

# THE STATE OF WASH FINANCING IN EASTERN AND SOUTHERN AFRICA

Regional Level Assessment









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# List of abbreviations

AFDB African Development Bank
AMCOW Africa's Minister Council of Water

AU African Union
AWV Africa Water Vision
AWF African Water Facility

**DFI** Development Finance Institution

EAC East African Community
EC European Commission
EIB European Investment Bank

**EMDE** Emerging Market and Developing Economies **ESAR** Eastern and Southern Africa Regional Office

**GDP** Gross Domestic Product

**HFCK** Housing Finance Company of Kenya **ICA** Infrastructure Consortium for Africa

**IBNET** International Benchmarking Network for Water and Sanitation Utilities

**IFC** International Finance Corporation

GSF Global Sanitation Fund
JMP Joint Monitoring Program
JSR Joint Sector Reviews

LGESLocal Government Equitable ShareM&EMonitoring and EvaluationMDBMultilateral Development BanksMDGMillennium Development GoalsMIGMunicipal Infrastructure GrantMTBFMedium-Term Budget Frameworks

MTEF Medium-Term Expenditure Frameworks
MTFF Medium-Term Fiscal Frameworks

**NPV** Net Present Value

**NWSC** National Water and Sewerage Corporation

**O&M** Operation and Maintenance

OBA Output-Based Aid OD Open Defecation

**ODA** Overseas Development Assistance

**OECD** Organisation for Economic Co-operation and Development

OPM Oxford Policy Management
PPI Public-Private Partnership Initiative

**PPP** Public-Private Partnership

**RIDMP** Regional Infrastructure Development Master Plan

**RSA** Republic of South Africa **S&H** Sanitation and Hygiene

**SADC** Southern African Development Community

SADCC Southern African Development Coordinating Conference

**SDC** Swiss Agency for Development Cooperation

SFP Strategic Financial Planning
 SLB Service Level Benchmarking
 SME Small and Medium Sized Enterprise

**SWAP** Sector Wide Approach

UNICEF United Nations Children Education Fund
 WASH Water Sanitation and Hygiene
 WASREB Water Services Regulatory Board
 WHO World Health Organization
 WRM Water Resources Management

**WSSCC** Water Supply and Sanitation Collaborative Council

# 1 Introduction

## 1.1 Background

UNICEF's Eastern and Southern Africa Regional Office (ESARO) has engaged Oxford Policy Management (OPM) to assess the state of financing of water, sanitation and hygiene (WASH) services in Eastern and Southern Africa region (ESAR). This assignment is intended to fill a critical knowledge gap in the region by providing a review of and documenting WASH financing issues at both the regional level and through four country reports. Together these reports seek to influence sector-level planning and advocacy activities to support more effective allocation and use of resources by government ministries, donors and other financiers engaged in delivering, operating and maintaining WASH services.

This report focuses on WASH financing for the entire ESAR and follows the development of four country reports (Burundi, Eswatini, Uganda and Zimbabwe). The country-level assessments provided an in-depth review of sources of WASH sector financing, how finance is channelled through different institutions, the quality and equity of financing and future financing options to achieve sector goals. This regional-level report draws on the country reports and other accessible financing data to provide an overview of current WASH financing in ESAR and provide direction for increasing the volume and impact of future WASH investment.

## 1.2 Methodology

Identifying and comparing financing across ESAR is challenging due to unevenness in data availability. Hence in some areas the analysis had to be conducted based on figures for sub-Saharan Africa or the whole of Africa. To develop this report the team relied on publicly accessible data from WHO-UNICEF Joint Monitoring Programme (JMP), the Organisation for Economic Co-operation and Development (OECD), the Infrastructure Consortium for Africa, African Development Bank statistics, the World Bank's Public-Private Partnership Initiative (PPI) and BOOST databases, and the International Benchmarking Network for Water and Sanitation Utilities database.

With the main actors identified, the methodology was designed to identify different financing types, such as tariffs, transfer, taxes and repayable financing. This involved reviewing sources of finance and the main national programmes being implemented to achieve sector goals. In addition to financing sources and financing types, the report also seeks to identify the costs currently covered in the sector, and who bear these costs.

### 1.3 Report structure

The remainder of this report is structured as follows:

**Section 2** - provides an overview of the regional context;

**Section 3** details the state of WASH services and institutional structures for WASH service delivery;

**Section 4** presents findings on government financing if WASH services;

**Section 5** presents findings on donor financing foilr WASH services;

**Section 6** presents findings on consumer and commercial financing of WASH services;

**Section 7** - summarizes the overall regional financing picture and outlines potential options to address these gaps; and

**Section 8** formulates recommendations for UNICEF about the role it can play in improving the context for WASH financing in the region.

# 2 Regional Context

## 2.1 Geography and demography

UNICEF's Eastern and Southern Africa Region consists of 21 countries.<sup>1</sup> It is projected that he regional population will dramatically increase from around 540 million people today to more than a billion in less than 30 years.

Despite steady progress in poverty reduction, which has seen extreme poverty rates fall by 10 per cent over the last decade, around 40 per cent of the region's population live in extreme poverty (less than US\$1.90 per day), which rises to more than four out of every five persons if the international poverty line of US\$5.50 a day is used.

Over the last 10 years, significant progress has been made on a range of health indicators in the region. For example under-five mortality rates have fallen by 55 per cent and under-five stunting rates have declined by close to 10 percentage points.<sup>2</sup>

Nevertheless, challenges persist. Approximately a million children under the age of five die from preventable causes every year, most during the first month of life. In addition, more than 27 million children under the age of five are stunted while 36 million school-age children are not attending primary or secondary school in the region and those that do often share classrooms with 50 or more other pupils.<sup>3</sup>

Climate change and increasingly extreme weather events present major risks to the region. Recurrent droughts, floods, and rising temperatures will make it more difficult to manage water resources effectively and to ensure continuity in water and sanitation service delivery in the region. Moreover, rainfall variability will contribute to increasing frequency and intensity of floods. Coping with and adapting to climate change and its impacts should be an increasing priority for countries in the region, and for the international development community as a whole.

### 2.2 Macroeconomy

Africa's economic growth continued in 2018 at the same rate achieved in 2017 (3.5 per cent) and the rate is up 1.4 percentage points from the 2.1 per cent in 2016. While longer-term growth is likely to be impacted by slow growth in both China and India, it is anticipated that growth could reach 4 per cent in the coming year. As would be expected due to the significant diversity in size, stability and access to resources and external markets, growth is variable across the continent.

East Africa was the fastest growing African region between 2010 and 2018, with growth averaging almost 6 per cent; Ethiopia, Rwanda and the United Republic of Tanzania all recorded above-average rates. However, in several countries growth remains weak, notably Burundi, Comoros, and South Sudan, where political and economic issues hamper progress. Southern Africa's subdued growth is due mainly to South Africa's weak performance, which affects neighbouring countries. Botswana's diamond trade and services, and Mauritius' strong consumption and higher exports have resulted in them being the fastest growing countries in the region of late.<sup>4</sup>

Countries not dependent on resource exports are growing the fastest, with growth instead driven by higher agricultural production, increasing consumer demand, and rising public investment. For example the Rwandan

<sup>&</sup>lt;sup>1</sup>Angola, Botswana, Burundi, Comoros, Eritrea, Eswatini, Ethiopia, Kenya, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Rwanda, Somalia, South Africa, South Sudan, Uganda, the United Republic of Tanzania, Zambia and Zimbabwe.

 $<sup>{}^2</sup>https:/\!/data.worldbank.org/indicator/SP.DYN.IMRT.IN?locations = RW-ZG$ 

<sup>&</sup>lt;sup>3</sup>The World Development Report 2018, Learning to Realize Education's Promise

<sup>&</sup>lt;sup>4</sup>Africa Development Bank, African Economic Outlook, 2019

economy grew at 7.2 per cent in 2018. In contrast, major commodity-exporting countries saw little growth, including Angola, whose growth fell by 0.7 per cent.<sup>5</sup>

Inflationary pressures have eased, with Africa's average inflation falling from 12.6 per cent in 2017 to 10.9 per cent in 2018, and projected to further decline. Double-digit inflation occurs mostly in conflict-affected countries (such as South Sudan, where it reached 188 per cent) and countries that are not members of a currency union such as the Central African Economic and Monetary Community or the West African Economic and Monetary Union. Where inflationary pressures have reduced and exchange rates have stabilized (such as in South Africa, Uganda and the United Republic of Tanzania) central banks have gradually eased monetary policy. Significant concerns still persist with regard to the economic health of Zimbabwe, where according to the national statistical office annualized inflation surged to 175.7 per cent in June 2019, up from 97.9 per cent in May 2019.

In many countries, growth remains insufficient to address the structural challenges of persistent current and fiscal deficits and debt vulnerability. In such cases, public finance policy interventions are needed in areas such as tax reform and expenditure consolidation to ensure debt sustainability. The increasing vulnerability to debt distress in some countries is hampering growth, and the region's economic progress continues to be held back by uncertainties associated with elections and political transition, such as in Burundi, Sudan and Zimbabwe. In addition to these internal challenges, escalating global trade tensions and uncertainty in global commodity prices pose further risks to economic growth in Africa.

## 2.3 Administrative setup

### 2.3.1 Regional structures

The African Union (AU) is the main political structure governing the continent, and ESAR, and its mandate includes the promotion of sustainable development at the economic, social and cultural levels, as well as the integration of African economies. In addition, the Common Market for East and Southern Africa (COMESA) was established in 1994

to support cooperation in developing the natural and human resources of its member states, as well as the promotion of peace and security in the region. However, its main focus is on creating a large economic and trading unit that is capable of overcoming some of the barriers that are faced by individual states. Its 21 members have a combined population of over 540 million and global trade in goods worth US\$235 billion.

The East African Community (EAC) is a regional intergovernmental organization of six partner states, comprising Burundi, Kenya, Rwanda, South Sudan, Uganda and the United Republic of Tanzania. In a recent report Heads of State Priority Infrastructure Projects Implementation Progress and Status Updates, the EAC has identified 286 priority infrastructure projects and programmes that will require investment amounting to US\$78.7 billion by 2028.6 This includes a range of water projects focused on improvement of waterways rather than water resource management or water supply initiatives. However, EAC is also planning a Corridor Development Investment Plan and a marketing plan to develop and implement projects in the transport, energy, transboundary water and ICT sectors. The Lake Victoria Basin Commission (LVBC) is a specialized institution of the EAC located in the Lake Victoria Basin (LVB) in Kenya. The Commission is mandated to coordinate sustainable development and management of the Lake Victoria Basin in the five EAC Partner States.

The Southern African Development Coordinating Conference (SADCC), established in 1980, was the precursor of the Southern African Development Community (SADC). The SADCC was transformed into the SADC in 1992. The Regional Infrastructure Development Master Plan (RIDMP) is the region's strategy for the development of integrated regional infrastructure by 2027. The RIDMP focuses on the six infrastructure areas that constitute the SADC Regional Infrastructure Programme: Energy, Tourism (Trans-frontier Conservation Areas), Transport, ICT, Meteorology and Transboundary Water. The RIDMP contains 15-year financial needs forecasts of US\$558 billion for the period 2012-27.

The Water Chapter of the RIDMP identified some 34 water infrastructure projects that are ready for

<sup>&</sup>lt;sup>5</sup>Africa Development Bank, African Economic Outlook, 2019

<sup>&</sup>lt;sup>6</sup>Programme for Infrastructure Development in Africa (PIDA) Progress Report, 2018

implementation over the period 2013 to 2021, with an estimated cost of US\$16 billion, less than 3 per cent of the total planned investment. The majority of these projects are focused on hydropower, river basin management and water monitoring. The exceptions are Lomahasha/NamaAcha Water Supply and Sanitation in Mozambique and Eswatini (US\$0.25 billion) and an institutional capacity enhancement, policy reform and harmonization project for river basin organizations and water utilities (US\$0.49 billion).

ESAR does not have a specific institutional structure for the water sector, as the sector is overseen by the Africa's Ministerial Council of Water (AMCOW). AMCOW was launched in 2002 with the Abuja Declaration, following a long process to forge and formalize a coordination structure for water policy dialogue and policy in Africa. Since its creation, a range of commitments have been made by the political leadership in an effort to accelerate progress towards achievement of national and international sector targets. These have been articulated in the Africa Water Vision across four levels (AMCOW, regional, transboundary, and national,) and AMCOW focuses on providing leadership and oversight for its implementation.

The accompanying workplan sets out key actions to be taken to achieve the political commitments and is divided into seven themes: (i) Water Infrastructure for Economic Growth; (ii) Managing Water Resources; (ii) Meeting the Sanitation, Hygiene and Water MDG Gaps; (iv) Global Changes and Risk Management: Climate variability and Change; (v) Governance and Management; (vi) Financing; and (vii) Education, Knowledge and Capacity Development. It also includes a commitment by African water ministers to provide annual reports on their water status and on progress against commitments.

AMCOW does not have access to investment funding and is not mandated to be an on-lender of investment funds. Therefore, its role in resource mobilization is focused on raising member states' awareness of how they should consider their water security and safe sanitation investment strategies in their efforts to comply with SDG 6; and to assist them to improve their capacities to develop strategies to both finance and sustain the necessary investments.

AMCOW aims to leverage its cooperation with donors, international development partners and relevant continental institutions as critical financing instruments to deliver sector financing. One area

where AMCOW can play a part is by increasing training for its member states on how they can create an enabling environment at national level to attract private sector participation.

#### 2.3.2 Country-level structures

Within individual countries in the region a range of institutional structures exists for the management of the WASH sector. Ministries present in the WASH sector in most countries included those responsible for water, health, urban development, education and finance. However, in most countries other ministries and agencies are also engaged in planning, financing and implementing WASH activities.

Decentralization has been transforming the structure of governance in Africa for a number of decades, with most countries in the region transferring some level of power, resources and responsibilities to their subnational governments. Decentralization has become a key mechanism in sector reform since the concept of subsidiarity was introduced within the Dublin Principles in 1992. While the literature demonstrates a strong degree of consensus on the importance of decentralizing WASH delivery, as well as management of expenditure, to the lowest appropriate level, for this to be successful managerial and technical capacities need to be in place in local authorities.

The pace of transformation varies across the regions, with countries like Ethiopia, South Africa and Uganda leading the way. A number of countries have started the process and are still establishing the necessary institutions and transferring responsibilities and revenues to them. Of those that have attempted to decentralize the WASH sector, few have successfully transferred decision-making. Most have been slow in resource and asset transfer. Instead, most have in some form deconcentrated the apex ministry, with key staff moving to local levels and reporting to the centre, which retains power over their functions and performance. A large group has only adopted legal texts that require the central government to proceed towards a more decentralized system, while in a few countries decentralization is still under discussion or in the early stage of policy development.

In Malawi, for example, decentralization of the WASH sector has been handicapped by a lack of capacity at district levels that has resulted in deconcentration (central government staff posted at the local level to administer programmes) rather than devolution. There has also been limited fiscal decentralization,

with most sector development still centrally controlled, and the management of many sector development initiatives is controlled by programme and project management units that often bypass the government structures

Procurement, project and financial management is an area where central governments have been cautious in the decentralization process . Specifically, this relates to the level of control central government is prepared to assign to local-level institutions to determine how funds are spent. In Uganda, for example, the government has developed and implemented policies and an institutional framework that provide clarity and separation of functional roles and responsibilities.

Countries with functioning decentralized systems are more likely to have transparent budgeting formulae. In this respect decentralization can improve budget allocation effectiveness by enabling lower levels of government and civil society to participate in expenditure formulation and management processes. Local government capacity has proven to be a significant constraining factor to effectively implementing decentralized budgeting. However, the provision of conditional grants to local government have been used as a stepping stone to block grants as capacity increases, such as in Ethiopia.

#### Box 1: Local government financing and decentralization

Uganda is using a formula-based system to allocate resources to local governments. The formulae for providing these allocations were developed by consensus, although it has taken several years to have them used on a consistent basis. In addition, medium-term expenditure frameworks (MTEFs) are being used to develop multi-year projections of sector expenditures. These provide local governments with estimates of future budgetary allocations, which support local-level planning for both local government and other sector stakeholders. Malawi is behind Uganda in its development of this system, and while MTEFs are in place allocations are not predictable and formula-based allocations are not being used.

The system is further undermined by a weak monitoring system, which is not able to measure service equity or distribution of allocations. One the most innovative models for formula-based allocation system was seen in South Africa. In addition to local taxes and charges, municipalities receive budgetary support from the national government: notably the Municipal Infrastructure Grant (MIG) and the Local Government Equitable Share (LGES).

The Basic Services component of the LGES accounted for about 75 per cent of the total, allocating a 'Free Basic Services' package to households with monthly incomes below a set level. Households were identified by the national census. While the Free Basic Services package was nominally intended to be divided as follows: water 31 per cent, sanitation 26 per cent, refuse removal 22 per cent and energy 21 per cent, the LGES grants are unconditional so municipalities were able to spend the amount as they chose. Data from International Water and Sanitation Centre(IRC) suggested the average nominal allocation for water was 26 per cent (a range of 10-56 per cent) and for sanitation 21 per cent (range 8-45 per cent).<sup>7</sup>

Norman G & Trémolet S (2015) Municipal finance for sanitation in African cities. Finance Brief 3, Public Finance for WASH, www.publicfinanceforwash.org

# **3 WASH Sector Context**

#### 3.1 Access to WASH services

ESAR has the lowest percentage of households with at least basic water coverage of all UNICEF regions and accounts for 30 per cent of the 782 million people in the world that have less than basic water coverage.

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% Western North Eastern Middle EastEast Asia & South Asia America & Europe & Europe America & North Pacific Central Southern Caribbean Central Africa Africa Africa ■ Safely managed service ■ Basic service ■ Limited service ■ Unimproved ■ Surface water

Figure 1 Global water coverage, 2017

Source: JMP

Since 2000, progress has been steady in water supply coverage in ESAR but further acceleration is required to meet the SDG target. The proportion with at least basic water coverage has increased from 42 per cent in 2000 to 58 per cent in 2017, which represents the provision of at least a basic water service to 174 million people.

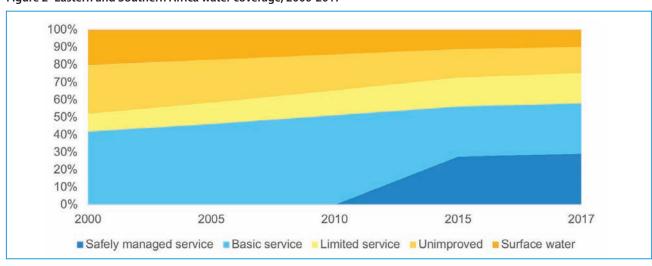


Figure 2 Eastern and Southern Africa water coverage, 2000-2017

Source: JMP

In relation to sanitation coverage, the Eastern and Southern and the West and Central Africa regions lag behind the rest of the world in terms of access to at least basic sanitation coverage (31 and 32 per cent respectively). However, ESAR and South Asia are the only regions that have not yet reported any households with access to safely managed sanitation services. This is in part due to monitoring system not allowing for this data to be gathered. ESAR accounts for 19 per cent of the nearly two billion people in the world that have less than basic sanitation coverage.

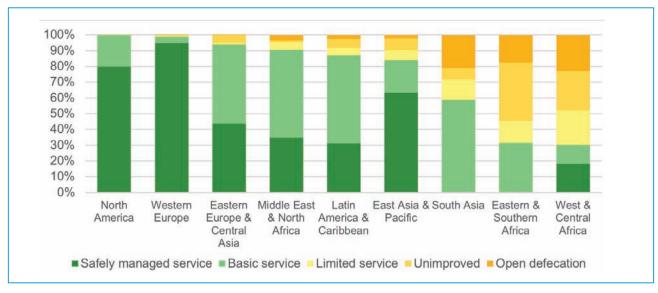


Figure 3 Global sanitation coverage, 2017

Source: JMP

Progress on sanitation has been much slower than on water, and significant acceleration will be required to meet the SDGs. Those with at least basic coverage have increased from 23 per cent in 2000 to 31 per cent in 2017, which is equivalent to 93 million people gaining access during this period.

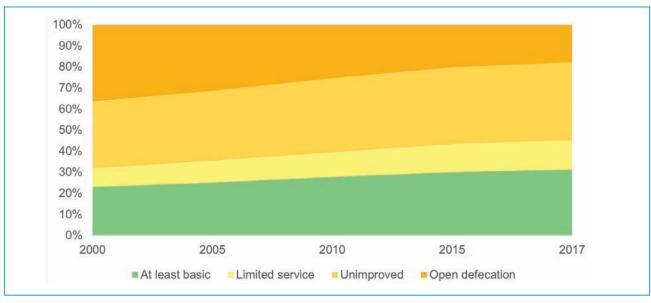
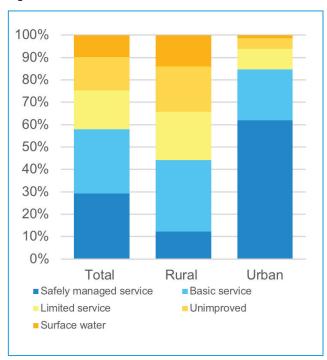


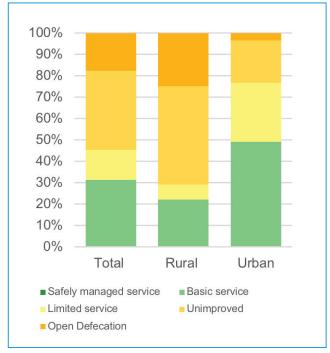
Figure 4 Eastern and Southern Africa sanitation coverage, 2000-2017

Source: JMP

Significant disparities can be seen in rural and urban coverage for both water and sanitation. While 69 per cent of households in urban areas have access to safely managed water, only 12 per cent have access to this level of service in rural areas. In the same way, open defecation is mostly a rural phenomenon, with 29 per cent of the rural population practicing open defecation, compared to just 4 per cent in urban areas.

Figure 5 East and Southern Africa water and sanitation coverage, 2017, rural and urban

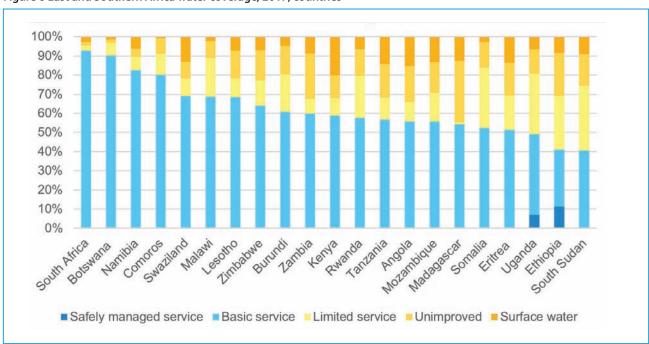




Source: JMP

As would be expected, significant disparities are also observed between countries in the region. Access to at least basic water services ranges from nearly 100 per cent to as low at 40 per cent in South Sudan. Currently only two countries in the region (Ethiopia and Uganda) have reported access to safely managed services, although it is interesting to note that after South Sudan, they have lowest coverage of basic water services.

Figure 6 East and Southern Africa water coverage, 2017, countries



Source: JMP. Note: Figures for Eritrea are from 2015 data

Disparities in sanitation coverage are even wider than for water, with coverage of at least a basic service ranging from 77 per cent in Botswana to 7 per cent in Ethiopia and Madagascar. Safely managed sanitation services are only reported in the United Republic of Tanzania.

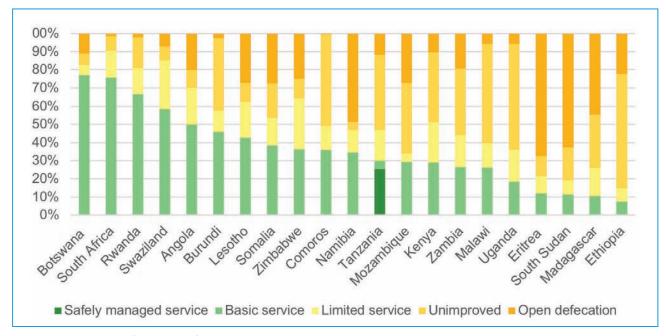


Figure 7 East and Southern Africa sanitation coverage, 2017, countries

Source: JMP. Note: Figures for Eritrea are from 2015 data

## 3.2 Regional initiatives

The AMCOW-led African Water Week brings together governments, regional institutions, development partners, the private sector, civil society, academia and the media to discuss and collectively seek solutions to Africa's water and sanitation challenges.

The event has provided an important platform to discuss sector financing issues, with the recognition that new approaches are needed to complement traditional financing mechanisms. In recent years there has been a strong focus on domestic resource mobilization, which is an area the region has not yet effectively tapped into or articulated a clear strategy.

AfricaSan is another AMCOW initiative, and is focused on the sanitation and hygiene sub-sectors. This has proved an influential forum to advocate for greater focus on and investment in this sub-sector. At AfricanSan 2 (2008) 32 African Ministers produced the eThekwini Declaration, which makes 11 important commitments to improve the performance of the sanitation and hygiene sector. The Declaration sets out a commitment to establish specific public sector budgetary allocations for sanitation and hygiene programmes, and for these allocations to be a minimum of 0.5 per cent of gross domestic product (GDP). The Declaration was subsequently endorsed by Heads of State at the 2008 AU Summit in the Sharm EI Sheikh Declaration, and has been reaffirmed in subsequent declarations such as the Libreville Declaration on Health and the Environment in Africa. In 2015 as an outcome of AfricaSan4 Africa, governments reconfirmed their focus on sanitation through the Ngor Commitments, in which AMCOW agreed to prioritize and facilitate adequate resourcing for sanitation and hygiene by mobilizing dedicated, substantive new sources of financing.

# 3.3 Private sector participation

Private sector participation in the provision of WASH services remains limited and is most found in the delivery of small-scale urban water and sanitation services. Only a handful of countries in Africa, and ESAR region in particular, have had positive experiences with public-private partnerships (PPPs) involving private sector finance.

# 3.3.1 Public-private partnerships

Despite the WASH sector's limited engagement with PPPs, many infrastructure sectors have turned to PPPs to address gaps in funding. According to the World Bank's Private Participation in Infrastructure (PPI) database, there have been 335 infrastructure-focused PPP projects across sub-Saharan Africa in the past 25 years. PPP projects have been financed in 41 of the 48 sub-Saharan African countries, with Burundi, Eritrea, Equatorial Guinea, Eswatini, Mauritania, the Seychelles and South Sudan yet to implement any PPP projects.

PPPs remain a relatively small market in sub-Saharan Africa, with projects concentrated in only a few countries (Kenya, Nigeria, South Africa and Uganda), most of which are in ESAR. Together these account for 48 per cent of the 335 PPP infrastructure projects in the region in the past 25 years. Despite the increasing use of PPPs to support the financing of infrastructure projects in Sub-Saharan Africa, application to WASH sector investments remains limited. In the past five years, for example, PPPs have been concentrated in the energy sector (78 per cent), followed by transportation (22 per cent) and water and sanitation (0.5 per cent).

Experience in other sectors has shown that financing is often required from multiple sources for PPPs, including the public sector, the private sector, and development finance institutions (DFI). Public funds have been used to facilitate the process, financing upfront capital costs through grants, or addressing

funding gaps through subsidies. Private financing sources include equity (including corporate debt) and project finance debt through private lenders, which has been from commercial banks or institutional financiers. Multilateral development banks' (MDBs') financial assistance to PPP has included loans, guarantees, equity, quasi-equity, syndications and risk management instruments.

DFIs have played a facilitating role in many PPPs, through playing a diligence and capacity building role to prepare and structure complex PPPs to mobilize private sector and institutional capital, and they have helped to expand the pipeline of bankable infrastructure projects.

The WASH sector's inability to put in place a significant number of PPPs demonstrates weakness in the ability or interest of DFIs to play this role in the WASH sector. The lack of PPP in the WASH sector also points to the lack of a conducive enable environment for such initiatives, and the fact that WASH service providers have not been able to establish profitable business models and be creditworthy. In addition, barriers to PPP investment include limited project scale, as well as the perceived challenges of generating commercial returns due to low tariffs.

As discussed later in the document, of the four WASH sub-sectors, urban water has been the only one to demonstrate commercial returns and offer a viable investment opportunity. IBNET data provide a clear picture of the financial health of the utilities in ESAR. Figure 8 below shows the ratios between total annual operational revenues and total annual operating costs. While the regional average is below the global average, it is encouraging to see that in 13 of the 17 countries where data is available, on average utilities are covering their operating costs. However, eight countries are either just breaking even or are not, suggesting that utilities in those countries are going to struggle to fund operations and maintenance (O&M) and attract investment. Lack of investment in O&M can result in increases in non-revenue water, which undermines utilities' ability to be commercially viable. In ESAR countries non-revenue water ranges from 52 to 14 per cent.

<sup>8</sup>http://ppi.worldbank.org/ 9http://ppi.worldbank.org/

2.50 2.00 1.50 1.00 0.50 0.00 Timbabue 2014) Marritus 2010) Bolsmana 2015) Mozamique 2017 Saychalles (2006) Harribia 2009) Malani (2010) Esnairi 2009) Ethiopia 2018) Joanda (2017) Bururdi 2017) Zambia/2017) Tarlaria 2017) Felds (5011) Lesotho 2017)

Figure 8 Operating cost coverage, ESAR

Source: IBNET. Note: Figure from latest year available provided

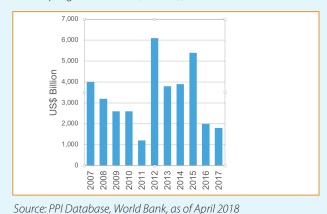
#### **Box 2: Quantifying PPP investments in WASH**

The World Bank has reported under its Private Partnership for Infrastructure (PPI) initiative that between 2013 and 2017 water and sewerage PPI investments only accounted for 0.42 percent of total investment in International Development Association (IDA) countries and 4 per cent in non-IDA countries. However, in 2018 US\$3.8 billion was invested through PPPs in the water and sewerage sector. While this accounted for just 4 per cent of total investments in 2018, it was the highest share allocated the water sector in the past 10 years and double the 2017 level.<sup>10</sup>

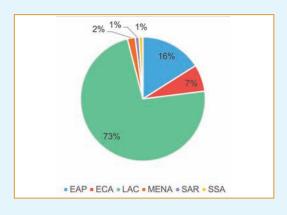
The increase was due to increased investments in China and India. China accounted for almost half the investments in the water sector in 2018, with US\$1.6 billion, and India received US\$0.6 billion worth of investment. While PPI transactions have taken place in recent years in Kenya, Namibia, Somalia and Zambia, ESAR has been unable to realize the potential of PPP in the water and sanitation sector. This is demonstrated well by the fact that a a US\$60 million investment received by a water treatment plant project in Rwanda in 2017 was double the size of the sector's 10-year and 5-year investment averages in the region.

Figure 9

Investment Commitments with private participation in the water and sewerage sector in emerging markets and developing economies (EMDEs), 2007–2017



Private participation in water and sewerage projects by region, 2012–2017



World Bank, Private Participation in Infrastructure, Annual Report, 2018

International operators and financiers of PPP initiatives have had a strong bias towards large-size projects with lower transaction costs. In fact, most PPP projects in the water sector are bulk water projects, which are typically based on offtake agreements with a local utility. This arrangement is viewed as less risky than service-level activities that extend into all commercial aspects of the operation, including management of water losses and the politically charged rate-setting processes.

Interestingly, and unlike other sectors, most water and sewerage projects are municipal projects. Over the previous 10 years, an average of 77 per cent of contracts were granted at the local and municipal levels, whereas for other sectors, a majority of contracts were granted at national level.<sup>11</sup>

None of the four countries included in this study have had experience of mobilizing private sector finance via PPP, though other forms of private sector participation are emerging. In Uganda, for example, local governments are delegating parts of service operations (e.g. revenue collection) to private companies.

#### **Box 3: UNICEF partnership with LIXIL**

In 2018, UNICEF entered a partnership with the private company LIXIL. LIXIL is a private company focused on water and housing products and has developed affordable and workable toilet solutions for underserved markets in Africa and Asia. The partnership aims to build on UNICEF's and LIXIL's respective strengths, by combining UNICEF's sanitation knowledge and global reach with LIXIL's knowledge of supply chains and innovative designs of sanitation products for poorer households, including its SATO Toilet Systems. The partnership between LIXIL and UNICEF combines sanitation behavioural change training with access to readily available and affordable sanitation products and includes a commitment to support affordable finance for the purchase and installation of sanitation wares. This partnership with the private sector aims to leverage resources and demonstrate a sustainable market-driven solution that can deliver sanitation products that meet consumer needs and budgets.

# 3.3.2 Small-scale private sector participation

The bulk of private sector participation in financing WASH services occurs in urban areas, predominantly via water vendors and sanitation service providers. As most of these activities occur informally and are unregulated it is difficult to assess the extent of small-scale private sector financing. But the market size of these providers is not negligible. In Burundi, Eswatini, Uganda and Zimbabwe, for example, faecal sludge emptying services are mainly delivered by private operators on an open-market basis (i.e. without formal agreements or contracts with authorities).

Experience of private sector participation in rural water financing remains limited but is slowly increasing. In Kenya, World Bank support has enabled small water service providers to access commercial loans to finance service expansion. As previously mentioned, other forms of private sector participation are emerging (not necessarily involving financial contribution to capital costs). These include service contracts (with local governments or communities) for the operation and maintenance of rural water systems as in Kenya and Uganda.<sup>12</sup>

In the rural WASH sub-sector, the market is not well developed for the provision of products and services. Private sector actors, mostly operating in the supply of products and provision of maintenance services, are mostly informal in nature, lack capacity and are often unskilled. In many countries, such as Eswatini and Zimbabwe, regulatory frameworks are not in place in rural areas to support the supply chain for WASH-related products and services .

In addition, WASH sector public institutions lack the capacity to engage with the private sector to maximize their capacity and resources. The lack of monitoring data in the WASH sector has also hampered the sector's ability to articulate the commercial value of the rural WASH sector, and to attract new private entrants into the market.

<sup>&</sup>lt;sup>11</sup>World Bank, Water & Sewerage Sector, Private Participation in Infrastructure, 2017

<sup>&</sup>lt;sup>12</sup>In Kenya, for example, Oxford University is piloting a maintenance service for handpumps and small piped systems which mobilizes the services of trained professionals (mechanics, plumbers snf do on) who have created private enterprises.

# 4 Government Financing of WASH Services

This section aims to present an overall picture of government financing for WASH. Where possible, the data presented here are expenditures data. However, as expenditure is difficult to track, the analysis also relies on budgetary data. The analysis therefore holds some limitations, including the fact that budgets only represent commitments and that budgets are transferred to ministries whose responsibilities also include other sectors (e.g. health and the environment). In addition, budgets often bundle staff compensation (i.e. salaries) with budgets for other activities (such as investment, equipment), which make it difficult to assess how much was allocated to improve services themselves.

# 4.1 Government budgets and expenditure on infrastructure

The Infrastructure Consortium for Africa report that African states spending in the water sector was US\$5.9 billion in 2017, a slight decline on the US\$6.1 billion spent in 2016 but well above the US\$3.6 billion spent in 2015. Of the estimated US\$ 13.1 billion of investment in the water sector in 2017 across Africa, state financing through taxes, accounted for 45 per cent.<sup>13</sup>

Of the countries in Africa, South Africa was the strongest investor. Its US\$2.3 billion spending accounted for 39 per cent of state funding in the sector. The second highest investment was made in Egypt, which registered US\$800 million. This was followed by Kenya (US\$483 million) and Angola (US\$478 million).<sup>14</sup>

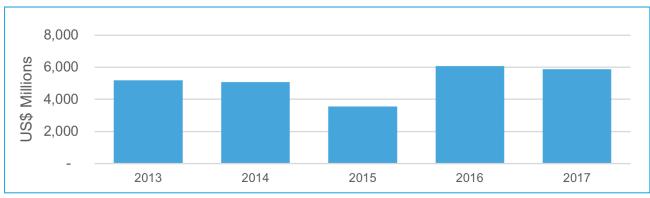


Figure 10 State funding of the water sector in Africa, 2013-2017

Source: The Infrastructure Consortium for Africa 2017 Report

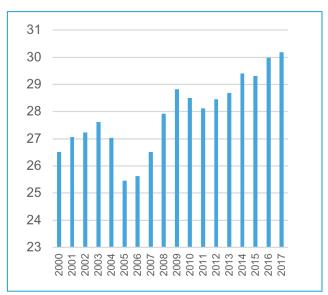
Despite some fluctuation, government general expenditure across ESAR as a percentage of GDP has shown a positive trend between 2000 and 2017. In 2019, on average government budgets in ESAR amounted to around 27 per cent of GDP, which compared favourably to other regions. However poor economic growth in the region and inability to gather tax revenues has resulted in ESAR countries being required to increase borrowing to record high levels, resulting in significant budget deficits across the region. This debt has placed pressure on economies, with governments facing competing demands for budget allocations and coming up against public debt ceilings.

<sup>&</sup>lt;sup>13</sup>Infrastructure Consortium for Africa's Infrastructure Financing Trends in Africa – 2017

<sup>14</sup>lbid

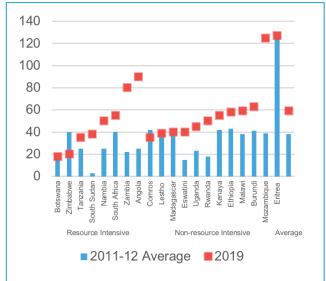
Figure 11

Average government expenditure in ESAR as percentage of GDP (2000 -2017)



Source: OECD

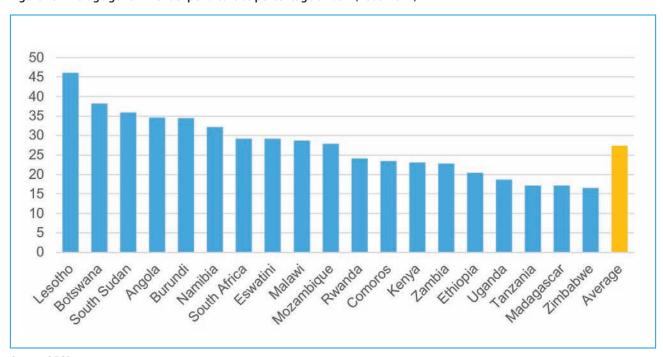
Figure 12
General gross government debt trends in ESAR countries,
2011-12 period averages and 2019 (as % of GDP)



Source: UNICEF, The Macroeconomic and Social Investment Outlook for Children in Eastern and Southern Africa data from IMF World Economic Outlook Database (April 2019).

As would be expected, there are significant variations across ESAR in government expenditure as a percentage of GDP – ranging from a high of 46 per cent in Lesotho to 16.5 per cent in Zimbabwe. Average government expenditure as a percentage of GDP across ESAR between 2000 and 20017 was 28 per cent.

Figure 13 Average government expenditure as percentage of GDP (2000-2017)



Source: OECD

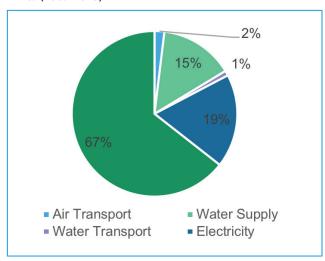
## 4.2 Government budgets and expenditure in WASH

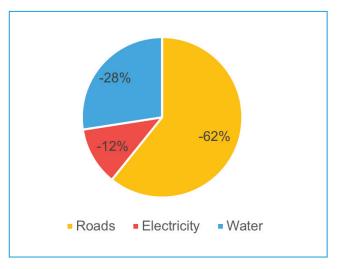
There are no consolidated data on government expenditure on WASH services in Africa, and in ESAR in particular. The World Bank BOOST programme has attempted to quantify overall government expenditure on water and sanitation. BOOST estimates that, on average, for the 24 African countries surveyed, government expenditure on building, rehabilitating or improving the existing capacity of infrastructure across the main subsectors made up 2 per cent of overall expenditure.<sup>15</sup>

Roads accounted for two-thirds of overall investment. Capital spending on electricity and pm water supply and sanitation each accounted for 15 per cent of total capital expenditure. BOOST data also reveal that actual spending on infrastructure was considerably lower than capital allocations during the same period, amounting to around 3.4 per cent of GDP, reflecting substantial under-execution of such investment.

Figure 14 Investment on infrastructure subsectors in sub-Saharan Africa (2009-2015)

Figure 15
Under-execution in capital spending





Source: World Bank, BOOST data

Looking particularly at the four countries retained in this WASH financing analysis, the data confirm that the WASH sector lags behind other sectors in terms of government spending priorities. In addition, specific WASH sub-sectors attract the bulk of government funding, while others (sanitation in particular) remain critically under-funded:

- In Burundi, government financing of WASH services has been erratic in recent years, due to the ongoing political and economic crisis. UNICEF budget briefs estimated that government budgets for WASH ministries reached US\$84 million in 2013, but dropped to US\$12 million in 2017 and US\$39 million in 2018. It should be noted, however, that WASH ministries are in charge of other sub-sectors (e.g. energy and health) and therefore the bulk of these government transfers are absorbed into other (non-WASH) activities. In 2018, the actual budget allocated to the department within the Health Ministry in charge of sanitation services was US\$3,573, a budget derisory in comparison with sector needs.
- In Eswatini capital budget expenditure to WASH programmes over recent years has ranged from US\$1.25 million in 2013/14 to a high of US\$9.9 million in 2016/17. However, upcoming budget for the coming year appears to be lower, with the budget for the coming four years averaging at US\$3.29 million per year. Between 2015 and 2020, on average government investment made up around 45 per cent of spending in the water sector, with foreign grants (5 per cent) and loans (51 per cent) accounting for the rest.

<sup>&</sup>lt;sup>15</sup>BOOST is a World Bank initiative launched in 2010 to provide access to budget data. The initiative aims to aggregate budget data, for improved budgetary decision making, analysis, transparency, and accountability. BOOST data enable a review the capital spending in infrastructure for 24 countries in sub-Saharan Africa across the main infrastructure subsectors (roads, water, air transport, electricity, telecommunications, and water and sanitation).

- In Uganda, between 2015 and 2018, government expenditure on WASH fluctuated between US\$59 million and US\$62 million a year; further analysis revealed a bias towards WASH in urban areas, with US\$2.9 of expenditure per capita for urban WASH, compared with US\$1 for rural WASH. Government data does not allow for disaggregation of expenditure by sub-sector, however.
- In Zimbabwe, government investment in water resource, water supply and sanitation infrastructure has ranged from 2.9 to 1.0 per cent of total budgetary expenditure in recent years, and averaged 2.1 per cent, well below the Sanitation and Water for All (SWA) commitment of 7 per cent per year. WASH infrastructure investment as a percentage of GDP averaged 0.5 per cent between 2010 and 2018. It is worth noting that investments in water resource management dominate the budget for water and WASH.

## 4.3 Financing strategies and plans

Countries across ESAR have to a greater extent and lesser tried to include a financing strategy within their broader strategies to improved water and sanitation coverage. Strategies have sometimes included a cost for achieving national targets, these have ranged from estimates based on historic spending and available resources to detailed unit cost analysis (such as in Ethiopia) taking into account changing service levels, inflation, slippage and leakages. Some strategies (such as in Zimbabwe) have also set out a variety of fiduciary mechanisms to finance service delivery, including inter-ministerial transfers, off-budget allocations (e.g. donor funding), cross-subsidization, taxation, user fees and public-private partnerships.

Financial management systems, including budget formulation and expenditure management frameworks, are a key part of sector governance, and their strength has a significant bearing on the implementation of financing strategies and plans. Too often there is a vast disconnect between sector policies and targets, and sectoral budgetary allocations. Few countries in the region have clear budgeting processes that link sector targets, coverage and equity considerations to final budget allocations.

Medium-term expenditure frameworks (MTEFs) and the medium-term budget frameworks (MTBFs) and medium-term fiscal frameworks (MTFFs) that precede them have become common tools to strengthen policy and spending linkages in macro-level expenditure planning. However, many African countries lack the capacity to implement them effectively.

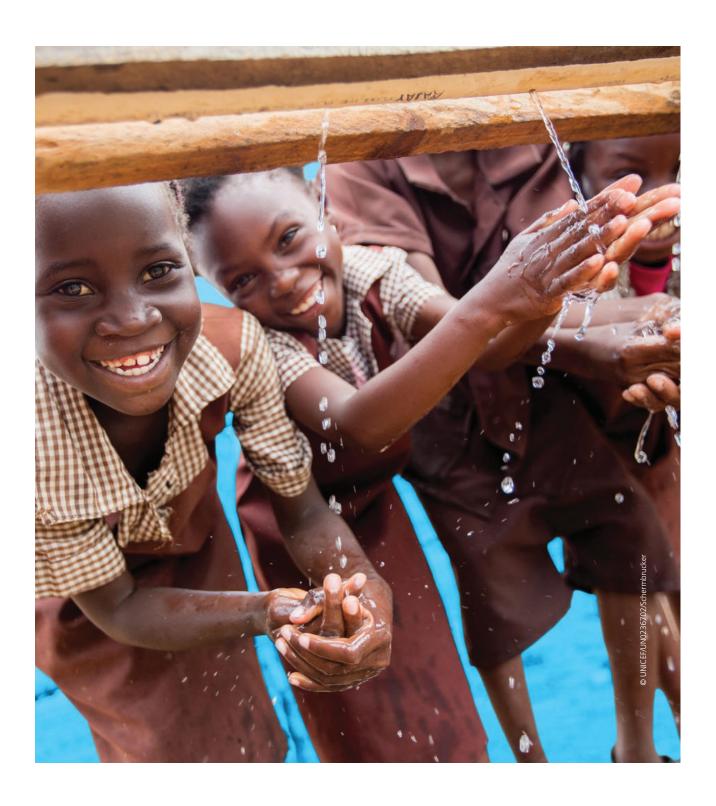
To promote comprehensive and realistic planning, the OECD developed the approach of using strategic financial plans (SFPs). This is a national approach to policy dialogue that looks at the supply and demand of finance for the sector over 20–30 years. The country first sets a baseline, an economic forecast and sector targets, and then looks at the trade-offs (including costs and financing options) between different options for meeting the targets. SFPs can be compiled using standardized tools or financial models that are tailor-made for the country. However, for some countries an SFP is the gold standard and other, interim, analysis using readily available data will be needed first.

#### **Box 4: Uganda's Sector Investment Plan**

In Uganda, section financial planning has raised national awareness of hygiene and sanitation, promoted the involvement of district administrators, and improved coordination between the three main ministries responsible. The Sector Investment Plan (SIP) produced in 2004 was the first attempt to produce coherent cost estimates of its aspirations in the WASH sector. Under the SIP, total financing needs of the sub-sectors were generated under different scenarios (such as coverage targets, subsidy levels, tariffs, unaccounted-for-water levels, service levels and technology) and with assumptions about the level of public subsidy available. As a spin-off from the full SIP, a separate sanitation and hygiene financing strategy was developed. This was intended to show clearly how much finance would be required for the 'software' elements of meeting sanitation targets, to provide a tool showing the effect of funding deficits, and to support optimal spending of existing budgets. More generally, it provided a national platform on which district strategies could be developed.<sup>16</sup>

<sup>&</sup>lt;sup>16</sup>OECD, Strategic Financial Planning for Water Supply and Sanitation, 2009

Despite the existence of project preparation facilities, many of the projects found in national infrastructure plans are not sufficiently developed either for uptake by available project preparation funds or 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 can be well down the development process before it is adjudged not to be financially viable. Many strategic plans, calculate the financial gaps in the sector as the difference between current spending by governments and aspirational plans. However if water infrastructure plans are updated to only include financially viable projects, this gap could widen significantly.



# 5 Donor Financing of WASH Services

#### 5.1 Recent trends in ODA

Official development assistance (ODA) to Africa from Organisation for Economic Co-operation and Development (OECD) countries peaked in 2013 at US\$52 billion and has since declined to US\$45 billion in 2017, with fragile states receiving more ODA as a percentage of GDP than non-fragile states.<sup>17</sup> All regions saw ODA increase between 2005–10 and 2011–16, with East Africa and West Africa remaining the highest recipients. Of the ODA provided to Africa in 2017 47 per cent was given to ESAR.

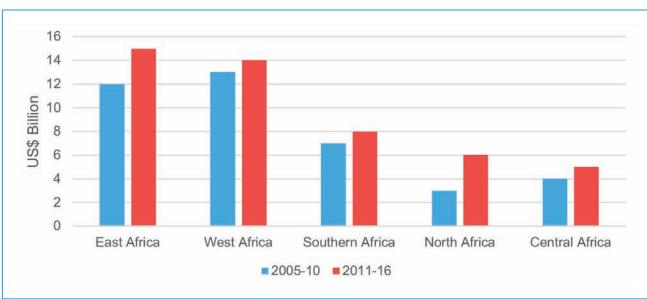


Figure 16 Average annual ODA to Africa, by region, 2005–10 and 2011–16

Source: African Development Bank statistics

With regard to ODA from non-OECD countries, China is the largest financier of infrastructure and water in Africa. The continent is the largest recipient of Chinese development financing, and its share is increasing. In 2012, Africa received nearly half of the US\$54 billion spent by China on global foreign aid, significantly more than any other region.<sup>18</sup> Although Chinese assistance has increased rapidly as OECD disbursements declined (Figure 17), Chinese aid remains well below that from the OECD countries, amounting to US\$3.2 billion in 2013.<sup>19</sup> However Chinese and OECD ODA differ substantially in scale and nature. Chinese development assistance is frequently packaged into agreements that mix grants and investment, and concessional and non-concessional loans. In addition, OECD assistance typically includes greater focus on social development projects and policy reforms. As a result, almost two-thirds of OECD assistance to Sub-Saharan Africa flows to health, education, water, and sanitation, or toward emergency relief and food aid. In contrast, half of Chinese assistance is for infrastructure.<sup>20</sup>

<sup>&</sup>lt;sup>17</sup>AFDB, African Economic Outlook 2019

<sup>&</sup>lt;sup>18</sup>Chinese Ministry of Commerce statistics from http://www.chinaafri- carealstory.com/p/chinese-fdi.html.

<sup>&</sup>lt;sup>19</sup>World Bank 2013 Annual Report

<sup>&</sup>lt;sup>20</sup>World Bank 2013 Annual Report

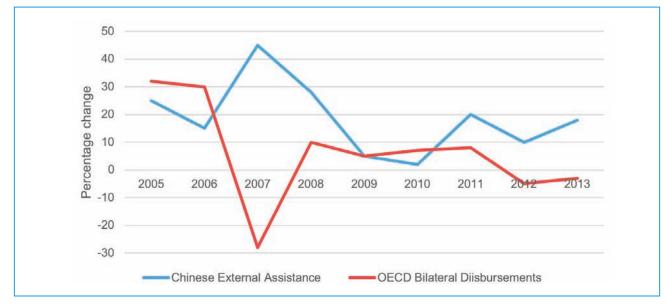


Figure 17 Chinese development assistance and bilateral aid from OECD countries to Sub-Saharan Africa

Source: OECD; Chinese Statistical Yearbook; MOFCOM. Cited from http://www.china africarealstory.com/p/chinese-aid.html.

ODA across the 21 countries in Eastern and Southern Africa was reported by the OECD to be US\$25.2 billion in 2017, thus averaging US\$1 billion per county. However, distribution across countries varied significantly, from US\$4,276 million to Ethiopia to just US\$22 million to the Seychelles. Contributions to the five countries that received the most ODA (Ethiopia, Kenya, the United Republic of Tanzania, South Sudan and Mozambique) accounted for 56 per cent of the total ODA, and the top ten countries received 83 per cent of the ODA.

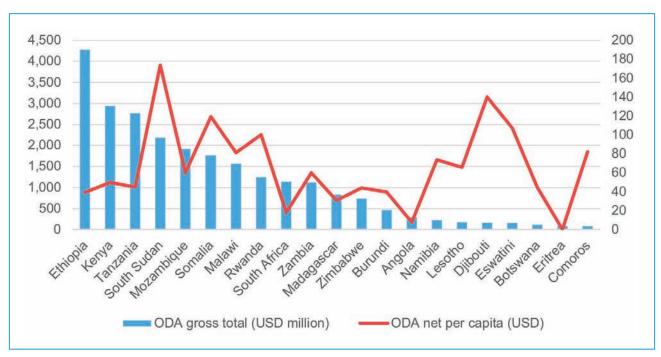


Figure 18 Disbursements of ODA in ESAR, 2017 (US\$, million)

Source: OECD, authors' calculations

### 5.2 Recent trends in ODA for WASH

Africa is estimated to have received US\$3.95 billion in ODA for the WASH sector from OECD countries in 2017. Of the 10 countries that received most ODA for the WASH, sector, 5 were in ESAR and these account for 38 per cent of the total investment received.

700 600 500 400 300 200 100 0 Tunisia Ethiopia Kenya Tanzania Egypt Nigeria Angola Djobouti ■ France Japan ■ Germany ■ Green Climate Fund Kuwait ■ EU Institutes United States Ad. Dev. Fund Arab Fund (AFESD) Other Donors

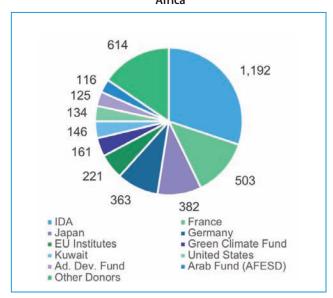
Figure 19 Africa's top 10 recipients of water ODA 2017 (US\$ million, commitments)

Source: OECD, Development Aid at a Glance, Africa, 2017

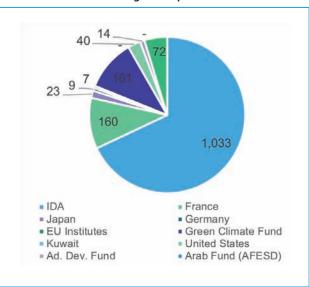
The World Bank through its International Development Association (IDA) was the largest OECD donor to Africa for water, providing 30 per cent of investment. While disaggregated data for the whole of ESAR was not available, looking at the five largest recipients of ODA for water<sup>21</sup> demonstrated that at 69 per cent of financing IDA provide a significantly larger percentage that Africa's average. The other donor to break the continental trend in ESAR was the Green Climate Fund, with 11 per cent.

Figure 20 ODA commitment to water by donor, 2017 (US\$)

Africa



Five largest recipients in ESAR

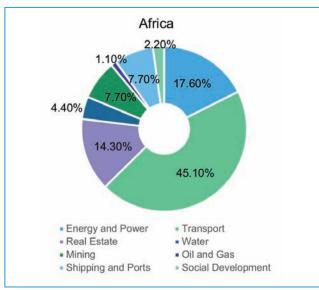


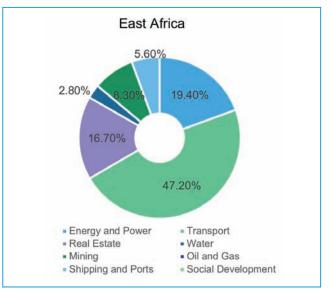
Source: OECD, Development Aid at a Glance, Africa, 2017

To date China has participated in over 200 African infrastructure projects, and this has included more than nine million tons per day of clean water treatment capacity across the continent. While not one of China's largest areas of infrastructure investment, in 2018 the water sector accounted for 4.4 per cent of China's infrastructure investment across Africa and 2.8 per cent in East Africa.

<sup>&</sup>lt;sup>21</sup>Ethiopia, Kenya, the United Republic of Tanzania, Angola and Malawi

Figure 21: Chinese infrastructure financing in Africa and East Africa, 2018

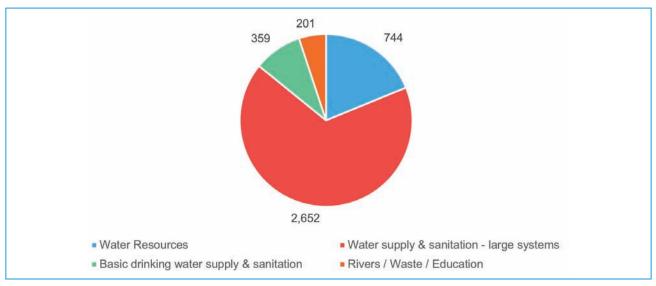




Source: Deloitte Africa Construction Trends, 2018

OECD data also revealed that 67 per cent of ODA was provides to large water and sanitation systems, with water resources receiving the second largest level of investment (20 per cent)

Figure 22: ODA to water by subsector in Africa, 2017 (US\$ million, commitments)



Source: OECD, Development Aid at a Glance, Africa, 2017

World Bank BOOST data from a sample of 24 countries in sub-Saharan Africa shows that the proportion of overall capital budget allocations funded through external aid fell from 39 per cent in 2009 to 36 per cent in 2015. <sup>22</sup> Capital spending on water and sanitation has been vulnerable to fluctuations in foreign assistance which nevertheless, in some situations, risks crowding out domestic capital. Data on capital spending also shows a significant reduction in foreign funds devoted to the WASH sector since 2012, with foreign aid dropping from 60 per cent to less than 50 per cent of the total. The main driver behind the fall was the reduction in overall capital allocations by sub-Saharan African countries in the sample, from 1 per cent of GDP in 2012 to less than 0.5 per cent in 2015. When foreign assistance was reduced in 2015, this generated a significant drop in overall capital allocations in the sector. Similar patterns were found in Mozambique and the United Republic of Tanzania, although overall capital reductions were less significant.

<sup>&</sup>lt;sup>22</sup>World Bank, Africa Pulse: An analysis of issues shaping Africa's economic future, 2017

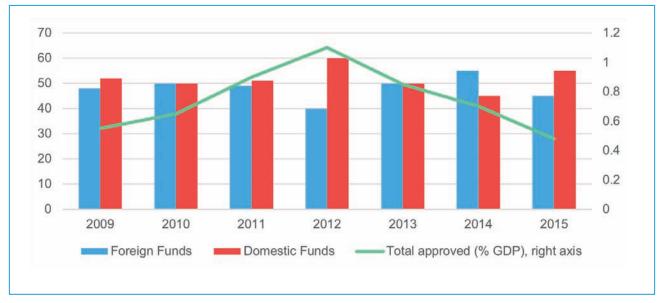


Figure 23: Spending in the WASH sector in sub-Saharan Africa, total and by source, 2009-15

Source: World Bank BOOST, authors' calculations

In the countries reviewed in detail for this study, some insights can be gained from the balance between taxes, tariffs, and transfers. In Burundi, donor financing was estimated to make up 57 per cent of overall WASH sector spending in 2017, compared with 12 per cent from government taxes and 31 per cent from tariffs. In contrast in Uganda, donor finance constitutes an estimated 30 per cent of overall WASH sector spending, compared to 22 per cent from the government and 48 per cent from user tariffs and household contributions. In Eswatini the water resource management sector received an average of 51 per cent of its investment from foreign loans between 2015 and 2020. The government's own contribution to the water sector (through taxes) was 43 per cent, and foreign grants accounted for just 5 per cent of allocations. A comprehensive figure for revenue generated from tariffs was not available in Eswatini.

Although ODA continues to serve as an important financing source for most governments, flows are heavily concentrated in a sub-set of countries. Given the strategic importance of improving the size and quality of public spending in the sector, it is imperative for African countries to reduce their exposure to and reliance on foreign aid, by striving to reach a better balance of funding sources for the sector toward greater domestic mobilization.

Looking specifically at donor financing for WASH in Burundi, Eswatini, Uganda and Zimbabwe, the data confirm that donor funding is erratic, insufficient despite the needs, but also changing in nature.

- In Burundi, recent years have seen a substantial decline in donor funding for the WASH sector. While donor funding peaked in 2011, with US\$56 million disbursed, only US\$9.7 million was disbursed in 2017 for water and sanitation according to the OECD Development Assistance Committee (DAC) database. Further analysis shows that ODA WASH funding in Burundi is lower than ODA WASH funding in countries with higher GDP per capita: US\$0.89 per capita in Burundi compated to US\$0.97 in the Democratic Republic of the Congo. ODA funding is a reflection of the difficult political environment which has frozen bilateral cooperation as of 2019. Other multilateral financiers (including the World Bank) have yet to put WASH at the heart of their priorities.
- In Eswatini, on-budget donor commitments grew gradually from around US\$1.3 million in 2013/14 to US\$11.2 million in 2016/17. On-budget donor financing was maintained at this level in 2017/18 (US\$10.8 million). However currently investment in the coming year is well down on these highs.
- In Uganda, the sector performance report states that in 2017/2018 overall development partner investment spending in the entire water and environment sector was just over US\$72 million dollars. Of these funds, the on-budget contribution for the direct provision of rural and urban WASH services totals US\$50.7 million dollars, with the majority (US\$36.2 million) allocated to urban water and sanitation services. Donor funding

- is increasingly channelled via loans, which made up 71 per cent of donor support to the sector in 2017, compared with 14 per cent in 2011.
- In Zimbabwe, development partners have contributed a total of US\$251.34 million over the period 2009 to 2016, reaching a peak of US\$50 million in 2014 before declining to US\$19 million in 2016, again a consequence of the country's pollical situation.

# 5.3 Main modalities of development partner investments

The channelling of development partners' finance to the WASH sector has taken a variety of forms in ESAR, including bilateral relationships between donors and governments, pooled funding mechanisms, sectorwide approaches, and the creation of funds and funding facilities.

Bilateral financing. Development partners have traditionally favoured bilateral funding arrangements, as these provide them with more flexibility and control of the resources they are investing. Under such arrangements they can cherry pick initiatives or sub-sectors that align with their interests and put in place structure and systems that align with their corporate requirements. The main critiques of bilateral funding arrangements have been that they reduce the leadership of the national government and hamper its ability to effectively fund their strategies in their entirety. In addition, such an approach risks duplication both in outcome (with donors replicating activities in a single sub-sector or thematic focus), and in effort (with systems, such as monitoring and financing, that have to be tailored to meet the requirement of multiple development partners).

As a result, there has been a trend to organize the WASH sector around sector-wide approaches (SWAPs).

**SWAPs.** While SWAPs are promising in theory, debate continues over their effectiveness in practice, particularly with regard to the WASH sector. Effective water governance depends not only on how much financing can be mobilized, but also on the extent to which these resources are managed and allocated efficiently, effectively and sustainably by recipient institutions across the sector. SWAPs typically encompass public financial management, sector

policy, accountability and performance monitoring, and aid alignment and harmonization. Donor finance for SWAPs has been critical for sector development, and has generally provided much-needed flexibility. For example, in Uganda the Joint Partnership Fund enables the funding of one-off capacity-building efforts such as technical support units.

Sector approaches should improve cooperation between donors and government. In some countries, such as Ethiopia, South Africa and Uganda, SWAPs appear to be having a positive impact on sector governance, centred on annual technical performance assessments and joint sector reviews (JSRs) led by stakeholder working groups.

Elsewhere, donor coordination is less evident. This results in overlapping and sometimes contradictory donor efforts and approaches. In part, this is a function of the complexity of the sector (with subsectors including water supply, sanitation and hygiene, as well as related sectors of agriculture, and environment). For this reason, it may be prudent to introduce SWAPs at the sub-sector level, before expanding to include all sub-sectors.

In the same way, the plurality of institutions and budgets involved in the WASH sector has caused problems in effectively coordinating and managing single sector budgets. Under the Ethiopian One WASH National Programme significant emphasis in its design was placed on having "one plan, one budget and one monitoring system." However, this has proved challenging to achieve. Collation and integration of the budgets of all actors implementing off-budget projects has proved impossible. It has also been very difficult to collect and collate onbudget WASH-related resources. In Ethiopia there is an increasing realization that, rather than trying to create a comprehensive sector budget, the national programme should focus on encouraging interinstitutional dialogue and financial coordination in the pursuit of shared objectives.

Despite the clear potential benefits of improving how sector resources are allocated, the impact of SWAPs on domestic resource mobilization in ESAR has been mixed. Lesotho saw domestic public resources roughly double in two to three years following the commencement of the SWAP, while Uganda experienced stagnation in budget allocation. It could be argued that attracting additional donor resources has resulted in SWAP countries feeling less pressure to commit their own domestic resources to achieving their water and sanitation goals.

**Financing facilities.** The African Water Facility (AWF), launched in 2006, is hosted and managed by the African Development Bank (AfDB) and seeks to support African countries to address key sector investment needs. The AWF is demand-driven and its main, but not exclusive, focus is preparation of projects for sustainable multipurpose water resource development and use and/or projects which adopt innovation and/or mobilize the private sector. AWF also undertakes marketing and investment promotion activities to expand the number of investment opportunities and projects financed in the sector. AWF's latest strategy is intended to provide 25 million people with increased access to safely managed water, and 19 million with access to safely managed sanitation.

Another financing facility relevant for ESAR is the Global Sanitation Fund (GSF). The GSF is a pooled global fund established by the Water Supply and Sanitation Collaborative Council (WSSCC) and funded by its donors<sup>23</sup> to gather and direct finance to help people to access improved sanitation and adopt good hygiene practices. Since its establishment in 2008, the GSF has committed over US\$117 million to programmes in 13 developing countries, including 6 in ESAR (Ethiopia, Kenya, Madagascar, Malawi, Uganda and the United Republic of Tanzania). Despite the GSF having been running for over ten years, it has yet to demonstrate a more efficient model for channelling finance for sanitation and hygiene or mobilized more resources that would have been in the sector without its existence. The WSSCC is currently in the process of reviewing its modality in an attempt to return it to its course principle of both mobilizing and leveraging more finance for the sector.



<sup>&</sup>lt;sup>23</sup>The Governments of Australia, Finland, the Netherlands, Norway, Sweden, Switzerland and the United Kingdom

# 6 Consumer Financing of WASH Services

This section presents a broad overview of the state of WASH financing by consumers, either via tariffs for services provided or through self-supply. Most of the regional data that is available pertains to tariffs for urban water supplies. As these only serve a minority of ESAR's population, the picture presented here is only partial. The significant financial (in cash or kind) contribution of households to improving water and sanitation access has been underestimated by sector professionals for many years, and poor data in this area mean the sector still lacks a clear picture of household contributions.

#### 6.1 Urban water and sanitation services

Mechanisms for setting prices for water and sanitation service in urban areas vary across the region based on national policies, institutional structures, and ownership and management of water utilities. While water is a natural monopoly and therefore cannot be regulated by the market, sanitation services are open to market forces. Where water and sanitation services are directly provided by the state and effective regulation is not in place, price setting is less likely to result from market interactions between suppliers and customers.

The review of four ESAR countries has not shown any urban water and sanitation systems that are achieving full cost recovery, and wider literature demonstrates that this is the case across the continent. A survey of 30 utilities in Africa found that only 36 per cent of the utilities surveyed met their full O&M costs and only 9 per cent met O&M costs plus a part of their capital costs.<sup>24</sup> Where tariffs are not achieving full cost recovery, contractual agreements are put in place between the private or semi-autonomous service providers and the government to subsidize the cost difference between the production of water and a price that is affordable and acceptable to users. As a result, urban water tariffs vary considerably across ESAR, from US\$1.45 per m³ in Namibia to US\$0.16 per m³ in Ethiopia. The regional average is US\$0.75 per m³.

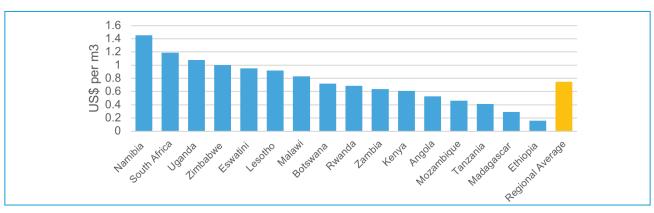


Figure 24: ESAR water tariffs per m<sup>3</sup>

Source: IBNET

Cross-subsidies are a mechanism harnessed across ESAR, often through the use of block tariffs, under which higher tariff rates are charged once consumption increases above a threshold level. However, such structures often do not include mechanisms that restrict access to the lowest tariff block to qualifying low-income users, meaning that subsidies are utilized by all instead of only those who need them.

<sup>&</sup>lt;sup>24</sup>Banerjee et al, Cost Recovery, Equity, and Efficiency in Water Tariffs: Evidence from African Utilities, 2010

Political pressure on water tariffs are common in ESAR and undermine the financial and environmental sustainability of the sector. An example of such pressure is the case of Kenya, where tariffs are reviewed by WASREB (the national regulator) and a clear tariff-setting process is in place. Despite this clear process the Constitution of Kenya requires final decisions on tariffs to be at county level, meaning that while the regulator recommends tariff rates, the relevant local authority determines the tariff. Even when the regulator has supported tariff increases, several Kenyan utilities have struggled to maintain their tariff levels in the face of political pressures. This uncertainly over tariff setting has increased the risk for commercial finance in the sector and deterred some investors.

One way to ensure that the revenues of a service provider do not fall behind inflation is to index-link the tariff. The National Water and Sewerage Corporation (NWSC) in Uganda was able to negotiate an indexation of the tariff with its parent ministry. This meant that the tariff would increase automatically in line with inflation and other agreed core cost drivers. The result of this indexation was that NWSC did not have to apply for a tariff increase or adjustment for many years and it was still able to sustain positive operating cash flows over a long period of time. The tariff charged by NWSC (US\$1.03 per m³ for domestic customers as of 2019) is close to some of the highest tariffs in the region but is not considered excessive. From a utility financial viability perspective, these tariffs are thought to be broadly adequate to safeguard the operational sustainability of NWSC service delivery.

#### Box 5: Uganda's NWSC, a relatively well-performing utility

NWSC is an autonomous public-owned utility positioned under the ministry of Water and the Environment and is responsible for the provision of urban water and sanitation services in all large towns and cities and an increasing number of small towns. As of 2019, NWSC is serving over 10.5 million users across Uganda.

In recent years, the remit of NWSC has been growing rapidly as part of an ambitious programme of government-mandated expansion. This has meant that since 2011 there has been four-fold increase in the number of people serviced by NWSC water services and a rapid growth in the number of service areas under NWSC control. This expansion has also been accompanied by targeted capital investment support, largely from central government and development partners, to upgrade service delivery infrastructure in these service areas.

NWSC annual reports show a clear trend in increasing revenue collection, driving up the absolute value operational margin the corporation achieves. In 2017, the NWSC collected US\$86.7 million dollars in household tariffs, up 16 per cent from 2016 and up 45 per cent from 2015. This compares to operational expenditure of US\$67.8 million in 2017, resulting in an operational margin of US\$19.1 million.

The financial position of NWSC greatly benefits from investments in new infrastructure financed by government taxes and subsidized by concessional loans from development partners. In this set up the NWSC benefits from an expanding customer base made accessible through network expansion, but it is not required to bear the costs of borrowing this money as this is paid for by central government.

It is worth noting that these figures represent the financial situation for the entirety of NWSC and masks differences in operational performance in different regions. For example, seven out of twelve areas in the Central Region are not breaking even and require cross-subsidy from other parts of the business: this situation is similar for parts of Eastern and Northern Region.

The rapid expansion of NWSC into smaller and more remote towns is putting pressure on its ability to recover costs in all service areas, though the current financial health of the organization is strong. This unevenness in financial viability, as well as reported variations in service level, is likely to put a strain on NWSC's financial performance in future years.

Source: NWSC Annual Reports

In addition to the poor pricing of water services, water users not paying for services is a common problem across ESAR. While willingness to pay is clearly an issue, stemming from both ability to pay and perception of poor service levels, utilities are often not incentivized to address bill payment problems. Interestingly, in many countries, the penetration of household water meters is very high, with over half of the countries reporting in ESAR stating that 100 per cent of their customers are metered. In addition, the regional average is well above the global average. These data do not include information about dysfunctional meters, but do suggest that in additional to willingness to pay, issues with meter reading and billing systems are hampering revenue collection.

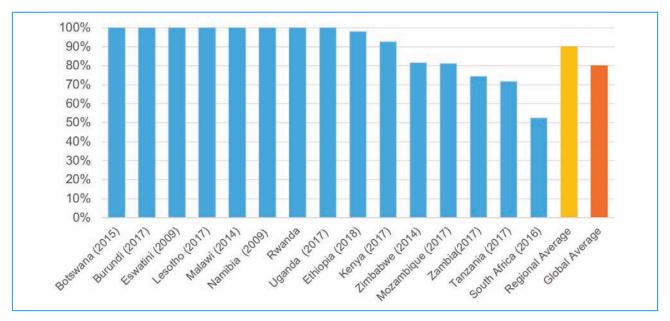


Figure 25: Percentage of utility customers in ESAR with meters

Source: IBNET. Note: Figures from latest year available provided

In urban areas, those that gain access to piped water and trunk line sewerage services are required to pay (often substantial) connection charges and ongoing tariffs, as set out in Section 6.1. On the other hand, those in ESAR countries not connected to the network often have to pay much higher costs.

Water supplied through informal mechanisms (such as water vendors) is more expensive that those provided through utilities household connections or stand posts. In some countries, prices at public stand posts or enhanced kiosks are subsidized so that low-income households in peri-urban areas can benefit from improved water supply, but this is not always the case.

### 6.2 Rural water and sanitation sector

Data on consumer financing of the rural water and sanitation sub-sectors in ESAR is scarce. The predominant service providers in these sub-sectors are small-scale operators, sometimes operating informally. As a result, tariffs that are charged and the scale of revenues cannot be tracked in the absence of a dedicated country-level household survey. The scale of this contribution is likely to be very large, as indicated in the TrackFin results for Ghana (where user contributions to urban sanitation services were estimated to make up 80 per cent of total expenditure on sanitation in 2014).<sup>25</sup>

In the rural water sub-sector, most water schemes require a household to make contribution of payment in-kind (collecting local materials and labour) and sometimes a cash payment, and households that decide to construct so-called 'self-supply' water schemes also make significant contributions to the construction of infrastructure. Consumers also pay ongoing fees to community water committees, for the operation and maintenance (O&M) of water infrastructure.

<sup>25</sup> Government of Ghana and WHO (2018): TrackFin Initiative. Tracking Financing to WASH Sector in Ghana. Findings from the TrackFin Initiative in Ghana 2013-2014

While some countries have ill-defined (or non-existent) basic rural water tariff policies, others are gradually introducing policies for cost-recovering tariffs. In Burundi, there is simply no official policy for tariffs in rural areas; when tariffs are applied (which is the case for only a small proportion of rural systems), they are usually set by municipal councils, and vary between US\$0.16 and US\$0.54 as an annual charge: this implies that water services are almost free of charge;

In Uganda, current policy is that rural and small-town tariffs should be set to cover actual O&M costs, with lower rates for gravity flow schemes which do not require pumping. A sector performance report for 2018 indicates that cost recovery can be achieved in most towns, apart from those with high pumping costs.

Under the community-based management model promoted in Zimbabwe, as communities assume ownership of water and sanitation infrastructure, they are responsible for development, management, operation and maintenance of their own primary water supplies and sanitation facilities. To facilitate this, rural district councils and other support agencies are required to provide information to the community on both the initial cost and the long-term financial implications of technology.

World Bank research has estimated that the monthly spending of households in Africa on water averages at US\$4, or 2 per cent of household budgets, and rarely exceeds 3 per cent.<sup>26</sup> Within ESAR only in Rwanda do households spend more than 5 per cent of their budgets on water. As might be expected, spending on water services increases with rising income levels, with the top 20 per cent of African households paying US\$6 per month; however this is still equivalent to 2 per cent of their income.<sup>27</sup>

The debate concerning the effectiveness of subsidies in the water and sanitation sector has been ongoing for over a decade, but is now more prominent in the rural sanitation sector. While subsidies for software (e.g. community mobilization and educational) activities are broadly acceptable, countries in ESAR have taken different approaches to the subsidizing of household hardware costs and investment to support market development.

#### **Box 6: Eswatini sanitation subsidies**

In Eswatini, the government sanitation hardware subsidy programme as not been implemented consistently, and no figures are available on the total amount provided in subsidies each year. Households are required to pay a sum total of 65 SZL (US\$4.63) to the local government revenue office. The total value of the goods provided is around 908 SZL (US\$64.67), which equates to 27 per cent of the estimated total costs. The precedent of subsidizing materials means that most rural households do not invest in their own sanitation services, but either build new facilities or replace full pits. With the recent reduction in government budgets, funding is currently not available, from the government programme to support rural subsidies, and this puts efforts to promote rural sanitation at significant risk

#### 6.3 Access to finance

Access to consumer credit is a critical enabling factor for some households to improve access to water and sanitation, whether it being mobilizing resources to construct household latrines or covering the upfront cost of connecting to a main line water or sewerage line. In addition to consumer credit, financing for small and medium-sized enterprises (SMEs) is critical for improving the supply of water and sanitation-related products and services.

However, like in several countries of the region, none of the focus countries of this study has any significant experience (i.e. beyond pilot level) of mobilizing commercial finance for WASH, whether for households or enterprises. Experiences are only starting to scale up in Ethiopia, Kenya, Uganda and the United Republic of Tanzania, with support from international NGOs.

<sup>&</sup>lt;sup>26</sup>World Bank, Africa's Water and Sanitation Infrastructure: Access, Affordability, and Alternatives, 2011

<sup>&</sup>lt;sup>27</sup>World Bank, Africa's Water and Sanitation Infrastructure: Access, Affordability, and Alternatives, 2011

#### Box 7: Experiences of financial services for WASH in selected ESAR countries

In Ethiopia, financial services for WASH improvements have focused on urban sanitation, and have only been delivered at a small scale with support from donors and NGOs. Two recent initiatives are noteworthy:

- In 2018, the NGO iDE established a partnership with VisionFund, a privately-operated microfinance institution (MFI), to provide sanitation loans to borrower groups in rural areas in the SNNPR region. This partnership was established to de-risk entry to the sanitation market for VisionFund, and it remains to be seen whether the MFI will continue to pursue this line of business at a greater scale.
- Water.org's WaterCredit programme provides technical assistance and capacity building to partner financial institutions to enable them to identify market opportunities, design appropriate financial products and roll out these products across their branches. Water.org is working with three privately owned MFIs. According to Water.org, to date over 4,200 loans have been disbursed, benefiting 26,000 people. Of the US\$1.2 million of lending capital disbursed to date, US\$772,000 has been used for household sanitation improvements and the remainder for water. The average loan size for sanitation is US\$338, repaid over a period of 14 months (on average) and with an interest rate of 14 per cent per year.

In Kenya, several WASH sector actors have tested the potential of using small-scale finance to support household improvements in sanitation as well as SME lending. The largest initiative is led by Water.org. Since 2010, Water.org has partnered with several financial institutions, including Equity Bank, Family Bank and Kenya Women. To date, an estimated US\$65 million has been disbursed for sanitation loans in Kenya via Water.org. Most of these have been delivered for household improvements. The average loan size is US\$410, with an annual interest rate of 15 per cent.

Another programme in Kenya that addresses household finance is Financial Inclusion Improves Sanitation and Health in Kenya (FINISH INK). FINISH kickstarted in Kenya in 2014 (following some success in India) tackling at the same time demand for sanitation products, supply side strengthening (training of artisans to produce affordable latrines) and financial inclusion (by linking households or businesses with financial institutions). FINISH estimates that over US\$8 million has been disbursed in lending capital for sanitation as of December 2018

In the United Republic of Tanzania, financial services for WASH improvements have only been delivered at pilot scale. Water.org (which launched WaterCredit in 2017) has partnered three financial institutions. To date, some 240 water and sanitation loans have been delivered, mainly in urban and peri-urban areas, for both household improvements and businesses. As of January 2019, Water.org facilitated the disbursement of US\$511,612 for water and sanitation lending (of which at least 10 per cent was used for sanitation purposes) with an average loan size of US\$1,895. This average is quite high as partner financial institutions have been lending to households as well as businesses. The specific nature of these businesses could not be identified for this market assessment.

Source: Mikhael et al. (2019): Sanitation market assessment in Ethiopia, Kenya and Tanzania, UNICEF.

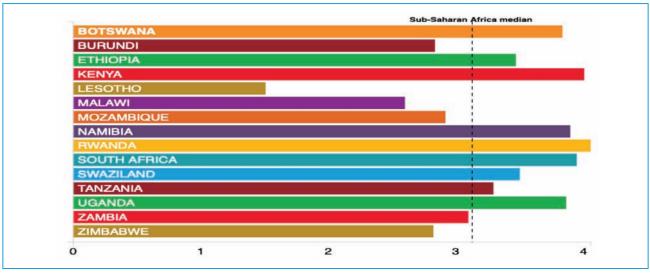
The reasons for this limited take off of financial services for WASH are numerous. First, it is important to note that structural barriers affect the development of financial services for WASH. Many poor residents remain excluded from financial services. For example, only 35 per cent of Ethiopians have access to financial services as of 2019.<sup>28</sup> Lack of access is sometimes related to the poor geographic penetration of financial services, which tend to be concentrated in urban areas. For example, in Kenya, access to financial services from formal financial institutions is significantly higher in urban areas, where close to 60 per cent benefit from such services, than in rural areas (32 per cent).<sup>29</sup>

<sup>28</sup>World Bank Findex

<sup>&</sup>lt;sup>29</sup>CBK, KBNS, FSD (2016): Kenya FinAccess Household Survey.

The World Economic Forum's Global Competitive Index provides an insight into consumer finance from a number of different perspectives. The Index looks at how easy is it for both enterprises and consumers to obtain a bank loan, taking into account factors such the level of collateral required and likely return on the loan. The global average score for this indicator is 3.9, and a few countries in ESAR, such as Botswana, Kenya, Namibia, Rwanda, South Africa and Uganda reach or are close to this benchmark. However, a number of countries are well below the sub-Saharan African mean, including Burundi, Lesotho, Malawi, Mozambique and Zimbabwe.

Figure 26: Ease of access to loans in ESAR, 2017

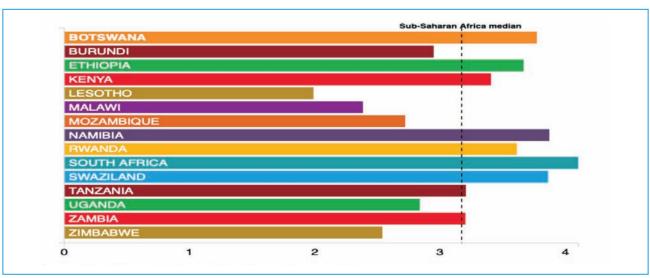


Source: World Economic Forum Global Competitiveness Index

*Note: 1 = extremely difficult; 7 = extremely easy* 

The affordability of financial services is also a critical indicator for gauging where consumer and business will be able to access finance to support improvements in water and sanitation coverage. Within ESAR, only South Africa scores the global average of 4, but a further eight countries score above the Sub-Saharan African median score. The five countries that score poorly on ease of access to finance, also score poorly on this indicator. However, despite scoring well for ease of access to finance, Uganda is in the lower scoring group for this indicator.

Figure 27: Affordability of Financial Services in ESAR, 2017



Source: World Economic Forum Global Competitiveness Index

Note: 1 = not affordable at all; 7 = affordable

In addition, many countries in the region have underdeveloped financial markets (often due to tight government regulations, as in Ethiopia). This means that the supply of finance is limited. In this context, financial institutions

prioritize lending to sectors they are familiar with, and the WASH sector is not necessarily one of those. With regard to household finance WASH lending is seen as a consumer loan, and therefore a risky loan. Financial institutions are also unfamiliar with the business models of WASH enterprises. WASH services' creditworthiness can also be an issue.

Within ESAR, improving utility creditworthiness and more robust financial markets in Kenya have resulted in it leading the way in access to commercial finance for WASH projects. In 2007, the World Bank launched a pilot programme with Kenyan microfinance institution K-Rep Bank to help rural and peri-urban communities access loan financing to improve and expand small piped-water systems. As a result, US\$21 million of results-based grants were provided to help water service providers obtain commercial funds to deliver water services to low-income areas. As of 2018, approximately 50 transactions had been completed, raising more than US\$25 million in private capital.

In 2011, Kenya Water Services Regulatory Board (WASREB) conducted a credit assessment of 43 Kenya utilities. Despite the low average scores shown in IBNET, 13 utilities received an A or BBB rating (creditworthy), 16 received a BB rating (potentially creditworthy) and 14 utilities receiving 'no rating'. In May 2014 the Kenya Embu Water and Sanitation Company received a US\$1 million loan from the Housing Finance Company of Kenya (HFCK) to construct a water pipeline. This is the first commercial loan issued by HFCK, and will expand connectivity to 6,000 households. Following this the Karaweti Water Trust, a small piped water provider, sought finance to install a new borehole to supplement its existing supplies and customer-level meters. To enable this the Trust had to make improvements in credit information and credit recovery, and subsequently the project was financed with equity from the community, a loan of US\$54,000 from K-Rep Bank, a grant of US\$26,000 from the Global Partnership on Output-Based Aid and technical support from the World Bank. The Trust was able to increase its number of connections by 38 per cent, average monthly revenue by 90 per cent, and seven day/week water service from 8 per cent to 87 per cent. average monthly revenue by 90 per cent, and seven day/week water service from 8 per cent to 87 per cent. average monthly revenue by 90 per cent, and seven day/week water service from 8 per cent to 87 per cent. average monthly revenue by 90 per cent, and seven day/week water service from 8 per cent to 87 per cent. average monthly revenue by 90 per cent, and seven day/week water service from 8 per cent to 87 per cent. average monthly revenue by 90 per cent, and seven day/week water service from 8 per cent to 87 per cent. average monthly revenue by 90 per cent, and seven day/week water service from 8 per cent to 87 per cent. average monthly revenue by 90 per cent, and seven day/week water service from 8 per cent to 87 per cent. Service from 8 per cent to 87 per cent. Service from 8 per cent to 87 per

<sup>&</sup>lt;sup>30</sup>World Bank, Governments Don't Have to Go It Alone: Leveraging public funds to attract commercial finance for improved water services, 2015

## 7 Regional Financing Requirements and Options

## 7.1 Overview of financing

In 2016 and 2017, commitments to the water sector in Africa stood at US\$12.2 billion and US\$13.2 billion respectively. ODA plays an important role in the water sector across Africa, with ICA members<sup>31</sup> accounting for about 35 per cent of total financing to the water sector. In 2017, China committed US\$1.8 billion, accounting for 14 per cent of total financing for the sector.

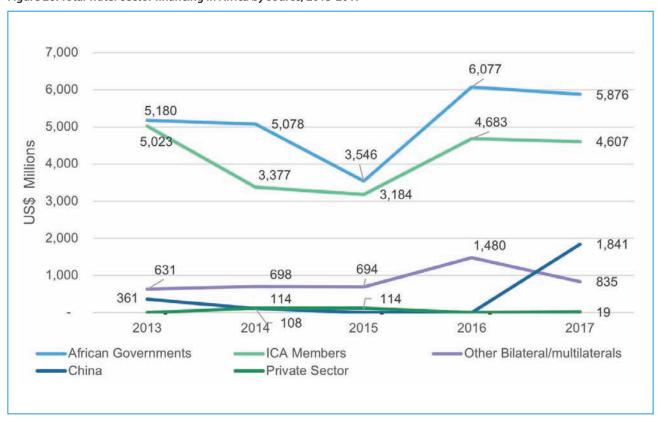


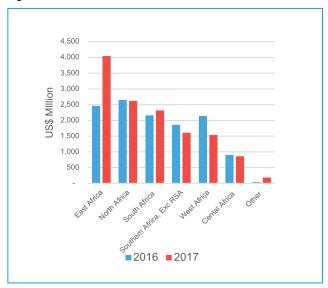
Figure 28: Total water sector financing in Africa by source, 2013-2017

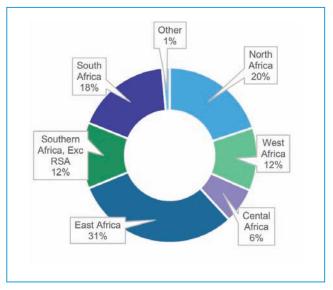
Source: The Infrastructure Consortium for Africa 2017 Report

East Africa accounted for the largest share of new investment in the water and sanitation sector (31 per cent). Investments in South Africa accounted for 18 per cent of financing of Africa's water sector, while Southern Africa (excluding South Africa) and West Africa accounted for 12 per cent each.

<sup>&</sup>lt;sup>31</sup>The ICA is a tripartite relationship between bilateral donors, multilateral agencies and African institutions. ICA membership from the African side is led by the African Development Bank and Development Bank of Southern Africa, while the African Union (AU) Commission, NEPAD Secretariat and Regional Economic Communities participate as observers at ICA meetings. The multilateral agencies that are ICA members are the World Bank, International Finance Corporation (IFC), the European Commission (EC) and the European Investment Bank (EIB). All G8 countries are members of the ICA (Canada, France, Germany, Italy, Japan, Russia, the United Kingdom and the United States). South Africa has recently joined the ICA: making it the first African country member.

Figure 29: New water and sanitation investments across Africa, 2017

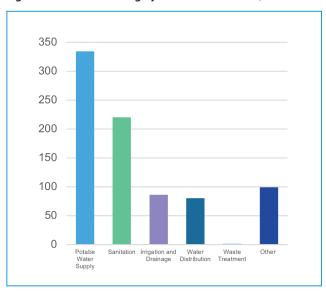


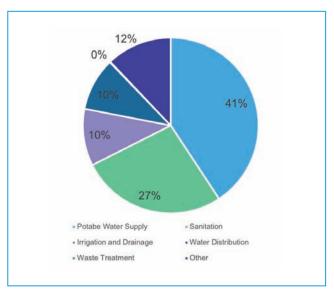


Source: The Infrastructure Consortium for Africa 2017 Report

Focusing down on WASH spending, in 2017 41 per cent of investment was on water supply access and 27 per cent was allocated to investment in access to sanitation.

Figure 30: Water financing by sub-sector in Africa, 2017





Source: The Infrastructure Consortium for Africa 2017 Report

## 7.2 Financial requirement to meet the relevant SDGs

The Sanitation and Water for All (SWA) SDG WASH costing tools estimates that US\$14,704 million is required every year until 2030 to achieve the SDG goals in ESAR. Based on these calculation 50 per cent of these resources are needed in Ethiopia and Kenya. Of the 21 countries in the region, the 9 countries requiring the most support account for 90 per cent of the required resources, with the highest being Ethiopia. While the precision of the SWA SDG Costing Tool estimates varies from country to country due to the quality of the unit cost data, the tool provides a good indicative picture of funding needs. Based on these figures and current national WASH budgets in ESAR, it is clear that significant additional financial resources are required to reach the SDG targets.

Figure 31: Annual capital costs of reaching entire population to achieve universal access of different service levels by 2030, in million USS

Source: SWA SDG WASH Cost Tool

## 7.3 Options to close the financial gap

Closing the financing gap can be achieved through a combination of measures, including maximizing the use of existing resources and mobilizing additional finance from taxes, tariffs and transfers.

However, the strategies and tools to achieve this are not applicable to all countries or sub-sectors as they will be at different stages of socio-economic development and will have different political and governance arrangements that will be more or less conducive to different forms of financing. A number of variables will guide whether a specific financing strategy or tool is a viable option including existing inefficiencies in the system, economic status and stability of a country or service provider, market size and available finance, and political will. As outlined in prior sub-sections sp,e WASH-sub-sectors are more conducive to certain forms of financing than others.

The characteristics of the sub-sectors and the broader enabling environment at national and local levels are key factors for shaping a financing strategy. For example, certain common characteristics in the region can shape financing options:

Table 1 Common service delivery issues and financing options in ESAR

	Example issues	Reason	Possible financing strategy
1.	Service providers will find it difficult to achieve commercial viability (e.g. rural water supply)	<ul> <li>(i) Limited economies of scale in water supply mean that the per capita costs of service delivery (CapEx, OpEx and CapManEx) will tend to be higher. This makes it difficult for the service provider to achieve financial sustainability through tariffs alone while maintaining affordability</li> <li>(ii) In terms of sanitation, limited economies of scale can lead to poorly formed private sector markets and higher costs. This can suppress effective household demand for sanitation services.</li> </ul>	Balancing financial sustainability and equity often requires the full costs of service delivery to be paid for by a combination of taxes, tariffs and transfers.

<ol> <li>High capital costs (common to all sub- sectors)</li> </ol>	In many cases infrastructure costs outweigh the ability of government through taxes or users through tariffs / user contributions to expand or improve services (coverage). If investment to expand coverage cannot be mobilized it is often the poor who suffer the consequences though higher prices of accessing informal water services in cities or use of unsafe sources.	Historically transfers have played a significant role in paying for CapEx, particularly for water supply and networked sanitation. As many countries in the region transition to lower-middle income status there is an important role for public finance through taxes as developing countries get richer and fiscal space is increased
3. Inefficient service delivery	The service provider does not have the technical or management expertise or equipment to run a service efficiently or effectively. This erodes service quality, generates higher costs and degrades revenue generation options	In this scenario taxes and transfers may be appropriate to support service provider operations through technical assistance, on the premise that improved performance will unlock greater revenue generation through tariffs and may provide a route to access commercial and private finance sources.

Table 2 sets out a comprehensive summary of some of the main strategies and tools that can be considered in ESAR to improve the environment for mobilizing additional financing from taxes, tariffs and transfers. The left-hand column of the table indicates the expected outcomes of the actions suggested.

Table 2 Options to improve WASH sector financing and resource mobilization through sector strengthening

Strategy or Tool	Actions
Strengthen institutional and regulatory framework —> improving enabling environment for resource mobilization from all sources	<ul> <li>Ensure roles and responsibilities concerning achieving financial targets are clearly set out and adhered to;</li> <li>Provide training to staff so they better understand sustainable finance models and are enabled to improve efficiency and mobilize resources;</li> <li>Establish a strong regulatory framework to monitor performance and enforce guidelines for tariff setting;</li> <li>Improve the policy framework to manage risks under various currency devaluation scenarios;</li> <li>Develop policies to enhance access to international credit</li> </ul>
Sector financial planning and budgeting —> improving the efficiency and targeting of public finance	<ul> <li>Generate more data to inform decision making on budget allocations;</li> <li>Target resources to sub-sectors based on need, coverage and targets;</li> <li>Focus public resources on areas not suited to commercial financing e.g. sanitation infrastructure and low-density small town locations;</li> <li>Develop multi-year budgets, using MTEFs, MTBFs, MTFF, SFP and/or similar tools;</li> <li>Strengthen mechanism to enable decentralized financial planning and decision making;</li> <li>Provide grants or low-cost funds to establish project preparation funds.</li> </ul>
Broaden ODA pool —> increasing transfers	<ul> <li>Create platforms for engaging new partners, including development partners not engaged in sector before, philanthropic foundations, and private firms with corporate social responsibility initiatives;</li> <li>Develop bankable projects, with thorough financial and net present value analysis;</li> <li>Develop multi-sectoral programmes, including health, education, social protection, agriculture and environment, to attract donors to the WASH sector;</li> <li>Facilitate access to the growing number of climate funds by more clearly articulating the positive impacts that investing in the WASH sector could have on mitigating the effects of climate change;</li> </ul>
Improve operating efficiency of service providers ————————————————————————————————————	<ul> <li>Review and where possible reduce operating costs;</li> <li>Recruit strong managers to lead change management strategies, and provide ongoing management training and development;</li> <li>Maximize investment through improved procurement processes and targeting initiatives with higher net present value;</li> <li>Identify innovative ways of motivating the workforce;</li> <li>Maximize income from tariffs (see next box)</li> </ul>

Maximize income from tariffs ———————————————————————————————————	<ul> <li>Set tariffs at a rate that ensures full cost recovery for service providers;</li> <li>Ensure effective metering and billing systems are in place;</li> <li>Ensure budget is allocated to invest in maintaining water systems and addressing leaks in the systems to minimize non-revenue water;</li> </ul>
Increase engagement with the private sector increasing access to private finance	<ul> <li>Build the capacity of government and service provider staff for private sector participation options and how to engage with the private sector on service delivery;</li> <li>Engage organizations that can provide technical assistance to overcome the capacity constraints of water providers and facilitate relationship with lenders;</li> <li>Identify opportunities for the private sector to engage in the WASH Sector, including bundling small projects or creating pooled funds to enable the creation of a financing facility or extracting specific elements of q larger project which are easier for private developers to mobilize finance for.</li> </ul>
Use subsidies to create the right incentives ————————————————————————————————————	<ul> <li>Aim for capital cost subsidies to mobilize resources from other stakeholders, such as commercial finance or consumers;</li> <li>Ensure that subsidies to service providers are not undermining improvements in service or management efficiencies;</li> <li>Review the targeting of subsidies to ensure that those in most need are the net beneficiaries.</li> <li>Ensure subsidies are not reducing ownership of infrastructure</li> <li>Use cross-subsidies as a mechanism to rebalance market distortions and achieve equity.</li> </ul>
Credit rating assessments   supporting access to commercial finance	<ul> <li>Provide credit ratings to help water service providers establish credit histories, improve their bankability with development institutions and private lenders, and help benchmark water service providers with corporate entities;</li> <li>Develop a uniform set of creditworthiness standards for water utilities in partnership with credit rating organizations;</li> <li>Undertake benchmarking of utilities, with creditworthy utilities or local government identified as ready for investment, and less creditworthy providers offered technical assistance targeted to address their weaknesses.</li> </ul>

In and of themselves the actions provide multiple pathways for service providers and governments in different contexts to increase overall sector financing. In doing so, in many cases service providers are likely to be in a stronger position to mobilize a number of commercial and private financing options that have previously not been available to the WASH. Access to these sources will depend on the strength of service providers' balance sheets and the broader economic position of the country. Table 2 provides an overview of commercial financing options available and action to support them being implemented.

Table 3 Options to facilitate commercial finance options

Strategy or Tool	Actions
Output-based aid (OBA)	<ul> <li>Use incentives to catalyse commercial finance, by increasing the cash flow of operators and reducing default risk</li> <li>Make subsidy payments to the borrower when an intervention achieves an agreed level of output,</li> <li>Design project with very clear and measurable outputs, such as reduction in non-revenue water or water connections, and supported with strong M&amp;E systems.</li> </ul>
Microfinance	<ul> <li>Provide technical support to microfinance institutions (MFIs) to understand the WASH market and correctly evaluate WASH projects;</li> <li>Provide capital or support MFIs to access capital markets (potentially through guarantees) to increase liquidity among MFI agencies;</li> <li>Where necessary, set limits on the interest rate margin charged on microlending or targeted subsidies to lower borrowing costs;</li> <li>Facilitate discussions between MFIs and borrowers, to find a balance between short-term repayment circles preferred by MFI and the longer-term loan needs of borrowers.</li> </ul>

Commercial bank loans	<ul> <li>Sensitize banks to market opportunities;</li> <li>Provide assistance to investment projects and structure transactions effectively;</li> <li>Assist in pooling or grouping projects to create investment opportunities which are attractive to larger commercial finance providers;</li> <li>Provide guarantees to commercial lenders, potentially through blended finance models (see below)</li> </ul>
Partial Credit Guarantees	<ul> <li>Use partial credit guarantees to provide commercial lenders with increased confidence to enable lending to new sectors and reduce collateral requirements; this addresses the risks that local lenders will not cover and offering the minimum guarantees to facilitate a transaction;</li> <li>Design such interventions to include a fee, a deed on receivables and some specific project requirements;</li> <li>Consider including coverage of a percentage of the loan in the event of default, actions to reduce the probability of default, and/or extended loan maturity;</li> </ul>
Pension funds and bonds	<ul> <li>Create favourable conditions to support pension fund investment in the WASH sector, through both regulation and regulatory oversight;</li> <li>Provide transaction or structuring advice;</li> <li>Offer incentives to create favourable risk dynamics for long-term investors; this could include partial guarantees on bonds;</li> <li>Review opportunities for bonds to be supported by credit enhancements from institutions, such as MIGA and European Bank of Reconstruction and Development, to mitigate both political and liquidity risks;</li> <li>However, as bond issues are usually substantial investments ensure large institutional investors as well as developed capital market are in place.</li> </ul>
Equity	<ul> <li>Equity finance is a controversial form of finance because it entails some form or level of private ownership of assets used to deliver a public service;</li> <li>Ensure that public investment is not crowding out private investment;</li> <li>Ensure legal systems are in place to set out ownership structure for assets;</li> <li>Encourage international investors by having clear on returns on investment, exit routes and other financial protections in place;</li> <li>Develop local capital markets to support local investors.</li> </ul>
Blended finance	<ul> <li>Use blended finance approach harnessing two or more of the financing options discussed in this paper;</li> <li>Utilize blended finance to address market failures and facilitate finance to enable service providers to demonstrate their commercial viability;</li> <li>Identify opportunities to mix grants and concessional loans to increase available finance and increase positive cash flows to WASH projects;</li> <li>Use blended finance to soften lending terms;</li> <li>Subordination should be reviewed as possible tool to mobilize commercial finance by creating a security in which has a hierarchy of risk, often including a senior tranche (intuitional investors), mezzanine tranche (could be philanthropic investors) and junior or 1st loss investors (development finance).</li> <li>Blending models and tools, such as securitization and collective investment vehicles, could be reviewed for more mature markets.</li> </ul>

Within ESAR only a handful of countries are currently in a position to access commercial finance in the WASH, including South Africa, Kenya, Uganda, Namibia and Ethiopia. Other countries that may be able move in this direction in coming years if their economic situations improve and service providers can be made creditworthy, include Eswatini, Rwanda, the United Republic of Tanzania and Zimbabwe.

# 8 Recommendations for UNICEF

UNICEF can play an important role in maximizing existing financial resources; mobilizing additional resources from governments, traditional development partners and new providers of concessional finance; and supporting countries as they increase the percentage of commercial finance within the sector.

### Maximizing existing finance:

- Support budget and expenditure review processes to facilitate monitor funding from various sources of funds, enable longer-term reliable budget allocations and draw attention to targeting to resources to improve focus on low-coverage and high-poverty areas;
- Support governments to develop and implement more transparent budget allocation processes, such as formula approaches;
- Support the establishment of effective public financial management systems within government structures to enable the tracking of expenditure and real-time reallocation of resources to increase the absorption of funds allocated to the sector;
- Support sector-specific research examining the effectiveness of existing public financial management (PFM) arrangements, for example through public expenditure reviews (PER), or public expenditure tracking surveys (PETS). Studies of these type can help pinpoint bottlenecks and capacity constraints within existing PFM systems and structures, amd can be used to start conversations with national governments on investment targeting and equity;
- Harmonize sector approaches to subsidies to create the right incentives in the sector and ensure that subsidies are well targeted;
- Undertake formative research to assess the financial viability and business models of new or innovative service delivery models and approaches;
- Provide technical assistance to service providers to improve their operational performance, such as the technical capability of service delivery staff;
- Undertake a market assessment to assess consumer willingness and ability to pay for services, to maximize household investment in services and facilitate household access to finance where possible.

### Mobilizing additional resources:

- Use evidence-based advocacy to lobby government agencies to meet national and international commitments on budget allocations for the WASH sector, including those made under the eThekwini declaration and the Addis Ababa Financing for Development Agreement;
- Provide financial and technical assistance to support the design of bankable projects;
- Undertake research to demonstrate the wider impact of improved WASH services on society (health and education), the environment (climate change mitigation) and the economy (business development and job creation), to attract finance from a broader pool of donors;
- Map and engage with potential donor sources that have not traditionally supported WASH activities, including climate funds, philanthropic foundations and private sector corporate social responsibility entities;
- Engage in efforts to strengthen sector regulation to help enable service providers, particularly water utilities, to reach financial autonomy and become creditworthy to enable them to access commercial finance;
- Work with national governments and sector partners to improve the enabling environment for commercial investment in WASH services, including putting in place effective policies and establishing frameworks for PPP investment in the sector;
- Support commercial investors to understand the WASH sector better, including sensitizinf them to opportunities to invest in water service providers.



# Annex A Emerging Research Questions and Resources

### Long-list of questions to guide in-country assessments

Questions	Sources
<ul> <li>Policy and Strategies:</li> <li>Which government policies are in place to guide donor financial support to the WASH sector, and how do these differ (if at all) from other development financing?</li> <li>Is there a budgeting formula in place to guide financial allocations to and/or within the WASH sector, based on coverage, equity or other parameters?</li> <li>Has an assessment been undertaken to calculate the financing requirements for meeting the SDG target, and if so, by whom and what is the required amount?</li> <li>Has the government set sector targets in relation to SDG 6, in terms of coverage and service levels? If so, what are these targets?</li> <li>Are policy or strategies in place to meet SDG targets 17.1-17.5 on financing, including domestic resource mobilization (DRM)?</li> <li>Has a strategic framework been developed for private investment in the SDGs, in line with UNCTAD's Action Plan for financing the SDGs, SDIP, or other similar approaches?</li> <li>Which policies and regulations are in place to guide the management and financing of water utilities?</li> <li>Which government policies are in place to encourage and incentivize private sector investment and/or engagement in the WASH sector?</li> </ul>	<ul> <li>Sector JSRs</li> <li>Government websites</li> <li>UNICEF/WHO – JMP</li> <li>Sector strategies identified</li> </ul>
<ul> <li>Which ministries are engaged in WASH financing and implementation, at national and sub-national levels?</li> <li>Which bilateral and multilateral donors are financing the WASH programmes, and in which sub-sector are thet focused?</li> <li>Which NGOs (international and local) are engaged in the WASH sector?</li> <li>Which private sector actors (national and international) are active in the WASH sector?</li> <li>Who are the commercial financing institutions (banks, main micro-finance, and so on) and are any active in the WASH sector?</li> <li>Which structures/processes are in place to coordinate sector financing between actors?</li> </ul>	<ul> <li>OECD-DAC Reports and Data</li> <li>Sector strategies and plans</li> <li>Dialogue with UNICEF's staff</li> </ul>
<ul> <li>What is the total annual investment in the WASH sector over the past decade, and what is/are the overall trend(s)?</li> <li>What is the split between government and donor contributions (taxes, tariffs, and transfers)?</li> <li>What proportion of overall development assistance does the WASH sector account for?</li> <li>What percentage of aid flows in the WASH sector are: <ul> <li>allocated through sector budget support?</li> <li>extended in the form of projects?</li> <li>allocated through a pooled financing mechanism, either managed by the government or international organizations?</li> <li>allocated to technical assistance?</li> <li>What is the split between donor assistance in terms of:</li> <li>loans and grants, and how does this vary across sub-sectors?</li> <li>on and off-budget financial support from donors and development actors?</li> <li>Which donors are providing support directly to the government programmes and which are financing other actors, or both?</li> </ul> </li> </ul>	<ul> <li>OECD-DAC reports and data</li> <li>Government budget and expenditure reports</li> <li>Government strategies</li> <li>Central Bank documents and reports</li> <li>Donor project documents</li> <li>Donor financial reports</li> <li>GLASS reports</li> <li>TrackFin</li> <li>Dialogue with UNICEF staff</li> </ul>

- Is there a vibrant market for microfinance in the country, and if so, how active is it in the WASH sector?
- Is there currently an identified funding gap in the sectors?
- If so, what is the size of this gap and what are the main contributing factors?

#### **Project and Programs:**

- Is there a national WASH programme led by the government? If so:
- which sub-sector does it focus on, include investment split?
- who provides financial support to this programme?
- What is the balance of overall sector financing between:
- Water, sanitation and hygiene?
- Rural and urban?
- Households and institutions?
- Development and humanitarian?
- Are there examples of results-based financing programmes, such as output-based in the WASH or other sector?
- Are there examples of projects being supported through a blended finance approach, in the WASH or other development sectors?

#### OECD-DAC

- Government strategies
- Donor project documents
- Dialogue with UNICEF staff

### **Decentralization and service providers:**

- Which policies are in place to support decentralization of government decision making in relation to WASH investment?
- Which percentage of annual WASH budgets is allocated from central and local levels?
- Who are the main service providers in the sector (rural and urban) and how are they financed?
- What are the systems in place to provide financial support to water utilities?
- Are government policies in place to guide cost recovery and pricing of water infrastructure and services?
- Government budget and expenditure reports
- Government strategies
- Donor project documents
- Donor financial reports
- GLASS reports
- TrackFin
- Dialogue with UNICEF staff
- IBNET
- National surveys

### **Monitoring Finance:**

- Which institution(s) is are responsible for monitoring financing in the WASH sector?
- What systems are in place to track donor and development partners commitments, disbursements and expenditure?
- Can existing systems track investment across different sub-sector, rural/urban and expenditure types (capital and recurrent)?
- Is there a system to track private sector investment in the WASH sector?
- Is there a system to track or calculate households' contributions to the construction, operation or management of WASH services?
- OECD-DAC
- Government budget and expenditure reports
- Government strategies
- Central Bank documents and reports
- Donor project documents
- Donor financial reports
- National surveys

## **Annex B Definitions of Key Terms**

Term	Definition
Blended Finance	Using public funds to leverage commercial finance
Bonds	A debt instrument bought by investors. When buying a bond, an investor lends money to the borrowing entity (which can be a government, a municipality or a corporate) for a defined period of time at a variable or a fixed interest rate.
Budget	A budget is an estimation of revenue and expenses over a specified future period of time; it is compiled and re-evaluated on a periodic basis.
Capital	Financial assets and resources, such as cash.
Capital Expenditures (CAPEX)	Capital expenditure measures the value of purchases of fixed assets, i.e. those assets that are used repeatedly in production processes for more than a year. The value is at full cost price. Sales of fixed assets are not deducted.
Capital maintenance expenditure (CapManEx)	Occasional large maintenance costs for the renewal, replacement and rehabilitation of a system that goes beyond routine maintenance to repair and replace equipment, in order to keep systems running. These essential expenditures are required before failure occurs to maintain service levels and need to be planned for.
Capital Flows	Capital flows refer to the movement of money for the purpose of investment, trade or business production, including the flow of capital within corporations in the form of investment capital, capital spending on operations and research and development. On a larger scale, a government directs capital flows from tax receipts into programs and operations and through trade with other nations and currencies.
Capital Markets	The market for long-term debt and equity shares. Capital markets channel savings from suppliers of capital such as retail investors and institutional investors, to users of capital such as businesses, government, and individual borrowers.
Capital Structure	The sources of capital that a company uses to finance its operations and growth. It is the mix of the company's debt and equity.

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Commercial Bank Loan	When a bank provides a loan at market-based lending terms. These differ from "concessional loans," i.e. loans provided by development banks at conditions that are more advantageous to the borrower than market conditions.
Commercial Finance	An umbrella term for commercial bank loans, commercial bond issuances, and private equity investment of all sorts.
Commercially Oriented	A company or other entity (such as an utility) is operating on principles of good governance, financial viability, and meeting demand for service in the service area at the ap- propriate service levels.
Commercially Viable	A project or investment that will provide a private investor with the return on their investment required for the project to have a positive net present value for that investor and, as a result, increase the value of the investor.
Concessionary loan (or 'soft loan')	A loan provided on concessionary lending terms, which may include a lower interest rate than the market rate, a longer repayment period or a grace period.
Cost of Capital	Cost of capital is the required return necessary to make a capital budgeting project worthwhile. Cost of capital includes the cost of debt and the cost of equity and is used to judge whether a capital project is worth the expenditure of resources, and by investors who use it to determine whether an investment is worth the risk compared to the return. Cost of capital depends on the mode of financing used — it refers to the cost of equity if the business is financed solely through equity, or to the cost of debt if it is financed solely through debt.
Cost of Debt	Cost of debt refers to the effective rate a company or government pays on its current debt.
Cost of Service	The total cost of providing the required service at reasonable levels of efficiency.
Creditworthiness	The current and future capacity of the utility to service debt—that is, to pay interest and repay principle on loans when due. This assessment is determined based on the utility's credit history, credit ratings (if available), assets and liabilities, and economic environment.
Debt	One of two ways in which a business (e.g. project or utility) can raise money. The essence of debt is that the borrower promises to make fixed payments in the future to the lender (interest payments and repaying principal).
Development Finance Institutions	A development finance institution (DFI) or development bank is a financial institution that provides risk capital for economic development projects.

Domestic Public Transfers	Domestic public transfers from government agencies (central or local government) to service providers (such as WASH implementation agencies). These are often subsidies from taxes or other sources of government revenue. These would include only grants and excludes concessionary loans.
Economic Viability	A project is economically viable when its overall impact on society will result in society being better off. In contrast to financial viability, economic viability assesses a more comprehensive list of project costs and benefits, including positive and negative impacts that are not traded in the market and therefore have no market price. This can include pollution, public health, and benefits to people who cannot afford to pay for service.
Equity	One of two ways in which a business (e.g. project or utility) can raise money. With equity, the investor gets whatever cash flows are left over after paying debt and other commitments.  Companies can raise equity in two ways. First, they can issue new shares of stock. The investors who buy the new shares put up cash in exchange for a fraction of the business' future cash flow and profits. Second, the company can take the cash flow generated by its existing assets and reinvest the cash in new assets.
Factors of production	Factor inputs used by providers to produce the goods and services consumed or the activities conducted in the system.
Financial Viability	Whether or not a project or investment will have a positive net present value and, as a result, increase the value of the investor. This assessment evaluates the direct effects of the project or investment on the cash flow of the investor. It considers whether the projected revenues will be sufficient to cover expenditures and whether the financial return is sufficient to provide the return required by the investor.
Financially Sustainable	A situation in which the total revenue to the service provider (including reliably provided grants from governments and transfers from donors) equals or exceeds the full cost of providing and sustaining quality service, including the costs of capital maintenance and cost of capital.
Financing	Act of providing funding
Financing Gap	The amount of money needed to fund the ongoing operations or future development of a business or project that is not currently provided by cash, equity, or debt. In the case of sector or project, it can also refer to the shortfall in finance needed to achieve specific goals or objectives.
Financing sources	

Where funding originates from before being channeled by financing units. The OECD 3T typology refers to financing sources as tariffs, taxes and transfers, to which must be added private repayable financing.  A fixed asset is a long-term tangible piece of property that a firm or project owns and uses in its operations to generate income. Fixed assets are not expected to be consumed or converted into cash in the short term.  Funding Monetary value of the funds provided to support a given activity.  Grant A form of development aid without repayment obligations. Grants might be untied or carry explicit or implied political and commercial obligations.  Gross valued added Gross value added output – intermediate consumption. Gross value added is a measure of the contribution to GDP made by an individual producer, industry of sector.  A document (such as a check, draft, bond, share, bill of exchange, futures or options contract) that has a monetary value or represents a legally enforceable (binding) agreement between two or more parties regarding a right to payment of money.  Internal Rate of Return (IRR) IRR a performance measure equal to the internal rate of return after fees and carried interest are factored in. It is used in capital budgeting and portfolio management to calculate an investment's yield or overall financial quality by calculating an expected rate of return. Practically, it is the rate at which the net present value of positive cash flow. A net internal rate of return is expressed as a percentage.  Voluntary donations (or grants) from public donors and multilateral agencies that come from other countries. Concessionary loans are excluded from this.  A loan is the act of giving money, property, or other material goods to another party in exchange for future repayment of the principal amount along with interest or other finance charges. A loan may be for a specific, one-time amount or can be available as open-ended credit up to a specified ceiling amount.  Microfinance institutions (MFI) Refers to schem		
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	Microfinance institutions (MFI)	money transfers and other financial products to small business, farmers and other low-income borrowers who cannot

Net Present Value (NPV)	The difference between the present value of cash inflows and the present value of cash outflows over a period of time. NPV is used in capital budgeting and investment planning to analyze the profitability of a projected investment or project.
Official Development Assistance (ODA)	Grants or loans to countries and territories on the DAC List of ODA Recipients (developing countries) and to multilateral agencies which are: (a) undertaken by the official sector; (b) with promotion of economic development and welfare as the main objective; (c) at concessional financial terms (if a loan, having a grant element of at least 25 percent). The OECD DAC database at present only tracks ODA flows from OECD member countries but is looking to develop coverage of other non-OECD donors.
Operating Cost Recovery	A situation in which the revenues are at least equal to the operating costs of providing a service.
Operating Expenditures (OPEX)	An operating expense is an expense a business or project incurs through its normal business operations. Often abbreviated as OPEX, operating expenses include rent, equipment, inventory costs, marketing, payroll, insurance, and funds allocated for research and development.
Partial Credit Guarantees	A credit enhancement mechanism for debt instruments (bonds and loans). It is an irrevocable promise by a financial institution to pay principal and/or interest up to a pre-determined amount. Typically, the guarantee is structured to cover 100% of each debt service payment, subject to a maximum cumulative payout equal to the guarantee amount. The guarantee amount is usually expressed as a percentage of principal and amortizes in proportion to the bond or loan. In certain circumstances, this percentage can increase or decrease in the later years of the debt obligation, depending upon the needs of the borrower or creditors.
Pooled Fund	Pooled funds are funds from many individual investors that are aggregated for the purposes of investment, as in the case of a mutual or pension fund. Investors in pooled fund investments benefit from economies of scale, which allow for lower trading costs per dollar of investment, diversification and professional money management. Along with the added costs involved in the form of management fees, the main detractor of pooled fund investments is that capital gains are spread evenly among all investors, sometimes at the expense of new shareholders.
Public Finance	Loans or equity investments provided by the government (public sector)

Public-Private Partnership	A long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance.			
Repayable financing	Sources of finance from private or public sources that ultimately need to be repaid, such as loans (including concessionary loans and guarantees), equity investments, or other financial instruments such as bonds. Trackfin splits this into two sub-categories: FT6.1 Concessionary repayable financing, and FT6.2 Non-concessionary repayable financing.			
Return on Investment (ROI)	ROI is a performance measure used to evaluate the efficiency of an investment or compare the efficiency of a number of different investments. ROI tries to directly measure the amount of return on a particular investment, relative to the investment's cost. To calculate ROI, the benefit (or return) of an investment is divided by the cost of the investment. The result is expressed as a percentage or a ratio.			
Revenue Requirement	The total amount of money that needs to be earnt in order to cover its cost of service.			
Self-Financing Ratio	Self-Financing Ratio is a term that indicates the enterprise's ability to finance planned investments from its own resources.			
Subsidy	A benefit given by the government or project to groups or individuals usually in the form of a cash transfer or tax reduction. The subsidy is usually given to remove some type of burden and is often considered to be in the interest of the public.			
Tariff	A tariff is the price charged to customers for the provision of the services (such as water users to utilities). It is also a tax imposed on imported goods and services.			
Taxes	Taxes are involuntary fees levied on individuals or corporations and enforced by a government entity - whether local, regional or national - in order to finance government activities. Includes taxes and fiscal contributions levied from service providers, such as:  Taxes on production (corporate tax on profits, property tax, leasing tax for renting fixed assets, taxes for occupation of public grounds or in relation to employees).  Usage charges related to (or earmarked for) the sector such as royalties, levies or duties for the use of water or the discharge of wastewater into water bodies.  Other charges on production levied for earmarked uses, such as social contribution.  "Nothing is certain except death and taxes." Benjamin Franklin			

Transfers	Funds from international donors and international charitable foundations (including NGOs, decentralized cooperation or local civil society organizations) that typically come from other countries. These funds can be contributed either in the form of grants, concessionary loans (i.e. through the grant element included in a concessionary loan, in the form of a subsidized interest rate or a grace period) or guarantees.
Unviable Loss-Making Company	A company that does not have sufficient revenue to cover its operating expense or its capital expenses. It relies on capital and operational subsidies.
Voluntary contributions	
	Voluntary donations (or grants) from international and national non- governmental donors including from charitable foundations, non- governmental organizations (NGOs), civil society organizations and individuals (remittances)



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