which the instruments can actually be designed and implemented. Thus, the actual design and sequencing would need to respond to these ground realities.

5 Issues, Generic Contexts, and Directions for Further Research

Based on the issues related to the use of different mechanisms discussed in chapters 2 to 4, a number of critical and cross-cutting issues are identified in chapter 5. This chapter also initiates a discussion on the choice of appropriate financing mechanisms in different contexts, which also emerges as an important area for further research. The chapter summarizes this and other important directions for further research that emerge from this global overview.

The review identifies a number of critical and cross-cutting issues:

- *Fiscal consistency at scale.* A major drawback of WSS strategies has been the lack of fiscal consistency for countrywide scaling up of programs to achieve agreed access targets in a sustainable manner within a reasonable timeframe. Any financing mechanism that uses a direct subsidy element needs to be assessed for such fiscal consistency.
- *WSS preparedness within a multisector context.* Most financing mechanisms and public sector allocation mechanisms are operated within a multisectoral framework that includes either social sectors or infrastructure sectors. Market resources would also be guided by market considerations of risk and returns. This necessitates that the water and sanitation sector is relatively well prepared to absorb the resources that are available through such mechanisms.

Table 3. Mechanisms for Pro-poor Subsidies

Financing Mechanism	Relevant Contexts	Illustrative Examples
a. Subsidies for Access to Water and Sanitation		
Partial capital grants for RWSS and slum improvement	In all developing countries where large shortfalls in access to safe rural water supply systems are prevalent. The level of subsidies should be linked to affordability, WTP, and fiscal sustainability at scale	Partial capital grants in World Bank-funded RWSS projects (table 4.1 and box 3.13)
Demand promotion for sanitation and hygiene	In all developing countries where coverage of access to and use of safe sanitation is low and hygiene awareness needs to be enhanced	Subsidies to support costs of sanitation demand promotion for Global Handwashing Initiative, village rewards in India, and toilets in Burkina Faso and India (box 4.2)
Social connections for the urban poor	In contexts where urban water service providers have well-functioning networks but low levels of access to these for the poor	Subsidies for private water service providers in Côte d'Ivoire and Senegal to provide connections to utility systems (box 4.3 and box 4.7)
b. Improving Cross-Subsidies for Water Tariffs		
Principles for improved cross-subsidies	In contexts where they have been used in the past, and/or politically and administratively they appear relevant and necessary	Rules suggested on the basis of analysis in Guayaquil, Ecuador (section 4.3)
Universal service funds	In contexts where universal service policy for WSS is explicitly adopted and its cost (less other government subsidies) as a proportion of total sector turnover is reasonable (less than 5 percent?)	Universal service funds used in telecommunications sector in USA and Europe (box 4.4)
Auctions for minimum subsidies	In contexts where the sector institutions/regulators do not have firm information on the level of subsidies required for specific services and a base of private providers exists	Auction for minimum subsidies in the rural telecom sector in Peru (box 4.5)
c. Output-Based Aid for Water and Sanitation		
For consumption through direct subsidies	In contexts where there are utilities that are able to provide reliable water services and the information and administrative capacities for cost-effective identification of the poor and low-income groups exist	Direct subsidies to utilities in Chile for serving the identified poor customers (box 4.6)
For access through social connections	In contexts where urban water service providers have well-functioning networks but low levels of access to these for the poor	Performance-linked subsidies for social connections to the private service providers in Côte d'Ivoire and Senegal (box 4.7)
Subsidy-linked concessions	In contexts where the affordability and willingness to pay for services among the poor is less than the service costs and there is a base of small private providers with capacity to bid for concessions	Fixed subsidy-linked concessions in Paraguay through aguateros (box 4.8)
For supporting transition to reforms such as tariff reforms	In contexts where there is commitment to reforms, but the cost of immediate reforms may be high or gradual reforms are necessary for political reasons	Support to meet the transition costs of institutional reforms against agreed milestones (box 2.9) and support for gradual tariff reforms in Guinea (box 3.2)
Sanitation demand promotion	In most developing countries where demand promotion is already a local government (LG) mandate, but special efforts are necessary for the LGs to implement this mandate	Village rewards for sanitation improvements by village LG and community (box 4.2)

- *Constraints in financing software and institutional reform.* To meet the WSS financing challenge, public finance mechanisms need to focus on funding other nontraditional activities such as capacity building, institutional reform, project development support, sector strategy development, sector monitoring and evaluation systems, and providing for performance-linked partial guarantees. A major change in mindset among decisionmakers, supported by appropriate design of finance mechanisms, will be needed to achieve funding for such activities.
- *Monitoring and information constraints.* New approaches focus on linking public finance and aid to outcomes and performance to enhance the finance–reform link. This requires measures such as better articulation and measurement of performance, ensuring that the service providers have the capacity to deliver the targeted performance, and setting up strong and transparent M&E systems. This is a key sector weakness as in the past M&E efforts have largely focused only on externally aided projects and there is almost a complete absence of systematic collection of sector-level information and sector-level monitoring and evaluation.
- *Need for appropriate and flexible standards/technologies.* The review also suggests the need for appropriate and flexible standards as a first step in enhancing access for the poor, in order to ensure that the fiscal consistency of the total magnitude of subsidies is maintained when going to the scale required to reach all the poor within a defined timeframe.
- *Design of financing mechanisms: “the devil is in the details”.* The successful use of a financing mechanism is linked to its sensitive design in the local context. A number of factors affect successful design and often it is the detail that requires careful attention and determines success or failure.

The choice and use of different financing mechanisms in different country and regional contexts will be guided both by factors defining the macro country context and the WSS sector context. There are three different levels of decisionmaking for choosing appropriate financing mechanisms for water and sanitation: (a) global level, especially for bilateral and multilateral agencies; (b) country/large region level for national government, or the regional governments, in the case of large federal countries such as India and Brazil; and (c) local level for local government, especially in the context of medium and large urban areas.

The process of choosing appropriate financing mechanisms in a given country is a complex process, and requires an assessment of the country context in relation to a number of influencing factors: those operating at the national level, such as progress on fiscal and governance reforms, financial sector development, and economic and demographic considerations; and those linked to the country’s infrastructure sector, such as commitment to reform (particularly in the WSS sector), levels of decentralization, and the capacity of local governments.

The tradeoffs and sequencing of actions will vary according to the particular situation in a given country. Chapter 5 provides illustrations of the nature of the tradeoffs involved in choosing between decentralization-linked mechanisms and special funds, in choosing the mechanisms for the development of domestic credit markets, and in identifying the appropriate subsidy mechanisms to move towards the goal of universal service in different country contexts (see figure 1 for the selection of subsidy mechanisms).

Existing WSS Status – Quality /Coverage

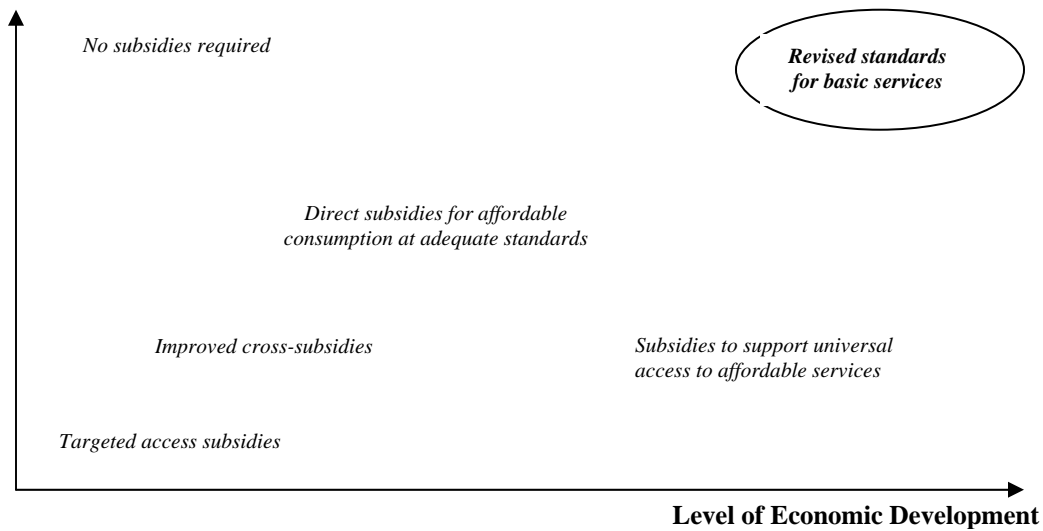


Figure 1: Illustrative Tradeoff: Subsidy Mechanisms to Ensure Universal Service in Different Contexts

Further research would be useful for the following:

- *Analysis of choices in local contexts.* The choice of a particular set of financing mechanisms will be influenced by a number of factors, as discussed in chapter 5. It would be useful to develop a better understanding of how such decisions have actually been made in different contexts and their impact on sector reforms, leveraging resources, and targeting of subsidies. Such analysis would help guide local decisions and present options for sequencing in the use of financing mechanisms.
- *Exploring the issue of fiscal consistency at scale.* Any financing mechanism needs also to be grounded in the fiscal realities of any given country. A key issue that cuts across most financing mechanisms in this respect is the fiscal sustainability of any measure at scale. Surprisingly, most efforts and programs in the WSS sector fail to address this key concern. In view of the increasing emphasis on the Millennium Development Goals, it becomes important to assess the fiscal sustainability of achieving the development targets within a reasonable timeframe. This requires a better understanding of the link between inputs and outputs and the actual flow of resources in the WSS sector. This particular sector characteristic, where leveraging is important and other stakeholders such as NGOs and communities also contribute to the sector resources in a significant manner, requires such analysis of resources to go beyond the public sector resources. Research in such assessment of WSS resource flows has been recently initiated in Kenya and Ethiopia, and will need to be extended further to look at the issues of fiscal sustainability at scale. A particular weakness in the WSS sector has been inadequate emphasis on understanding, assessing, and measuring outputs and outcomes. When compared to other sectors such as education and health, analysis of value for money in the water and sanitation sector has lacked depth and analytical rigor. Along with the efforts to develop a sector-wide approach and a sector monitoring and evaluation system, this aspect probably needs critical attention.
- *Continuing documentation of financing mechanisms.* In order to support the stakeholders from different countries to explore the use of different financing mechanisms, it is necessary to

develop more detailed documentation on different financing mechanisms and their use in different contexts. Such documentation will need to provide adequate details and guidance for the use of a particular mechanism in different contexts in terms of key issues that need to be addressed.