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Unblocking Sector Financing for Universal Access to Water Supply and Sanitation in Kenya

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Executive Summary

Kenya has set itself an ambitious goal of achieving universal access to safe and affordable water supply and sanitation (WSS) services by 2030, in progressive fulfillment of the rights to water and sanitation established in the Constitution of Kenya (2010). A review of WSS access reveals significant coverage gaps. According to the Kenya Population and Housing Census (KPHC) 2019, around a quarter of the country's population lacked access to an improved water source while 16 percent lacked access to an improved sanitation facility.[1] This access gap is even larger if the more stringent Sustainable Development Goal (SDG) metrics are used to determine access to basic water (in 30 minutes) and sanitation services (not shared with another household).[2] Based on the SDG metrics, over a third of households in Kenya do not have access to a basic water supply and two-thirds do not have access to basic sanitation. What both KPHC 2019 and other sources of data confirm is that around 35 million people do not have access to piped water (of whom 30 million live in rural areas) and that close to 4 million people still practice open defecation. Kenya is lagging its regional peers, and access to WSS is lagging other services nationally.

Because the sector is off-track for meeting this universal access goal, we examined the existing sector investment framework to identify opportunities for expanding the financing available to meet sector needs. The primary question is: How can the Government of Kenya (GoK) improve the institutional framework for WSS planning and public expenditure to achieve universal access to WSS services? These are the specific questions we examined:

- How are public funds allocated and spent in the WSS subsector at national and county levels?
- What funding, financing, and efficiency gaps affect the GoK's ability to expand access to WSS services?
- What are the most effective intergovernmental planning strategies for rapidly increasing WSS services coverage?
- What institutional and financial reforms are needed in the medium term to unlock and expand financing to increase access to WSS services?

Several analytical tools were used to answer these questions. First, a comprehensive public expenditure review (PER) explains how the GoK allocates and spends public funds in the WSS subsector as well as the financing and efficiency gaps. Second, a strategic scenario analysis has identified the most promising planning strategies for service coverage expansion, considering factors such as service levels, investment mix, rural-urban disparities, and the financing sources available in the medium term. Finally, the policies, institutions, and regulation diagnostic tools helped to analyze how integrated policy, institutional, and regulatory reforms can help align incentives for more sector financing.

The PER indicates that water sector expenditures as a proportion of total public expenditures have remained relatively constant from fiscal 2015 to fiscal 2020, averaging 2.9 percent. While around a third of Kenya's water sector expenditures were funded from international development partners (31 percent loans and 5 percent grants), nearly two-thirds of sector expenditures were from domestic resources during the period under review. The WSS sub-sector received the most funding from loan proceeds. More than half of water sector expenditure for the period went toward the WSS subsector (US$1.7 billion, or K Sh 188 billion). Of the domestic expenditure on the WSS subsector, 70 percent was from central government and 30 percent from counties.

Sustainable financing and management of WSS services have been blocked by the lack of a functional intergovernmental coordination framework for investment and asset replacement (World Bank, n.d.) The lack of this framework has resulted in two systems for creating assets: one that operates through national government institutions and another through county government institutions. Consultations between these two systems are weak, plans are not aligned, and often scarce investment resources are not optimally allocated. Further, although the financing model is premised on the ability of water services providers (WSPs) to repay loans used for capital investment in piped water systems, most WSPs are not able to honor their loan obligations. Counties (which own the WSPs) have contested the debt accumulated by WSPs prior to devolution. Most WSPs are not making repayments to national government for loans provided to them as infrastructure finance from development partners, both prior to and after devolution. Due to this impasse between counties and national government, arrears on debt repayments from WSPs to the national government were estimated to be US$1.8 billion in 2020, diminishing the fiscal space available at national level to close access gaps (WASREB, n.d.).

The sector must improve budget execution rates, WSP efficiency, and equity of its expenditure. From 2015 to 2020, budget execution rates in the water sector were around 75 percent, lower than execution rates for the recurrent budget-driven sectors such as education and social protection. Budget execution rates were lowest in the WSS subsector, at 67 percent. The low absorption of available funds is due to delays in fund flows to line ministries and sector institutions as well as implementation delays caused by slow procurement processes and land acquisition and resettlement challenges. There is considerable scope to improve WSP performance by, for example, reducing nonrevenue water losses from the current 47 percent level, which has stagnated for the past decade. Average water supply tariffs were 25 percent lower than the average cost of service for WSPs, which provide piped water services primarily to urban residents and the nonpoor, let alone full cost recovery of capital investment. There is also an opportunity for performance improvement, which would increase available financing. Water subsidies are not well targeted. Poor households received only 22 percent of all water supply subsidies. Despite three-quarters of the population being rural, only one-third of subsidy was channeled to rural areas. This situation calls for available funds to be efficiently and effectively spent to meet the policy objectives and plans. In particular, subsidies should be reallocated from urban piped WSS systems to improve access to WSS in rural areas.

To underpin reforms, the national and the county governments have taken a first bold step by agreeing on a new WSS Investment Framework that will coordinate investment and incentivize reforms. The framework recognizes that both levels of government share a

constitutional obligation to ensure the right to WSS for all Kenyans and that they must cooperate in planning functions. Adopting the WSS Investment Framework approves a revised planning option that aims at universal WSS access but with revised service levels. Adopting this planning scenario will involve (a) dropping the urban sewerage target from 80 percent to 40 percent; (b) implementing all identified reforms (see table 4 in chapter 5), and (c) seeking US$675 million (K Sh 73 billion) in additional public funding above business-as-usual levels. Under this scenario, 100 percent of Kenyan households would have access to improved WSS, with 100 percent and 40 percent of urban households having access to piped water and sewer services, respectively. These planning parameters form part of a new National Water and Sanitation Investment Program, under preparation by the Ministry of Water, Sanitation, and Irrigation and county governments.

The new WSS Investment Framework includes reforms aimed at mobilizing as much as K Sh 166 billion (US$1.5 billion). These additional resources for service expansion would not put an additional burden on national or county government budgets. But the implementation of these reforms will require financing and incentivizing through an innovative results-based financing (RBF) approach. Key to this approach is improving the efficiency and creditworthiness of WSPs so that they can access finance from domestic capital markets blended with public funds. This would free up other public funding to be channeled to rural and peri-urban WSS not managed by the WSPs. This RBF approach could be financed by redirecting flows from existing government and development partner financing or through allocation of additional budget.

The GoK cannot achieve the WSS subsector goals without embarking on three critical reforms:

- A new intergovernmental conditional transfer scheme to incentivize implementation of the reform activities
- WSP reforms to improve the efficiency of capital expenditure and operational efficiency
- Allocation of additional US$675 billion to close the sector financing gap

The GoK is acting on these reforms. As part of the policy actions under an ongoing World Bank–funded Development Policy Operation,[3] the national government and counties have adopted a new WSS Investment Framework that sets the pace for expanding access and increasing the financing available for the sector. Taking this forward quickly and implementing the agreed reforms would further signify progress in the two levels of governments meeting their constitutional obligations and acting to improve basic WSS services.

NOTES

1. An *improved water source* is defined as water sourced from a properly protected source that can either be piped into individual dwellings, into a shared yard or plot by several households, or nonpiped accessed at a public standpoint or kiosk. An improved sanitation facility is designed to hygienically separate excreta from human contact (e.g., flushed toilet, a proper pit latrine with a slab owned by an individual household or shared by several households).

2. Data from the UNICEF/WHO Joint Monitoring Programme (JMP) database, UNICEF, New York, NY; WHO, Geneva, Switzerland (accessed 2021), https://washdata.org/data.
3. See the World Bank website "Accelerating Reforms for an Inclusive and Resilient Recovery DPF 2," P176903. World Bank, Washington, DC, https://projects.worldbank.org/en/projects-operations/project-detail/P176903.

Abbreviations

BAU	business as usual
capex	capital expenditure
CWIS	citywide inclusive sanitation
GDP	gross domestic product
GHG	greenhouse gas
GoK	Government of Kenya
JMP	Joint Monitoring Programme
KPHC	Kenya Population and Housing Census
MDA	ministries, departments, and agencies
MoWSI	Ministry of Water, Sanitation, and Irrigation
MTP	medium-term plan
NAWASIP	National Water and Sanitation Investment Program
NRW	nonrevenue water
NWSS	National Water and Sanitation Services strategy
O&M	operations and maintenance
PER	public expenditure review
RBF	results-based financing
SDG	Sustainable Development Goal
SSA	strategic scenario analysis
UNICEF	United Nations Children's Fund
WHO	World Health Organization
WRM	water resources management
WSIGCCF	Water Sector Inter-Governmental Consultation and Co-operation Framework
WSP	water services provider
WSS	water supply and sanitation
WSTF	Water Sector Trust Fund

1. Introduction

Kenya has enjoyed consistent economic growth over the past decade. Before the COVID-19 pandemic, the economy grew at an annual average rate of 5.8 percent during 2010 to 2019, lifting per capita incomes and placing Kenya in the lower-middle-income bracket. Significant political, structural, and economic reforms (including the adoption of a new constitution in 2010) and increased public investment have driven the country's growth over the past decade. However, this growth has not translated into concomitant reductions in poverty.[1] Poverty at the US$1.90 per day line fell from 44 percent in 2006 to 33 percent in 2019 (World Bank 2020), a modest improvement in living conditions but still high poverty levels compared to other lower-middle-income countries. The economy has shown resilience to the COVID-19 shock, with output in 2021 rising above pre-pandemic levels. After contracting by 0.3 percent in 2020, real gross domestic product (GDP) increased by 5.3 percent year-on-year in the first half of 2021, supported by rebounds in industry and, especially, services. In 2022 and beyond, Kenya's economic performance is expected to be robust, with real GDP growth of 4.9 percent per year on average projected over 2022–23 (similar to that of the pre-pandemic pace) (World Bank 2021).

The Government of Kenya (GoK) aims for the country to reach middle-income industrialized status—providing a high quality of life to all citizens, including universal access to water supply and sanitation (WSS) services—by 2030. This ambition is guided by the Kenya Vision 2030, the country's long-term development blueprint, which is aligned with the UN Sustainable Development Goals (SDGs) and implemented through successive five-year medium-term plans (MTPs). The current government has prioritized four main pillars as part of the MTP 2018–22: agriculture, health, housing, and manufacturing, which are collectively referred to as the Big Four Agenda. Water is considered as a critical enabler of the Big Four Agenda. The COVID-19 pandemic has hampered the Big Four Agenda, prompting the government to launch a three-year post-COVID-19 Economic Recovery Strategy in November 2020 to get the economy back on a growth trajectory. The economic recovery package includes, among others, investments to expand access to WSS services as the first line of defense against the pandemic and other public health threats.

Kenya is a water-scarce country, with low and declining freshwater resources.[2] The country's water availability has fallen by over 50 percent in the past 30 years, from 1,400 to 450 cubic meters per capita per year, a level lower than found in countries such as Iraq, Morocco, and Somalia. Rainfall is unevenly distributed, both spatially and temporally, and over 80 percent of land is arid or semi-arid. Mismatches exist between supply and demand, with increasing demand in the northwestern region versus increasing supply in the southwestern region. The country's water storage capacity is low at only about 103 cubic meters per capita (well below the Sub-Saharan Africa average of 807 cubic meters per capita).[3] Critical watersheds are degrading quickly due to poor land use practices,

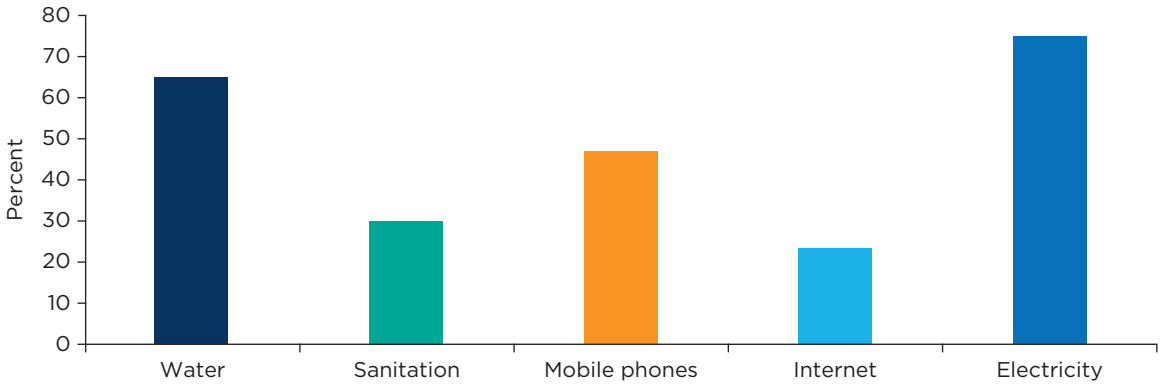
deforestation, and encroachment on riparian lands. Population growth and rapid urbanization not only result in increased water demand[4] but also pollute surface and groundwater resources due to inadequate sanitation systems. The country's water insecurity challenge is further compounded by the effects of climate change. Kenya already loses about 3 percent of its GDP per year due to extreme climate events (Downing and Watkiss 2009). Floods and droughts are increasing in frequency and severity, with the impact on the economy expected to intensify in the coming decades. The water sector is at the core of the climate change agenda, with great potential for both climate mitigation and adaptation. Climate-resilient water infrastructure and properly managed sanitation systems can help reduce the public health and environmental impact of climate events as well as greenhouse gas (GHG) emissions.

The GoK has set an ambitious goal of achieving universal access to safe and affordable WSS services by 2030, in progressive fulfillment of the rights to WSS established in the Constitution of Kenya (2010). However, although Kenya has made some progress in expanding access to WSS services over the last decade, a huge service gap remains. Access to WSS is lagging other services nationally, and the country is lagging its regional peers. Kenya Population and Housing Census (KPHC) 2019 data show that twice as many Kenyans have access to electricity than basic sanitation[5] (figure 1.1), at least 23 percent of the country's population lack access to an improved water source, and 25 percent have no access to an improved sanitation facility. These figures on the access gap are significantly lower than those reported by the UNICEF/WHO Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP),[6] which, since the inception of SDGs, has had more stringent criteria for access to basic water (in 30 minutes) and sanitation services (not shared with another household). Based on the JMP definition, over a third of households in Kenya do not have access to basic water supply and two-thirds do not have access to basic sanitation. According to the JMP, Kenya's WSS indicators are among the lowest in Sub-Saharan Africa (figure 1.2).

There are huge disparities in access to WSS services between rural and urban areas and between high and low incomes households (figures 3 and 4). According to the KPHC 2019, while 91 percent of the urban population have access to improved water services,[7] only 63 percent of the rural population have access. Access to piped water services is significantly higher in urban areas (58 percent) compared to rural areas (19 percent). The inequalities are similar for sanitation services, with 93 percent of urban households having access to improved sanitation services, compared to 75 percent in rural areas. Similar disparities exist across counties. Nairobi County has near universal access to improved water and sanitation, while 10 counties (21 percent of counties) have less than 50 percent of households with access to improved water (figure 1.4). Almost 79 percent of open defecation occurs in 13 counties, mainly in the northern and eastern regions (KPHC 2019).

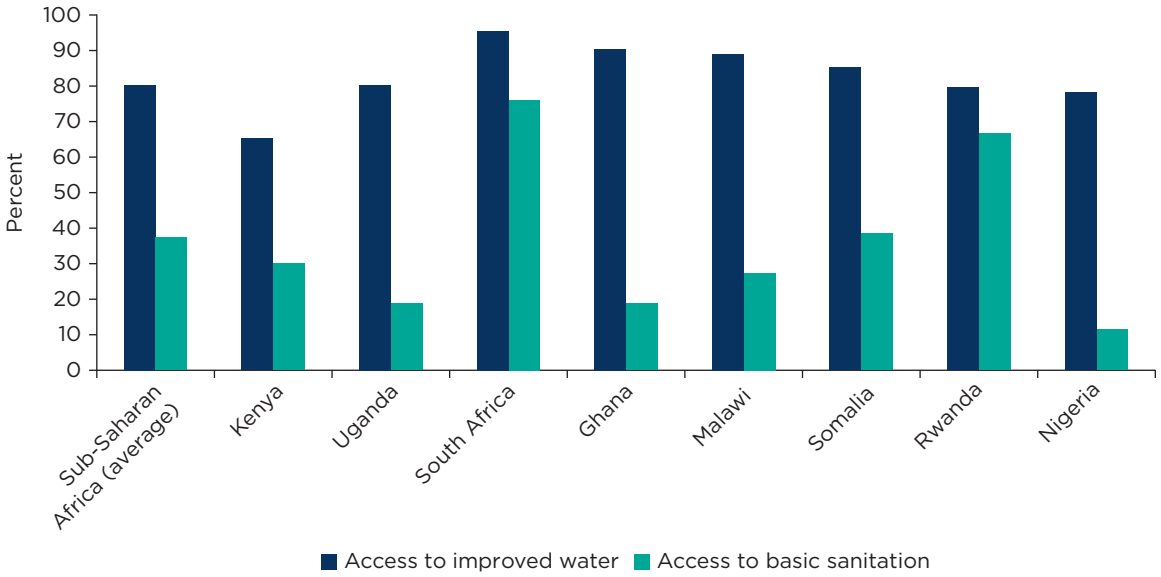
The poor record on WSS access significantly affects Kenya's economy and human capital. Kenya loses about 1 percent of GDP per year due to inadequate sanitation[8]. Unsafe drinking water and poor sanitation are major causes of water-borne diseases, with cholera outbreaks being a common occurrence in most counties. Women and girls suffer disproportionately due to inadequate access to WSS services, affecting their educational performance and developmental outcomes. Continuous exposure to fecal pathogens causes enteric infections, contributing to stunting in

Figure 1.1. Access to Water Supply and Sanitation in Kenya Compared to Other Services, 2019



Source: KPHC 2019; UNICEF/WHO Joint Monitoring Programme (JMP) database, UNICEF, New York, NY; WHO, Geneva, Switzerland (accessed 2021), https://washdata.org/data.

Figure 1.2. Access to Water Supply and Sanitation Services in Kenya Compared to Other Countries in Sub-Saharan Africa, 2021

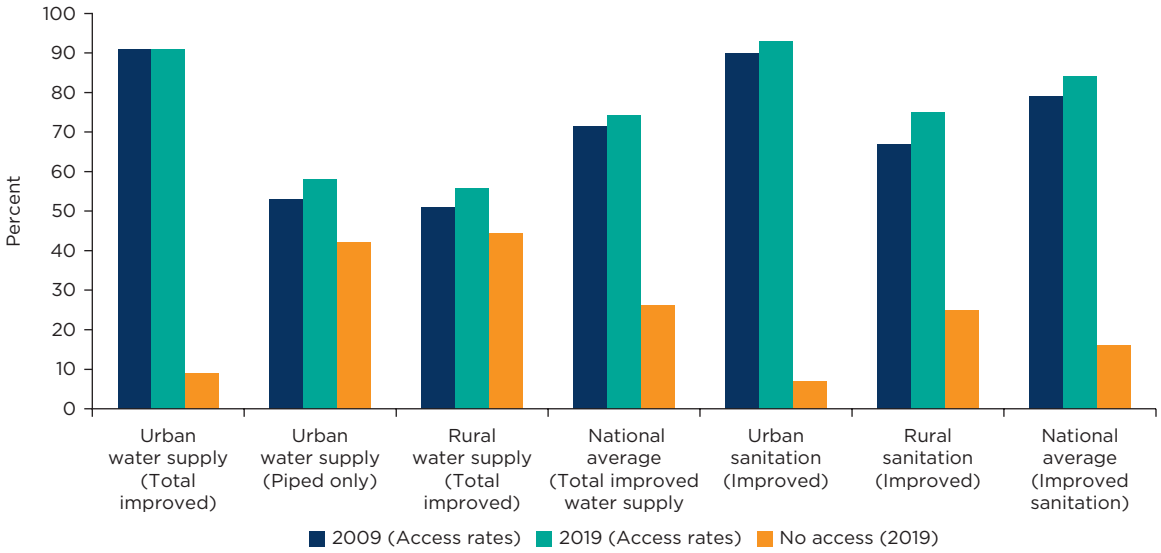


Source: UNICEF/WHO Joint Monitoring Programme (JMP) database, UNICEF, New York, NY; WHO, Geneva, Switzerland (accessed 2021), https://washdata.org/data.

millions of children,[9] with long-term intergenerational consequences.[10] The COVID-19 pandemic has underscored the urgent need to expand access to WSS services as the first line of defense against public health threats to the economy.

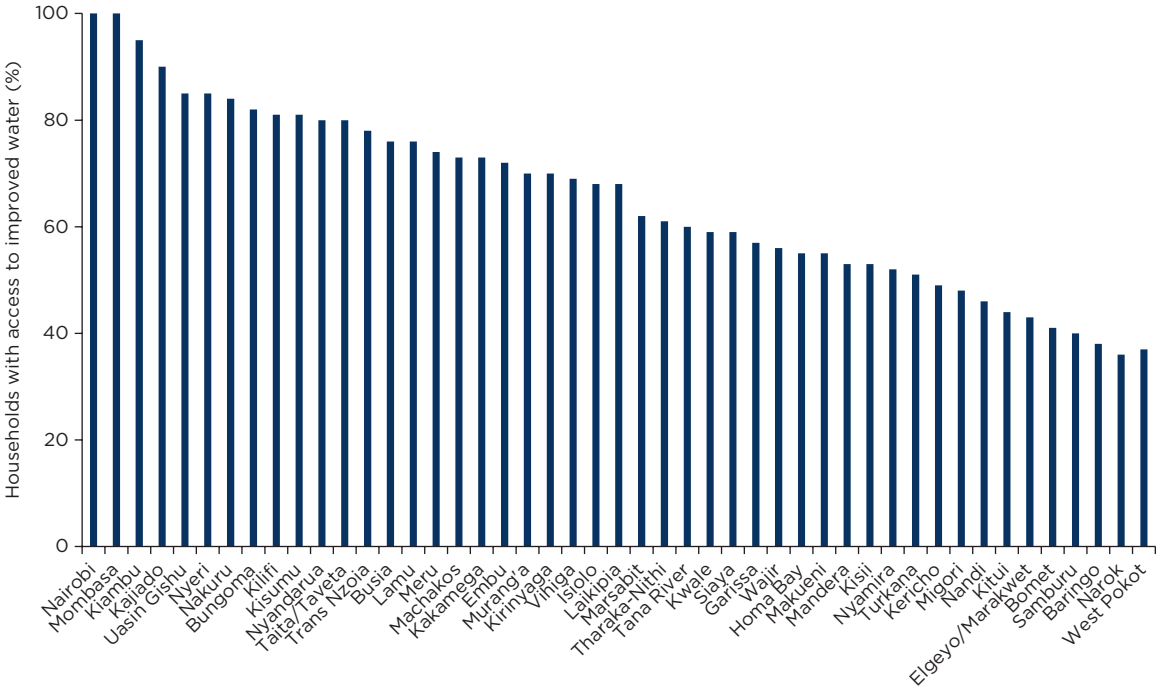
Under Kenya's devolved system of government, responsibility for water sector development and service provision is shared between the national and county governments. Both levels of government have an obligation to ensure the progressive realization of the human right to WSS.

Figure 1.3. Urban-Rural Disparities in Access to Water Supply and Sanitation Services in Kenya, 2019



Source: KPHC 2019.

Figure 1.4. Share of Access to Improved Water by County in Kenya, 2019



Source: KPHC 2019.

The national government is responsible for water sector policy leadership, regulation, the provision of bulk infrastructure that serves more than one county, and financial support to county governments to achieve sectoral objectives. Following the adoption of a new Constitution in 2010, the Ministry of Water, Sanitation, and Irrigation (MoWSI) has completed several reforms to align the sector to the Constitution and enhance the legal, policy, and regulatory framework for managing the sector. These include the National Water Policy 2020, Water Act 2016, and several regulations governing water resources management, water services, water harvesting and storage, and irrigation. The MoWSI's 2019–30 National Water Services Strategy defines the strategic priorities, targets, and objectives for the WSS subsector. The Constitution devolved responsibility for WSS to county governments, giving them and their water service providers (WSPs) the responsibility for planning, developing, and operating WSS investments in their jurisdictions.

But what is hampering progress? Recent World Bank analysis identifies several impediments to sustainable financing and management of WSS service provision (Muwonge et al. 2022; World Bank n.d.). Two critical challenges have emerged: (a) lack of a functional intergovernmental coordination framework; and (b) an unsustainable sector financing model. Although the 2010 Constitution requires the national and the county governments to conduct their mutual activities through consultation and cooperation, the water supply sector lacks a robust framework for intergovernmental coordination in planning and financing of WSS services. As a result, two systems for creating assets have emerged: one that operates through national government institutions and another that works through county government institutions. The two systems operate mostly independently of each other, leading to suboptimal allocation of scarce investment resources.

Estimates suggest that, collectively, county governments contribute roughly 30 percent of the total investment funding going to the WSS subsector (World Bank, n.d.). The rest of the financing is from the national government, mostly concessional loans expected to be repaid through county-owned WSPs' tariff revenues. This financing model, developed pre-devolution, is no longer sustainable because counties have contested the loan repayments, and most WSPs are not in a financial position to honor their loan obligations. As a result, by 2020, the national government had accumulated a debt burden estimated at US$1.8 billion (WASREB, n.d.), which threatens its fiscal capacity to finance the sector at a time when substantial resources are needed to close access gaps. While there appears to be an overall increase in the level of investments going into the WSS subsector post-devolution—investments have almost doubled from about K Sh 15 billion in 2012 to over K Sh 30 billion in 2017—the annual sector expenditure is, on average, less than a third of what is needed.

This note summarizes the findings of the WSS subsector review conducted through the lens of a public expenditure and institutional review. The review seeks to support the government in addressing the challenges impeding the sector's performance by highlighting the reforms needed to expand the financing for achieving universal WSS coverage. The primary question is: How can the GoK improve the institutional framework for WSS planning and public expenditure to achieve universal access to WSS services? The specific questions examined are: (a) How are

public funds allocated and spent in the WSS subsector at national and county levels? (b) What funding, financing, and efficiency gaps affect the GoK's ability to expand access to WSS services? (c) What are the most effective intergovernmental planning strategies for rapidly increasing WSS services coverage? (d) What institutional and financial reforms are needed in the medium term to unlock and expand financing to increase access to WSS services?

Three analytical tools were used to answer these questions. First, a comprehensive public expenditure review (PER) shed light on how the GoK currently allocates and spends public funds in the WSS subsector and the critical gaps in the system. The PER examines public spending by the national and county governments in the water sector by addressing three key questions: (a) How are public funds spent? (b) How well are public funds spent? and (c) How will financing and efficiency gaps affect Kenya's ability to meet national and international water sector–related goals? The PER guides strategic planning for expenditure requirements and suggests ways to improve the efficiency and effectiveness of resource allocations, including for future revisions of sector plans. It covers the period between fiscal 2015 and fiscal 2020, with projections up to fiscal 2031. Second, a coverage and financing strategic scenario analysis (SSA) has identified the most promising planning options for service coverage expansion. The SSA considered factors such as service levels, investment mix, rural-urban disparities, and the financing sources available in the medium term. Finally, policies, institutions, and regulation diagnostic tools were used to analyze how integrated policy, institutional, and regulatory reforms can help align incentives for more sector financing.

This note has six chapters, organized around the questions addressed by the review. Chapter 1 presents the sector context and the approach for both the public expenditure and the institutional reviews. Chapter 2 presents the key findings on how public funds are allocated and spent in the WSS subsector, both at the national and county levels, while chapter 3 summarizes the funding, financing, and efficiency gaps affecting the government's ability to expand access to WSS services. Chapter 4 presents the SSA findings and the planning option adopted by the national and county governments for increasing WSS services coverage. Chapter 5 presents the institutional and financial reforms needed to unlock and expand the financing required to meet the WSS services coverage targets, based on the findings of the previous chapters. Chapter 6 concludes with a collaborative call to action by both levels of government toward achieving the WSS subsector goals.

A few analytical limitations should be highlighted. While some reflections apply to the entire water sector, this note focuses on the WSS subsector. A separate PER report takes a comprehensive and integrated approach toward the entire water sector, including the water subsectors of WSS, including water resources management, irrigation, and flood and drought management. The report also draws from the recent World Bank study *Making Devolution Work for Service Delivery in Kenya* (Muwonge et al. 2022), which includes a deep dive on the impact of devolution on WSS services. Another limitation concerns data on access to WSS services, which are available through the national censuses and household surveys, but the definitions used for this data collection do not exactly match those of the SDG 6 (collected through the WHO/UNICEF JMP).[11] As a result, there are reporting inconsistencies of WSS indicators nationally and globally.

NOTES

1. The elasticity of growth to poverty in Kenya is lower than that of peer countries such as Tanzania, Ghana, and Uganda (World Bank 2018).
2. The total renewable water resource in Kenya is 450 cubic meters per capita per year, well below the globally recognized scarcity threshold of 1,000 cubic meters per capita per year (Falkenmark et al. 1989). A recent study by the 2030 Water Resources Group (Water Resources in Kenya: Closing the Gap, May 2014 - https://2030wrg.org/wp-content/uploads/2015/05/Kenya-Hydro-Economic-Briefing-Note_May2015.pdf) analyzed current water demand and future national development plans, concluding that in 2030 Kenya will likely face a 30 percent gap between water demand and available water resources.
3. For instance, South Africa has seven times more storage capacity than Kenya.
4. Water supply for Mombasa and Nairobi covers only 25 percent and 75 percent of water demand, respectively.
5. Access to a basic sanitation service means a household uses an improved sanitation facility (e.g. flush/pour flush connected to pit latrine or septic tank, ventilated improved pit latrine, pit latrine with slab, composting toilet, etc.) that is not shared with other households.
6. According to the UNICEF/WHO Joint Monitoring Programme (JMP) data (2021), about a third of the country's population have no access to basic water services, half have no access to basic sanitation services, and 9 percent practice open defecation. Data from the UNICEF/WHO Joint Monitoring Programme (JMP) database, UNICEF, New York, NY; WHO, Geneva, Switzerland (accessed 2021), https://washdata.org/data.
7. The Kenyan definition of *improved water sanitation and sanitation access* includes shared services.
8. Government of Kenya, Kenya Environmental Sanitation and Hygiene Policy 2016-2030 http://repository.kippra.or.ke/handle/123456789/1803
9. About 26 percent of Kenya's children under five years are stunted. In some counties (e.g., Wajir), stunting rate is as high as 78 percent.
10. According to the World Bank's Human Capital Index, a child born in Kenya today is likely to achieve half of his or her potential when they grow up as they could be if they enjoyed complete education and full health. See the Human Capital Index (HCI) database for Kenya, World Bank, Washington, DC, https://data.worldbank.org/indicator/HD.HCI.OVRL?locations=KE.
11. Data from the UNICEF/WHO Joint Monitoring Programme (JMP) database, UNICEF, New York, NY; WHO, Geneva, Switzerland (accessed 2021), https://washdata.org/data.

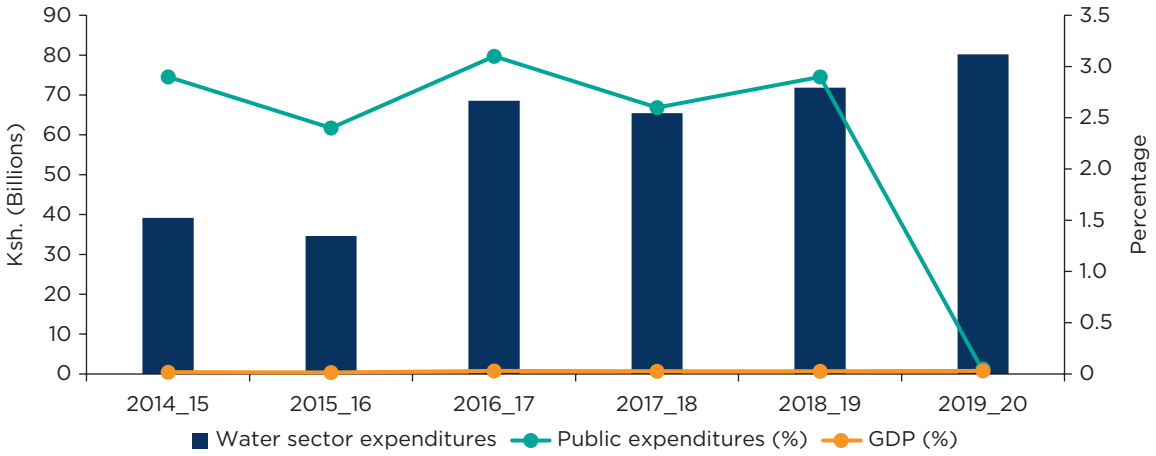
2. How Are Public Funds Allocated and Spent in the WSS Subsector at National and County Levels?

The Government of Kenya has developed policies and strategies to guide both medium- and long-term planning in the water sector, including setting targets for the subsectors. Water supply and sanitation (WSS) goals are included in the overarching, long-term national development strategy (Kenya Vision 2030), Third Medium-Term Plan (2018–22), and National Water and Sanitation Services Strategy (2019–30). However, planning at the county level is less developed.

Water sector expenditures as a proportion of total public expenditures have remained relatively constant from fiscal 2015 to fiscal 2020, averaging 2.9 percent, but have outpaced population growth during this period (figure 2.1). Water sector expenditures have also increased as a share of gross domestic product (GDP), due to increases in the sector budget, which have exceeded overall economic growth. Compared to other sectors, the water sector made up a smaller share of public expenditures (2–3 percent), indicating that other sectors, for instance, those directly contributing to the Big Four Agenda,[1] may have received higher priority. Also, compared to other countries in Africa, Kenya ranks low in water supply, sanitation, and hygiene expenditures, both as a percentage of GDP and per capita (figure 2.2).

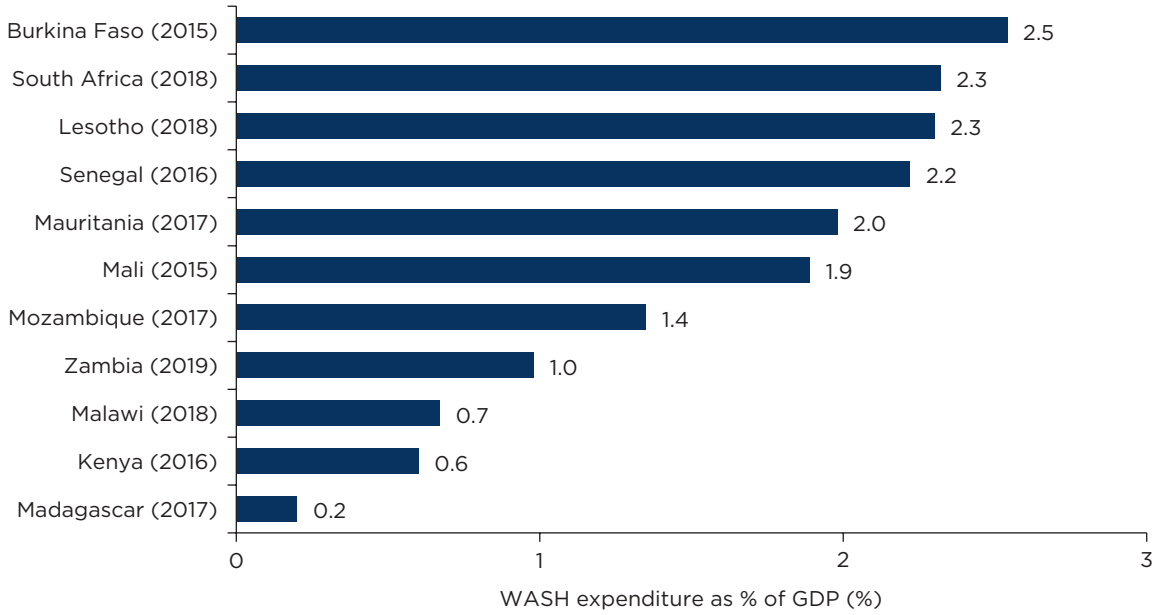
More than half (52 percent, or K Sh 187.6 billion) of the water sector's expenditures were on the WSS subsector from 2014 to 2020 (figure 2.3), and mainly funded with domestic resources (figure 2.4). The higher allocation to WSS than to other subsectors indicates that the WSS is a sector priority. Nearly two-thirds of Kenya's water sector expenditures were funded from domestic resources during the period under review, with domestic funding (K Sh 227 billion) to the sector coming from the consolidated fund.[2] This is also the case for the WSS subsector, in which domestic resources funded most expenditures. The remaining sector budget was funded by loans (31 percent) and grants (5 percent) from international development partners. The World Bank, the African Development Bank, the Government of Italy, and the Agence Française de Développement (AFD) were the main financiers. However, there has been a substantial reduction in loan proceeds going to the WSS subsector (about 32 percent from fiscal 2015 to fiscal 2020).

Figure 2.1. Water Sector Expenditures as a Percentage of Total Public Expenditures and GDP in Kenya



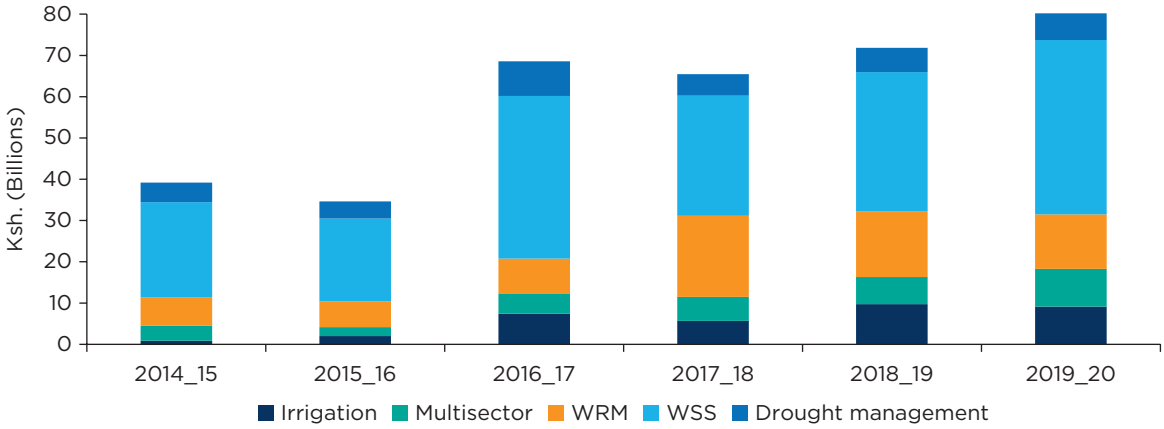
Source: Original to this publication. Based on consultant's calculation from BOOST database https://www.worldbank.org/en/programs/boost-portal.

Figure 2.2. Water Supply and Sanitation Expenditures as a Percentage of GDP in Selected African Countries



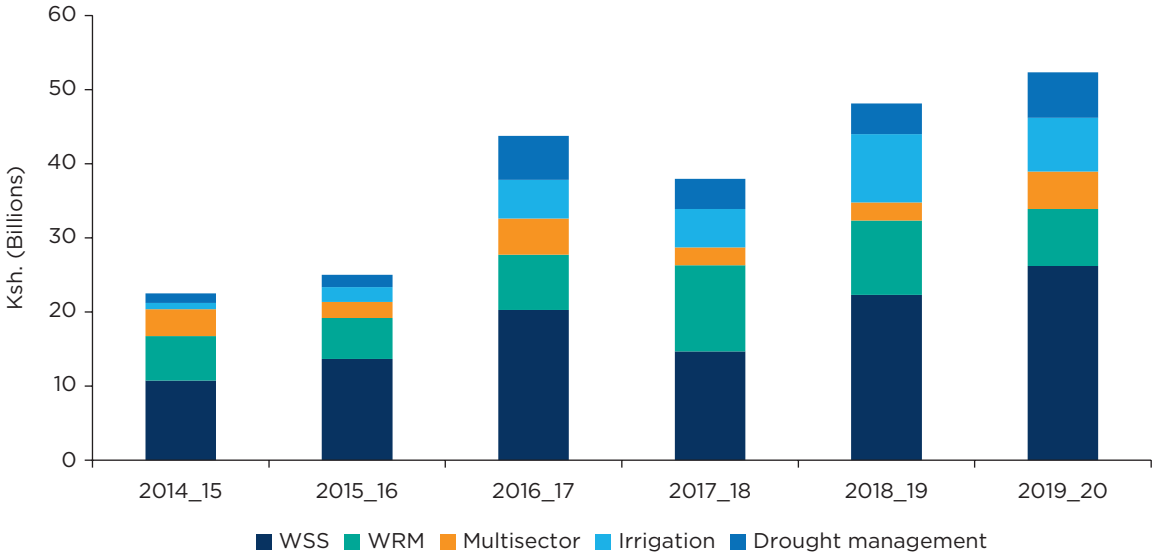
Source: WHO 2019.
Note: WASH = water supply, sanitation, and hygiene.

Figure 2.3. Water Sector Expenditures by Subsector in Kenya, 2014–20



Source: Original to this publication. Based on consultant's calculation from BOOST database. https://www.worldbank.org/en/programs/boost-portal.
Note: WRM = water resources management; WSS = water supply and sanitation.

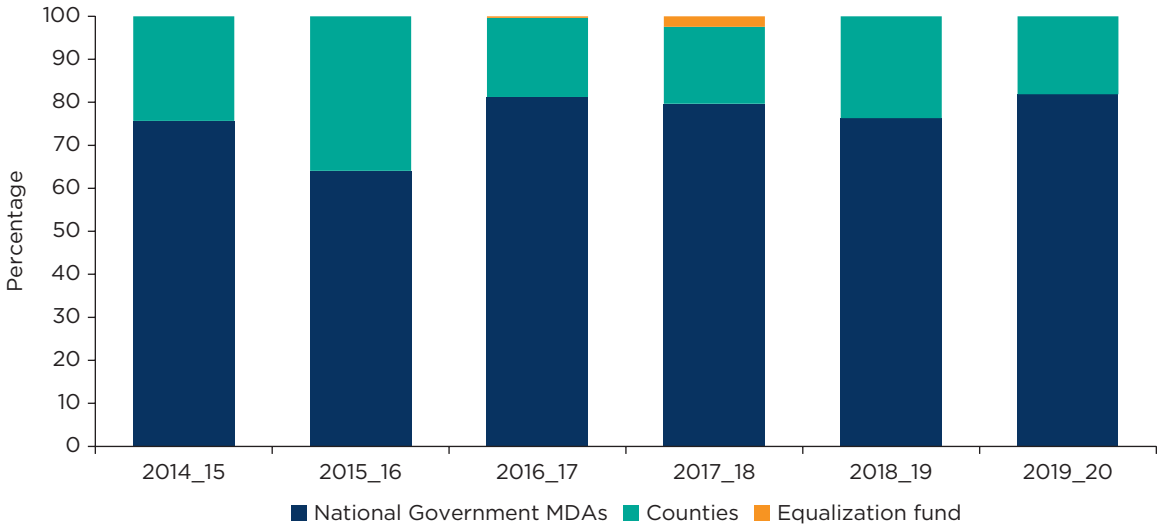
Figure 2.4. Domestically Funded Water Sector Expenditures in Kenya, 2014–20



Source: Original to this publication. Based on consultant's calculation from BOOST database. https://www.worldbank.org/en/programs/boost-portal.
Note: WRM = water resources management; WSS = water supply and sanitation.

While most water sector spending (71 percent) was by ministries, departments, and agencies (MDAs), counties allocated a higher proportion of their total water expenditures to the WSS subsector than the MDAs (figure 2.5). The relative share of water sector expenditures by MDAs increased slightly (6 percent) during the review period, while the share of expenditures at the county level decreased by a similar amount. However, despite overall expenditures in WSS being almost less than half that of national institutions, counties allocate a higher proportion (67 percent per year, on average) of their total water expenditures to the WSS subsector than

Figure 2.5. Relative Distribution of Water Sector Expenditures, by National and County Levels in Kenya, 2014–20



Source: Original to this publication.
Note: MDAs = ministries, departments, and agencies.

MDAs (49 percent per year). This could because WSS service provision is a devolved function. There are, however, substantial disparities in water sector expenditures at the county level. Ten counties were responsible for more than half of county-level water expenditures, and the highest spending county (Mandera) spent 10 times more than 26 counties, collectively. In general, arid and semi-arid counties had higher water sector spending than the more water-endowed counties. Proceeds from the equalization fund,[3] disbursed in fiscal 2017 and fiscal 2018, made up about 0.7 percent of sector expenditures.

Development expenditures averaged 89 percent of water sector expenditures between fiscal 2015 and fiscal 2020, with the remaining portion used for recurrent expenditure.[4] Development expenditures declined slightly from about 92 percent in fiscal 2015 to 84 percent in fiscal 2019 but increased again in fiscal 2020. This indicates that expenditures, in general, followed the sector plans because they determine development spending.

Budget execution in the water sector was low (77 percent during the period under review) but comparable to execution in sectors such as energy, infrastructure, information and communication technology, and health. It was, however, lower than execution rates for the education and social protection, culture, and recreation sectors. Water sector budget execution has also increased marginally, and since fiscal 2017 it has been above 75 percent. At subsector level, budget execution rate was lowest in the WSS subsector at 67 percent but has been rising in recent years, and, on average, has been higher among counties (76 percent) than MDAs (72 percent). But while MDAs have improved their budget execution during the period of analysis, the average county-level budget execution rate has declined. There are substantial disparities in budget execution at the county level, with average budget execution as high as 190 percent in one county and as low as 36 percent in another. The low absorption of

available funds is due to delays in fund flow from the National Treasury to line ministries and departments, implementation delays because of slow procurement processes, and land acquisition and resettlement challenges, among others.

The budget execution rate of expenses funded by the equalization fund was very low (18 percent). While the fund covers other services, including health, roads, and energy, it offers an opportunity for counties to provide financing to target the poor and marginalized groups. Since the available funds were not being used, the low execution rates pose a risk of the sector finding it more difficult to mobilize budget allocations. Also, the poor are more exposed to lack of services even when the required budget is available, so there is need for more concerted planning and targeting of services to this population.

NOTES

1. The Big Four Agenda comprises food security, affordable housing, manufacturing, and affordable healthcare.
2. The Consolidated Fund is the GoK's public account. Money raised or received on behalf of the national government is consolidated in this fund.
3. The equalization fund was established in the 2010 Constitution. It is used to "provide basic services including water, roads, health facilities and electricity to marginalized areas to the extent necessary to bring the quality of those services in those areas to the level generally enjoyed by the rest of the nation, so far as possible."
4. Recurrent and development expenditures in the BOOST database seem to include expense categories that would not typically be considered capital expenditure or recurrent expenditure and should be interpreted with caution. https://www.worldbank.org/en/programs/boost-portal.

3. What Financing and Efficiency Gaps Affect the GoK's Ability to Expand Access to WSS Services?

The Government of Kenya (GoK) needs to mobilize substantial resources, amid a period of fiscal constraint, to meet the ambitious 2030 water sector targets. The National Water Master Plan 2030 (the Master Plan) published in 2013 and the environmental protection, water, and natural resources sector reports indicate that roughly K Sh 3.8 trillion (US$35 billion) will be required between fiscal 2020 and fiscal 2030 to meet the GoK's targets in the water supply and sanitation (WSS), water resources management (WRM), irrigation, and flood and drought management subsectors.[1] To achieve this level of funding, the GoK would have to mobilize eight times the level of historical expenditure in the sector, which was K Sh 306.3 billion (or about K Sh 43.8 billion per year) between fiscal 2013 and fiscal 2019. Assuming that future water sector revenues are the same as approved expenditures from fiscal 2020 to fiscal 2023, and that the same allocation rates will remain after fiscal 2023, the total financing gap to meet fiscal 2030 targets is K Sh 1.6 trillion—an average of 1 percent of GDP for the fiscal 2020 to fiscal 2030 period. The WSS requirement is about K Sh2.2 trillion (US$22 billion), with only half the amount projected to be available during this period.

Water tariffs and subsidies[2] are not well targeted. A benefit incidence analysis shows that the correlation between poverty incidence and WSS sector expenditure at the county level is weak, with counties with fewer poor households having higher WSS expenditures. Data indicates that poor households spend more on WSS services as a share of their total household expenditures. While there is no statistically significant correlation between the average subsidy for households and the poverty rates at county level, water tariffs and subsidies are not well targeted. Average water supply tariffs were 25 percent lower than the average cost of service. The benefit incidence analysis shows that poor households received only 22 percent of all water supply subsidies. The distribution of water subsidies reflects the distribution of access to reticulated water services, primarily available for the urban residents and the nonpoor in Kenya. Thus, urban households that are more likely to have access to reticulated services received 57 percent of all water supply subsidies compared to rural households (34 percent), which are less likely to rely on piped water services. Yet, the rural population relies more on unimproved water supply services (13 percent) than the urban population (3 percent) so there is an urgent need to move the rural population up the access ladder. Table 3.1 summarizes the average and relative share of subsidies received for WSS services by settlement type and welfare status in Kenya.

Table 3.1. Average and Relative Share of Subsidies Received for Water Supply and Sanitation Services by Settlement Type and Welfare Status in Kenya, 2015–16

	AVG. SUBSIDY (K SH/MONTH)	TOTAL SUBSIDIES (%)
Rural	57.2	34.1
Urban	78.4	57.1
Peri-urban	65.4	8.8
Nonpoor	72.7	77.6
Poor	63.2	22.4

Sources: Consultant's calculation from 2015–16 Integrated Household Budget Survey[3]; WASH Alliance, WASREB Impact Reports.[4]

The performance of regulated WSS services is mixed, but there is an opportunity for performance improvement, thereby increasing available financing. Recovery of operations and maintenance costs among regulated water supply providers (WSPs) has declined slightly from a ratio of 1.05 in 2010 to 1.03 in 2019, against an estimated 1.50 ratio needed to cover the full cost of service. NRW, while fluctuating year by year, is in the same level as in 2010 (47 percent, on average). The average revenue collection efficiency among utilities remains relatively high, which could be attributed to availability of various payment options. However, there has been a decline in revenue collection efficiency since 2017, providing an opportunity for improvement. Similarly, metering levels are high and have been increasing, reaching 96 percent in 2019, with a forward look for WSPs to increase, replace, and repair bulk meters to better track supply and address NRW. Staff productivity has fluctuated between 2010 and 2019 and averaged at seven staff per 1,000 connections among all utilities. Very large and large utilities outperform the medium and small utilities on staff productivity. Average daily service hours vary substantially among and in counties, and only a minority of regulated utilities meet continuity of service standards.

To achieve the ambitious WSS targets, the GoK must find more innovative and sustainable strategies to enhance the sector's efficiency and to cover the financing gap. Concerted efforts must be made to improve the financial and operational performance of WSPs and the quality of services they provide while reducing the reliance on unregulated WSS services. Both levels of government will need to increase their WSS financing and ensure efficient use of available resources.

NOTES

1. According to the National Water Master Plan, 2030 targets in WSS include increasing coverage of improved supply to 100 percent in urban and rural areas, increasing coverage of piped water supply by WSPs to 100 percent in urban areas, increasing the water allowance per capita to national standard levels, and decreasing the nonrevenue water (NRW) rate to 20 percent. The main WRM objective is to meet all water demand projections based on Kenya Vision 2030 projections, including domestic, industrial, irrigation, livestock, wildlife, and inland fisheries demands, as well as for hydropower use.

2. Subsidies here mean the difference between the unit cost of producing and distributing water and the tariff that households pay (the difference between cost recovery tariffs and actual tariffs).
3. https://statistics.knbs.or.ke/nada/index.php/catalog/13#:~:text=About%2070%20per%20cent%20of,above%20are%20in%20monogamous%20unions.
4. https://wasreb.go.ke/impact-reports/.

4. What Are the Most Effective Intergovernmental Planning Strategies for Rapidly Increasing WSS Services Coverage?

The National Water and Sanitation Services (NWSS) strategy 2019–30 translates the goal of universal access to safe and affordable water and sanitation by 2030 into specific coverage targets for 2030, differentiated by subsector (table 4.1). The two levels are the 2030 target and the minimum 2030 target. The latter reflects concerns that the water sector may not be able to mobilize the necessary funds for achieving the 2030 target. This approach is consistent with the constitutional recognition that the human right to water supply and sanitation (WSS) standards must be progressively realized. In addition to NWSS targets, the National Environmental Sanitation and Hygiene Program aims at 100 percent open defecation free villages in Kenya by 2030, and 100 percent access to improved sanitation in rural and urban areas by 2030.

The NWSS details strategies to expand service coverage equitably and cost-effectively to achieve these targets. For urban areas, it calls for shared water facilities like water kiosks and yard taps to be promoted in low-income areas or where it is not techno-economically feasible to connect households to the network. For rural areas, the NWSS promotes outsourcing of operations and maintenance (O&M) of piped systems to small-scale private operators or registered community operators. The NWSS also prioritizes safeguarding of water sources and rehabilitating point water sources over the development of new infrastructure.

Achieving the 2030 targets will require acceleration of expansion of services by a faster rate than in the last decade. This review's coverage and financing strategic scenario analysis provides projections under business-as-usual (BAU)[1] growth rates (figure 4.1, panels a–d). Under BAU growth rate, access to piped water in urban areas is estimated to remain constant at 58 percent from 2019 to 2030. This means expansion of the network would match–but not exceed–growth in the number of urban households. Access to sewerage services would increase slightly, from 25 percent in 2019 to 29 percent in 2030. In rural areas, access to improved water would increase from 56 percent to 79 percent, and, notably, BAU growth rates for rural sanitation are enough to lift coverage from 75 percent to 100 percent by 2030. However, the government must introduce

measures to target the poor and pay attention to 13 counties that account for 79 percent of open defecation in Kenya.

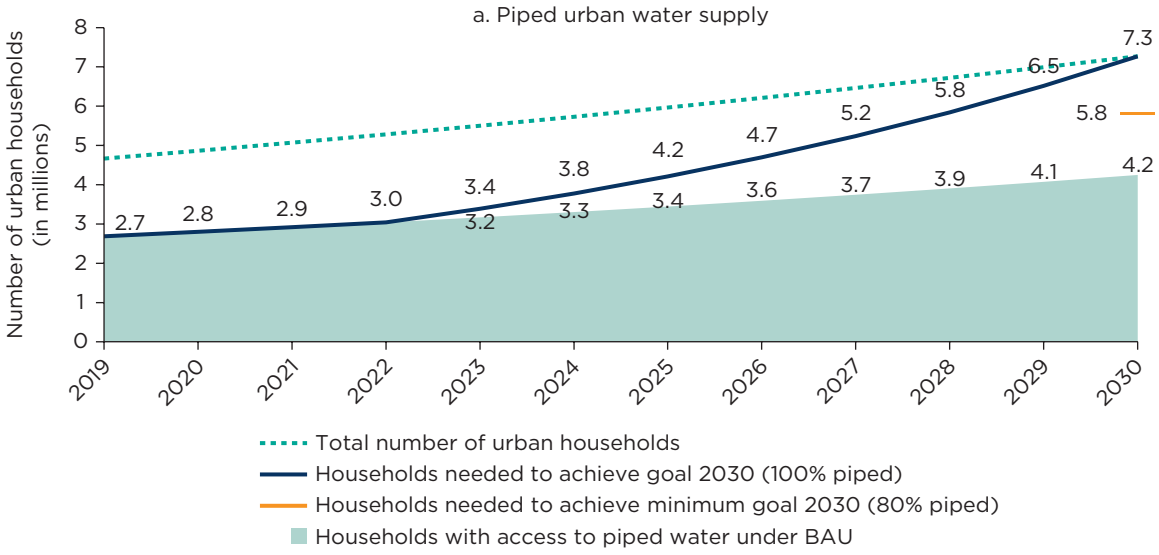
Expansion of services to meet the 2030 goals requires significant funding beyond the projected BAU allocations. Expansion of piped water supply and sewer networks and provision of safely managed sanitation in urban areas and universal access to improved WSS in rural areas would require an **additional K Sh 652 billion (US$6 billion)** from 2023 to 2030. How can Kenya accelerate the expansion of WSS services to achieve universal coverage in urban and rural areas?

Table 4.1. Water Supply and Sanitation Service Targets in Kenya for 2040

SECTOR	CLASSIFICATION	2030 TARGET (%)	MINIMUM 2030 TARGET (%)
Water	Urban	Access to safe water (100)	Access to safe water (80)
	Rural	Access to safe water ((100)	Access to safe water (80)
Sanitation	Urban	Access to sewerage (80)	Access to sewerage (40) Access to safely managed, on-site sanitation facilities (40)
	Rural	None stated	Access to safely managed, on-site sanitation facilities (20) Access to improved sanitation facilities in households, markets, schools, and health facilities (80) Access to improved facilities in close vicinity of households (100)

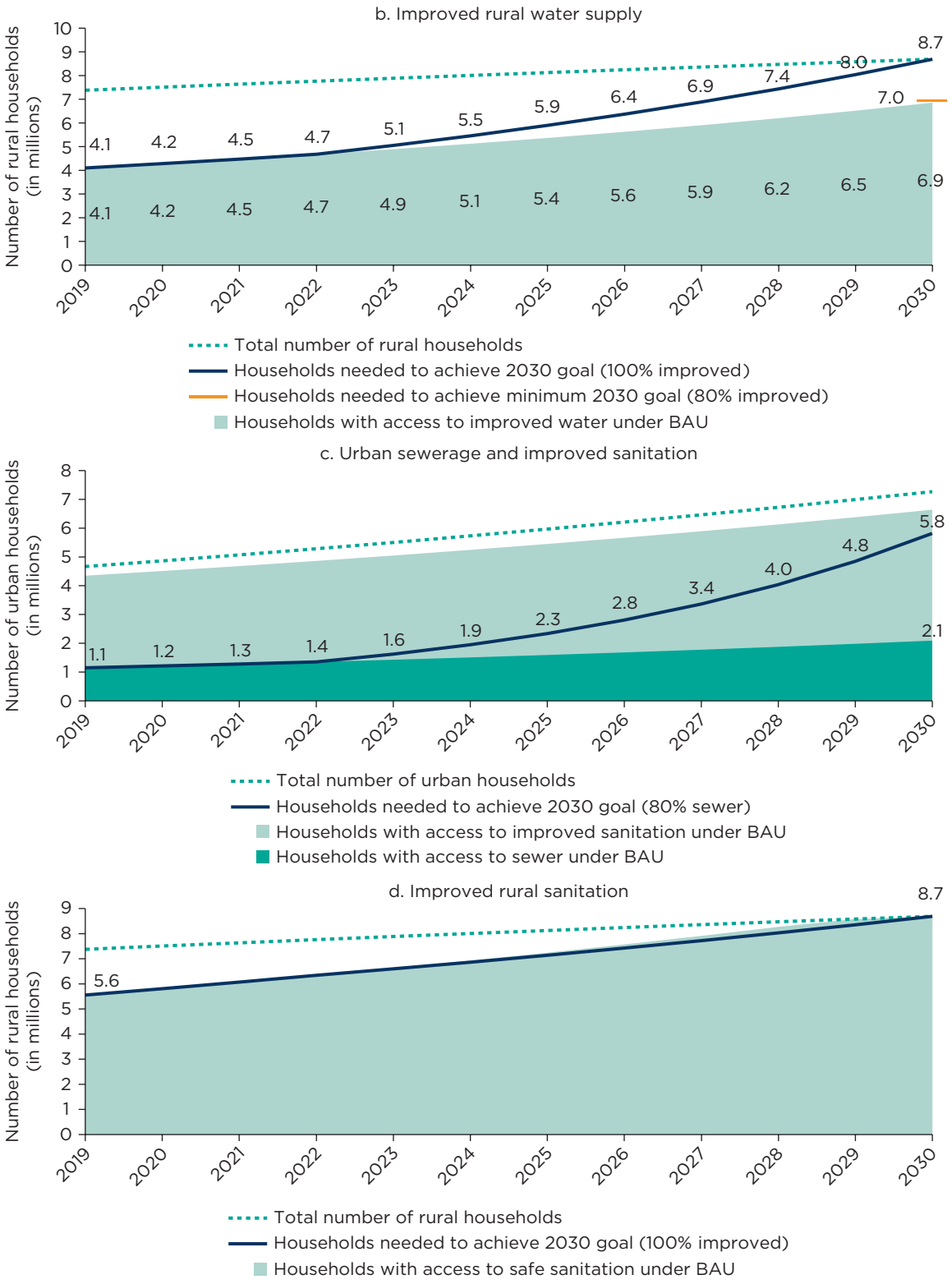
Source: MoWSI, Kenya, 2022, 10.

Figure 4.1. Service Gap under BAU Growth Rates in Kenya, 2019–30



(*Continued*)

Figure 4.1. (*Continued*)



Source: Original to this publication.
Note: BAU = business-as-usual.

The conventional answer would be to increase public expenditure. But such an increase would require doubling of public spending from the projected BAU levels (K Sh 529 billion, or US$4.9 billion).[2] This scenario is unlikely, especially after the fiscal stresses brought by the COVID-19 pandemic. Moreover, capital spending inefficiencies (due to lack of intergovernmental coordination in investment planning) and service delivery inefficiencies have created a fiscal burden, making it harder for the government to mobilize resources for the sector.

The Government of Kenya has identified a package of reforms that will help to mobilize part of the additional financing required to meet the WSS targets. Once implemented, the **reforms could catalyze as much as K Sh 166 billion (US$1.5 billion)** of additional resources for service expansion over the next seven years, without imposing an extra burden on national or county government budgets.[3] The reform options are summarized as follows:

- US$1.5 billion from water service provider contributions to investment, made possible by (a) reducing nonrevenue water, (b) increasing collection rates, (c) raising real tariffs to achieve O&M cost recovery levels recommended by the Water Services Regulatory Board, and (d) raising commercial finance on the strength of improved operating cash flows.
- US$84 million would come from levies. The sewerage levy could raise US$31 million. The Water Sector Trust Fund (WSTF) has pioneered new financing mechanisms, such as output-based aid, and could be scaled up by operationalizing the WSTF levy (US$52 million).
- Additional gains can be made from redirecting national government expenditure to an intergovernmental conditional transfer scheme, specific for financing innovative intergovernmental output-based fiscal transfers and viability gap funding. These transfers can increase the efficiency of national government expenditure by paying only for results, leveraging additional county and household expenditure, and targeting those most in need.

Although these improvement options could move the sector forward significantly, the universal access goals will still not be achieved without additional funding. Together, the improvement options could enable 92 percent access to piped water in urban areas, 36 percent access to sewerage services in urban areas, and 95 percent access to improved water in rural areas by 2030. Achieving improved water and sanitation for all, with 80 percent sewerage coverage in urban areas, requires about K Sh 327 billion (USD$3 billion)—80 percent of which for urban sewerage systems—more than expected from BAU government funding and the sector reform options outlined above. Both levels of government acknowledge that this level of extra public funding is unattainable under the current macro-fiscal conditions.

The strategic scenario analysis considered three planning options for achieving universal coverage, comparing them to the "no change" option. Table 4.2 figu summarizes the planning options considered: (a) option A shows that the remaining gap after implementing the reforms is US$3 billion; (b) option B considers implementing the reforms and reducing the urban sewerage access target to 40 percent, thereby reducing the gap to US$675 million; and (c) option C entails implementing the reforms but no increase in BAU government spending.

As part of the new WSS Investment Framework,[4] both levels of government have agreed to option B as the preferred planning scenario. This option requires the least additional funding to

Table 4.2. Summary of Water Supply and Sanitation Planning Options in Kenya

	ACTION TOWARD REFORMS	INCREASE IN GOVERNMENT SPENDING	WSS LOCATION AND IMPROVEMENT (%)
	No change	K Sh 652 billion (US$6 billion)	Urban: piped water (100) Urban: sewer (80); improved sanitation (20) Rural: improved water (100) Rural: improved sanitation (100)
A	Implement reforms	K Sh 327 billion (US$3 billion)	Urban: piped water (100) Urban: sewer (80); improved sanitation (20) Rural: improved water (100) Rural: improved sanitation (100)
B	Implement reforms	K Sh 73 billion (US$675 million)	Urban: piped water (100) Urban: sewer (40); improved sanitation access (60) Rural: improved water (100) Rural: improved sanitation (100)
C	Implement reforms	Maintain government spending at BAU levels	Urban: piped water (92) Urban: sewer (36); improved sanitation access (64) Rural: improved water (95) Rural: improved sanitation (100)

Source: Original to this publication.
Note: BAU = business-as-usual.

achieve universal WSS coverage. Adoption of this planning scenario will involve (a) dropping the urban sewerage target to 40 percent; (b) implementing all identified reforms, and (c) seeking K Sh 73 billion (US$675 million) in additional public funding above BAU levels. Under this scenario, 100 percent of Kenyan households would have improved WSS, with 100 percent and 40 percent of urban households having access to piped water and to sewer services, respectively. These planning parameters form part of a new National Water and Sanitation Investment Program, currently under preparation by the Ministry of Water, Sanitation, and Irrigation and county governments using the new investment framework.

NOTES

1. BAU is estimated assuming investment as a percentage of GDP remains constant.
2. Following traditional approaches, an estimated US$11 billion would be required from 2023 to 2030.
3. The World Bank has carried out a detailed modeling of the reform options and their impact on sector finance. The findings are in the report "Strategic Scenario Analysis for Expanding Access to WSS Services in Kenya" (World Bank, forthcoming).
4. As part of the policy actions under an ongoing World Bank–funded Development Policy Operation, the national government and counties adopted a new WSS Investment Framework. It aims to expand access and increase the amount of financing available for the sector to help meet 2030 goals.

5. What Institutional and Financial Reforms Are Needed in the Medium Term to Unlock and Expand Financing to Increase Access to WSS Services?

The Water Supply and Sanitation (WSS) Investment Framework identifies a feasible package of reforms that can mobilize as much as US$1.5 billion of additional resources, while enhancing efficient use of available resources. These reforms can be grouped into three categories: (a) operational efficiency reforms, (b) capital efficiency reforms, and (c) tariff reforms. Table 5.1 describes these reforms and provides the views of both national- and county-level stakeholders on acceptability of the reforms. These reforms will require further preparation in an implementation plan with clear responsibilities, targets, and incentives.

An intergovernmental conditional transfer scheme with a dedicated budget line to incentivize implementation of the identified reforms would be a strong driver of sector transformation. A results-based financing (RBF)[1] approach to incentivize performance and promote efficiency and viability gap financing to facilitate mobilization of private finance for selected WSS projects could be part of such a conditional transfer scheme. Implementation of RBF approaches requires important preconditions, including a strong monitoring and evaluation framework, and the availability of bridge financing, which allows service providers to borrow the capital they need to make the investment (repayment occurs if they hit their RBF targets).

Efficient planning and execution of the sector budget are required. An examination of government spending across sectors makes it clear that the water sector is a priority, but fiscal constraints are likely to force difficult choices in the years ahead. The economic impact of the COVID-19 pandemic has already shown signs of reducing government's fiscal space. There is clearly room for improvement of execution efficiency in sector expenditure to maximize on available allocation. This includes the execution of the equalization fund. There is also a critical need to align government expenditure as closely as possible with policy objectives. One method would be to link sector expenditure to performance through RBF approaches.

Table 5.1. Summary of Water Supply and Sanitation Reform Options in Kenya

BUSINESS AS USUAL	REFORM	ACCEPTABILITY AND FEASIBILITY OF REFORM
Operational efficiency reforms		
NRW is 47%, on average, and collection rate is 92%, on average	Reduce NRW to 25% and increase collections to 97% (K Sh 31 billion)	Stakeholders agreed improving operational efficiency is essential. They noted that it is essential that adequate funds for NRW reduction activities and other activities be available to WSPs early in the reform.
The ratio is 7 staff per 1,000 connections, on average, and there are opportunities to reduce operating costs	Increase labor productivity	
	Reduce operating costs	
Capital efficiency reforms		
Limited predictability, transparency, and results-orientation of national government funding for WSS	Establish an intergovernmental conditional transfer scheme with dedicated a budget line	Stakeholders agreed that a new framework for intergovernmental cooperation is needed. They recommended a communication protocol, coordination of investment plans to avoid duplication, a forum for planning and cooperation, and an explicit mechanism to resolve intergovernmental disputes.
National and county governments do not coordinate WSS investment planning and implementation	Give WSPs responsibility for their capex program	
Water projects usually focus on increasing bulk supply	Prioritize expanding connections where investment in bulk water not required (K Sh 47 billion)	
Sewer projects usually focus on increasing wastewater treatment capacity and expanding the sewer network	Prioritize expanding sewer connections where there is unused wastewater treatment capacity and where many households are located near (but not connected to) the sewer network	
Urban sanitation goal is 80% sewer coverage	Rely more on on-site sanitation in urban areas (K Sh 254 billion)	Stakeholders suggested that a goal of 80% urban sewerage coverage by 2030 is not realistic due to cost and pace of expansion required. They agreed that reducing sewerage target to 40% sewerage coverage, combined with a greater focus on CWIS, would be a better strategy.
Fecal sludge management not prioritized	Invest in, and create enabling environment for, fecal sludge management and prioritize CWIS	
Open defecation may not be eliminated until 2053	Shift funding for rural sanitation to focus on eliminating open defecation in the 13 counties that account for 79% of open defecation	Stakeholders agreed that NAWASIP should include practical steps to end open defecation, such as putting more national funding toward the 13 counties.

(*Continued*)

Table 5.1. (*Continued*)

BUSINESS AS USUAL	REFORM	ACCEPTABILITY AND FEASIBILITY OF REFORM
Most WSPs are not creditworthy and do not finance capex	WSPs become creditworthy and borrow to finance capex (K Sh 81 billion)	Stakeholders noted that WSPs need access to long-term loans at affordable interest rates, and that while the pooled bond fund was a good idea in principle, it has not progressed. They believe that counties and national government should work together to create a national water financing facility. Stakeholders agreed that NAWASIP funding solutions should be integrated with solving the sector's bad debt issues, because WSPs have taken on loans that they are not able to service.
WSTF's Up-scaling Basic Sanitation for the Urban Poor program provides output-based aid for on-site sanitation system projects	Scale up the program to increase access to more households	
No system for providing means-tested grants to very poor households	Establish means-tested grant program	
Tariff reforms		
Tariffs cover 105% of operating costs on average	Increase tariffs to cover 150% of operating costs (K Sh 45 billion)	Stakeholders agreed that increasing tariffs is necessary. They noted the political constraints and stated that technical staff should provide recommendations and options to assist representatives in making the best choices for their community.

Source: Original to this publication.
Note: capex = capital expenditure; CWIS = citywide inclusive sanitation; NAWASIP = National Water and Sanitation Investment Program; NRW = nonrevenue water; WSP = water service provider; WSS = water supply and sanitation; WSTF = Water Sector Trust Fund.

Improving public investment management in the water sector will promote efficiency throughout the implementation chain. Better and coordinated planning, enhanced project readiness including land acquisition and resettlement, and enhanced capacity of executing agencies would facilitate improved expenditure execution, spending efficiency, and equity across wealth groups and counties. The sector should also explore the use of results- or performance-based financing mechanisms to incentivize results.

Targeted spending is critical to reach counties that are lagging as well as the poor and rural populations. The findings of the public expenditure review point to uneven progress in meeting Kenya's water sector objectives, with WSS services better in urban than in rural areas. The uneven progress has highlighted disparities between higher- and lower-income populations. Access to WSS varies greatly by socioeconomic status and county. Among households in the lowest expenditure quintile, 42 percent do not have access to an improved drinking water source, and 63 percent lack access to improved sanitation. The comparable numbers in the highest expenditure quintile were 22 percent and 20 percent, respectively.

Good subsidy design and implementation must be integrated into physical and financial planning at the national and county levels, and policy makers must consider how potential beneficiaries are identified, what will be subsidized (e.g., connections or consumption), how much of a subsidy is required, how they are delivered, and what accompanying policy measures are needed.

Implementing the planning scenario successfully requires collaboration between the national and county governments. The Constitution and the Intergovernmental Relations Act (2012) require the national and the county governments to conduct their mutual activities based on consultation and cooperation. They also provide for effective management of intergovernmental relations, including dispute resolution. The water sector has developed the Water Sector Inter-Governmental Consultation and Co-operation Framework (WSIGCCF) to guide operations in investment planning, development, and service provision, as well as in monitoring sector performance and advocating for change. Under the WSS investment framework, the WSIGCCF will be operationalized through a new joint secretariat to manage the intergovernmental consultative forum. This will also be the channel through which the National Water and Sanitation Investment Program will be reviewed and approved, which will end the disconnect between the national and county governments in investment planning, development, and service provision.

Political and technical leadership are critical for achieving the reforms. Although the technical view paints a good picture of the potential financing that the sector can generate from improved performance of the water service providers (WSPs), the setting and collection of water tariffs is as much a political decision as a technical one. It takes political foresight and courage (alongside WSPs' technical skill and professionalism) to spend more on operations and maintenance, thus reducing spending on emergency repairs down the line. Poor water tariff collection, excessive nonrevenue water, and WSP operational inefficiencies are likely the result of binding institutional (or political economy) constraints, rather than merely technical ones. It is unrealistic to expect that simply demanding that counties or WSPs collect higher tariffs or rates would result in greater tariff collections. Much work needs to be done, therefore, in identifying the scope of underlying technical and institutional causes of poor water tariff collection, NRW, and WSP operational inefficiency, and in consulting key stakeholders in addressing them.

NOTE

1. RBF is an aid mechanism in which payments are made upon verification of the delivery of the desired outputs or the performance of desired behaviors.

6. Conclusion

Kenya requires considerable investment to achieve its ambitious water supply and sanitation (WSS) access goals, and it needs to improve intergovernmental coordination, budget execution rates, service efficiency, and targeting of subsides. The analytical work summarized in this note shows that though there is a financing gap, available resources are not used efficiently.

By adopting the new WSS Investment Framework, the national and the county governments have begun implementing critical reforms to increase financing and improve sector performance. The new framework recognizes that both levels of government share a constitutional obligation to ensure the right to WSS for all Kenyans and that they must cooperate in planning functions. The new framework contains:

- Revised service coverage targets for 2030
- Funding levels that national and county governments will commit to the sector over the next seven years
- Guidelines for project selection and appraisal
- Agreed reforms to improve the efficiency of capital expenditure and operational efficiency of WSPs
- Operationalization of the water sector intergovernmental coordination framework
- A new intergovernmental conditional transfer scheme to incentivize reform implementation

These planning parameters form part of a new National Water and Sanitation Investment Program (NAWASIP), currently under preparation by the Ministry of Water, Sanitation, and Irrigation and county governments. NAWASIP will guide sector investments at both levels of government, thus addressing the current disjointed planning systems and facilitating better resource allocation toward a common goal.

By implementing these reforms, the sector can reduce the financial burden in a time of fiscal constraints and limited public resources. Enhancing sector performance and reducing inefficiencies will attract concessional financing and help leverage additional private capital for the sector. The proposed package of reforms can mobilize as much as US$1.5 billion in additional resources, while enhancing efficient use of resources.

A culture that supports good performance by holding institutions, political heads, and officials clearly accountable for (a) specific functions and tasks and (b) being customer-oriented, technically competent, and financially sustainable services will strengthen public, private, and civil society alliances. Such collaboration would add momentum and legitimacy to governance and institutional, policy, and financial reforms.

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