Costing and financing of small-scale water and sanitation services

Stef Smits and Catarina Fonseca
IRC

5th session
Meeting of the Parties to the Protocol on Water and Health
19-21 November | Belgrade | Serbia
Background

• Significant proportion of the pan-European population rely on small-scale water and sanitation services

• Insufficient funding remains a serious issue for countries to achieve their national WASH targets (UN-Water GLAAS, 2019)

• 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
Scope

- This document:
  - Extension and improvement of small-scale systems requires financing strategies that recognise their specific needs and challenges
  - 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
  - A broad framework to identify strategies and options for addressing these challenges
Key concepts: life-cycle costs...

Cost categories:
- Capital expenditure
- Operation and minor maintenance
- Capital maintenance
- Direct support
- Indirect support
- Costs of capital
..., the 3Ts as 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
## Overview of strategies

<table>
<thead>
<tr>
<th>Cost category</th>
<th>Current source of finance</th>
<th>Options to reduce financial gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capital expenditure</strong></td>
<td><strong>Taxes</strong></td>
<td>- Increasing the local tax base for drinking-water and sanitation</td>
</tr>
<tr>
<td></td>
<td><strong>Transfers in some countries</strong></td>
<td>- Create challenge funds for small-scale systems</td>
</tr>
<tr>
<td></td>
<td><strong>Tariffs in form of household own investments</strong></td>
<td>- Access long term loans through aggregation and inter municipal cooperation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Support by Municipal Development Funds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Incentives for household investments</td>
</tr>
<tr>
<td><strong>Operational and maintenance and capital maintenance expenditure</strong></td>
<td><strong>Tariffs ideally cover OpEx and (part of) CapManEx. Where that is insufficient, taxes are used to fill the gap</strong></td>
<td>- Clarify or update tariff policy and legislation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Increase revenue from tariffs, within affordability parameters</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Provide financial incentives linked to performance indicators</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Decrease costs by preventive maintenance</td>
</tr>
<tr>
<td><strong>Direct and indirect support cots</strong></td>
<td><strong>Mainly taxes</strong></td>
<td>- Evidence-based advocacy for increased public expenditure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Increase efficiency by collaboration and cooperation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Provide capacity building on a regular basis to district and municipal staff</td>
</tr>
</tbody>
</table>
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