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Financing and cost recovery: What happens after construction?

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WATER AND SANITATION PROJECTS are known to bring wider economic benefits to communities in the form of health, opportunities for women[1] and poverty reduction[2]. Given the overall societal gains that can be achieved, water and sanitation services should be improved, especially for the poor. However, the challenge to finance new projects and increase sustainable access to water and sanitation services is particularly acute, largely due to lack of ability to generate funds for operations, maintenance, expansions and upgrades, coupled with insufficient institutional and administrative capacity.

The consequences of failing to recover costs for water and sanitation services include an inability to finance network expansions and major repairs, high levels of unaccounted for water due to leaks and disrepair, poor water quality and low service levels which lowers willingness of customers to pay, and which in turn lowers the service level. Futhermore, within non-networked systems, poor cost recovery can lead to waste of a possibly scarce resource, an inability to maintain machinery (such as pumps), and possible health risks if people are compelled to use alternative, and often unsafe, sources of water.

The current widespread failure to adequately recover costs of provision is a constraint that must be overcome, if current coverage levels are to be maintained and improved. While part of the solution has to do with institutional, technical and management aspects of service provision, a fundamental one has to do with policy decisions such as what costs need to be recovered and by whom.

The forgotten costs

Traditional approaches to cost recovery consider only the financial costs of a project or programme in an isolated fashion, such as operations and maintenance (O&M) costs, capital costs and possibly investments for future growth and rehabilitation (which includes accounting for depreciation of assets over time). Conventional wisdom within the water sector is often that part or the totality of these costs should be recovered from consumers (users), making tariff design, billing and revenue collection a crucial element in the recovery of *financial costs*. A second less narrow economic perspective considers, in addition to the financial costs, the *opportunity and environmental costs* to society of ensuring the water supply and sanitation services and the broader water resources environment.

However, none of these approaches considers costs such as those associated with developing the skills of the staff of the district, municipal, provincial or national offices that has to ensure that the local water supply providers are providing a good service at an affordable price to the local communities, or the field worker that needs to undertake willingness to pay studies, or the organisation that is trying to make the necessary institutional arrangements to ensure that the new regulation for financing poor rural households is put into practice.

While essential, calculating the costs associated with the operation and management of a system as well as those related with the environment does not guarantee that the system will last after its construction. To meet the Millennium Development Goal[3] of halving the proportion of people without sustainable access to safe drinking water by 2015, it is estimated by the World Water Council[4] that annual investments of $75 billion are needed for guaranteeing the construction of major infrastructure for water supply and sanitation alone. The main question that remains to be answered is "after the construction, how do we make sure that the systems keep working?"

This paper advocates for an approach to cost recovery which broadens what are usually considered financial and economic costs. The paper aims to look beyond the individual water system and its users and the short time horizon (often three years) of many projects or programmes financed by international support agencies. It considers not only the construction, but the lifetime of the project, to include rehabilitation and extension of water supply systems and all the elements that are necessary to providing a long term service to all users, guaranteeing an equitable access and use to water services, taking into account opportunity and environmental costs.

All the costs related to providing a sustainable service should be matched with all the available sources of funding, and this is shown in Figure 1. These funding sources may lie entirely with the consumers, but may also include external funding from national governments or national and international funding agencies. The crucial point is that unless all the costs related to providing and maintaining a service (technical, human resource, institutional) are identified and covered by consumers or others, a service cannot be considered to be financially sustainable in the long term.

Figure 1 emphasises that in order to enhance financial sustainability, ***all*** costs related to providing water and sanitation services should be matched with ***all*** available sources of funding.

Both financial and economic approaches to cost recovery typically include the system construction, system maintenance, some training to the community and local NGOs during project implementation. Often not taken into account are the system rehabilitation and extension costs as a result of population growth or increased demand for service levels and the maintenance of the existing capacities and institutions within the community. Too often, the trained caretaker leaves his community in search of a better job or the just created water committee falls apart after a corruption scandal. The costs of extension staff to monitor and maintain the existing structures and capacities within the community are not usually considered.

In many countries, many projects and programmes are typically implemented by international NGOs working directly with the communities through local NGOs and/or the private sector, without sufficiently involving the national or local government. However, when there are serious systems breakdowns or when there are conflicts within the communities (the implementing agency having left the area), support and mediation is needed from outside the community. The costs of ensuring that the local government staff have the capacities in place to help the communities when systems are breaking down or monitoring private sector performance are never included in the calculation of project costs. This is frequently a cause for project failure, hence lack of sustainability of the service.

Deciding on tariffs, subsidies, loans, contracts with the private sector, methods of payment, achieving poverty reduction goals and many others requires a high level of skills, institutional arrangements, guidelines and policy making. These costs are usually not calculated, yet provision for these costs can help enhance the sustainability of the services.

Who pays for what?

As relates to recovering the costs of service provision, it is generally agreed and widely accepted within the donor community that users should pay for operation and maintenance costs. There is no consensus on whether users should pay for capital costs, and if so, what percentage is reasonable, and how might it be paid (cash, sweat equity, smaller payments over time, etc). If users do not pay for all or part of capital costs, then who pays? This is a major policy decision that needs to be made, particularly if the Millennium Development Goals for the water sector are to be attained. In terms of translating policy decisions on cost recovery into action, there are a number of ways costs can be recovered. Tariffs, subsidies, and financial support mechanisms can all work to improve cost recovery and raise consumer awareness of economic and financial values within the water and sanitation sector.

Presently, much emphasis is on setting of water tariffs as the main form to recover costs from consumers. In many developing countries, water tariffs have at least one thing in common: they are set well below the level needed to achieve even the operation and maintenance costs. Research has shown that these low rates of water tariffs are set largely for political, rather than practical, purposes. While low-income users have demonstrated a willingness to pay for water services, water tariffs are consistently used as a campaign promise, for political gain. In fact, political interference[6] has been found to be a significant barrier to effective cost recovery. It is doubtful if governments in most developing countries can do away with cost recovery, and still meet the Millennium Development Goals for the water sector.

Apart from policy decisions on cost recovery, determination of the real costs of service provision is also part of the problem. This is particularly so with no right tools to calculate costs that were originally set decades ago, for various reasons that might not be valid anymore. In the absence of appropriate data and accounting systems, it is difficult to make progress in rational tariff designs, subsidy allocation and in devising strategies for matching all the sources of available funding with the real costs incurred in providing sustainable water and sanitation services.

Conclusion

A key aspect towards meeting the Millennium Development Goals for water and sanitation is to develop sustainable financing mechanisms, and this has implications for cost recovery. Appropriate cost recovery policies need to be set, to support available financing mechanisms. In order to achieve sustainable financing of water and sanitation services, all the available sources of funds should be carefully matched with all the costs associated with service provision. While there is some agreement within the sector that consumers should pay for water and sanitation services, methods and tools for ensuring access to improved services by all including the poor remain highly debatable and many knowledge gaps remain to be properly addressed. Tackling these problems and translating validated principles and procedures into guidelines and capacity development tools needs an urgent and concerted effort.

In an effort to address the gaps in knowledge resources and understanding about the role of financing and cost recovery in service and systems sustainability, IRC has initiated the setting up of a Thematic Group on "Financing and Cost Recovery for rural, urban and peri-urban water and waste water services", focusing on the needs of the poor who are often the ones without improved access to water and sanitation services. WEDC is a key member of the thematic group, and has co-organised a workshop on this topic on the back of this conference. Interested participants are invited to attend a workshop on financing and cost recovery, which will be facilitated by the authors of this paper.

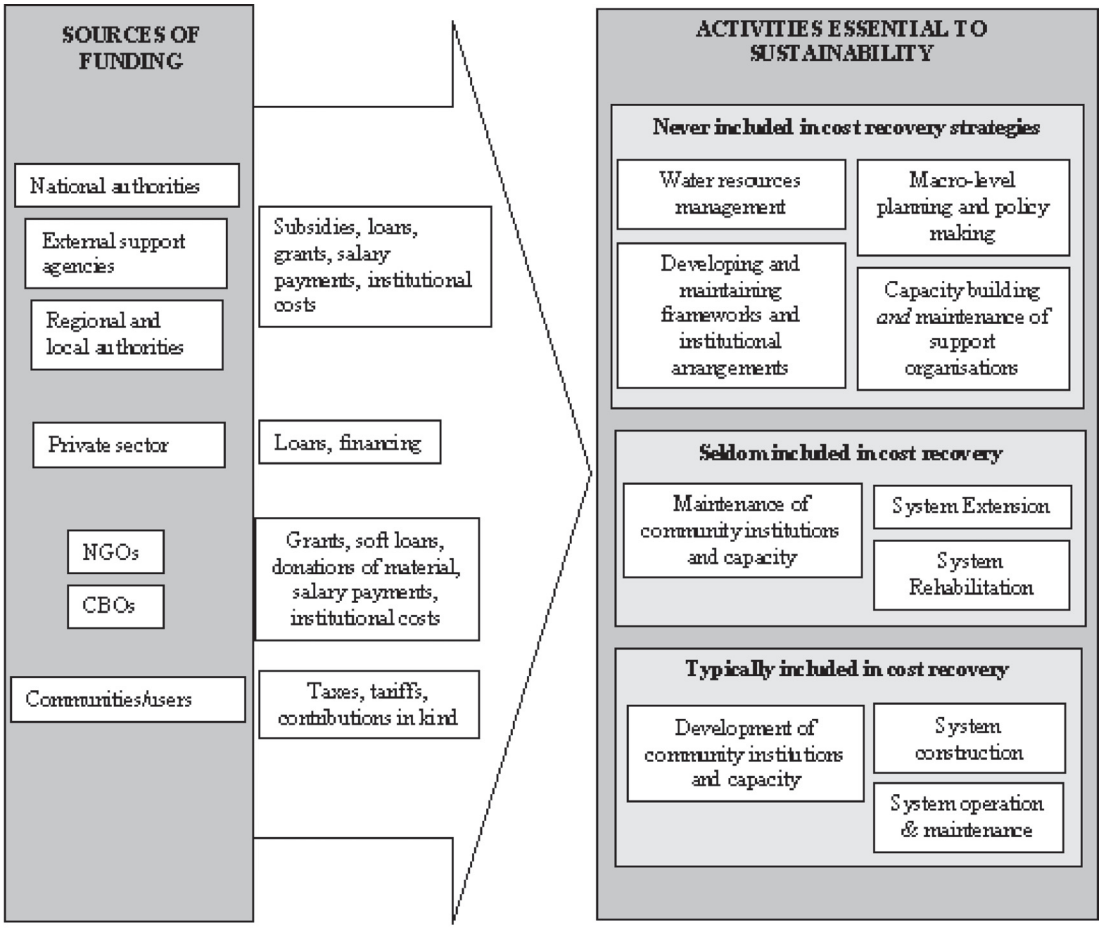

Figure 1: Matching ALL costs of service provision with ALL available sources of funding to achieve financial sustainability[5]

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Part of the content of this paper is derived from an upcoming IRC web based publication by Rachel Cardone and Catarina Fonseca: Thematic Overview Paper on Financing and Cost Recovery.

Footnotes

[1]WaterAid: Women's Problems: http://www.wateraid.org.uk/site/what_we_do/the_need/241.asp

[2]SEWA presentation at WaterDome http://www.genderandwateralliance.org/reports/Document%2016.doc

[3]http://www.developmentgoals.org/

[4]World Water Vision Report 2000 http://watervision.cdinet.com/visioncontents.html

[5]Fonseca, C. 2003. Cost Recovery: Taking into Account the Poorest and Systems Sustainability. International Congress Proceedings "Watershed Management for Water Supply Systems"

[6]Komives, Kristin and Linda Stalker Prokopy. 2000. Cost Recovery in Partnership: Results, Attitudes, Lessons and Strategies. BPD Water and Sanitation Cluster, London. http://www.bpd-waterandsanitation.org/english/docs/costrec.pdf