



# KENYA

## High-Priority Country Plan

GLOBAL WATER STRATEGY | 2022-2027

In 2022, Kenya was re-designated as a High-Priority Country under the new U.S. government Global Water Strategy (the GWS or “Strategy”). Over the next five years of the Strategy period, USAID/Kenya and the East Africa Regional Mission (USAID/KEA) will continue to work with the Government of Kenya (GoK) and other stakeholders to strengthen sector governance; address key financing gaps; and increase access to area-wide, sustainable water and sanitation services. USAID/KEA’s investments over the next five years will increase access to basic or improved water services for 1.6 million people (7.5 percent of the current need); provide basic or improved sanitation to 1 million people (2.6 percent of the current need); and mobilize roughly \$130 million for the sector (an additional \$600 million is needed annually to reach universal coverage by 2030). Outside of these direct investments, USAID/KEA will partner broadly with stakeholders to leverage resources for amplified impact.

## CONTEXT

Characterized by 85 percent arid and semi-arid lands (ASALs), Kenya has a culturally diverse population, high levels of environmental vulnerability, and constrained financing, which challenge its ability to ensure sustainable drinking water, sanitation, and hygiene (WASH) services. Kenya faces unique challenges and opportunities, including its geopolitical importance in the East Africa Region. Kenya’s ability to effectively and sustainably finance and deliver safe, reliable, and affordable WASH services can help shape socio-economic growth and reduce fragility to violent extremism and conflict, which are often driven by constrained natural resources and economic opportunities.

Kenya has seen improvements in its WASH access rates over recent years, with water services growing at a faster pace than sanitation. According to 2019 data from the Kenya National Bureau of Statistics (KNBS), national rates of open defecation declined from 13.6 percent in 2009 to 7.4 percent in 2019, while the rates of surface water as a drinking source declined from 26.7 percent in 2009 to 24.1 percent in 2019 (KNBS, 2009 and 2019). The 2020 UNICEF and WHO Joint Monitoring Programme (JMP) reports that 61 percent of Kenyans now have access to basic water services,<sup>1</sup> 32 percent have access to sanitation services,<sup>2</sup> and 26 percent have access to basic hygiene services. There is evident inequality between rural and urban populations that is further exacerbated by gender inequality. The divide in access between urban and rural areas is especially stark in the area of sanitation. In urban areas, 57 percent and 29 percent of Kenyans have access to safely managed water services and basic water services, respectively, and 51 percent of Kenyans in rural areas have at least basic access to water services. The access rate to at least basic sanitation services is 35 percent in urban areas, and in rural areas, the access rate is a meager 2 percent. The JMP data do not include informal settlements.

Kenya faces both significant challenges and critical opportunities in its capacity to deliver sustainable and affordable water and sanitation services, particularly to communities in ASAL areas and the growing number of informal settlements.

**Water scarcity is a challenge—for drinking, productive use, and water resources management.** Kenya is a water-scarce country with per capita water resources of less than 500 cubic millimeters (mm).<sup>3</sup> Mean annual rainfall across the country is 680 cubic mm, but it varies from 200 cubic mm in the ASAL area to about 1,800 cubic mm in the humid zone. High variability in rainfall leads to frequent and prolonged droughts and floods. The uneven distribution of resources and variability will likely worsen with climate changes; thus, USAID and partners should leverage opportunities to support climate-resilient interventions to ensure sustainable resource management. Kenya remains vulnerable to conflict over water resources. The ASAL counties are home to a significant population of pastoralists and agro-pastoralists who make their living from livestock and rely heavily on natural resources, particularly water, which is a determinant factor in their mobility and overall resource management. Water resources management responsibilities have been devolved to basin- and county-level authorities; however, overlapping roles and responsibilities, institutional capacity constraints, and funding shortfalls contribute to sector coordination challenges and impede sound water management.

**Insufficient finance for the WASH sector is a persistent challenge.** As financing units, the county governments contributed 18.3 percent, 18.8 percent, and 20.8 percent of sector funding in 2014/15, 2015/16, and 2016/17, respectively, while the national government accounted for 19.7 percent in 2015/16, 15.5 percent in 2015/16, and 18.6 percent in 2016/17. Multilateral and bilateral partners accounted for 26.7 percent in 2014/15, 24.4 percent in 2015/16, and 21.5 percent in 2016/17. These investments remain below what is needed to meet the levels of investment in the Kenya Water Master Plan 2030.

**Shifting to a decentralized governance system creates opportunities.** Following the decentralization of Kenya's government in 2010, county governments have negotiated power and fiscal relationships with the national government. Political, fiscal, and administrative challenges remain in providing services as a result of this transition. However, the new governance system creates opportunities to more quickly improve WASH services at the local level, particularly for more vulnerable communities. USAID/KEA has finalized memoranda of understanding with the Council of Governors and the individual counties in which it implements WASH activities. These agreements and the proceeding joint work plans with the government institutions provide an opportunity to improve service delivery, water resources management, and financing and governance by focusing resources at the local level.

## NATIONAL PRIORITIES

The GoK has an advanced constitutional, legal, and policy framework for WASH, including the 2016 Kenya Water Law, reflecting its elevated commitment to ensuring access to services for all communities. According to the National Water Master Plan 2030, based on Kenya Vision 2030, improving water access will enable socio-economic development to transform Kenya into a “middle-income country providing a high quality of life to all of its citizens by the year 2030.” However, climate change and population growth impact water availability and use. With rapid urbanization, it is estimated that 30 million Kenyans will reside in urban areas and account for 48 percent of the country's projected population by 2030. The GoK aims to increase access to clean WASH services in the major urban centers and their suburbs, as well as the underserved rural areas and informal settlements where coverage is much lower.

Several GoK policies lay out priorities in the WASH sector, including the National Water Policy of 2021, the National Water Services Strategy for 2021–2025, the National Water Harvesting and Storage Strategy for 2021–2025, and several sets of regulations. The specific policy objectives are to:

1. Preserve, conserve, and protect all available water resources and allocate them in a sustainable, rational, and economical way;
2. Supply water of good quality and in sufficient quantities to meet the various water needs including poverty alleviation, while ensuring safe disposal of wastewater and environmental protection;
3. Establish an efficient and effective institutional framework to achieve systematic development and management of the water sector; and
4. Develop a sound and sustainable financing system for effective water resources management, water supply, and sanitation development.

For sanitation and hygiene, the GoK has developed a long-term policy goal of achieving and sustaining Open Defecation Free (ODF) status and ensuring universal access to improved sanitation by 2030. This goal is in line with Kenya's economic and development vision of creating a globally competitive and prosperous nation with a high

quality of life. Presidential Executive Order No. 1 of 2020 assigned sanitation management to the Ministry of Water, Sanitation, and Irrigation (MOWSI), which resulted in the prioritization of sewerage and non-sewerage sanitation and the development of the National Sanitation Management Policy.

USAID/KEA has a formal bilateral agreement with MOWSI and its parastatals that details joint priorities and the plan for, roles, and responsibilities of each partner in achieving the priorities. This agreement includes joint monitoring of activities and alignment of resources.

## USAID APPROACH AND RESULTS FRAMEWORK

The goal of the GWS 2022–2027, is to **improve health, prosperity, stability, and resilience through sustainable and equitable water resources management and access to safe drinking water and sanitation services and hygiene practices.**

Since January 2022, USAID/KEA has awarded over \$100 million in new activities that will run until 2027/2028 and aim to further the Agency's progress in achieving the GWS goal. These include the Kenya Sustainable Transformational and Accessible Water Interventions (STAWI) Project, Western Kenya Water Project, Western Kenya Sanitation Project, Kenya Sanitation Enabling Environment Project, Groundwater Mapping Project, WASH Finance (WASH-FIN) 2, and the Africa Trade and Investment Mechanism.

This new portfolio takes a bifurcated approach to WASH programming that reflects the different contexts, challenges, and opportunities that exist within Kenya, and is centered on two geographic regions:

### WESTERN KENYA

**Water Security:** The investments in this region are centered on sustainable water service delivery in largely water-rich and population-dense counties. This marries effective management of the water resources concentrated in Kenya's most important watersheds with professionalized services in the cities and small towns throughout the region.

**Sanitation and Hygiene:** The investments in this region focus on strengthening markets for sanitation and hygiene products to meet the growing demand for household sanitation in a region where open defecation is quite low. In addition, these investments include a focus on waste treatment to protect health gains.

### ARID AND SEMI-ARID LANDS (ASALS)

**Water Security:** The investments in this region focus on strengthening resilience and expanding economic opportunities through management of water resources, expansion of sustainable water services, and improved use of water within agriculture and livestock market systems. In a drought-prone region, these investments strengthen both water and food security, harmonizing Feed the Future and WASH investments as well as USAID's humanitarian and development efforts to save lives and protect development gains.

**Sanitation and Hygiene:** Investments focus on catalyzing key changes in behaviors for the adoption of household sanitation, as open defecation remains quite high in this region. Approaches are often adapted to the pastoralist and semi-pastoralist environment to reach the greatest number of people.

Underpinning all investments is a focus on governance and financing. USAID/KEA views these as foundational objectives that cut across and support all others. With effective policies, country-led processes, and institutions capable of implementing them, USAID believes Kenya will attract investment from both domestic and external sources, leading to a cycle of increased capacity, greater investor confidence, increased sector finance, and accelerated coverage of water and sanitation services.



## STRATEGIC OBJECTIVE I

### Strengthen Water and Sanitation Sector Governance, Financing, Institutions, and Markets

Kenya continues to face challenges related to weaknesses in water governance and institutions. Devolution has come with capacity challenges within the counties, and while devolution creates new spaces for public participation and accountability at local levels, it also comes with added risk that oversight could be weakened and corruption problems decentralized. In addition to improved governance, the sector will require significant increases in financing and stronger markets to meet the growing demand for products and services.

#### Intermediate Results (IRs):

**IR 1.1 Develop, strengthen, and implement inclusive laws, policies, and regulations:** Mission WASH investments strengthen government and private sector capacity to implement inclusive laws, policies, and regulations through a county-wide, systems-based approach to expanding and sustaining WASH access. Activities such as the Western Kenya Water Project and STAWI support county governments to develop, pass, and implement water laws and policies, and to establish county-level fora to increase stakeholder accountability.

**IR 1.2 Effectively mobilize and target public and private financing:** USAID/KEA provides project preparation and transaction advisory services for public and private finance, in addition to options for catalytic grant funding, de-risking, and yield enhancements to attract additional financial partners. The WASH-FIN 2 activity is the primary vehicle for contributing to this IR, though the full suite of Mission investments engages in mobilization of financing and engagement of the private sector.

**IR 1.3 Improve the capacity and performance of regional, national, and subnational institutions:** USAID/KEA has become a trusted partner to national and county governments, which have the mandate to deliver water and sanitation services. USAID works with counties to strengthen their abilities to support, oversee, and regulate WASH services, with a focus on access to services for the most vulnerable. STAWI and the Western Kenya Water and Sanitation Projects are co-located with county governments and water service providers to allow for seamless support and partnership. Likewise, WASH-FIN 2 works directly with national and county governments on an on-demand basis to address capacity needs.

**IR 1.4 Advance transparency, accountability, equity, and efficiency through participatory, data-driven decision-making:** Civil society organizations (CSOs) and citizens have an important role to play in holding government actors accountable for delivering the services within their mandates. USAID/KEA invests in CSOs to support their advocacy efforts and enhance engagement with citizen groups to build a better understanding of the services citizens are entitled to. Mission funds also foster collaboration platforms that bring together relevant stakeholders. This enables better allocation of resources within counties as stakeholders better coordinate their investments and work to jointly monitor sector progress. It also fosters cross-learning between those in the sector in order to more quickly scale up innovations and promising approaches. All USAID/KEA mechanisms incorporate data-driven decision-making approaches and create learning partnerships to ensure more efficient and effective use of data. USAID's partnership with the U.S. Geological Survey (USGS), for example, funds and implements groundwater mapping data generation and provides training to county and national government staff on the analysis and application of the data for informed management of and decision-making for water resources management.



## STRATEGIC OBJECTIVE 2

### Increase Equitable Access to Safe, Sustainable, and Climate-Resilient Drinking Water and Sanitation Services and the Adoption of Key Behaviors

USAID/KEA's current portfolio makes a concerted effort to focus on the equity and sustainability of services, going beyond basic service improvements to reach the most vulnerable and incorporate climate resilience.

#### Intermediate Results (IRs):

**IR 2.1 Increase area-wide access to safe, equitable, and affordable sanitation services:** USAID/KEA works through government systems and the private sector to increase county-wide access to sanitation products and services. This includes increasing consumer demand through a market-based sanitation approach and social and behavior change interventions. The Western Kenya Sanitation Project works to strengthen the supply chain for desirable, inclusive sanitation and menstrual hygiene products, while the Kenya Sanitation Enabling Environment Project adapts behavior change methodologies to better fit the populations most in need of sanitation.

**IR 2.2 Increase access to equitable, safe, reliable, and affordable drinking water services:** In an effort to facilitate better delivery of services, as opposed to focusing on direct service provision, USAID/KEA applies a range of approaches to professionalize rural water services and strengthen water utilities, while protecting the watersheds that these services rely upon. Activities such as STAWI and Western Kenya Water Project support sustainable drinking water services for entire counties, including both rural and urban areas, under the regulation and authority of the county governments.

**IR 2.3 Improve performance and climate resilience of water and sanitation service providers:** In order to ensure both the quality and quantity of water supply services, the management of water resources needs to be better integrated into water supply activities. Through STAWI and the Western Kenya Water Project, USAID/KEA directly links the work of water resource user associations with that of service providers to protect water sources, and works closely with Mission environment activities to apply learning, identify opportunities for joint support and collaboration, and mutually reinforce results in areas of geographic overlap.

**IR 2.4 Increase adoption of key hygiene practices:** Girls and women frequently lack the water, toilets, and disposal mechanisms to manage their menstruation at school, at home, at work, and in other public institutions. The Western Kenya Sanitation Project ensures that behavior change and market-based sanitation activities include menstrual health and hygiene as a core focus. This includes working with the national and county governments to set standards for products and facilities and consider policy changes that would expand the market for these products. The activities also engage with the private sector to stimulate innovation to meet demand, considering affordability,



## STRATEGIC OBJECTIVE 3

### Improve Climate-Resilient Conservation and Management of Freshwater Resources and Associated Ecosystems

Although Kenya has abundant rivers and lakes, these are not equitably distributed throughout the country and the quantity and quality of surface water are likely to be less predictable as a result of climate change. Moreover, little is known about the country's groundwater resources, which are critical to the diversification and climate resilience of Kenya's overall water supply. Increasing capacity for water resources management (WRM), including groundwater management, will allow for increased resilience of Kenya's water supplies and will facilitate adaptation.

#### Intermediate Results (IRs):

**IR 3.1 Allocate and use water resources more equitably and efficiently:** To achieve lasting water security, USAID/KEA takes an integrated and inclusive approach, working across built and natural systems in both rural and



urban areas to connect WRM, water services, and water for productive uses. STAWI works with governments to strengthen institutional and governance systems of water resources and services for domestic, agricultural, and other productive uses while also fostering partnerships through learning and collaboration.

**IR 3.2 Enhance reliability and quality of water resources through watershed management, including protection, restoration, and nature-based solutions:** USAID/KEA, through STAWI, works with national and county governments on the lack of sector coordination among upstream and downstream actors; insufficient data to inform advocacy and action; gaps in water resources management enforcement; and capacity gaps at all levels of water resources management.

**IR 3.3 Improve the climate resilience of WRM:** USAID/KEA works closely with partners such as USGS to better understand the availability of groundwater resources, including through mapping, assessments, and modeling exercises. These resources, coupled with intensive training for government technical staff, allow the GoK to better manage its resources and drive growth. At a sub-national level, activities such as STAWI and Western Kenya Water Project build the capacity of wards and counties to manage climate risks, and improve their capacity to maintain the quality and quantity of water they provide for domestic and productive uses. This includes the identification of measures to protect water sources and consideration of climate impacts when planning for the future, with an aim to allocate water resources as equitably and efficiently as possible.



## STRATEGIC OBJECTIVE 4

### Anticipate and Reduce Conflict and Fragility Related to Water

#### Intermediate Results (IRs):

**IR 4.1 Strengthen capacity to predict, prepare for, and adapt to shocks impacting water and sanitation systems in fragile settings:** Many of USAID/KEA's target WASH counties are at high risk of both droughts and flooding. These shocks exacerbate the already poor reliability of water services in the ASALs, leaving water sources that serve people and livestock non-operational for long periods. Disaster risk management is a shared function of the national and county governments, cutting across multiple sectors, and USAID works through Feed the Future and WASH investments to develop disaster risk scenarios and required adaptations; collaboratively plan and sequence actions to these risks; and create, finance, and implement strategies to ensure water availability during shocks. The STAWI mechanism is addressing these challenges and leveraging opportunities to enhance the capacity of county governments and local organizations via the Diversifying Partnerships in WASH (DiP-WASH) Addendum, to prepare for, adapt to, and mitigate climate change and water stress caused by conflict.

**IR 4.4 Strengthen coherence across humanitarian, development, and peace approaches to water and sanitation programming:** Through the Partnership for Resilience and Economic Growth (PREG) and the Southeastern Kenya (SEK) Coordination Mechanism, USAID partners across humanitarian and development interventions engage in joint work planning, identification of opportunities for integrating interventions, and data and knowledge sharing. Embedded county staff attend PREG and SEK meetings and proactively identify synergies. The USGS Groundwater Mapping activity is also an important mechanism that is resulting in data-informed decision-making to build the resilience of communities, government institutions, and markets in the face of recurring and predicted droughts.

## PRINCIPLES

USAID/KEA also integrates the Global Water Strategy Operating Principles throughout its programming. The Mission uses data and evidence to guide decision-making while also addressing critical sector data gaps. Resilience is incorporated into all activities, particularly in the context of investing in climate-resilient water and sanitation infrastructure and withstanding shocks and stresses. A systems approach focused on catalytic investments to improve the enabling environment for sustainable WASH service provision underlies all of USAID/KEA's water and sanitation programming. Finally, gender equality and social inclusion (GESI) principles are integrated throughout Mission WASH programming. This includes WASH monitoring systems that disaggregate data for gender, sex, disabled and vulnerable groups, evaluation of service provider performance on equity criteria, improving service providers' customer approach to meet the needs of marginalized groups, and increasing women's agency in household decision-making.

## MISSION RESULTS FRAMEWORK

The approach outlined in this plan aligns with USAID/KEA broader Country Development Cooperation Strategy results framework for 2020–2025.

### Development Objectives (DOs):

**DO1: SYSTEMS – Key systems such as health, governance, and markets improved:** As a constitutionally devolved sector, all WASH sector investments directly support the achievement of IR 1.4, devolution deepened. Each activity in the Kenya WASH portfolio aims to strengthen the county-level institutions responsible for delivering WASH services by building their capacity, professionalizing service delivery, and improving the financial situation of service providers. In addition, Mission WASH activities such as the Western Kenya Water Project work with civil society organizations in support of IR 1.3 to increase inclusive voices that drive solutions to development challenges and interventions. This includes advocating for improved services and holding accountable those responsible for delivering services.

**DO2: RESILIENCE – Resilience of vulnerable populations and environments improved:** WASH services, particularly water for domestic and productive uses, are critical in Kenya’s resilience zones. Kenya’s WASH investments support all five of the DO2 sub-IRs:

- IR 2.1 Quality, well-financed, holistic services for vulnerable families improved;
- IR 2.2 Families’ and communities’ preparedness to mitigate shocks, risks, and stressors strengthened
- IR 2.3 Natural resources and biodiversity to enhance livelihoods for communities sustainably managed
- IR 2.4 Refocused and innovative social and economic investments for children enhanced
- IR 2.5 Capabilities of communities and families to reduce drivers of conflict, gender-based violence, and violent extremism strengthened

USAID works through activities such as STAWI, the Groundwater Mapping Project, and the Kenya Sanitation Enabling Environment Project to advance water security, sanitation, and hygiene for social, economic, and environmental needs, helping to reverse historic neglect and enabling the GoK to achieve its ambitious objectives for inclusive economic growth while building resilience to the region’s unique shocks and stresses.

**DO3: ECONOMY – Economic growth opportunities, especially for young men and women, catalyzed:** Mission WASH investments target three DO3 sub-IRs:

- IR 3.1 Markets and jobs created and expanded
- IR 3.2 Skills that match investment and market needs developed and cultivated
- IR 3.3 Access to markets and capital expanded and deepened

Mission WASH investments deploy private sector expertise, technology, and financing to provide solutions and improve the sustainability of WASH service delivery. Market-based approaches remain a core strategy in meeting the growing demand for services. Activities such as the Western Kenya Sanitation Project and WASH-FIN 2 partner with businesses and private financing institutions, respectively, to foster increased availability of products and financing for the sector.

## KEY RISKS AND MITIGATION STRATEGIES

The three main risks associated with successful achievement of the Mission’s WASH goals are (1) climate change; (2) conflict, instability, and food insecurity; and (3) uncertain USAID/KEA WASH directive allocations in out years. The first two risks are closely interlinked and vary geographically and temporally. The third risk is operational in nature and dependent on budget decisions in Washington.

To mitigate the impacts of climate change, USAID/Kenya ensures that all activities conduct Climate Risk Management screening prior to implementation and that all interventions take into account climate resilience. In addition, USAID/KEA uses adaptive approaches for responding to shocks and stressors such as droughts, floods, and pandemics to support household and community resilience, and coordinates closely with the Mission’s Humanitarian Assistance activities to enhance complementarity in areas of greatest vulnerability.

USAID/KEA requires a steady level of resources to allow for continuity of programs and will continue to advocate for increased WASH resources for the Mission to achieve country-level objectives.

# BUDGET

This plan is budgeted based on prior year resources still available for programming, the FY 2022 estimated allocation of \$19.5 million, and the FY 2023 President's Budget Request of \$14.34 million.

## EXPECTED RESULTS

From 2022 to 2028, USAID activities are estimated to provide Kenya with:



**1.6 million people** gaining access to basic or improved water services



**1 million people** gaining access to basic or improved sanitation services



**110 WASH sector institutions** strengthened



**\$130 million mobilized** for the WASH sector

**\$16.5 million mobilized** in climate financing



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## Endnotes

1 As defined by the UNICEF and WHO Joint Monitoring Programme (JMP), drinking water services refers to the accessibility, availability, and quality of the main source used by households for drinking, cooking, personal hygiene, and other domestic uses. The JMP service ladders are used to benchmark and compare service levels across countries. These have been updated and expanded to facilitate enhanced global monitoring of drinking water, sanitation, and hygiene. The new ladders build on the established improved/unimproved facility type classification, thereby providing continuity with past monitoring, and introduce new rungs with additional criteria relating to service levels.

Improved drinking water sources are those that, by nature of their design and construction, have the potential to deliver safe water. The JMP subdivides the population using improved sources into three groups according to the level of service provided. To meet the criteria for a safely managed drinking water service, households must use an improved source that is:

- Accessible on premises
- Available when needed
- Free from contamination

If the improved source does not meet any one of these criteria but a round trip to collect water takes 30 minutes or less, then it is classified as a basic drinking water service. If water collection from an improved source exceeds 30 minutes, it is categorized as a limited service. The JMP also differentiates populations using unimproved sources such as unprotected wells or springs, and populations drinking surface water collected directly from a river, dam, lake, stream, or irrigation canal.

2 Sanitation services refer to the management of excreta from the facilities used by individuals through emptying and transport of excreta for treatment and eventual discharge or reuse. The JMP service ladders are used to benchmark and compare service levels across countries. These have been updated and expanded to facilitate enhanced global monitoring of drinking water, sanitation, and hygiene. The new ladders build on the established improved/unimproved facility type classification, thereby providing continuity with past monitoring, and introduce new rungs with additional criteria relating to service levels.

Improved sanitation facilities are those designed to hygienically separate excreta from human contact. There are three main ways to meet the criteria for having a safely managed sanitation service (SDG 6.2). People should use improved sanitation facilities that are not shared with other households, and the excreta produced should either be:

- Treated and disposed of in situ;
- Stored temporarily and then emptied and treated off-site; or
- Transported through a sewer with wastewater and then treated off-site.

If the excreta from improved sanitation facilities are not safely managed, then people using those facilities are classed as having a basic sanitation service (SDG 6.2). People using improved facilities that are shared with other households are classified as having a limited service. The JMP also continues to monitor the population practicing open defecation, which is an explicit focus of SDG target 6.2. These service level classifications can also be visualized using excreta flow diagrams.

3 The water volume available per person is calculated in m<sup>3</sup>/cap/year. A value of 1700 m<sup>3</sup>/cap/year of renewable freshwater is the threshold for water scarcity below which social stress and high competition for water emerge. If water availability falls below 1000 m<sup>3</sup>/cap/year, then the area experiences high water scarcity. Kenya crossed this threshold in the late 1990s. Below 500 m<sup>3</sup>/cap/year is absolute scarcity. However, this indicator disregards temporal variability and some important drivers of demand related to economic growth, lifestyle, and technological developments. Therefore, many people in Kenya are much further below the absolute scarcity mark.