

Costing and financing of small-scale water and sanitation services

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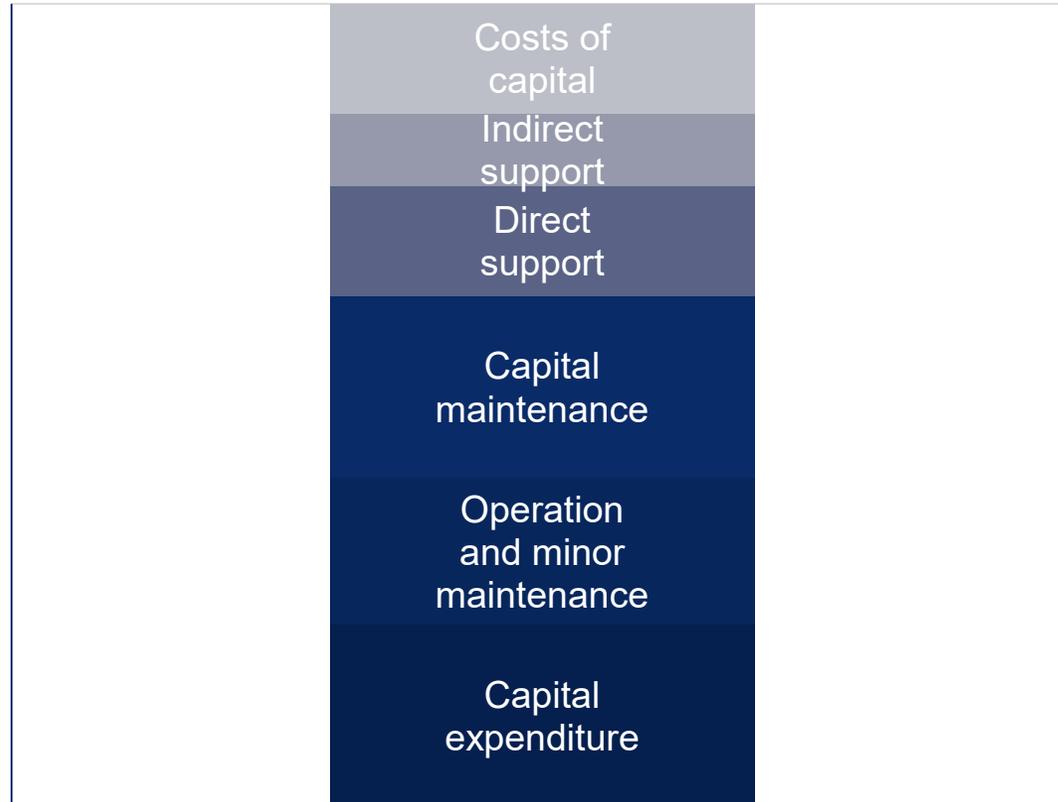


Background

- Small-scale water supply and sanitation services face a dual financial challenge
 - Unmet financial needs to cover expansion and improvement of services
 - Limited possibility to cover operation and maintenance costs
- Caused by:
 - Inherently limited economies of scale
 - Lower political and financial priority
 - Less well-developed institutional, regulatory and financial framework that governs these systems
 - Limited insight into current financial situation of such supplies, as shown in the GLAAS survey
- Framework:
 - Key concepts and terminology related to the costs and financing of small-scale drinking-water and sanitation services
 - A discussion on the challenges related to their financing
 - To identify strategies and options for addressing these challenges



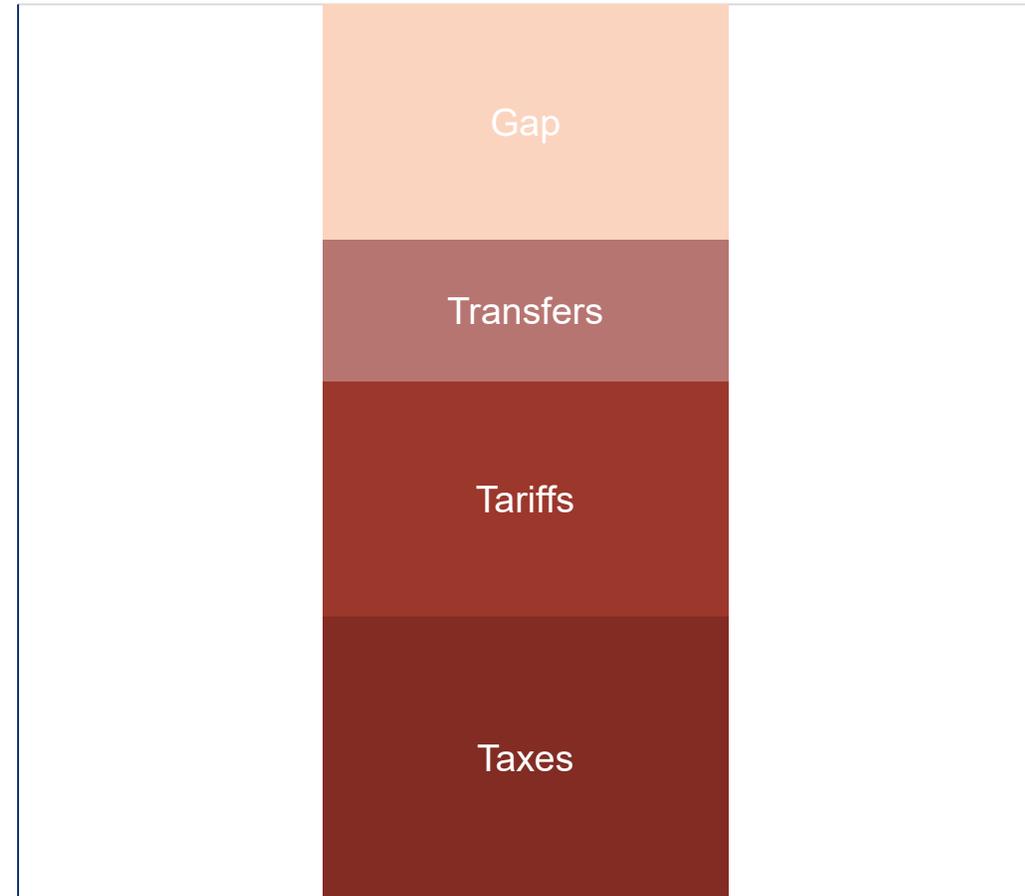
Key concepts: life-cycle costs...



Cost categories



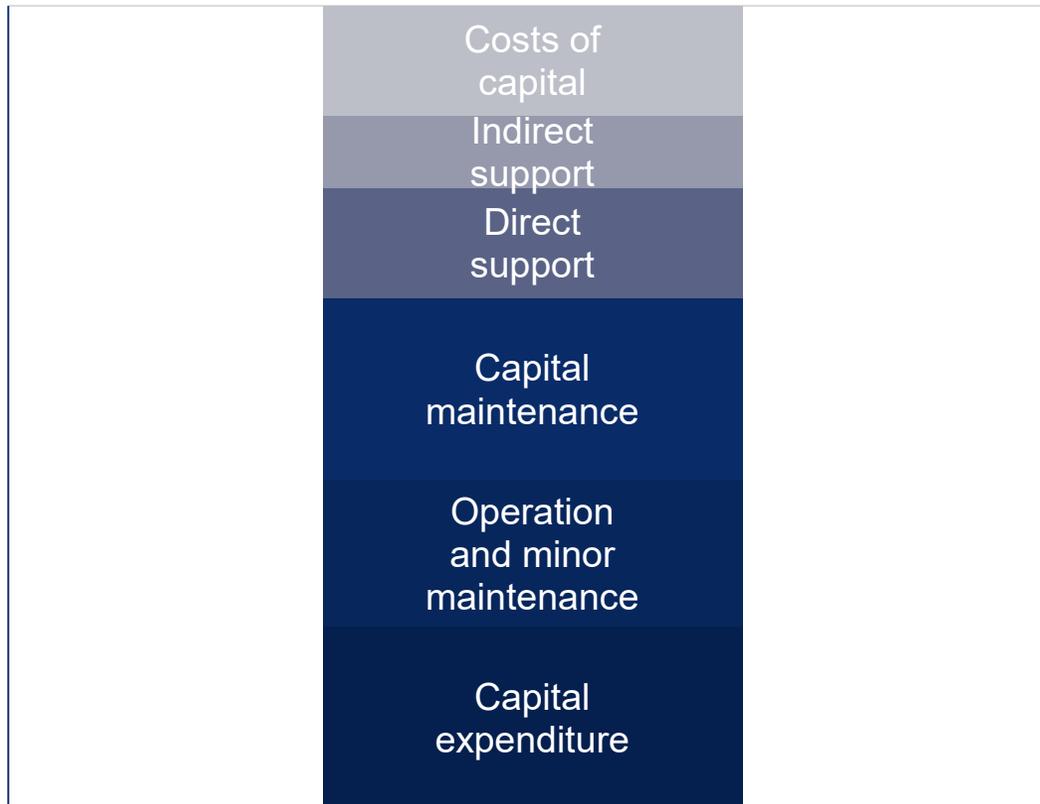
..., the 3Ts as sources of finance,...



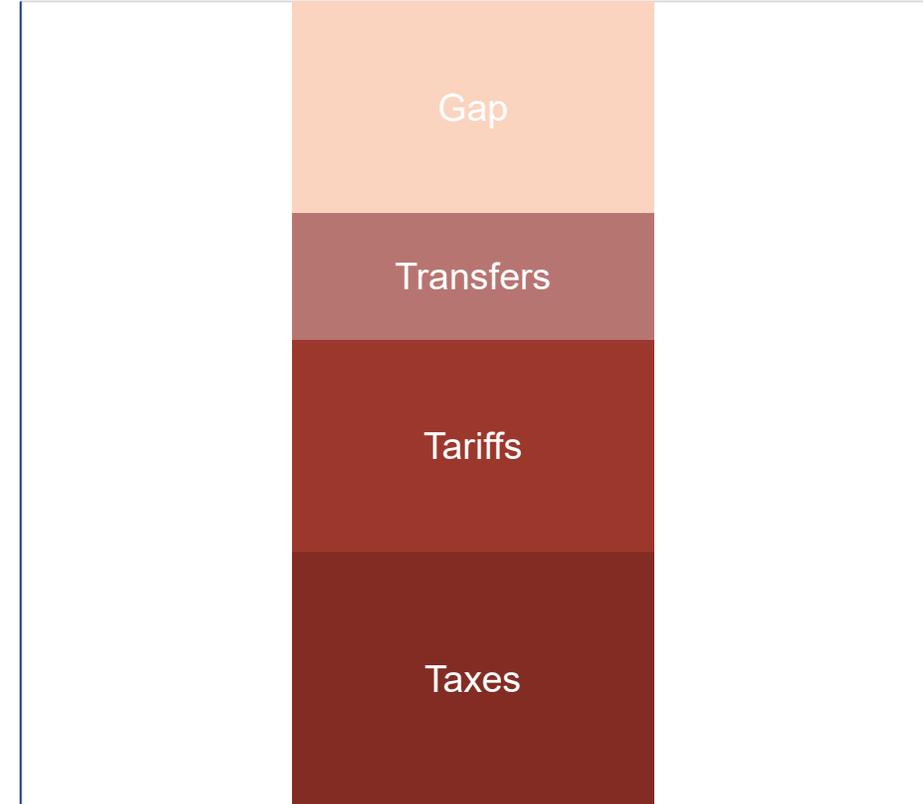
Sources of finance



...and possible gap between them



Cost categories



Sources of finance



Methods for quantifying costs and finance

- Life-cycle costs assessment: five-step approach to identifying and quantifying the various life-cycle costs for a specific area
 - Define the area as unit of analysis
 - Time-frame and periodicity of the assessment
 - Collect and compile information on each of the cost categories, each of which may require different methods
 - Add estimates of missing data, from modelling or reference costs, for expected or achieved levels of service
 - Process data into comparable units
- Assessing sources of finance
 - Define spatial and temporal units in same way as for costs
 - Define and identify the financial flows behind each of the T's, each from a number of sources
 - Quantify the financial flows, using different methods and estimation
 - TrackFin as standardised methodology for this



Strategies for reducing the gap

- Reducing the costs, whilst still reaching the same level of service
 - Efficiency improvements
 - At some point it goes at expense of service level
- Increasing one or more of the sources of finance
- Using repayable finance to fill the gap now, and pay back later
- These strategies can be applied – to different levels of extent - to each of the life-cycle cost categories



Capital investment costs

- Current sources of finance
 - Taxes: from central and local government budgets
 - Transfers: grants or concessional loans to Ministries of Finance, who pass it on to Line Ministries, or even to local governments for infrastructure development projects
 - “Tariffs”: household own investments, e.g. in toilets and wells
- Challenges:
 - Lower priority of rural areas (where small-scale systems are more common) as compared to urban areas, because of their degree of dispersion
 - Bottlenecks in the annual planning, budgeting and disbursement cycle



Capital investment costs

- Strategies to address the gap:
 - increasing the tax base for allocation to small-scale systems
 - Advocacy for larger share of tax revenue to (small-scale) water and sanitation, within given fiscal space
 - Local government level taxes
 - creating challenge funds for small-scale systems
 - Particular targeting of small-scale providers and local government
 - accessing long-term loans through aggregation and intermunicipal cooperation
 - In order to create economies of scale in accessing loans
 - using municipal development funds
 - Vehicle through which (smaller) local governments can access loans of smaller size
 - providing incentives for household investment
 - To catalyse household investment in self-supply, but under criteria of quality and safety



Operation and maintenance and capital maintenance costs

- Current sources of finance
 - Tariffs: stated preferred source of finance
 - Taxes: in reality, parts of capital maintenance, and even operation and maintenance costs come from general taxes
 - Transfers: in case of rehabilitation programmes
- Challenges:
 - Tariffs are often too low to cover capital maintenance costs
 - Low economies of scale
 - Limitation potential for cross subsidies in small service areas
 - Need for relatively large savings
 - Difficult to raises tariffs:
 - Affordability
 - Tariff regulation frameworks
 - Addressing the gap through taxes has important limitations:
 - Disincentive for efficiency and performance improvements
 - May lead to approach of ad hoc repairs and interruptions



Operation and maintenance and capital maintenance costs

- Strategies to address the gap
 - Clarifying tariff policies, legislation and regulation
 - Who needs to pay for what, mechanisms for cross-subsidy within and across service providers. Taking into account economic realities of small-scale providers
 - Increasing revenue from tariffs, within affordability parameters
 - Raising tariffs, but also billing and collection efficiency, reducing non-revenue water, legalizing non-authorized connections
 - Affordability measures, usually understood as specific tariff measures, though may also be addressed outside water and sanitation sector
- providing financial incentives linked to performance indicators;
 - Extensive guidance on performance improvement of service providers, to some extent applicable to small-scale providers
 - Link that to incentive systems
- decrease costs of capital maintenance by increasing preventive maintenance



Direct and indirect support costs

- Current source of finance
 - Taxes: main source of funding for (local) government staff who fulfil these support roles
 - Tariffs: some of the costs of support may be included in the tariff (e.g. water quality surveillance), though rare in the case of small systems
- Challenges:
 - Underfunding of these critical functions by local government, not planning and budgeting for them
 - Big differences in the extent to which this is happening in the European region



Direct and indirect support costs

- Strategies to address the gap
 - advocating increased public expenditure
 - Based on evidence of benefits of investing in direct support
 - increasing efficiency by collaboration and cooperation
 - Searching for economies of scale in direct support functions
 - increasing capacity at the local level
 - In providing support on a range of institutional and business skills



Conclusions: towards an overall finance strategy

- Many of the individual strategies are interlinked, and may reinforce each other
- Therefore need for an overall finance strategy:
 - Assessment of the current costs and sources of financing of drinking-water and sanitation services
 - Analysis of the gap
 - Identification of the specific options to reduce the financial gap
 - Sequencing and relations between the specific options, and the upfront investments required to reach them
 - Responsibilities and commitments for implementation
- Ideally, financing for small-scale systems should be an integral part of an overall WASH sector finance strategy, as it cannot be addressed separate from larger systems

