Developing Water, Sanitation and Hygiene (WASH) Finance Strategies
A Guide
SEPTEMBER 2022
INTRODUCTION
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08 REFERENCES
The following experts were consulted during the process of developing this guidance document, and are thanked and acknowledged for their valuable contributions. General comments on the guidance were provided by: Bill Kingdom (Independent, United Kingdom of Great Britain and Northern Ireland), Catarina Fonseca (Consultant, IRC Water and Sanitation Centre, The Netherlands), Clarissa Brocklehurst (Independent, Canada), James Wicken (Head of Country Fund Portfolio, The Sanitation and Hygiene Fund, Geneva, Switzerland), Jorge Alvarez-Sala (WASH Specialist, UNICEF, New York, United States), Olivier Crespi Raghizzi (Task Team Leader, Water and Sanitation Division, Agence Française de Développement, Paris, France), Sam Godfrey (Regional WASH Adviser, Eastern and Southern Africa Regional Office, UNICEF, Kenya), and Sebastien Truffaut (Chief of WASH, UNICEF, Ukraine).

Specific contributions on tools and case studies were provided by: Abdi Hassan (WASH Specialist, Nairobi, Kenya, UNICEF), Betsy Engebretson (Technical Officer, UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water team, or GLAAS, Water, Sanitation, Hygiene and Health Unit, World Health Organization, or WHO, Geneva, Switzerland), Didier Allely (Consultant, WHO, Geneva, Switzerland), Djouourou Bocouni (National Water Director, Ministry of Mines, Energy and Water, Mali), Fiona Gore (Team Leader GLAAS, Water, Sanitation, Hygiene and Health Unit, WHO, Geneva, Switzerland), Jean Marie Rutaganda (WASH Specialist, UNICEF, Rwanda), Kancho Namgyal (Chief of WASH, UNICEF, Myanmar), Laurent Raspaud (Task Team Leader, Water and Sanitation Division, Agence Française de Développement, Paris, France), Marina Takane (Technical Officer, GLAAS team, Water, Sanitation, Hygiene and Health Unit, WHO, Switzerland), Mark Penate (Social Policy Officer, UNICEF, Guatemala), Murtaza Malik (Chief of WASH, UNICEF, Rwanda), Sofia Murad (Technical Officer, GLAAS team, Water, Sanitation, Hygiene and Health Unit, WHO, Switzerland) and Theingi Soe (WASH Specialist, UNICEF, Myanmar).

The guidance document benefited from the comments provided by the participants at the learning event, ‘How to prepare and implement a WASH financing strategy’ for workstream two of SWA’s systems and financing working group, which took place on 3 November 2021.

Cite this document:

ABBREVIATIONS
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>3Ts</td>
<td>Taxes, tariffs and transfers</td>
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<td>AFD</td>
<td>Agence Française de Développement</td>
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<td>AMCOW</td>
<td>African Ministers’ Council on Water</td>
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<td>CAPEX</td>
<td>Capital expenditure</td>
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<td>GLAAS</td>
<td>UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water</td>
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<td>IRC</td>
<td>IRC International Water and Sanitation Centre</td>
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<tr>
<td>NGO</td>
<td>Non-governmental organization</td>
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<td>ODA</td>
<td>Official development assistance</td>
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<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>PPWSA</td>
<td>Phnom Penh Water Supply Authority</td>
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<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
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<td>SIP</td>
<td>Sector investment plan</td>
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<td>SWA</td>
<td>Sanitation and Water for All</td>
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<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<td>VfM</td>
<td>Value for money</td>
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<td>WASH</td>
<td>Water, sanitation and hygiene</td>
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<td>WHO</td>
<td>World Health Organization</td>
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SUMMARY
ABOUT THIS DOCUMENT

A national finance strategy for water, sanitation and hygiene (WASH) is key for accelerating progress towards national and international WASH targets. In 2015, the international community committed, in the framework of the Sustainable Development Goals (SDGs), to achieve universal, equitable and affordable access to safe drinking water and adequate sanitation and hygiene by 2030. The significant increase in finance needed to achieve the SDG WASH targets is not materializing (World Health Organization, 2019). Many governments and development partners are therefore committing to support the development of national and subnational WASH finance strategies as one way to strengthen system performance, make better use of existing funding and attract new investments.

The objective of this document is to support governments and development partners in promoting and facilitating the development of WASH finance strategies. Its primary target audience are senior officials in developing and transition countries who are responsible for the development of the WASH sector (including planners in WASH-related ministries, the ministry of finance, regulators and utilities), representatives of civil society organizations, and experts from technical and financial development partners interested in supporting the development of a WASH finance strategy.

THE CONCEPT OF WASH FINANCE STRATEGY

What is a WASH finance strategy?

A WASH finance strategy is a strategic document that helps to guide WASH sector decisions to ensure the financial sustainability of the sector. A WASH finance strategy (i) assesses the WASH sector finance gap over a long planning period, (ii) identifies options to close the finance gap (by mobilizing more financial resources and by finding ways to reduce the costs of achieving the WASH sector targets) and (iii) recommends a combination of policy measures that would close the finance gap (see Figure A).

Figure A. Elements of a WASH finance strategy

1. Estimating the finance gap
   - Costing sector targets
   - Projecting financial flows

2. Assessing options to close the finance gap
   - Managing costs
   - Mobilizing additional finance

3. Recommending a policy package to close the finance gap
   - Revised sector targets
   - Policy reforms
   - Institutional reforms
A WASH finance strategy is also a process that promotes policy dialogue and facilitates consensus building. To have significant chances of being implemented, a WASH finance strategy needs to be fully owned and supported by the WASH sector and led by the government. This requires a process to discuss and agree hard policy choices. The fact that such a policy dialogue and consensus building take place may be the strongest legacy of a WASH finance strategy.

The scope of a WASH finance strategy is case-specific. The scope will need to be clearly set out at the start of the process by defining sectoral coverage, geographical coverage, temporal coverage and the acceptable range of options.

**Why develop a WASH finance strategy?**

The fundamental reason to support the development of a WASH finance strategy is to accelerate progress in achieving the WASH national targets by improving the equity, effectiveness and efficiency of WASH expenditures, and by attracting additional financial resources. As illustrated in Figure B, the development of the WASH finance strategy may generate several intermediate benefits. The extent of the benefits of a WASH finance strategy depends on its scope.

**What does it take to develop a WASH finance strategy?**

**Government leadership.** The development of a WASH finance strategy needs a champion to identify that the country is ready for developing a WASH finance strategy and to present the idea to other key actors and gather their support. The development of a WASH finance strategy would usually be led by the ministry or ministries in charge of WASH and the ministry of finance.

**Committed supporters.** Developing a WASH finance strategy is a demanding exercise. The ministry or ministries leading its development may want to approach representatives from other ministries, development partners and other stakeholders to establish an informal group of core supporters.

**Engagement of strategic stakeholders.** Strategic stakeholders are those who represent different groups and perspectives, and who need to support the conclusions of the WASH finance strategy document for it to have a significant chance to be implemented. This will usually include representatives from other ministries, agencies that play a regulatory role, associations of municipalities, large utilities, associations of utilities, private sector representatives, associations of community-development non-governmental organizations, user/consumer associations and technical and financial partners.

**A platform for policy dialogue.** The development of a WASH finance strategy needs several rounds of policy dialogue among strategic stakeholders. For this dialogue to happen, a platform where the strategic stakeholders can be represented is needed. In some countries, such a multi-stakeholder platform will be readily available – for example, the platform that houses the joint sector review mechanism. When this is not the case, it will need to be created, at least on an ad hoc basis.

**Time and money.** The time needed to develop a WASH finance strategy will vary according to its scope and the country context. Once a concept note has been developed and agreed, the development of a WASH finance strategy is likely to take between 9 and 18 months. The cost of developing a WASH finance strategy will vary depending on its objectives and methodology, but it is likely to be upwards of US$150,000.

**When to develop a WASH finance strategy**

Windows of opportunity that may favour the initiation of a WASH finance strategy include: (i) a change of leadership in the ministry or ministries in charge of WASH, (ii) the development of a significant piece of national or WASH sector planning (such as a national development plan, a WASH sector strategy or a WASH sector investment plan), (iii) the introduction of significant reforms in the national budget planning process, (iv) the launching of a sector-wide governance platform or a development partner coordination process, and (v) when the sector is seeking (large) new injections of finance.
If a country is not ready for a full WASH finance strategy, it is worth considering: (i) a phased approach, whereby a rapid WASH finance strategy would be developed in a first phase to promote the concept of a WASH finance strategy and demonstrate its potential, or (ii) a modular approach, whereby the promoters of the WASH finance strategy pick one or several of the analytical elements or WASH sub-sectors of a WASH finance strategy.

THE WASH FINANCE STRATEGY DOCUMENT

The WASH finance strategy document will cover the following four areas.

Objectives and context of the WASH finance strategy. This section will present: (i) the rationale, objectives and scope of the WASH finance strategy, (ii) the WASH governance, policy and finance context, including any gaps and (iii) an up-to-date overview of sector performance.

The WASH finance gap. This section will provide a solid estimate of the finance gap that needs to be closed to achieve WASH sector goals and targets. Estimating the finance gap has three steps: (i) estimating the cost of achieving the WASH targets, (ii) projecting the likely sector revenues under a business-as-usual scenario (i.e., considering the long-term impacts of current sector policies and sector financing trends) and (iii), comparing projected sector costs with projected sector revenues. It is important to understand that ‘finance gap’ is a policy concept rather than a technical one, in the sense that the size of the finance gap depends on policy definitions and decisions.

Closing the WASH finance gap. This section will present options to close the finance gap and quantify their potential impacts. First, it will discuss options to reduce the cost of achieving WASH sector targets by a combination of improving the efficiency of WASH expenditures and reducing the ambition of WASH targets – whether in terms of service levels and/or timelines. Second, it will discuss options to increase financial resources to pay for WASH expenditures by (i) increasing user contributions, (ii) increasing allocations from public budgets, (iii) increasing grants from development partners and philanthropy and (iv) increasing the use of repayable finance (through mechanisms such as loans, bonds and equity investments). It must be noted that the use of repayable finance helps to spend now and pay later, but this it will increase future costs (debt repayment).

Recommended policy package and implementation arrangements. A WASH finance strategy document will conclude by presenting a combination of policy actions that, together as a package, aim to ensure the financial sustainability of the WASH sector. The recommended policy package in one country may vary significantly from those recommended in other countries. This section will also discuss implementation issues and present an implementation road map, including how the implementation of the WASH finance strategy will be monitored.

Figure C. Phases of the WASH finance strategy process
ABOUT THIS DOCUMENT
Background and rationale

In 2015, the international community committed, in the framework of the Sustainable Development Goals (SDGs), to achieve universal, equitable and affordable access to safe drinking water and adequate sanitation and hygiene (WASH) by 2030. By 2020, 2 billion people still lacked access to safely managed drinking water, 3.6 billion people lacked access to safely managed sanitation, and 2.3 billion people lacked access to basic hygiene (World Health Organization and UNICEF, 2021). Overall spending on WASH needs to triple or quadruple from the pre-SDG period to meet the SDG WASH targets in households (Hutton and Varughese, 2016), and further spending is required for WASH in institutions and public places. But the significant increase in finance needed is not happening to achieve the more ambitious SDG WASH targets set in 2015 (World Health Organization, 2019). Indeed, the COVID-19 pandemic has set the sector back in several ways, in many cases diverting funds from WASH capital projects, and has negatively affected household spending on WASH (Giné, Delepiere and Jiménez, 2020).

Achieving international and national WASH targets will require stronger WASH system performance. This will be dependent on sustained improvements in sector governance, policies, regulation, finance, project design and implementation, water and sanitation system operation and maintenance, and community engagement.

The Sanitation and Water for All (SWA) partnership has committed to support the development of national and subnational WASH finance strategies as one way to strengthen system performance, make better use of existing funding and attract new investments. The development of WASH finance strategies is a practical approach to implement the recommendations of SWA’s Handbook for finance ministers (SWA, 2020), and contributes to the implementation of integrated national financing frameworks (United Nations and European Union, 2022). WASH finance strategies are recognized as a crucial element to get the foundations of WASH finance right (Pories, Fonseca and Delmon, 2019) and their development is advocated by the World Bank as the first step of its proposed financing path to break out of the unsustainable status quo to meet the SDG (Kolker et al., 2016).

The concept of WASH finance strategies is not new. Since the late 1990s, the Organisation for Economic Co-operation and Development (OECD) has supported the development of WASH finance strategies in several countries of eastern Europe, Caucasus and Central Asia using its FEASIBLE tool (OECD, 2003). The Water and Sanitation Programme of the World Bank did similar work in several African countries in the 2000s using the Sector Wide Investment and Financing Tool (SWIFT) (Virjee, 2007). In 2009, the OECD developed related guidance for the members of its Development Assistance Committee (OECD, 2009).

Given this backdrop of agency initiatives to develop finance strategies in low- and middle-income countries, most of them quite dated, it is timely to release a guidance document to help both to reinvigorate discussions about WASH finance strategies and to support their development. It has been 20 years since the Camdessus report highlighted the importance of improving sector finance (Winpenny, 2003), but this remains an area where comparatively little progress has been made. In the last decade, there has been a strong uptake of some strategic concepts related to WASH finance – such as the 3Ts (tariffs, taxes and transfers) as ultimate sources of funding, and the six components of life-cycle cost – which increases the financial literacy of WASH experts to engage with strategic financial matters. But, despite some recent examples, relatively few WASH finance strategies have been developed since the SDGs were endorsed.

Objective, approach and target audience

The objective of this document is to support governments and WASH sector experts in promoting and facilitating the development of WASH finance strategies. This document reflect the view that there are some foundational issues that are common to WASH finance strategies. It also reflects the view there is no one-size-fits-all approach to the development of these finance strategies. Accordingly, it does not present a hard guideline, but rather presents the reader with different options.

The primary target audience of this document are senior officials in developing and transition countries who are responsible for the development of the WASH sector (including planners in WASH-related ministries, ministries of finance, regulators and utilities), representatives of civil society organizations, and experts from technical and financial development partners interested in supporting the development of a WASH finance strategy.

How to use this document

This document is divided into three parts.

- Part I presents the concept of a WASH finance strategy. It discusses what a WASH finance strategy is – both as a document and as a process – why develop it, what is required to develop it and when to develop it.
- Part II discusses the process of developing a WASH finance strategy. It describes the initial phase of conceptual development and preparatory work, the middle phase of analytical work and policy dialogue, and the final phase of supporting implementation.
- Part III discusses the contents that would be included in a WASH finance strategy document. It identifies four sections: (i) objectives and context, (ii) the finance gap, (iii) closing the finance gap, and (iv) recommended policy package and implementation arrangements.

Some ideas are repeated across the three parts so that each part can be read independently.

Part I is essential reading for high-level government officials responsible for WASH sector development. It will help them to

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1 WASH finance strategies are sometimes known by other names. The OECD and the World Bank, for example, have used the term strategic financial plans and the African Ministers’ Council on Water (AMCOW) refers to funding strategies (AMCOW, 2021).
decide whether it is a good idea to embark on the process of developing a WASH finance strategy. Part I will also be useful for development partners interested in strengthening WASH sector systems and will help them decide whether to support the development of a WASH finance strategy.

Part II is essential reading for government officials tasked with managing the development of a WASH finance strategy (and any partners supporting them). It will help them to draft the concept note for the development of a WASH finance strategy.

Part III is essential reading for government officials tasked with managing the development strategy. It will help them to develop the terms of reference for the team of analysts – whether in-house or external – who will produce the underlying analysis and draft the WASH finance strategy.

Key terms

WASH finance strategy. A strategic document, developed under government leadership in consultation with relevant WASH sector stakeholders, that aims to ensure the financial sustainability of the WASH sector. A WASH finance strategy would usually (i) assess the WASH sector finance gap over a long planning period, (ii) identify options to close the finance gap (by mobilizing more financial resources from the 3Ts and repayable sources of finance, as well as by finding ways to reduce the life-cycle costs of achieving the WASH sector targets) and (iii) recommend a combination of policy measures that would close the finance gap – including how the financial resources from the different sources would be strategically used to ensure that all the life-cycle costs are adequately funded.

Finance gap. Difference between the estimated life-cycle costs of reaching the current WASH sector targets and the estimated financial resources that can be expected to be allocated to the sector (from different funding sources) under a business-as-usual scenario over the planning period covered by the WASH finance strategy. A business-as-usual scenario would include the future effects of current policies. A finance gap may also be referred to as a funding gap.

WASH sector targets. The SDGs have set global targets for the WASH sector, but individual countries (or subnational entities) may have set targets for the WASH sector that differ from the SDGs – they may be more ambitious or more modest (in terms of service levels or timelines). Achieving WASH sector targets requires expenditures to cover all the costs required to deliver a service and not only to build infrastructure. See life-cycle costs.

Life-cycle costs are the costs of delivering an adequate service to a specific population in a determined geographical area – not just for a few years but over the full lifetime of the infrastructure, and beyond. All costs from construction and installation to maintenance, repairs and eventual replacement are considered, including the financial costs of debt repayment, at household, service provider and national government levels. Life-cycle costs also include costs for source protection, training and capacity development, planning and institutional pro-poor support.

Funding sources – the 3Ts. There are only three funding sources for the WASH sector, the so-called 3Ts (tariffs, taxes and transfers). Eventually, all life-cycle costs will need to be funded by a combination of the 3Ts. Repayable finance can help to ‘spend now and pay later’, but those later payments will have to be funded by the 3Ts.

• Tariffs are user contributions, whether made through water and sanitation bills (which are a function of the tariffs set by the service provider) or through self-supply.

• Taxes are allocations from national and subnational public budgets, which are effectively funded by citizen contributions through the general taxes they pay (such as income tax, value added tax or land tax). This category would also include budgetary allocations funded by a development cooperation through general budget support mechanisms.

• Transfers are financial resources transferred to the WASH sector by external agents (such as foreign governments, global funds, foundations and private corporations) through grants that do not require repayment (sometimes embedded in concessional loans). They include, for example, bilateral development assistance earmarked for the WASH sector, grants from vertical funds (such as the Green Climate Fund or the Sanitation and Hygiene Fund), grants from local or international charities and foundations, or grants from private corporations often delivered through their corporate social responsibility programmes.

Repayable finance is financial resources provided to the WASH sector by financial sector actors (development banks, commercial banks, equity investors) that will eventually need to be repaid through the 3Ts. Repayable finance is channelled through financing mechanisms such as loans, bonds and equity investments.

• A local or international development bank may provide a loan to the government, WASH asset owner or WASH service provider – the borrower will then need to pay interest to the lender throughout the life of the loan and repay the principal (amount loaned) according to the loan agreement.

• Fixed-income investors may buy bonds issued by governments, WASH asset owners or WASH service providers – bond issuers will then have to pay interest (coupon payments) and repay the amount of the bond at the end of its term.

• An equity investor may provide financial resources to a WASH sector company in exchange for a share of its ownership – the company will have to pay the investor dividends with part of its revenues.

Policy package. A combination of policy recommendations or decisions. A WASH finance strategy aims to define a package of policy recommendations such that the combined impact of the policy recommendations will close the finance gap.
PART I.

THE CONCEPT OF A WASH FINANCE STRATEGY

Part I discusses what a WASH finance strategy is (both as a document and as a process), why develop it, what is required to develop it and when to develop it.

Part I is essential reading for high-level government officials responsible for WASH sector development. It will help them to decide whether it is a good idea to embark on the process of developing a WASH finance strategy. Part I will also be useful for development partners interested in strengthening WASH sector systems and will help them to decide whether to support the development of a WASH finance strategy.
1. What is a WASH finance strategy?

A strategic document that helps to guide WASH sector decisions to ensure the sector’s financial sustainability

A WASH finance strategy is a strategic document that sets out a path to close the finance gap in the WASH sector. It usually discusses what is to be funded and by whom, which funding sources and financing mechanisms will be used and how funding will be coordinated. To do so, it provides a long-term view of the likely evolution of the costs and revenues of the WASH sector under different scenarios, and explores ways – on both the cost-control side and the revenue-raising side – to close the finance gap and ensure the financial sustainability of the WASH sector (see Figure 1).

A WASH finance strategy is a key component of the suite of strategic documents that guide the development of the WASH sector – such as the WASH sector policies, the sector strategies and the sector investment plans. Throughout its development, a WASH finance strategy should be in a two-way relationship with those other strategic documents. For example, a WASH finance strategy would take as some of its starting points the WASH access targets defined in them, the budgetary allocations to the WASH sector presented in the national budget, or the financial requirements derived from the WASH sector investment plan. But it would also seek to influence them: questioning WASH sector policies, WASH sector targets, the size and structure of the budgetary allocation to the WASH sector, or the sequencing of the investment projects included in the WASH sector investment plan.

A WASH finance strategy is related to, but differs from, the other sector documents. An investment case draws on various analyses (e.g., cost-benefit, value for money) and arguments (human rights, health impacts) to advance the case for more spending on WASH – see Klawitter and Hutton (2019) for information on how to develop an investment case for WASH.

A sector investment plan estimates the cost of achieving sector targets and guides how financial resources will be spent to achieve them. While sector investment plans usually focus on capital expenditures, some may also consider operational and maintenance expenditures. Not all sector investment plans provide the same level of detail: some stay at a more strategic level while others list specific projects.

A resource mobilization strategy guides how financial resources will be generated to achieve sector targets. Resource mobilization strategies take the funding targets as a given and then try to identify funding sources and financing mechanisms to achieve them. They may provide additional detail regarding the implementation of financing mechanisms.

A WASH finance strategy estimates the gap between the funding targets and the available financial resources and guides how this finance gap will be closed. While finance strategies look at both the sector expenditure and the sector revenue sides, they usually provide less detail than investment plans (e.g., regarding projects) and resource mobilization strategies (e.g., regarding financing mechanisms). They question the funding targets and prompt discussions about how sector policies could be better implemented or reformed to help to close the finance gap, including by looking at increasing efficiency and reducing costs.

A process that promotes policy dialogue and facilitates consensus building

The highest value of a WASH finance strategy often derives from the process of developing it. Getting to the point where a WASH finance strategy is recognized as a necessary part of the WASH sector planning system is already a considerable achievement.

A WASH finance strategy would normally be developed under the leadership of the ministry or ministries in charge of WASH, and the ministry of finance. It would involve major sector actors – from the public sector (including national and subnational governments and agencies), the private sector, civil society and development partners. In countries where a sector-wide platform for discussing WASH sector performance is well estab-

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2 Due to the nature of the WASH sector, the strategic documents may refer to sub-sectors – such as a sanitation policy, or a rural water supply and sanitation investment plan.
lished, the process of developing a WASH finance strategy will help to bring to the table and openly discuss contentious issues, such as tariff reform, sub-sectoral and geographical budget allocations, or the role of the private sector in providing repayable finance. These discussions would be supported by an analytical framework that clarifies trade-offs and highlights available evidence. In countries where such a sector-wide platform is not well established, a WASH finance strategy would in addition help to create or develop such a platform.

A WASH finance strategy is not a technical document to be drafted by analysts and validated by a single workshop. Analysts (whether in-house analysts or external consultants) may need to be engaged to support the gathering of data, model the evolution of key variables under different assumptions, write draft reports and make presentations. But to have significant chances of being implemented, a WASH finance strategy needs to be fully owned and supported by the WASH sector and led by government. This requires a process to discuss and agree hard policy choices. The fact that such policy dialogue and consensus building take place may be the strongest legacy of a WASH Financing Strategy.

**Scope of a WASH finance strategy**

The scope of a WASH finance strategy will be case-specific. Box 1 describes the example of Kenya. The scope will need to be clearly set out at the start of the process (see Section 1.3), possibly reflected in a WASH finance strategy concept note. This requires defining the following.

- **Sectoral coverage.** A WASH finance strategy would ideally cover the whole of the WASH sector. But it could also focus on a particular sub-sector, such as rural sanitation – since a sub-sector WASH finance strategy is better than none at all. The WASH finance strategy concept note would clarify whether the WASH finance strategy will cover only household WASH or also institutional WASH (access in educational, health and prison facilities, public places, workplaces). It would clarify whether it includes or excludes hygiene, or WASH in emergencies and, if so, which dimensions (emergency preparedness, short-term response to emergencies, rebuilding after emergencies).

- **Geographical coverage.** A WASH finance strategy would usually cover a whole country. But it could also be focused on a subnational entity, such as a province or a metropolitan area.

- **Temporal coverage.** A WASH finance strategy would usually cover a long-term period, such as 15 years. The time frame could be shorter or longer to align it with those of other strategic planning processes – such as a 10-year WASH sector plan or a 20-year national long-term development strategy. In any case, a WASH finance strategy is not a ‘fire and forget’ tool. To facilitate monitoring, evaluation and course correction, the WASH finance strategy could be divided into different phases (e.g., five-year periods) with specific intermediate objectives. Ideally, the implementation of the WASH finance strategy would be reviewed once a year, as part of a process of sector management.

- **Acceptable range of options.** There is a large range of options that could be considered to close the finance gap. This includes both increasing efficiencies (reducing costs) and raising spending from one of the 3Ts or repayable financing. Types of service levels could be discussed here. If at the outset, some of those options are already considered unfeasible for technical, policy or political reasons, this should be noted in the WASH finance strategy concept note (for example, increasing private sector participation or increasing tariffs above certain levels).

The scope of a WASH finance strategy would normally include the topics listed below. Depending on the availability of previous analyses, in some countries, a WASH finance strategy would need to summarize only the findings of available sector strategic documents, such as costings from a WASH sector investment plan, or sector analyses, such as financial flows from existing WASH accounts (see Box 11).

- **WASH sector targets and context**
  - Identifying WASH national targets (from existing strategic documents such as the national WASH sector plan)
  - Identifying WASH-related climate mitigation and adaptation targets in the Nationally Determined Contributions
  - Describing the WASH governance, policy and financing context (including issues around decentralization)
  - Assessing bottlenecks that might be preventing additional funding in the sector
- **WASH sector costs, revenues and finance gap**
  - Estimating the cost of achieving WASH national targets (according to the national WASH sector plan/programme, if it exists)
  - Assessing financial flows to the WASH sector from all sources (including household expenditures in self-supply and bottled/sachet water) under the current spending situation in the sector
  - Assessing potential projections on future financing/commitments to the sector
  - Calculating the WASH finance gap (for different sub-sectors)
- **Options to close the finance gap in the WASH sector**
  - Identifying options to reduce the cost of achieving WASH national targets, including current costs of providing services (by increasing efficiencies and reformulating the targets) and estimating the impact of their implementation on the WASH finance gap
  - Identifying options to increase financial flows to the WASH sector (from user contributions, public budgets, and development cooperation and other transfers, as well as...
Box 1. Scope of Kenya’s first Water Sector finance strategy

Kenya developed its first Water Sector finance strategy in 2015, as part of the process of developing its water sector investment programme (SIP). The water SIP covers not only water services and sanitation but also irrigation and water resources management and development, with a time frame of 15 years (2014/2015 to 2029/2030) and a national geographical scope. The framework for the Kenya water SIP proposed an eight-point sector finance strategy building on current best practice and informed by the Organisation for Economic Co-operation and Development (OECD) approach to strategic financial planning (see Figure 2). The concept of Kenya’s first Water Sector finance strategy was based on actively managing the finance gap (number 1 in the graphic), through a dual strategy of reducing sector costs (2) and increasing revenues made up of tariffs (3), taxes (4) and transfers (5) from development partners. At the same time and in the long term, there would still be a need to attract repayable finance (6), especially for large, economically attractive projects. The rapid increase in implementation and sector efficiency will need to be accompanied by measures to increase capacity (7) and facilitate the creation of public-private partnerships (8). In August 2021, Kenya started the process of developing a new Water Sector finance strategy.

Figure 2. Eight-point sector finance strategy adopted in Kenya

• Recommendations to close the finance gap in the WASH sector
  ○ Identifying a recommended policy package that would combine options on the cost and revenue sides to close the WASH finance gap
  ○ Identifying incentives and other mechanisms to support the implementation of the WASH finance strategy
  ○ Identifying indicators and mechanisms to monitor and assess the implementation of the WASH finance strategy

2. Why develop a WASH finance strategy?

The fundamental reason to support the development of a WASH finance strategy is to accelerate progress in achieving the WASH national targets by improving the equity, effectiveness and efficiency of WASH expenditures and by attracting additional financial resources. Specific reasons may vary across countries – Box 2 describes why there is a growing interest in WASH finance strategies in eastern and southern Africa.

As illustrated in Figure 3, the development of the WASH finance strategy may generate several intermediate benefits. The extent of the benefits depends on its scope.

Figure 3. Benefits of developing a WASH finance strategy

- **Improved WASH sector governance:**
  - Increased capacity of the ministry or ministries in charge of WASH to lead and coordinate the sector
  - Stronger engagement of the relevant stakeholders in WASH sector development and financial sustainability. For example, in Rwanda, it has led to the creation of a WASH finance working group (under the overall WASH sector working group) and, in Mali, the government initiated a high-level dialogue in October 2021, which involved the ministries in charge of water and sanitation, the ministry of finance, partners (donors and non-governmental organizations, or NGOs) and civil society
  - Stronger relationships and coordination between strategic stakeholders. This includes in particular the ministries of finance and planning as well as local governments

- **Improved quality of WASH policies and expenditures:**
  - Identification of priorities for improving the equity, effectiveness and/or efficiency of WASH expenditures, and supporting capacity development and institutional reforms
  - Development of a consensus among key sector actors of how to put the WASH sector on a sustainable path, including difficult policy choices, such as tariff reform or allocation of public WASH expenditures across sub-sectors and subnational units

- **Strengthened credibility of the WASH sector with the ministry of finance, thus supporting increases in the allocation of financial resources to the WASH sector:**
  - Improved financial realism of WASH policy objectives, policies, plans and programmes
  - Increased quality of WASH sector submissions to the annual budget process (and to the multi-annual budget process in those countries that have it)

- **Improved delivery and management of development partners’ support:**
  - Stronger alignment of development partners’ support to national WASH priorities
  - Improved coordination of financing from external sources

- **Strengthened credibility with the sources of repayable finance, thus supporting access to loans and other financing:**
  - Stronger project financing proposals
  - Enhanced creditworthiness of WASH service providers
Box 2. Why we need WASH finance strategies – the case of eastern and southern Africa

A regional review of the state of WASH finance in eastern and southern Africa has highlighted that many strategic plans calculate the finance gaps in the sector as the difference between current spending by governments and aspirational plans. Despite the existence of project preparation facilities, many of the projects found in national infrastructure plans are not sufficiently developed, neither for uptake by available project preparation funds nor for engagement with private sector financiers. In many cases, financial modelling is not integrated into the planning process from the start, and thus a project may be well developed before it is judged not to be financially viable.

As of late 2021, the region has been witnessing a growing interest in developing WASH finance strategies – with exercises being launched in Kenya, Malawi, Rwanda and Zimbabwe. In the case of Rwanda, the WASH sector has experienced a decrease in development partner support, as funds have been reallocated to respond to the COVID-19 pandemic. However, concerns about decreasing development partner support are not new, and go back to 2017–2018. This concern prompted the government to organize a workshop in 2018, where the idea of developing a WASH finance strategy was first discussed.

3. What does it take to develop a WASH finance strategy?

Figure 4 illustrates the different elements needed to develop a WASH finance strategy. This section briefly describes each.

Government leadership

To start with, the development of a WASH finance strategy needs a champion to identify that the country is ready for developing a WASH finance strategy, and to present the idea to other key actors and gather their support. The champion could be a government official (or former one) recognized within the sector. This could also be joint championing, such as between the government and one or more development partners.

The development of a WASH finance strategy would usually be led by the ministry or ministries in charge of WASH, and the ministry of finance. The ministry or ministries in charge of WASH, and in particular its planning and policy units, may recognize early on the benefits of developing a WASH finance strategy and naturally adopt their leadership role. They may need to do some upfront advocacy work with their colleagues in the ministry of finance to ensure it also takes a leadership role, despite WASH being only part of their portfolio.

Committed supporters

Developing a WASH finance strategy is a demanding exercise. The champion may want to approach a few representatives from other ministries, development partners and other stakeholders to establish an informal group of core supporters. These core supporters would then need to commit their time and influence to support the development of a concept (possibly reflected in a concept note), and to secure the financial resources for the development of the WASH finance strategy.

Once it has been ensured that a WASH finance strategy will be developed, it would be useful to establish a technical committee that would facilitate the process of developing the WASH finance strategy, possibly (but not exclusively) drawing on the core supporters.

Figure 4. Elements needed to develop a WASH finance strategy

Sources: Jones, Mansour and Burr (2019); UNICEF Rwanda Country Office staff.
Engagement of strategic stakeholders

The development of a WASH finance strategy combines elements of the planning process and policy discussions in a sector that involves many stakeholders. It will not be possible to have all stakeholders involved in the development of the WASH finance strategy, but it is important to ensure that a broad enough selection of stakeholders is engaged. Once a first draft of the WASH finance strategy has been developed, it would be possible to allow for a public review or comment period to garner broader stakeholder participation.

Strategic stakeholders are those who represent different groups and perspectives, and who need to support the conclusions of the WASH finance strategy document for it to have a significant chance to be implemented. Depending on the landscape of the sector in the specific country (or relevant subnational unit), this will usually include representatives from the following constituents: other ministries (e.g., local government, rural development, interior, health, education), agencies that play a regulatory role (e.g., price, quality, environmental), associations of municipalities, large utilities, associations of utilities, private sector (large users, service providers, financiers), association of community-development NGOs, users/consumer associations, and technical and financial partners. If nominated representatives exist, the Sanitation and Water for All (SWA) partnership focal points for key constituencies could be approached, such as from civil society organizations, utilities and regulators, the private sector, research and learning, and external support agencies (often referred to as development partners). It is often useful to formalize the group of strategic stakeholders – sometimes this is done under the term steering committee.

The engagement of strategic stakeholders is needed for at least three reasons: (i) ensuring a solid knowledge base for the development of the WASH finance strategy, (ii) ensuring that different perspectives are considered in the policy discussions and (iii) building a coalition that will support the recommendations of the WASH finance strategy document.

A platform for policy dialogue

The development of a WASH finance strategy requires the development of a baseline, the identification and discussion of possible policy options to close the finance gap (both on the revenue side and the expenditure side), and the identification of a recommended policy package. This, in turn, usually needs several rounds of policy dialogue among strategic stakeholders. For this dialogue to happen, a platform where the strategic stakeholders can be represented is needed. In some countries, such a multi-stakeholder platform will be readily available – for example, the platform that houses the joint sector review. When this is not the case, it will need to be created, at least on an ad hoc basis. It may be possible to build this platform on multi-stakeholder groups recently assembled to support other processes – such as SWA processes or consultations around sector data.

Time and money

The time needed to develop a WASH finance strategy will vary according to:

- Country context: How long may it take from initial idea to approved concept? How long may it take to secure the financial resources for the exercise? Is there a readily available platform for multi-stakeholder dialogue? How easy will it be to convene meetings of the steering committee?

- Scope of the WASH finance strategy and available data: Is it a national or subnational exercise? Is it limited to one WASH sub-sector? Is there a recent sector investment plan? Are there sector costing already available (such as an SDG 6 costing, a costing of a five-year plan or a costing of a specific sub-sector strategy)? Is spending tracked and reported through a formal exercise (e.g., public expenditure review, WASH accounts)? Has a note been produced describing the budget process and analysing budget data? Is there a clear picture of the financing landscape?

Once a concept has been developed and agreed by the government, and the financial resources have been secured for the exercise, the development of a WASH finance strategy is likely to take between 9 and 18 months. The two main drivers are (i) the development of the baseline, which is the most data-intensive phase of the analytical work, and (ii) the dynamics of the steering committee (multi-stakeholder platform) – the number of meetings needed to discuss the WASH finance strategy document, engaging with all stakeholders, and the time allowed between meetings (which is a function of the degree of formality of the committee).

The cost of developing a WASH finance strategy will vary depending on its objectives and methodology. Costs include the staff costs of technical committee members (usually funded by each member), activity costs (if specific activities need to be conducted to collect data for the baseline), analysts’ costs and meeting costs. Analysts’ costs will also depend on whether there is sufficient local expertise to support the strategy’s development or whether international consultants need to be mobilized. To provide a reference point, the full costs of developing a WASH finance strategy are likely to be upward of US$150,000.

The cost of developing a WASH finance strategy should be considered in relation to the benefits that it will bring about.
4. When to develop a WASH finance strategy

Figure 5 shows five windows of opportunity to launch the development of a WASH finance strategy.

As discussed in section I.2, the development of a WASH finance strategy is likely to deliver significant benefits for countries at practically any stage of WASH sector development.

The windows of opportunity that may favour the initiation of a WASH finance strategy include:

- When there is a change of leadership in the ministry or ministries in charge of WASH and the new leadership is looking for new approaches to improve sector performance
- When a significant piece of national or WASH sector planning (such as a national development plan, a WASH sector strategy or a WASH sector investment plan) is about to be developed or significantly revised
- When a country is in the process of introducing significant reforms in the budget planning process, in particular when introducing a medium-term expenditure framework
- When a country launches or reactivates its sector-wide governance platform or its development partner coordination processes – such as a joint sector review
- When the sector is seeking (large) new injections of funding and financing (e.g., as a response to an emergency that creates a window of political opportunity), thus requiring evidence and advocacy to make the funding case

Recent experience suggests that countries may become ready for the development of a WASH finance strategy when a more focused piece of analytical work such as a WASH public expenditure review has previously shown the potential of financial analysis to provide a better picture of the WASH sector. For example, Rwanda decided to develop a WASH finance strategy after having developed a WASH budget brief, and Myanmar developed an interest after doing analytical work to cost the WASH national targets (see Box 3).

Sometimes, countries are not ready for a full WASH finance strategy. The level of ambition of the WASH finance strategy will depend on the following.

- Level of government engagement:
  - Level of engagement of the ministry or ministries in charge of WASH
  - Level of engagement of the ministry of finance
- Availability of supporting information:
  - Have relevant analyses (e.g., WASH public expenditure review, WASH accounts, WASH budget brief) already been carried out?
  - Have the WASH policy objectives been costed?
  - Has a WASH sector investment plan or programme been developed?

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Figure 5. Windows of opportunity to launch the development of a WASH finance strategy

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3 Since 2010, WASH budget briefs have been developed in 15 countries of eastern and southern Africa region with the support of UNICEF.
Box 3. Building on the WASH sector investment plan – the example of Myanmar

Between 2015 and 2017, Myanmar developed a national strategy and a national investment plan for rural WASH, which included WASH in schools and health-care facilities. The investment plan was not a collection of investment projects; rather, it used a World Bank tool to estimate the funding requirements for both recurrent expenditure and capital expenditure. The attempted national investment plan highlighted that the budget of the Department for Rural Development for water supply investments (which includes most development partners’ contributions) represents only 17 per cent of the capital expenditure needs, and estimated the finance gap for capital expenditure on sanitation to be US$98 million per year across 2017–2023 and $24 million per year across 2024–2030. The national strategy identifies in its financing chapter 35 actions to increase revenues. The national investment plan briefly discusses sector finance strategy, highlighting the need for advocacy efforts to attract more funding for capital expenditures from public budgets and donors, assuming households will pay for recurrent expenditures, and noting the need to ensure affordability.

The leadership of the Department for Rural Development recognized that the figures in the investment plan were not realistic and that additional work was needed to better estimate the finance gap and formulate a more solid plan to close it. Following a WASH finance workshop in January 2020, a budget brief was developed and preparatory work was done on an assessment of the rural WASH finance strategy in Myanmar. Since the costing had been done as part of the investment plan, the draft terms of reference for the rural WASH finance strategy focused on the state of WASH financing. Political developments in the country in February 2021 put further efforts on hold.

Sources: Government of Myanmar (2016a, 2016b); UNICEF Myanmar Country Office staff.

- Maturity of WASH governance arrangements:
  - Is there a single ministry in charge of all WASH sub-sectors?
  - Are there clear institutional mandates and a good working relationship between the various ministries responsible for the sector?
  - Is there a solid WASH sector working group?
  - Is there some formal sector review mechanism, such as joint sector reviews?

- Availability of financial resources to develop the WASH finance strategy

When those parameters do not justify the development of a full WASH finance strategy, it may be worth considering the following.

- A phased approach, whereby a rapid WASH finance strategy would be developed in a first phase to promote the concept of a WASH finance strategy and demonstrate its potential, while also identifying data gaps. Later, if there is interest and support for a full WASH finance strategy, it could be developed in a second phase. A rapid WASH finance strategy would attempt to carry out the methodology of a WASH finance strategy over about three months, using only readily available data and possibly using only the technical committee to provide guidance.

- A modular approach, whereby the promoters of the WASH finance strategy pick one or several of the analytical elements of a WASH finance strategy. This could be a study focusing on financial flows for the WASH sector, or a one focusing on costing WASH policy targets, if those two key areas are not already covered by previous analyses. Another possibility is a study on the potential for increasing user contributions while considering the affordability of services to users.
PART II.
THE WASH FINANCE STRATEGY PROCESS

Part II discusses the process of developing a WASH finance strategy. It describes the initial phase of conceptual development and preparatory work, the middle phase of analytical work and policy dialogue, and the final phase of supporting the implementation of its recommendations.

Part II is essential reading for government officials tasked with managing the development of a WASH finance strategy (plus any partners supporting them). It will help them to draft the concept note for the development of a WASH finance strategy.
The process of developing a WASH finance strategy involves three different phases, as illustrated by Figure 6. The first phase focuses on developing the concept and launching the process—it may take three to six months. The second phase focuses on developing the supporting analytical work and carrying out the policy dialogue that will produce the WASH finance strategy document—it may take 6 to 12 months. The third phase focuses on disseminating the WASH finance strategy and setting up a framework to monitor its implementation—it may take one to three months.

**Phase 1. Conceptual development and preparatory work**

Phase 1 includes three steps, as illustrated in Figure 7.

**Developing a concept note, setting up a technical committee and securing funding**

The process of developing a WASH finance strategy usually starts when a champion has identified that a WASH finance strategy would be useful for the country and decides to push for it by involving other key actors (who together can be referred as the promoters of the WASH Financing Strategy). If the ministry responsible for WASH or the ministry of finance is not the initial champion, they should be involved as soon as possible in the development of the concept.

The next step would usually involve developing an initial concept note. This would describe the rationale and objectives of the WASH finance strategy, its scope and the approach for being developed. This includes clarifying who will be supporting the process (a small technical committee) and who will be guiding the process and endorsing the outputs (a broader steering committee).

The technical committee will usually include representatives from the leading ministries, possibly two or three key agencies, and may include representatives from the development partners. Its functions would include to:

- Develop a formal WASH finance strategy concept note
- Draft the terms of reference of the steering committee
- Support the co-chairs of the steering committee in convening, running and reporting the steering committee meetings
- Draft the terms of reference for the team of analysts (whether in-house, resourced NGOs, or private consultants) that will undertake the supportive analytical work
- Engage and manage the team of analysts
- Facilitate access by the team of analysts to data sources (via members of the steering committee)
- Provide a technical review of the work produced by the team of analysts

The development of a WASH finance strategy is sometimes funded by development partners. It is not always easy to secure funding for these exercises. If none of the promoters can (fully) fund the exercise, it would be necessary to approach potential funders to secure financial resources for the exercise, before moving further. In turn, the availability of financial resources may impact the scope of the WASH finance strategy.
Establishing a multi-stakeholder platform to guide and support the development of the WASH finance strategy

A defining characteristic of a WASH finance strategy is that it will recommend a policy package to close the finance gap. While this could be approached as a merely technical exercise, closing the finance gap will likely require hard policy choices. This is why it is good practice to ensure that strategic stakeholders are involved in the development of the WASH finance strategy. Strategic stakeholders include government agencies, development partners, and civil society organizations and community representatives (depending on the geographical scope of the exercise). Box 4 illustrates how stakeholders were brought together in Mali to launch a dialogue around WASH finance.

An effective way to involve strategic stakeholders in the development of the WASH finance strategy is to set up a steering committee, chaired by a high-level representative from the ministry or ministry responsible for WASH (or relevant apex institutions, depending on the scope) and if possible co-chaired by the ministry of finance. Depending on the country context, it may be useful to develop formal terms of reference for the steering committee. The steering committee might be expected to meet four or five times.

The functions of the steering committee would include:

- Facilitate access to data by the team of analysts developing the underlying analytical work
- Discuss and approve the baseline analysis
- Provide guidance to the analysts on what policy options to close the finance gap should be analysed
- Discuss which policy options should be retained for the recommended policy package
- Endorse the recommended policy package and the WASH finance strategy document as a whole

In some cases, it may not be necessary to set up a dedicated platform. If there is already a platform to discuss WASH sector performance and reforms, it would be beneficial to use it to guide and support the development of the WASH finance strategy. It would save organizational efforts (and possibly time and money) and it would strengthen the existing platform.

The high-level dialogue represented the first step of an exchange process between sector actors aiming to strengthen WASH sector finance and develop a concerted approach for the mobilization of financial resources. Specific recommendations included:

- Reforming water tariffs (to generate more revenues while achieving greater equity)
- Continuing efforts to mobilize public funds and reach the target of 5 per cent of the annual national budget
- Preparing integrated sector plans and programmes to better justify the need for additional funding from development partners
- Implementing measures to attracting private investment
- Streamlining procurement processes
- Strengthening the capacities of national institutions to support those initiatives

The next steps include further work on monitoring financial flows and, to this end, Mali is undertaking the fourth cycle of WASH national accounts, which will allow assessment of funding gaps; finalizing and adopting the eight national water and sanitation programmes (which correspond to investment plans for each sub-sector); developing a national funding strategy for the WASH sector; and organizing a roundtable meeting with development partners for funding the national programmes.


Box 4. Using international processes to launch national WASH finance dialogues – the case of Mali

The Government of Mali is looking for solutions to guarantee universal access to basic services for drinking water, sanitation and hygiene by 2030. Following the commitments made at the meeting of ministers of the water, sanitation and hygiene (WASH) sector, organized by the Ministry of Sanitation and Water for All (SWA) in Costa Rica in 2019, the Government of Mali organized a high-level dialogue on financing the sector on 27 October 2020. This brought together around 60 representatives of the government, civil society, the private sector, research institutes and development partners.

The high-level dialogue represented the first step of an exchange process between sector actors aiming to strengthen WASH sector finance and develop a concerted approach for the mobilization of financial resources. Specific recommendations included:

- Reforming water tariffs (to generate more revenues while achieving greater equity)
- Continuing efforts to mobilize public funds and reach the target of 5 per cent of the annual national budget
- Preparing integrated sector plans and programmes to better justify the need for additional funding from development partners
- Implementing measures to attracting private investment
- Streamlining procurement processes
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Developing terms of reference and engaging a team of analysts

As mentioned above, these tasks would be usually carried out by a technical committee. Often, one of its members would be delegated these tasks – in particular, the ministry or development partner that funds the analysts’ work. However, it is important to try and keep all members of the technical committee involved. Box 5 identifies the lessons learned in the process of launching a WASH finance strategy in Rwanda, including the need for solid terms of reference and the importance of engaging experienced managers, advisers and analysts.
Box 5. From idea to development – lessons from the Rwanda WASH finance strategy

In Rwanda, the idea of developing a WASH finance strategy first came out in a government-led workshop organized in 2019. Subsequently IRC, WaterAid and Water for People carried out a background study regarding the financial situation of the WASH sector, while UNICEF continued to develop its series of annual WASH budget briefs that started in November 2018. In 2020, the Ministry of Infrastructure (the lead ministry for the WASH sector) and UNICEF agreed to include the development of a WASH finance strategy in their joint work plan. This was followed by the development of a concept note on the WASH finance strategy, and establishment of a thematic working group on WASH financing (under the sector working group) that would oversee the development of the WASH finance strategy. At UNICEF, the WASH section worked closely with the social policy and research section on engagement of the Ministry of Finance.

Between August and September 2021, the terms of reference were finalised in consultation with the government and key partners. A consulting firm was engaged in December 2021. Monthly coordination meetings involving the Ministry of Infrastructure, UNICEF and the consulting firm were key to accessing document and data. As of May 2022, a first draft was completed and presented for discussion at an ad hoc meeting of the sub-working group on WASH finance, with a view to complete the WASH finance strategy by end-June 2022. Key lessons learned from the Rwanda experience include (1) the importance of ensuring government ownership and leadership from the start and throughout the process, (2) the importance of developing solid terms of reference with inputs from key ministries and partners, and (3) the importance of mobilising the right expertise.

Source: UNICEF Rwanda Country Office.

Phase 2. Analytical work and policy dialogue

Phase 2 has four steps, as illustrated in Figure 8.

Developing, discussing and endorsing a baseline report

The first step of the analytical work is to develop a baseline report. This will be the most resource- and time-intensive step. The draft baseline report would consist of a first part describing the WASH sector governance, policy and financing context, and a second part estimating the WASH sector finance gap. This corresponds to sections A and B of the WASH finance strategy document described in Part III.

The estimation of the finance gap would usually need the use, adaptation or development of two models: one for modelling the cost side and another for modelling the revenue side. Modelling the cost side tends to need significantly more data than modelling the revenue side. These two models can be anything from relatively simple to very complex, depending on the ambition and resources. They should be designed to allow for the modification of key policy parameters for simulations to be run. The technical committee has a crucial role to play in advising on the model formulation, on validating the models and on data sources.

The draft baseline report should identify a set of indicators that would be used to monitor progress towards closing the finance gap.

The draft baseline report would normally be discussed in the first meeting of the steering committee (baseline meeting). This is an important meeting for its members to understand the methodology underlying the WASH finance strategy and to buy into the process.

The steering committee may endorse the draft baseline report (while possibly requesting minor modifications) or may request a revision.

Identifying policy options, modelling their impacts, and discussing them

The second step of the analytical work is to develop an options report. The consultants may take advantage of the first meeting of the steering committee to request input regarding the selection
Disseminate the WASH finance strategy document

Set up a monitoring framework

Agreeing on a recommended policy package and endorsing it

The final step in this phase is to approve the WASH finance strategy document. The team of analysts would prepare and present a full document, but the discussion would be focused only on the recommendations chapter, since the other chapters have already been discussed in previous meetings. To have a successful endorsement meeting, it is important to ensure that the discussion at the policy packages meeting is conclusive and provides the consultants with clear guidance regarding the recommended policy package.

Phase 3. Supporting implementation of the recommendations

Phase 3 has two steps, as illustrated in Figure 9.

Disseminating the WASH finance strategy document

By developing the WASH finance strategy through a process that involves the key agencies that will be responsible for its implementation, many of the objectives of disseminating and communicating policy-relevant analytical work will already have been achieved. Nevertheless, it is still useful to socialize the contents of the WASH finance strategy document among the broader WASH policy community. Depending on the country context, it may be useful to produce a policy brief that highlights the finance gap, the recommended package to close it, and how it represents a consensus among key agencies; and possibly to organize workshops to present the results to a wider audience and explore how other actors could play a role in its implementation.

In the case of a rapid WASH finance strategy document that has relied more on analysts’ input and less on the engagement of strategic stakeholders, the dissemination efforts would be more important.

Issues of how to disseminate the results of the WASH finance strategy would be discussed at the endorsement meeting of the steering committee. In multilingual and multicultural contexts, these characteristics need to be taken into account.

Setting up a framework to monitoring its implementation

It would be useful to consider in the WASH finance strategy document how its implementation will be monitored. The WASH finance strategy should include a set of indicators to support the monitoring and assessment of its implementation. Box 6 illustrates the importance of monitoring financial indicators to support annual discussions in Cambodia.

The WASH finance strategy should also define a mechanism to review its implementation. One possible option would be to agree that the steering committee will reconvene once a year to monitor the imple-
The preparation of national development plans or WASH sector plans.

Issues of how to monitor the implementation of the WASH finance strategy would be discussed at the endorsement meeting of the steering committee.

Box 6. Supporting long-term evidence-based dialogue to ensure the financial sustainability of WASH services in Phnom Pen, Cambodia

The Phnom Penh Water Supply Authority (PPWSA) was established in 1960. In the early 1990s, the city’s water supply system was in a serious state of disrepair after the war and incidents that followed. Since 1993, PPWSA has managed to make a spectacular recovery. Nowadays, PPWSA is a drinking water operator recognized for its excellent commercial and technical performance: the maintenance of its production and distribution assets is satisfactory, non-revenue water is 9.7 per cent, and the service offered through its 431,401 connections in 2021 (to around 2.3 million people) was at the level of international standards in terms of continuity of supply, quality of water and social accessibility. In 1996, it obtained its status as a public enterprise, guaranteeing its administrative and financial independence and, in 2021, it became the first company to be listed in the Phnom Penh stock exchange. The majority shareholder of PPWSA is the Cambodian government, holding 85 percent of the capital. Tariff reforms are very sensitive and need to be approved by the Prime Minister. Over the years, PPWSA has received massive financial support from donors (US$669 million), of which half has come from France. France’s financial support started in 1992 through treasury protocols. Since 2002, it has been provided through Agence Française de Développement (AFD), initially in the form of a grant, between 2006–2016 in the form of direct loans to PPWSA, and since 2016 through sovereign loans to the Ministry of Economy and Finance that are on-lent to PPWSA.

An annual dialogue around the financial sustainability of PPWSA started in the framework of AFD’s direct lending to PPWSA in 2006. The dialogue entails monitoring of financial indicators and yearly discussions of the financial projections over the next 20 years, which has fostered a deep understanding of PPWSA’s underlying financial dynamics. In 2016, PPWSA’s third master plan, covering the period 2016–2030, planned a doubling of the production capacity (1 million cubic metres a day in 2030) and the extension of the distribution network, and included a financial analysis that recommended a tariff reform. The first tariff reform since 2001 became effective in January 2020 and provided for an increase of the average tariff (by 35 per cent, 30 per cent and 140 percent respectively for domestic, commercial and public administration customers) while lowering the impact on the poorest with a better progressivity of the tariff structure. The financial model was a key instrument for the advocacy of tariff reforms to ensure the financial sustainability of PPWSA. In 2021, PPWSA requested AFD to provide support for updating the financial model, to make it more accessible to all concerned staff within PPWSA and to produce aggregated data to support decision-making. In early 2022, PPWSA approved a revised version of the third Master Plan that foresees an additional 800,000 cubic metres a day by 2030 to provide clean water for all in Phnom Penh. The financial impact of this investment will be significant and needs further analysis to identify the policy reforms that could be necessary to ensure PPWSA’s future financial sustainability.

Source: AFD staff.
Part III discusses the contents that would be included in a WASH finance strategy document. It identifies four sections: (i) objectives and context, (ii) the finance gap, (iii) closing the finance gap and, (iv) recommended policy package and implementation arrangements.

Part III is essential reading for government officials tasked with managing the development of the WASH finance strategy. It will help them to develop the terms of reference for the team of analysts (whether in-house or external) that will produce the underlying analysis and draft the finance strategy.
Section A. Objectives and context of the WASH finance strategy

This section of the WASH finance strategy document has three objectives. The first is to present the rationale, objectives and scope of the WASH finance strategy. These elements would usually be part of the concept note that should be developed before the launch of any new analytical work. They drive the process of developing the WASH finance strategy, the resources to be invested in developing it, and the shape of the final WASH finance strategy document (including target length).

The second objective is to present the WASH governance, policy and finance context, including any gaps. A good understanding of this context will contribute to informing the process of developing the WASH finance strategy (e.g., which additional stakeholders could be invited to take part in the steering committee) and the selection of policy options to be analysed and discussed throughout the process of developing the WASH finance strategy.

The third objective is to present an up-to-date overview of sector performance. The combination of sector goals and sector performance would then inform the costing exercise in section B.

A first draft of sections A and B together would constitute the draft baseline report that would be discussed at the first meeting of the steering committee.

1. Rationale, objectives and scope of the WASH finance strategy

The rationale will be formulated in different ways from country to country, but it can be expected that it will refer to the need to ensure the financial sustainability of the WASH sector in order to achieve the SDG WASH targets and/or national WASH goals and targets.

The objectives of the WASH finance strategy could include a combination of the following.

- To strengthen the capacity of the WASH sector leader to steer the sector
- To develop a consensus among key sector actors of how to put the WASH sector on a financially sustainable path – including making difficult choices such as tariff and subsidy reform, allocation of public financial resources across WASH sub-sectors, or the use of private sector financing through public-private partnerships and other arrangements
- To check the financial realism of current WASH policy objectives (sector targets)
- To inform the development of WASH sector policies, plans and programmes
- To improve the equity, effectiveness and/or efficiency of WASH expenditure
- To increase the quality of the WASH sector submissions to the annual and multi-annual budget processes
- To engage and educate stakeholders in the financial challenges of the WASH sector
- To improve the alignment of development partners’ support with the WASH policy objectives, and the coordination of external partners, both among themselves and with government
- To increase the credibility of the WASH sector with the ministry of finance and/or development partners, and the financial sector

This section would also specify the sectoral, geographical and temporal scope of the WASH finance strategy. This includes clarifying whether the WASH finance strategy is limited to households or also includes public institutions, public places and private workplaces.

2. WASH sector governance, policy and financing context

The WASH finance strategy document should include a discussion of the governance, policy and finance context in the WASH sector. The depth of the discussion will depend on the objectives and scope of the WASH finance strategy, but it would usually include some discussion of the following.

- Identification of key WASH sector actors, description of their roles and responsibilities (and ideally a discussion of their capacities) for:
  - Policy-setting
  - Sector planning, monitoring and evaluation
  - Sector regulation
  - Sector financing
  - Infrastructure development and service delivery
  - Community engagement and user representation
- Description of coordination mechanisms in the WASH sector:
  - Intra-government coordination (among different government agencies)
  - Coordination between government agencies and other stakeholders
  - Coordination between development partners
- Description of the current framework for WASH sector development policy and planning
  - How is the WASH sector treated in the national development strategy and/or national development plan?
Which documents set out the WASH sector goals, policies and strategies? What are the main WASH sector goals and policies?

Which documents set out the WASH sector development plans? How is the implementation of these plans monitored and evaluated?

How is WASH featured in the Nationally Determined Contributions?

Discussion of the current framework for WASH finance:

Internally generated revenues:
- Who is in charge of tariff-setting? How does the tariff-setting and review process work? How are subsidies for WASH services designed? Are subsidies delivered through the tariff structure and, if not, how are they funded?
- What are the key issues around users’ contributions? Affordability of tariffs? Bill collection? Self-supply (by either households or industries)? Non-payment by certain actors, such as the government itself?

Budgetary resources:
- What is the budget cycle? Are there separate budgets for recurrent and capital expenses? Is there a medium-term expenditure framework? Who is involved in submitting budget proposals for WASH-related expenditure?
- How is the budget process aligned to the national and sectoral planning processes? To what extent do budgetary resources support policy priorities as expressed in the national development plan and WASH sector plan and programmes?
- How are budget resources allocated to subnational entities? Are there formulas for budget transfers? Do block grants come with conditions?

Repayable finance:
- Does the enabling environment support the use of repayable financial resources? Are utilities allowed to borrow? Are any utilities creditworthy (or could they be)?
- Are public-private partnerships for WASH service provision allowed? Are they encouraged? Is there a public-private partnership unit?
- Is there a pipeline of bankable projects?
- Are there specific initiatives to encourage the use of repayable finance?

Expenditure programmes:
- Is there a national (cross-sectoral) investment programme? Is there a WASH sector investment programme? Are there subnational level investment programmes that include WASH-related expenditures?
- Who manages these programmes? What are the criteria for including projects in them?
- What are the objectives of current subsidy programmes? How are subsidies delivered (transfers to service providers, transfers to users)?
- Information base on WASH finance:
  - How strong is the information base about WASH costs and expenditures? Are there WASH accounts or other ways to track expenditures? Has a WASH public expenditure review or other analyses of sector expenditures been carried out? Have WASH targets been costed? Are the different life-cycle costs known (in particular operation and maintenance costs)?
  - How strong is the information base about WASH funding and financing?
  - Is there a good understanding of the financial sustainability of service providers?

3. WASH sector performance

Here, the WASH finance strategy should cover:

- The evolution (over the last 5–10 years) of access to WASH services, disaggregating by sub-sector and technology mix
- To what extent the country (or alternative unit of analysis) is on track to achieve its WASH goals
- Key achievements and bottlenecks in the sector, including the enabling environment to use existing finance and to attract additional finance. Here, there can be reference to the Global Analysis and Assessment of Sanitation and Drinking Water (World Health Organization, 2019), the application of the WASH Bottleneck Analysis Tool (https://washbat.org) and other sector assessment exercises
- It could also discuss:
  - Concerns about disparities in access to WASH services and their impacts:
    - Geographical (e.g., rural-urban disparities)
    - Social (some social groups have
lower levels of access than others, e.g., due to ethnic-based inequalities or disabilities, gender-based inequalities, or vulnerabilities associated with children and youth

- Economic (affordability concerns)

- Concerns about:
  - The design and implementation of WASH sector policies, plans, programmes and projects
  - Inequities in the allocation of financial resources
  - Absorptive capacity and public budget execution rates
  - Transparency and corruption

- The performance of service providers, non-revenue water, staffing per connection, cost recovery and other financial performance. This can cover either aggregate numbers for many service providers, or examples of some of the major service providers in the country. This analysis could make use of established parameters from the World Bank’s International Benchmarking Network for Water and Sanitation Utilities (New IBNET) (https://newibnet.org).

Section B. The WASH finance gap

The objective of this section is to provide a solid estimate of the finance gap that needs to be closed to achieve WASH sector goals and targets. It is important to understand that ‘finance gap’ is a policy concept rather than a technical one, in the sense that the size of the finance gap depends on policy definitions and decisions.

Estimating the finance gap requires three steps: (i) estimating the cost of achieving the WASH targets, (ii) projecting the likely sector revenues under a business-as-usual scenario (i.e., considering the long-term impacts of current sector policies and sector financing trends) and (iii) comparing projected sector costs with projected sector revenues.

4. Costing WASH targets

The objective of this sub-section is to provide an estimate of the cost of achieving the WASH sector targets over the planning period covered by the WASH finance strategy under a business-as-usual scenario.

Given the ongoing and expected long-term impact of the climate emergency on the WASH sector, the cost estimates would need include the cost of making WASH services climate-resilient. For example, standard metrics indicate per capita costs of providing safe drinking water supply to be US$10 in rural settings and $100 in urban settings, but climate-resilient water supply could cost $300–$500 per capita (see Box 7).

Here, the WASH finance strategy document will:

- Introduce the country’s WASH targets (including time frame) disaggregated by relevant sub-sectors (e.g., rural/urban) and discuss how they relate to the SDGs. It will present the progress achieved in the last 5–10 years and discuss to what extent the country is on track to achieve its WASH targets

- Depending on the scope and objectives of the WASH finance strategy and data availability, present data on the historical distribution of WASH expenditure (by sub-sector and geographical area). This may enable an analysis of the equity of the allocation of financial flows

- If a cost estimate for achieving WASH targets is already available, describe the methodology and data used and present the results

- If a cost estimate for achieving WASH targets is not already available or is incomplete, choose and justify a methodology for estimating costs, both capital and recurrent (operation, maintenance, debt servicing). This could be using the SWA SDG WASH costing tool (see Box 8) and entering modified unit costs and coverage estimates based on country data (UNICEF, World Bank and SWA, 2020). For hand hygiene, it could use the WHO costing tool (World Health Organization, 2021a). For more detailed assessment, the OECD’s FEASIBLE tool could be used (OECD, 2003). It may also be possible to use project-based information on the actual costs of providing WASH services in certain localities

- Choose and justify the technology mix to be used in the projections of how to close the access gap and apply the chosen methodology to cost the WASH targets using the chosen technology mix. This is the baseline cost scenario. Box 9 describes the example of Kenya.

Box 7. The importance of using life-cycle costs: evidence from Ethiopia

A 2017 study comparing low- and high-cost capital expenditure (CAPEX) water supply infrastructure in Ethiopia concluded that piped water supplies were less expensive than point source supplies when CAPEX and emergency water supply provision costs were considered using a life-cycle cost analysis (see Figure 10). The study looked at 10 years of financial data (2006–2016) from point source water supplies (accompanied by emergency expenditure – EMMEX investments – emergency water trucking, treatment and distribution) and piped water supply systems in two districts of the Ethiopian Central Highland region of Amhara. The study found that, on average, point source water supplies accessing shallow groundwater were non-functional for an average of 60 months in a project period of 10 years. To supplement the water supply demand during the non-functioning period, emergency water trucking and treatment was provided over 10 years at a per capita cost of US$2,257. In comparison, the per capita cost of piped water supplies was $65 for a project of 20 years.
Box 8. The SWA SDG WASH costing tool

The SWA SDG WASH costing tool was created by World Bank and UNICEF in 2017, based on the global costing study released by the World Bank (Hutton and Varughese, 2016). The tool was updated in 2020 to enable the user to change the baseline year from 2015 (UNICEF, World Bank and SWA, 2020). It includes a spreadsheet-based tool and a user guideline available for download. This tool has been designed to develop global and regional estimates of the cost of achieving the WASH SDG targets (6.1 and 6.2). It has been used by countries that have not yet done their own costing of the SDG targets to prepare their estimates. It can therefore be useful to develop a rough-and-ready estimate of sector development costs, for example to support a rapid WASH finance strategy.

For the development of a full WASH finance strategy, more in-depth costing studies are encouraged, reflecting the variations in technologies and unit costs at subnational levels and for different population groups, and the need to rehabilitate or replace ageing infrastructure. In addition, local risks (such as climate adaptation), customs and preferences need to be taken into consideration, which have a bearing on the technologies chosen, the management models and their costs.


Figure 10. Investments in climate resilient water systems imply lower costs

While capital costs of rural piped water systems are substantially higher than hand-dug wells, the life cycle cost of hand-dug wells is 53% more expensive

+53%
5. Projecting WASH financial flows

The objective of this sub-section is to provide realistic projections of the availability of financial flows for the WASH sector over the planning period covered by the WASH finance strategy under a business-as-usual scenario.

Here, the WASH finance strategy document would:

- Gather and present historical data on WASH financial flows from non-repayable sources of finance. The data should cover at least five years and be disaggregated as much as possible by the 3Ts:
  - Financial flows coming from tariffs, self-supply and other user contributions
  - Financial flows coming from public budgetary sources funded by domestic taxes
  - Financial flows coming from development partners (grants) and other non-repayable transfers
- Gather and present historical data on WASH financial flows from repayable sources of finance. When repayable financial resources have a concessional component, this should be noted. The data should cover at least five years and, where possible, be disaggregated by:
  - Loans from international financial institutions
  - Loans from domestic development banks
  - Loans from international commercial banks
  - Loans from domestic commercial banks
  - Microfinance (for small providers, entrepreneurs and households)
  - Other relevant sources of repayable finance, including bonds and finance mobilized through public-private partnerships for WASH service provision
- Identify assumptions on how each of those financial flows will likely evolve over the time frame of the WASH finance strategy
Develop a baseline scenario where all financial flows evolve according to most likely trends (without new policy changes).

Boxes 10 and 11 show examples of gathering and presenting historical data on WASH financial flows in Ethiopia and Senegal, respectively.

Box 10. The importance of understanding financial flows in the WASH sector: evidence from Ethiopia

In Ethiopia, UNICEF conducted a study to better understand financial flows, triangulating information from the Ministry of Finance and Economic Development with information provided by over 30 development partners, estimated to represent more than 90 per cent of the sector’s official development assistance (ODA) contributions in the country. The development of the flow chart shown in Figure 12 required careful adjustments to make sure that ODA transfers to the treasury (e.g., World Bank loans) were not double counted. The presentation of this diagram in a joint sector review meeting in 2017 was eye-opening for many government and non-government partners, who, for the first time, visualized the important contributions that United Nations agencies and civil society organizations were making to the sector. That analysis also contributed to justifying a much more ambitious budget increase in the second phase of the ONEWASH National Programme.

Figure 12. Source and flow of funds to water supply and sanitation sector

<table>
<thead>
<tr>
<th>Source/Government</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Treasury</strong></td>
</tr>
<tr>
<td>(Federal + Regional) USD 123 million (est.)</td>
</tr>
</tbody>
</table>
| **External assistance**
| (loan + grant) |
| Channel 1b (non CWA) 93 |
| Channel 1b (CWA) 63 |
| Channel 2 (Bilateral) 55 |
| Multilateral 141 |
| - DP to CSO 106 |
| - DP to UN 20 |
| - CSO own 10 |
| - UN own 35 |
| Total USD 352 million |
| **Federal MoFED** |
| USD 324 million |
| **Regional BoFED** |
| USD 309 million |
| **Woreda** |
| USD 160 million (est.) |
| **UN & CSOs** |
| USD 151 million |
| **WASH projects** |
| USD 475 million |

Box 11. Using WASH accounts to support the development of WASH finance strategies

To identify and track financial flows in the WASH sector and develop WASH accounts, WHO has developed the TrackFin methodology. This supports the collection and mapping of WASH financial flows, in a comprehensive and comparable manner, based on standard classifications. TrackFin produces WASH accounts that can be used for national benchmarking, cross-country comparisons and to provide an evidence base to better plan, finance, manage and monitor WASH services and systems (Figure 13 provides an example).

TrackFin and WASH accounts aim to answer four key questions:

1. What is the total expenditure in the WASH sector?
2. What are WASH funds being spent on?
3. Who pays for WASH services and how much do they pay?
4. Who are the main WASH service providers and how much are they spending?

TrackFin has been initiated in over 20 countries with the support of a number of development partners. In countries where WASH accounts have already been developed, they can readily support the development of a WASH finance strategy. In countries where WASH accounts have not yet been developed, they could be considered for development as part of a modular approach to the development of a WASH finance strategy.

Figure 13. Indicative tabulations of WASH expenditures using WASH accounts methodology.

6. Estimating the WASH finance gap

The objective of this sub-section is to present the finance gap in the WASH sector over the planning period covered by the WASH finance strategy under a business-as-usual scenario.

The finance gap should be presented for the different sub-sectors covered by the WASH finance strategy and should be separated by cost categories (at least capital expenditures, operation and maintenance expenditures and debt servicing).

The finance gap should be presented annually over the time horizon of the finance strategy. The data could be grouped in multi-year periods (e.g., five-year periods) to facilitate understanding and/or to match planning periods.

Box 12 shows the example of estimating the finance gap in rural WASH in Armenia, and how it depends on the ambition of the sector targets.
Box 12. Estimating the finance gap for rural WASH in Armenia

In 2003/2004, the OECD and the Task Force for the Implementation of the Environmental Action Programme for Central and Eastern Europe supported the development of a finance strategy for urban wastewater treatment in Armenia. This effort was complemented in 2007/2008 with the development of a finance strategy for rural water supply and sanitation. The 2008 rural WASH finance strategy considered four different scenarios for sector development: (i) baseline (business-as-usual, no new policies), (ii) a minimal water supply standards scenario, (iii) a policy scenario (scenario ii plus some more ambitious targets), and (iv) a maximal scenario (95 per cent in-house taps and 150 litres per capita per day).

Figure 14 shows the estimated costs, projected financial flows and estimated finance gap under the baseline and maximal scenario for the period 2007–2015.

The estimated costs include operation and maintenance, renovations, reinvestments (to compensate for depreciation of assets) and extensions (only in the maximal scenario). The projected financial flows include revenues from user charges, contributions from public budgets, and loans and grants. The size of the finance gap is crucially dependent on the ambitions of the sector development targets.


Figure 14: Estimated financial gap for rural water supply and sanitation under the baseline scenario (above) and maximal scenario (below), including renovations, loans and budgets subsidies (Armenian dram, millions)
Section C. Closing the WASH finance gap

7. Options to reduce the cost of achieving WASH targets

The objective of this sub-section is to identify the options to reduce the cost of achieving WASH targets and present estimates of the cost reduction potential of each option.

Here, the WASH finance strategy document would:

- Identify a list of different options to reduce the cost of achieving WASH targets, and briefly describe them
- Describe the assumptions of how each option could reduce the cost of achieving WASH targets over the time frame of the WASH finance strategy (e.g., a leak detection programme can reduce technical losses in urban areas by 1 per cent per year for the next 20 years)
- Estimate the cost of implementing each option
- Estimate the (net) cost potentially saved by implementing each option

The WASH finance strategy should consider the options to reduce the cost of achieving WASH targets by improving the efficiency of WASH expenditures and by reducing the ambition of WASH targets.

Improving the efficiency of WASH expenditures (value for money)

Options to improve the efficiency of WASH expenditures include those related to improving operational efficiency and those related to improving capital expenditure efficiency. Opportunities to improve operational efficiency are usually well recognized. Figure 15 shows the impacts of increasing operational efficiency on the financial viability of utilities. Improving capital expenditure efficiency is equally important, as discussed in Box 13. Box 14 provides examples of how the efficiency of WASH expenditures can be increased. Improving the efficiency of WASH expenditures usually requires a broader effort to improve the overall performance of WASH service providers. The turnaround framework presented by Soppe, Janson and Piantini (2018) discusses this issue and provides a guide for improving the performance of WASH service providers in urban settings. The following is a selection of the many recommendations presented in Soppe, Janson and Piantini (2018):

- Adopting lower-cost technological solutions
- Reducing long-term operational costs (e.g., energy)
- Reducing technical losses (leakage)

Figure 15. The impact of increasing operating efficiency on the financial viability of utilities

Note: Based on a sample of 695 utilities in selected emerging markets. Financial viability is deemed achieved when utilities have an operating ratio >120 percent. Source: Kolker and others (2016).
Reducing the need for rehabilitation investments through timely maintenance

Reducing unit costs through improved public financial management (e.g., bidding, contracting and supervision procedures)

Reducing the cost of capital (e.g., by de-risking investments)

Reducing staff costs per connection by exploring efficiency gains through adjustments to staffing patterns and levels

Reducing unit costs by exploiting economies of scale in infrastructure development

Reducing unit costs by exploiting economies of scale in service delivery (e.g., aggregating service areas).

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**Box 13. The importance of increasing capital expenditure efficiency**

The examples gathered in a recent World Bank study show capital savings in the order of 25 per cent or more compared with traditional solutions. A 25 per cent improvement in capital expenditure efficiency would allow existing investment levels to deliver a 33 per cent increase in benefits. Lack of attention to capital expenditure efficiency in developing countries is partly due to the fact that WASH utility managers and planners are not faced with financing the full cost of asset creation (as WASH capital assets are often funded by public budgets or official development finance).

Source: Kingdom and others (2018).

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**Box 14. Identifying and adopting options to increase efficiencies and reduce WASH costs in development partner programming – examples from UNICEF’s practice**

Value-for-money studies: UNICEF uses value-for-money (VfM) studies to assess and ultimately improve cost efficiencies, including in the Accelerating Sanitation and Water for All programme countries, supported by the Foreign, Commonwealth and Development Office of the United Kingdom of Great Britain and Northern Ireland. VfM findings have influenced changes in the design of both UNICEF and government programming strategies and, in some cases, they have had a measurable impact on costs. Examples include Zimbabwe, where a VfM analysis showing that demand-led sanitation approaches were up to seven times more cost-effective than subsidy-driven approaches has prompted a change in strategy in the national rural sanitation programme. In Nepal, a VfM study triggered long-lasting changes to the total sanitation programme led by the national government.

**Government procurement systems:**

National procurement systems can be strengthened to cut costs and improve effectiveness for all stakeholders. In Mozambique, UNICEF sponsored formal and on-the-job training programmes for government managers and also used the public system for its own procurement. In Nigeria, UNICEF developed a new set of guidelines and training programmes based on an assessment of provincial and local government systems, which was rolled out countrywide, resulting in significant cost savings and improved timeliness.

**WASH in schools technologies:** In Ghana, UNICEF is modelling lower-cost school toilet options as a strategy for facilitating the scale-up of WASH in schools nationwide based on the premise that toilet designs, including gender- and disability-inclusive designs, do not need to be so expensive that they are out of reach for schools. Also, in Ghana, a large-scale school handwashing initiative uses low-cost ‘tippy-taps’ – a technique for handwashing that is especially appropriate for rural areas with no running water.

**Water well drilling:** Manual drilling technology is a highly cost-effective methodology that is especially appropriate in low-income countries and vulnerable communities, where mainstream mechanized drilling can be out of reach. There are also opportunities to improve the cost-effectiveness of mechanized wells through training and other activities related to the UNICEF/Rural Water Supply Network code of practice for cost-effective boreholes.

**Solar pumping:** In addition to improving the sustainability and reliability of water systems, and reducing CO2 emissions, solar pumps offer significant cost savings over diesel pumps. UNICEF has supported more than 40 countries on solar energy initiatives, including initiatives that combine multiple low-cost technologies (e.g., manual drilling and solar pumping) and the retrofitting of existing systems with solar pumps.

**Reducing reliance on water trucking:** Water trucking is widely used in major humanitarian emergencies, but if continued over long periods, it can become very expensive. Alternative technologies to reduce the reliance on water trucking include the use of blended approaches that combine water trucking with system repair (including retrofitting with solar pumps), water point rehabilitation and new construction.

Source: Keast (2018).
Reducing the ambition of WASH targets:

- Adopting alternative mixes of service levels and technologies for different populations
- Reducing the ambition of time scales

These two options can be combined. For instance, providing a less ambitious level of service in the short to medium term but with the possibility of upgrading it to higher levels of service. For example, start with a piped water system with public posts that is designed to gradually expand to include household connections. Figure 16 shows how there are different levels of service for sanitation that will coexist at any point in time. Sanitation policymakers can reduce the ambition of the sanitation targets by extending the date at which the final technological mix is achieved (horizontal axis). They can also reduce the ambition of targets by altering the desired technological mix at any intermediary time point (vertical axis).

8. Options to increase financial flows to pay for WASH targets

The objective of this sub-section is to identify the options to increase the financial flows to pay for WASH targets and presents estimates of the fundraising potential of each option.

Here, the WASH finance strategy document will:

- Identify a list of different options to increase financial flows to the WASH sector and briefly describe them. They will be presented following the 3T framework (tariffs, taxes, transfers) and include repayable finance
- Describe the assumptions of how each option could increase financial flows to the WASH sector over the time frame of the WASH finance strategy (e.g., improvements in billing and collection rates could increase user contributions by 10 per cent in real terms each year for the first three years)
- Estimate the revenues potentially raised by implementing each option

The WASH finance strategy will consider the following options to increase financial flows to the WASH sector. They are presented following the 3T framework and including repayable finance.

Increasing user and beneficiary contributions (tariffs)

This sub-section would discuss options to increase user contributions to fund WASH services:

- Establishing user contributions where they do not exist
- Reducing commercial losses (a subset of non-revenue water)

Figure 16. Achieving sanitation targets through incremental improvements

• Strengthening public financial management in the WASH sector
• Developing/strengthening the WASH sector investment programme and improving project submissions to the investment budget
• Improving billing and collection systems
• Reforming tariff systems and adjusting tariff structures – see Box 15 for the example of Albania
• Reforming subsidy programmes – see Andres and others (2019) for a discussion on how to make subsidies more effective and efficient
• Applying land value capture tools (see Box 16 for the example of Morocco)

Increasing allocations from public budgets (taxes)

This sub-section would discuss options to increase allocations of public budgets for WASH-related activities in the WASH ministries and agencies, but also in other ministries with WASH-relevant programmes (e.g., rural development, health, education) as well as in subnational governments:

• Making the case for increased budgetary allocations (needs, benefits, absorptive capacity)
• Improving engagement in budget processes (annual budget, medium-term expenditure framework, investment budget, local government budgets)
• Improving the quality of budget submissions
• Developing/strengthening the WASH sector investment programme and improving project submissions to the investment budget
• Strengthening public financial management in the WASH sector

Increasing grants from development partners and philanthropy (transfers)

This sub-section would discuss options to mobilize additional “free” financial resources (grants and other non-repayable funds). These transfers could come from

Box 15. Reforming the tariff system in Albania to promote the financial sustainability of WASH services while ensuring their affordability

In Albania, local governments are responsible for water and wastewater services, while the Water Regulatory Authority (WRA) is responsible for setting tariffs. Water and sanitation services are provided by 57 public utilities, of which 49 do not cover operation and maintenance costs through tariff revenues and are subsidized by the central government. The central government also finances infrastructure development costs. The tariff includes a fixed part that is the same for all customers in the service area of the utility, and a volumetric part that varies for the different categories of service (water supply, wastewater collection, wastewater treatment) and customer (households, commercial, industrial). Increasing block tariffs are used to promote water conservation. Affordability is one of the four criteria included the tariff setting methodology used by the WRA. The other criteria are recovering 100 per cent or more of the operation and maintenance costs, utility performance, and environmental protection. The water and sanitation monthly bill for a family of four (based on an average per capita consumption of 100 litres per day) is not expected to exceed the level of 5 per cent of monthly average expenditures. To promote affordability, the WRA has agreed that the fixed tariff will not cover more than 30 per cent of operation and maintenance costs; it allows the volumetric part of the tariff to vary across customer types to enable cross-subsidization (with the limit that the volumetric tariff for other types of customers cannot be higher than twice the tariff for households). It plans to include in the tariff-setting methodology a free allowance of 50 litres per capita per day for customers classified as in need of social help.

Box 16. Using land value capture tools to finance public investments in WASH infrastructure – the example of Casablanca, Morocco

Public investments, such as the provision of WASH infrastructure to a neighbourhood that did not have it, provide benefits to land owners. These benefits that can be observed in the increases in the value of their land. Public authorities may want to try to capture some of that increase in the value of land to finance the public investments that originated it. Tools to capture land value include a variety of levies (such as land taxes, betterment charges or development charges) or obligations for land developers.

In rapidly urbanizing Casablanca, the local authority has been investing in extending the water network, securing access to the resource and protecting the city against frequent floods. Revenue from user tariffs are used to cover operational and maintenance costs and the renewal of existing assets, which represent about 70 per cent of total costs. At the same time, contributions from property developers (channelled through a dedicated account: fonds de travaux, or works fund) are used to cover land acquisition, network extensions and social connections. The fonds de travaux has financed a growing share of total investment, from 7 per cent in 2004 to 54 per cent in 2014. Property developers also cover the costs of connecting to the network and in-house equipment. Their contribution varies depending on the type of housing (social housing, villas, hotels and industrial zones) and they pay additional costs for developments that do not feature in the master plan. Contributions are waived when the developments take place in underprivileged neighbourhoods and slums.


Source: Adapted from Leckie, Smythe and Leflaive (2021).
development partners, vertical funds (e.g., the Green Climate Fund, the Sanitation and Hygiene Fund), international and local charities, and private companies (e.g., through corporate social responsibility programmes). Depending on the country context and the scope of the WASH finance strategy, some of these sources of transfers may be too small, localized or uncertain to be worth including in the WASH finance strategy.

Increasing the use of repayable finance

This sub-section would discuss options to increase the availability of financing from loans, bonds and equity investments over the planning period of the WASH finance strategy. They could include:

- Increasing the understanding of the WASH sector among domestic financial institutions (both public development banks and private commercial banks)
- Increasing the creditworthiness of WASH service providers, to access financing from domestic and international financial institutions
- Promoting private sector participation in WASH service delivery across all WASH sub-sectors; this could include public-private partnerships and other forms of private sector participation
- Using guarantees and other instruments to crowd-in private financial resources
- Developing a pipeline of bankable projects for investment
- Implementing other enabling environment and sector reforms that can contribute to de-risking the sector or to private investments in it (such as improved clarity of the legal and institutional framework)

The use of repayable finance in the early years of the planning period would have an effect in later years, as interest payments and capital repayments kick in. This should be then modelled in the cost section of the WASH finance strategy.

Blended finance is a term that captures how development finance and philanthropy can be used strategically to mobilize private repayable finance (Leigland, Trémollet and Ikeda, 2016). The World Bank (Goksu et al., 2017) provides a broader discussion on how to attract private repayable finance (also known as commercial finance) and the paradigm shift that is required in how the WASH sector is financed.

Section D.
Recommended policy package and implementation arrangements

A WASH finance strategy document will normally conclude by presenting a combination of policy actions that together as a package aim to ensure the financial sustainability of the WASH sector. The recommended policy package in one country may vary significantly to that in other countries – there is no single financing policy that fits all situations, as each context calls for a specific policy solution.

The recommended policy package may include, for example:

- Proposals for changes in WASH sector targets
- Proposals for changes in tariff policies and other user contributions policies
- Proposals for changes in central budget allocations to the WASH sector
- Proposals for changes in the intra-sectoral allocation of financial resources. For example:
  - Across sub-sectors
  - Across geographies
  - Across social groups
- Proposals for the realignment of development partners’ support. For example:
  - More support for rural sanitation and less support for urban water
  - More support for strengthening the enabling environment, institutions and capacity (and less for infrastructure investment)
- Proposals for prioritizing support for certain programmes. For example:
  - Leak detection programmes
  - Billing and collection improvement programmes
- Proposals for increasing the use of repayable finance. For example:
  - Further developing a pipeline of bankable projects
  - Engaging with a range of investors
- Proposals for institutional reforms. For example:
  - The creation of an independent regulator
  - Making utilities more autonomous, with ring-fenced finances
- Proposals for capacity development activities. For example:
  - Strengthening the information system for monitoring WASH sector financing
  - Strengthening of financial analysis units in de-concentrated or decentralized WASH agencies
  - Strengthening the skills of certain stakeholders to participate in the WASH finance strategy process
  - Building capacity to analyse and design private sector participation options

This section of the WASH finance strategy document will also discuss implementation issues and present an implementation road map. This road map will normally identify a number of tasks to ensure the
smooth implementation of the WASH finance strategy, including identifying the institutions responsible for those tasks and an indicative timeline. It will also discuss the incentives to ensure that the different actors play their role.

This section will also describe the mechanism for monitoring the implementation of the WASH finance strategy. One option is to prepare an annual report and discuss it at future meetings of the WASH sector working group (in those countries where there is one) or at ad hoc meetings of the steering committee. The annual report and discussions would allow the identification of substantial deviations and set corrective action. They would also encourage the continued engagement of relevant stakeholders, and promote transparency and mutual accountability. Ideally, it will be integrated into existing in-country monitoring mechanisms for sector sustainability and would be a central element in a joint sector review.


