

Sanitation and Water for All: Priority Actions for Sector Financing

The global commitment to bring universal access to safely managed water supply and sanitation by 2030 set by the Sustainable Development Goals (SDGs) poses an unprecedented challenge. Strong political leadership will be required to bring about sector-wide changes to improve governance and build technical and administrative capacity at scale. This will pave the way for building, operating, and maintaining cost-effective infrastructure to supply improved and sustained services.

The current model of sector finance is insufficient for reaching these goals. This policy note sets out four interlinked priority actions that governments should take to tackle this challenge:

Priority 1: Make more efficient use of existing resources.

Priority 2: Use public funds in a more targeted manner.

Priority 3: Attract domestic commercial finance.

Priority 4: Focus on de-risking the sector.

What Have We Learned So Far?

The experience with the Millennium Development Goals (MDGs) offers critical lessons for achieving the SDGs by 2030:

This knowledge brief was developed by the World Bank and UNICEF to support the Sanitation and Water for All Finance Minister Meeting Preparatory Process.

Sanitation and Water for All: The Global Challenge

Sanitation and Water for All is a global partnership committed to achieving universal access to clean drinking water and adequate sanitation.

While 2.6 billion people gained access to an improved water source and 2.1 billion to an improved sanitation facility between 1990 and 2015, one in ten people still lack an improved drinking water source and one in three lack improved sanitation (1 billion people still defecate in the open). Most people who do not have adequate water and sanitation services are poor and live in rural areas in Sub-Saharan Africa and South Asia.

- Targets defined at the national level need to ensure that access is provided to those who are still unserved and in areas that deliver the greatest benefit to the largest number of people. Targets should be agreed quickly so they can begin to be implemented rapidly.

- Providing access does not necessarily result in sustainable service delivery. Governments need to invest in building human capacity and institutions.
- Monitoring systems are important to track progress and allow for adjustments to be made as implementation proceeds.
- Sector development plans should be programmatic rather than project based, to ensure more efficient use of existing resources.

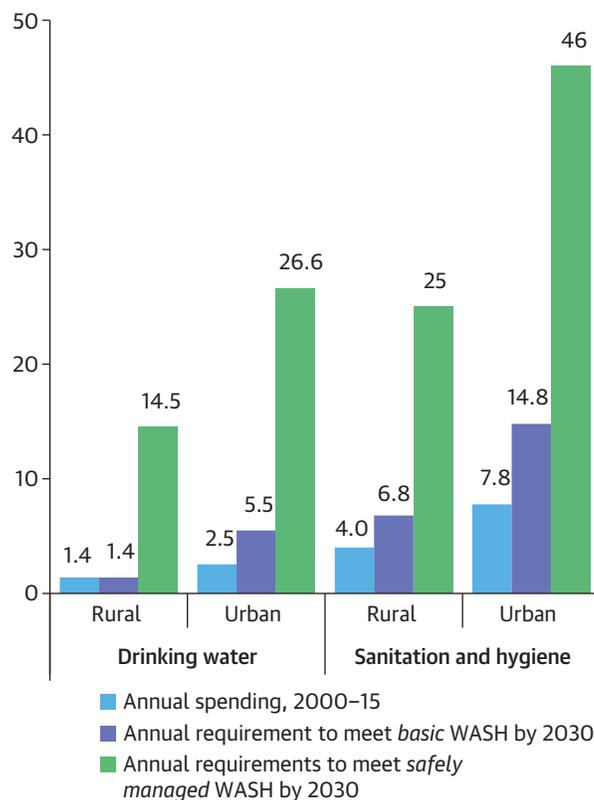
The SDGs set higher and broader expectations. SDG 6, the so-called water SDG, comprises eight targets that encompass the full cycle of water services, from water resource conservation to downstream pollution and resource recovery, and accounts for all types of water use—environmental, ecological, industrial, commercial, and residential. This policy note focuses on targets 6.1 and 6.2, which relate to water supply and sanitation, in line with the strategic focus of the Sanitation and Water for All partnership.

Whereas the MDGs for water and sanitation requested halving the proportion of people without access to improved water and sanitation, the level of ambition has greatly increased with the SDGs, with the aim to achieve *universal* and *equitable* access to *safe* and *affordable* water, sanitation, and hygiene (WASH), and to end open defecation.

Globally, the current levels of funding flowing to WASH services are in line only with the capital costs of meeting *basic* WASH services. Even then, given the differences in spending between and within countries, the resources available would have to be better targeted to unserved populations. In particular, higher spending is required in Sub-Saharan Africa and Southern Asia to achieve universal basic WASH. The costs of achieving *safely* managed WASH, on the other hand, are a multiple of the costs of achieving basic WASH. Meeting SDG targets 6.1 and 6.2 has been estimated to cost \$112 billion per year (ranging from \$74 billion to \$166 billion).

Figure 1 shows the escalation of the challenge, which is particularly great in the area of urban sanitation.

FIGURE 1. Financing Needed to Meet Global Targets for Basic and Safely Managed WASH Services by 2030 (US\$ billion)



Source: Hutton and Varughese 2016.
Note: WASH = water, sanitation, and hygiene.

Whereas the MDG for improved access (now called basic) is within a 30-minute round trip, safe water means located on premise, available when needed, and contaminate-free.¹ For sanitation, basic access refers to a latrine or toilet that separates excreta from human contact while safe management requires proper disposal or transportation of excreta for off-site treatment.

Priority 1: Make More Efficient Use of Existing Resources

Governments should provide incentives to service providers to improve the efficiency of their operations. Many service providers in developing countries generate losses, and only a few are partially or fully creditworthy. Governments have a large role to play in setting the

incentives for providers to improve technical and commercial efficiency, so that savings can be used to provide better services. This will in turn improve customers' willingness to pay, augment the revenue base, enhance the credibility of service providers, and set them on a path toward delivering universal, sustainable services. Once they become creditworthy, providers can begin to access commercial finance, which can facilitate more rapid expansion of services or even free up scarce public funds to meet other critical goals for the sector or country.

Efficient capital expenditure sets the tone for efficient operations. Capital planning should seek to reduce capital costs, with an eye to minimizing associated long-term operations and maintenance (O&M) costs. Capital efficiency can be achieved in many ways, including ensuring that new infrastructure is indeed needed (options to manage demand have been exhausted); the right approach has been selected and lower cost options are considered (appropriate design standards are in place); overpricing is mitigated (costs and contract awards are benchmarked to a reasonable and transparent standard); and communities are engaged for local oversight.

Good practice shows that tariffs should, at a minimum, recover O&M costs. Tariffs comprise the largest share of sector funding and are the most sustainable source. Tariffs that do not recover O&M costs can lead to deterioration of service: maintenance is forgone, thereby shortening asset lives and lowering asset performance.

Where tariffs are insufficient or unable to recover O&M costs, tax revenues are needed to fill the gap. Insufficient tariffs, without supplemental tax revenue, always result in poor service, deteriorating infrastructure, and further weakening of investment in the sector. Tax revenue can be channeled to the sector in several ways, including explicitly as operating revenue, or implicitly by waving a service provider's energy bill or transferring the proceeds of a concessional loan at a cheap rate. If tariffs are kept low—for whatever reason—taxes are the only revenue source that can close the gap.

Taxes and transfers can be treated as a reliable funding source only if they are predictable, transparent, and

Mobilizing All Funding Sources

There are three primary funding sources for water service delivery, commonly referred to as the "three Ts": tariffs, paid by users in the form of fees, charges, or direct investments; taxes from government coffers; and external transfers (including official development assistance, foundation funding, or remittances). Each water sector has different characteristics and thus a different mix of funding sources.

well targeted. Most existing subsidies are erratic and unpredictable making it hard for service providers to depend on them for day-to-day service delivery, let alone plan for expansion. Governments need to map out the purpose and intended target of subsidies, quantify implicit subsidies, and use them more effectively to ensure service delivery and leverage additional finance to enhance service delivery.

Boosting the level of transfers and taxes, while ensuring that they are used most efficiently, will be important for meeting the SDGs. In the short term, taxes and transfers (including concessional finance) will be a key source of capital financing. Table 1 presents some basic ways in which most countries can start to make improvements in the urban and rural water and sanitation subsectors.

Finally, more and different aid flows, such as climate finance, should also be tapped. There is huge potential to match water projects with increasing opportunities for climate finance. In 2014, \$392 billion was invested in measures to adapt to and mitigate climate change, much of it energy-related. In the area of water and wastewater projects, around \$15 billion was invested for adaptation and \$1 billion for mitigation. Much more climate finance could be tapped if proponents of water investments were better able to articulate co-benefits and the impact they could have on mitigating effects of climate change.

TABLE 1. Where to Start—Examples of Priority Actions by Water and Sanitation Subsectors

Sector	Urban	Rural
Water	<ul style="list-style-type: none"> • Aim for full cost recovery • Improve service providers' performance • Cut energy costs and reduce water leakage • Improve billing and collections • Mobilize commercial loans for specific investments, blended with public funds 	<ul style="list-style-type: none"> • Transition from hand pumps to piped systems • Improve functionality of rural water points • Take a full life-cycle approach to estimating costs and defining financing requirements • Leverage the private sector for maintenance • Establish pooled borrowing mechanisms for small-scale providers
Sanitation	<ul style="list-style-type: none"> • Adopt citywide inclusive sanitation approaches, moving away from an exclusive focus on sewerage and considering on-site sanitation and sustainable fecal sludge management • Leverage microfinance for households and small-scale service providers 	<ul style="list-style-type: none"> • Develop new markets by creating demand and fostering behavior change for the use of safe WASH services • Leverage microfinance for households to be able to afford improved facilities

Priority 2: Use Public Funds in a More Targeted Manner

The role of public funds needs to be rethought so they are used more effectively to leverage commercial finance. Public resources should be recognized for what they are: scarce, pivotal, and catalytic. Commercial finance should be pursued, not only because public funds are insufficient, but because commercial finance is more abundant and brings long-term stability to the sector.

Each dollar of public funds should be valued in terms of its potential to leverage commercial finance. Rather than working on a one-off investment basis, governments need to take a strategic, programmatic approach. A \$100 million concessional loan to build a water treatment plant builds just that plant, whereas a \$25 million investment to build creditworthiness and design a guarantee can leverage three to four times that amount, enabling a much larger pool of investment funds that can be used to meet more ambitious goals.

The shift toward using commercial finance requires global cooperation among donors. Official financial flows from donors and development banks for water sector investments amount to \$18 billion per year,² just

a small piece of the estimated capital needed to meet SDG 6.1 and 6.2. If not targeted to the right countries and projects, such flows can actually crowd out opportunities to move toward greater commercial finance of the sector. Donors should work together with governments to prevent undermining such opportunities.

Public funds should be targeted to areas of the water sector where commercial finance cannot cover existing financing needs. This includes bringing services to those who cannot otherwise afford them; mitigating externalities (such as pollution); and funding critical public functions, such as planning, regulation, capacity building, and monitoring. As a rule of thumb, public funds should be reallocated away from subsectors that can leverage commercial finance from their own revenue sources to those that need public finance to ensure access.

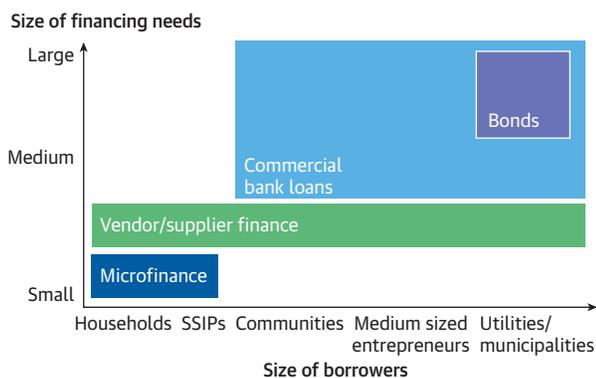
Finance alone is not enough: improved service delivery and transparent governance need to be built alongside new and improved financing arrangements. This includes utility managers with high professional capability, sound financial management, effective use of benchmarks, strategic business plans, internal and external auditing, and transparent governance and regulation by technically capable and independent agencies.

Priority 3: Attract Domestic Commercial Finance

The largest untapped source of money for the sector is commercial finance. Commercial finance can come in many forms, ranging from microfinance and vendor finance to commercial loans and bonds (Figure 2). Mobilizing commercial finance will be more expensive at the start, but the eventual payoff is significant, including a more transparent and accountable sector, and an ability to tap into increasingly larger volumes of capital. Using domestic commercial finance also reduces foreign exchange rate risk. By accessing these funds it is possible to bring forwards societal benefits that would otherwise materialize only once more public funds could be mobilized or until tariffs could fully recover costs.

Governments need to broker relationships between borrowers (service providers) and financiers—ideally domestic ones. The transition to accessing commercial finance may take time, particularly where local capital markets are underdeveloped. Domestic financiers must understand the benefits and risks of investing in the sector, and gain hands-on experience over time by participating in different transactions. Likewise service providers, as borrowers, need to better understand the needs of lenders.

FIGURE 2. Type of Private Finance by Borrower Size and Size of Financing Needs



Source: World Bank.

Note: SSIPs = small scale independent service providers.

The water sector will need to tap different sources of finance for different stages of investment. Commercial banks can lend for the construction phase of a project, while capital markets, such as pension and insurance funds, may be more attracted to refinance that investment during the operational phase of a project, which poses less risk. Microfinance and vendor finance may be more appropriate in less developed economies or for smaller investments by households and small-scale independent service providers.

Mobilizing commercial finance has several major benefits:

- It will not increase sovereign borrowing or crowd out other sovereign borrowing.
- Capital can be reallocated to other (social) sectors that cannot access commercial finance, enhancing the prospects for economic growth.
- The additional scrutiny of investors can foster improvements in governance.
- The involvement of commercial lenders provides another layer of transparency and accountability for maintaining service provider performance.

In addition, *domestic* commercial finance has several other benefits, compared to international commercial finance.

- It contributes to the development of local capital markets.
- It helps reduce the budgetary impact of currency shocks, making debt service more predictable.

The affordability of finance is a critical issue in the water sector. Governments can start by blending public and concessional funds with commercial finance to soften terms. Blending can make commercial finance more affordable by stretching out repayment over a longer tenor and/or at a lower effective interest rate. Blending provides experience to the government, service providers, and financiers that will open the door for more commercial finance in the future.

Priority 4: Focus on De-Risking the Sector

The transition toward commercial finance will be a continuous and incremental process. Global experience in the use of private sector participation in the water sector has shown that service providers do not need to be fully creditworthy to start accessing commercial finance. Governments can assist by supporting the right policies, regulations and incentives; providing transparent oversight; and blending public and concessional finance with commercial finance.

Estimating commercial finance flows in the water sector is difficult, as there are not readily available databases. Despite the very stable, long-term returns on well-managed water and sanitation investments, private lenders are often dissuaded from making such investments in developing countries due to poor performance and the politicization and decentralized structure of the water sector. On the other hand, in many developed countries commercial domestic finance is a core source of investment funds. Several instruments to attract more commercial finance for water are available to service providers.

Increase transparency

- *Credit ratings* provide an independent assessment of the financial health of a water service provider. Ratings assist lenders in understanding borrowing risks and provide insights for service providers on how they may be viewed by the market. While credit ratings are public information, “shadow credit ratings” are not a matter of public record and can offer a first step to expose public service providers to the needs and demands of the private lending market.
- *Benchmarking* is another important instrument to measure and report on the technical and financial health of a water service provider. Key performance indicators look at an array of factors, including service levels, employees, revenues, and costs. These

standardized measurements can be used by investors to assess and compare the overall health of the institution over time and with other institutions.

Reduce risk exposure

- *Guarantees* are among the most effective tools to reduce credit or political risks for commercial investors against potential nonpayment by a government borrower. They can also extend maturities and, in selective instances, lower interest rates for the borrower. By enticing new lenders to a market, guarantees unlock access to new sources of finance. Guarantees also have an intrinsic value; the existence of a guarantee means that a project or service provider has already been duly assessed and potential problems have been addressed during the loan structuring, providing more comfort to potential lenders.
- *Revenue intercepts* are another form of guarantee where separate sources of revenue can be used to cover debt service in the case of default. These are generally fiscal transfers from the central government to subnational governments, including water service providers, and can be provided in lieu of collateral.

Reduce transaction costs

- *Pooled finance* is a mechanism used to bundle multiple water service providers with varying degrees of attractiveness to investors. The “collective approach” diversifies borrower risk to improve creditworthiness and can provide access to capital markets at scale by enabling the pooled facility to issue bonds and on-lend to service providers. This is particularly appropriate for small service providers.
- *Project preparation funds* provide grants and other low-cost funds to help establish the viability of a project. Traditionally, upfront preparation costs are 3 percent of total project costs, but can run as high as 10 percent. These funds can be critical for

Take-Away Messages for Ministers of Finance

Help the water sector “get its house in order”

- Support and fund improvements in governance, regulation, and sector capacity.
- Set higher expectations for improved technical and financial efficiency, including capital efficiency.
- Establish incentive frameworks to encourage management actions better aligned with meeting the SDGs.

Set in motion a culture and cycle of improved sector performance

- Promote a culture of efficiency by making service providers accountable for results.
- Instigate a virtuous cycle of sector performance to attract commercial finance.

Allocate sufficient and well-targeted resources to the water sector

- Explicitly target public funds to investments that yield the highest return.
- Where possible, leverage public and concessional funds to crowd in commercial finance.

Support the transition to commercial finance

- Consider domestic commercial finance before borrowing in foreign exchange.
- Support the development of domestic capital markets and encourage domestic investors to consider water sector investment, potentially through supportive regulation.

Start now

- Take an incremental approach that aims to increase commercial finance by 10–20 percent and build on that.
- Examine how other countries have used financial enhancements to ease the transition.

ensuring that projects are investment-ready and can attract the interest of concessional and private financiers.

Notes

1. Free from fecal contamination (*E. coli*/thermotolerant coliforms) and priority chemicals (arsenic and fluoride where relevant).
2. Official development assistance and other official flows as of 2016.

References

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