



28th AGUASAN Workshop (2012): Briefing Note

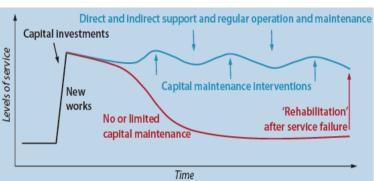
FINANCIAL SUSTAINABILITY OF WASH SERVICES About mindset change and an eye for the future

Topic

Although in recent years considerable effort has been directed towards scaling-up the spatial coverage of WASH services and reaching targets, it remains crucial and vital to ensure that the services are sustained in the long-term and current approaches need to be re-considered with that requirement in mind. Supplying water as well as providing sanitation and hygiene services have an inherent financial cost not only with regards to capital investments but also during the operation and maintenance, rehabilitation, upgrading and expansion phases. Therefore, financial sustainability focuses on how the governments, donors, civil society and private sector responsible for WASH services ensure revenue streams to cover those costs.

The investments needed to deliver sustainable WASH services meeting current and future social and environmental expectations are huge. Yet, most services are underfunded with dire consequences for the users, especially the poorest. This occurs despite that people in developing countries spend a significant portion of their income on WASH services through contributions in cash/kind for capital expenditures, connection fees, tariff payment or investments in improving their individual water system (self-supply) and in installing on-site sanitation. Hence people continue to face unacceptable problems with systems that fail prematurely, leading to wasted resources. Studies from various countries indicate that 30-40% of all WASH systems either do not function or operate significantly below design expectations.





Providing sustainable WASH services requires sound strategic financial planning to ensure that existing and prospective resources are commensurate with investment needs as well as the costs of operating and maintaining services. One issue is that in the current way of thinking and working, accounting for the capital maintenance, direct and indirect support costs in the life-cycle of services is often "forgotten" and the mechanisms and institutional changes catering for them left unaddressed. Another issue is that in most cases those responsible for WASH services enabling, developing and sustaining have basic knowledge of financial systems and mechanisms only. Still, there is a wide range of experiences with approaches to financial sustainability of WASH services, including established practices and recently developed innovative mechanisms. Finally, improving the financial sustainability of operations of systems in place is crucial and practitioners are experimenting with new models and enabling approaches to either increase revenues or decrease operating costs.

Process

Against this backdrop, an international group of 43 water and sanitation practitioners and wider development specialists from both humanitarian aid and development cooperation gathered in Gwatt, Switzerland from 18 to 22 June, 2012 within the framework of the $28^{\rm th}$ AGUASAN Workshop. The event was dedicated to the key question of "What kind of change in

mindset is required to achieve long-term financial sustainability of rural and small town WASH services - what will it take and how can it be put into practice?" Presentations from resource persons, plenary discussions, group work on topic cases, a crash course on life-cycle costs, individual sustainability clinics and an excursion into Swiss solid waste management (as neighbouring sector) supported the learning process as well as the development of new ideas.

Workshop process							
Day 1	Basic groundwork	Key inputs from resource persons					
Day 2	Deductive analysis	Case studies, group work					
Day 3	Inductive analysis	Case studies reports, LCCA wrap-up, Excursion					
Day 4	Deductive/inductive analysis	Clinics, identification of main threads of the framework					
Day 5	Validation	Refining the framework, reflecting with invited guests					

The workshop was designed as a full week constitutive process allowing for a progressive and cumulative learning experience. The inputs of the resources persons to the plenary and the five topic cases explored in working groups were well prepared in advance, whereas the sustainability clinics, where participants could expose specific financial sustainability issues of their activities to a group of peers, were called in spontaneously during the event

Results

At the end of the workshop, various results could be highlighted and presented to invited Swiss decisions-makers:

Collective learning of the participants: The key inputs from the resource persons on costing



WASH services, valuing benefits and using cost-benefit analysis for advocacy, as well as a short training on the life-cycle cost approach (LCCA), provided concrete "take-away" knowledge for the participants: new approaches and practical applications, tools and tips, documentation and resources for further involvement.

Peer assistance to topic cases and clinics presenters:

The group discussions provided an opportunity for collective brainstorming on similarities and specificities of concrete cases (from Benin, Haiti, Kosovo, Mozambique and Peru) as well as on specific issues (e.g. tariffs, maintenance funds, supply chains). The audience could share their experiences on financial sustainability, suggest ways for improvements and develop practical recommendations for the case owners and clinics hosts. In turn the peers could equally identify ways of improving their own work.



Development of a framework outline: Throughout the continuous learning process, the reflexions of the workshop participants evolved towards key elements of a successful approach

Appropriate Sector Governance Comprehen-Ownership sive Cost and Commit-Analysis **Financial** Sustainability of WASH **Financially** Services Organisatio-Viable and nal Capacity Socially of Relevant **Equitable** Actors Services A Solution Suitable to the Context

regarding financial sustainability issues. The **six key elements** identified and composing the outline of a **"Framework for Financial Sustainability of WASH Services"** are:

- An appropriate sector governance;
- A comprehensive cost analysis;
- Financially viable and socially equitable services:
- A solution suitable to the context;
- Organisational capacity of relevant actors;
- Ownership and commitment.

Financial Sustainability Framework

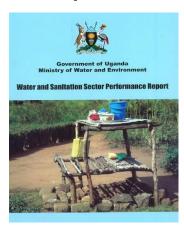
Defining financial sustainability of WASH services

"Sustainability is about whether or not WASH services and good hygiene practices continue to work and deliver benefits over time. No time limit is set on those continued services, behaviour changes and outcomes. In other words, sustainability is about **lasting benefits** achieved through the continued enjoyment of water supply and sanitation services and hygiene practices (Sustainability framework, WaterAid, 2011)". Focusing on financial sustainability, there should be **adequate revenue to cover all costs**, with appropriate tariff structures that include the poorest and most marginalized and with due attention to the environment, in order that the services last indefinitely.

Key element 1 - Appropriate sector governance

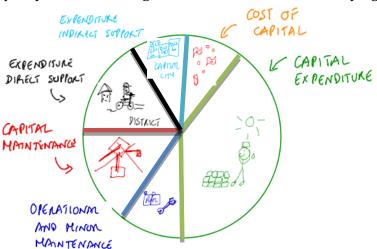
A conducive **legal and policy environment** is crucial for the sustainability of WASH services; in particular **roles and responsibilities** of the various stakeholders have to be clearly defined. **National governments** are ultimately responsible for ensuring that WASH services are delivered to their citizens and for deciding how this is achieved. **Households** have a key role in demanding improved services and taking responsibilities in management and recurrent financing. An **independent regulatory body** for both urban and rural WASH services should guarantee access for all, monitor quality and equity and supervise the service providers.

Predictable sector financing and planning mechanisms and practices are an additional key factor for an enabling environment: national mechanisms for planning and monitoring should be set up and strengthened (such as yearly sector reviews, budget programming by objectives), whereas donors should commit to long-term engagements. Monitoring & evaluation be it global, national or local should be highlighted as it performs two distinct functions: first it aims at guaranteeing accountability for donors, national governments and users; second it constitutes a mean to improve the performance and a space for sector learning. Finally existing mechanisms should be supported to assure accountability and transparency at local, regional and national levels.



Key element 2 - Comprehensive cost analysis

Initial investment costs for WASH schemes and their long-term management, operation, maintenance, replacement and extension/upgrading of services have to be accounted for. However, it is commonly acknowledged that system managers don't usually know e.g. what the recurrent costs truly are. The same is also the case at regional or national level regarding indirect support costs or costs of capital. Hence, **recurrent costs need to be identified in their entirety and thoroughly quantified and monitored.** Taking this fact into account, policy makers and regulators should focus on identifying all costs, highlighting financial gaps



and implementing sound strategies to **match costs with revenues**.

At local level, managers should identify the costs they need to finance, including **often forgotten costs** (e.g. guaranteeing water resource protection in quantity / quality or dealing with risk mitigation). One main reason for investigating these cost issues is to ensure the **availability of necessary capital maintenance funding** before systems fail and are abandoned.

Cost categories (Source: Fonseca et al., 2011.)

One time expenditure on providing a new or extended service where there was none:

• **Capital expenditure:** Initial costs to develop or extend a service. 'Hardware' such as pipes, pumps, excavation, lining, and concrete structures and one-off 'software' such as community training and consultations.

Recurrent expenditure on maintaining an existing service at its intended level:

- **Cost of capital:** Cost of interest payments on micro-finance and any other loans.
- **Operating and minor maintenance expenditure:** Typically regular expenditure, such as wages, fuel, and the purchase of cleaning products. Neglect can lead to service failure and expensive capital (maintenance) expenditure.
- **Capital maintenance expenditure:** Asset renewal and replacement cost; occasional and lumpy costs that seek to restore the functionality of a system, such as replacing a handpump or emptying a septic tank. It is required to avert failure and to maintain a continuous service.
- **Expenditure on direct support:** Cost of support activities for service providers, users or user groups, not directly related to implementation, e.g. training for a community or a private sector operator. Critical to achieve long-term functionality and scale.
- **Expenditure on indirect support:** The cost of macro-level support, planning, policy making and capacity building. Includes support to decentralised service authorities or local government. These costs have a direct impact on long-term sustainability.

Key element 3 - Financially viable and socially equitable services

Appropriate pricing and financing models are key to financial sustainability. Both revenues coming from outside the service area (transfers in the form of grants, subsidies or loans) as well as from inside (taxes and tariffs) are to be considered and cost covering mechanisms should ensure that the **burdens of improved services are borne equitably** by the different sections of the stakeholder community.



Hence, revenues for covering recurrent costs of WASH services in particular have to be mobilized from the three basic sources of tariffs, taxes and transfers - the mix of these having to exceed all life-cycle costs of a service whilst assuring access for the poor (i.e. human right to water and sanitation). Although there may be significant costs implications for governments to reach the un- and underserved populations, achieving sustainable WASH services for all is not only about public financing: better

targeting of existing resources and innovative financing approaches involving households (as service users and taxpayers) and the private sector (incentivizing local level self-sustaining, market-driven approaches) are key factors for success.

Key element 4 - A solution suitable to the context

WASH services are sustainable in the long term only if they provide tangible economic advantages and health benefits, provided these are accepted as such by the end users and payers. The integration of the **socio-cultural context**, including traditional practices and traditionally grown rules, rights and decision-making processes of communities concerning the use and management of water as well as of sanitation systems is paramount in designing WASH interventions. Therefore, the solution chosen for services provision should be **appropriate and affordable**, i.e.:



• A **choice of technologies** which are socially acceptable, financially affordable and environmentally suitable. These should minimize administrative burden and require operation and maintenance tasks matching the local capacities of the system managers;

• A **choice of the service level** which fits the users' preferences: a weak demand for service improvement constitutes a serious threat for the sustainability of the services.

The solution should be **responsive to specific institutional and organisational contexts** (e.g. fragile states), developed after an **in-depth analysis of the situation**, flexible and adaptable to context evolution, with a strong emphasis on capacity building. Professional, user and market information combined should yield in a dialogue leading to a choice of options to be piloted and finally a fully informed choice based on the experience gathered: applying **household-centred problem solving** ensures that the choice responds to the needs and demands of the user, rather than to central planner's often ill-informed opinions about them.

Key element 5 - Organisational capacity of relevant actors

Strong and competent institutions at all levels are essential for sustained WASH services. New approaches need also new skills and newly assigned tasks have to be balanced with the required professional competence. Existing gaps in know-how, skills and capacities have therefore to be filled through adequate capacity building, institutional development and resources allocation. Indeed, poor quality of implementation threatens efforts of guaranteeing adequate and sustainable WASH services: good quality of both hardware and software; transparent procurement procedures, appropriate national standards and supervision of implementing partners and contractors are conducive features for improved sustainability. The capacities of key stakeholders should therefore be assessed and further strengthened, be it in administrational, managerial, technical and analytical aspects. Moreover, financial skills are often overlooked and need enhanced expertise, e.g. to secure financial reserves, manage accumulated funds effectively and mitigate the risks of misusing funds and devaluations.



To strengthen institutional and human capacities, clear objectives and contextual conditions based on national, participative processes involving large sectors of the society need to be established through national sector strategies and long-term human resources and institutional development plans. **Targeted training activities** (short courses, in-depth qualifying trainings), immersion (on the job, horizontal/vertical exchanges) as well as support in the provision of **specific institutional support**

mechanisms such as resource centres, business development services, financial services providers and counsel support services may have to be fostered.

Key element 6 - Ownership and commitment

A **committed leadership** is essential as the lack of such guidance can completely undermine any prospects for sustainability. Furthermore all relevant stakeholders need to be identified, actively involved, highly committed and effectively participating. At **local level**, there needs

to be a real **demand and understanding** for improved WASH services, otherwise people will not be able to overcome the behaviour change and management implications of the improved system and will return to the former (familiar) lower level of service: be it the use of contaminated water sources or to practice open defecation. At **national level, government leadership** is required in streamlining national policies, strategies and programs, creating an enabling environment, monitoring outcomes of programs and strategies, guaranteeing continuity and coordination of legal and financial frameworks, as well in providing the relevant sector information.



As politics determine budget priorities and many sectors compete for allocations in national and local government budgets, **advocacy strategies** are important for the sector to argue its case in the budget process and to retain priority at national and local levels. The case for sustainable WASH needs to be underpinned by facts on returns of investment in financially viable services. Hence, the **economic benefits need to identified, understood and valued** to act as a tool for advocacy at policy level and awareness raising at community level.

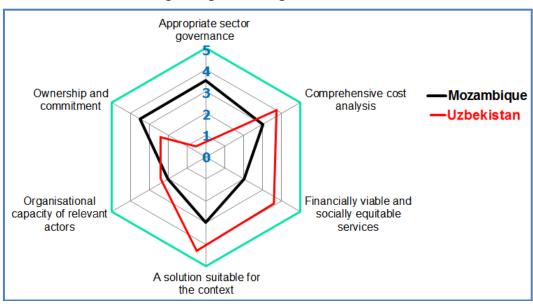
Framework application

The systematic application of the framework allows comprehensively assessing and tackling the key elements underlying financial sustainability of WASH services, i.e. **asking the right questions at the right moment and harnessing the right answers**, for a broad range of contexts, situations and purposes. Several aspects regarding the scope and boundaries of its application need therefore to be sorted out at the outset of an assessment, such as the:

- **Level of analysis:** what is the starting point and angle of view? The individual system level, the utility level, the areal (local, regional, national) level, the sector approach level or the supranational level?
- **Point in time of the analysis:** *what is the spotlight on?* Situation analysis (services delivery, stakeholder capacities, sector framework/governance), on designing strategies and interventions (needs, entry points and actions), on budgeting and execution (cost/benefits analysis, prioritisation, capacity building) or on monitoring and evaluation?
- **Projection of the analysis:** what is the assessment about? Getting a single snap-shot, an absolute comparison over time (at different stages of an endeavour) or about a relative comparison (across parallel endeavours at the same moment)?

To delve deeper into the key elements of the framework and to find answers to the questions and issues identified, **existing instruments** such as specific guidelines, best practices compilations and toolkits (signposted at the end of this document) can be selected and applied.

The **visualisation** of an assessment can be presented e.g. as **radar chart** (spider diagram), each equiangular spoke representing one of the framework's key elements as variable, and plotting the variable's value (from centre to periphery) proportionally to its maximum magnitude. A qualitative rating for typical initiatives in the drinking-water sector of Mozambique and Uzbekistan is presented below based on a provisional assessment of the six key elements of the sustainability framework developed. This type of visualisation is suited for prominently showing outliers and commonalities: individually low scoring variables would call for **particular attention to be paid to the respective key element** to improve its pertinence; distorted spider diagrams would call for a **more balanced approach** to be adopted towards the six key elements. The visualisation tool can be developed further by introducing a set of indicators and benchmarks for the grading and rating of each of the six elements assessed.



Conclusion

Against the backdrop of the WASH sector context and trends, the red thread throughout the workshop was the **shift in emphasis we need to make, from expanding the coverage of services to delivering services that are sustained into the future**. That is, safe water supply provided day in and day out; clean toilets used by all; effective treatment methods for wastewater and sludge management; and deeply ingrained hygiene habits. All stakeholders need to consider financial sustainability of WASH services as a critical mission and to re-think fundamentally their role in the sector in light of the ideas developed during the workshop. For donors this may mean moving beyond funding increases in coverage to requiring evidence of sustainability of services and behaviours from those they support. For implementing organisations this may mean revising approaches to take into account this critical concept.

The framework outlined during the workshop and described above understands itself as a contribution to this critical concept, **triggering reflection on the financial sustainability of WASH services and sparking off the required change in mindset and an eye for the future rather than the present of those having a stake in sector development. It is applicable in a broad range of WASH contexts (both drinking-water and sanitation services, at system, utility or areal level) by a large audience (practitioners, utility managers, policy makers, researchers, etc.) at situation analysis, strategy development, budgeting, implementation, monitoring & evaluation as well as lobbying/advocacy stages of sector endeavours. It links to existing instruments for assessing more in-depth the key elements of financial sustainability and for designing as well as implementing the appropriate answers.**

Selection of further instruments

Key elements of financial sustainability framework Existing tools, documents and guidelines (click on hyperlinks)	Appropriate sector governance	Comprehensive cost analysis	Financially viable & socially equitable services	A solution suitable to the context	Organisational capacity of relevant actors	Ownership and commitment
Akvopedia				X		
Blue Books (International Secretariat for Water)	X					
Burden of disease and cost-effectiveness estimates (WHO)						X
Business Platform (cewas)			X		X	
Compendium of Sanitation Systems & Technologies (Eawag)				X		
End Water Poverty						X
Human Rights to Water and Sanitation Toolkit (SDC/WaterLex)			X			X
Life-Cycle Cost Approach (LCCA)		X				
Price of Water (SDC)		X	X	X		
Results-Based Financing for Sanitation (WSP)					X	X
Series of Manuals on Drinking Water Supply (SDC/Skat)			X	X	X	
Sustainability Framework (WaterAid)					X	X
Sustainable Sanitation & Water Management Toolbox (SSWM)			X	X	X	
UN Special Rapporteur on Human Right to Water & Sanitation			X			X
WASHTech				X		
Water Integrity Network (WIN)						
Water Services That Last (Triple-S initiative)		X				
Water Supply and Sanitation Collaborative Council (WSSCC)						X

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