

MOZAMBIQUE High-Priority Country Plan

GLOBAL WATER STRATEGY | 2022-2027

In 2022, Mozambique was re-designated as a High-Priority Country (HPC) under the U.S. government Global Water Strategy (the GWS or "Strategy"). Over the next five years of the Strategy period, USAID/Mozambique will continue to work with the Government of the Republic of Mozambique (GRM) to strengthen the capacity of the water, sanitation, and hygiene (WASH) sector to implement policies, expand access to water and sanitation services and products, strengthen national and local institutional capacity to manage water resources in a resilient and sustainable manner, and increase adoption of key WASH behaviors. USAID/Mozambique's investments will provide access to basic or safely managed water services for 325,000 people and 90 institutions, provide basic sanitation and services to 325,000 people and 130 institutions, strengthen 167 WASH institutions,¹ and mobilize \$21 million for the WASH sector.

CONTEXT

The water security, sanitation, and hygiene (WSSH) needs in Mozambique are significant. The Joint Monitoring Program (JMP) estimated that in 2022, approximately 63 percent of the Mozambican population had access to basic water services. However, this access was significantly higher in urban areas, with 87 percent of urban households having access, compared to 48 percent of rural households. In secondary cities¹ less than 30 percent of the population had access to basic sanitation facilities, and the national rate of open defecation was 29 percent. As a result, Mozambique ranks 12th out of 193 countries (with 1 indicating highest need) on the USAID WASH Needs Index. The country has abundant surface and groundwater, although 54 percent of its freshwater resources originate in upstream countries.² While water stress is low at the national level, water is not evenly available throughout Mozambique and many water courses are seasonal, which can contribute to regional water stress, especially in the south and during times of drought. The country is highly vulnerable to drought and faces recurrent threats from cyclones, which exacerbate flood risks. The factors contributing to the low status of WASH in Mozambique include the following.

Governance and institutional capacities. Mozambique has established policies and institutional arrangements for the water sector, but there is room for improvement in implementation. The legal and regulatory framework is still evolving, presenting an opportunity to enhance transparency and predictability. This landscape also provides an opportunity for the government to effectively collaborate with private investors in the WASH sector, reducing investment and business risks. To maximize this potential, Mozambique is actively pursuing a decentralized approach to the planning, investment, and management of water and sanitation service providers, particularly in rural areas. The government and its development partners are committed to supporting this decentralization process. By strengthening the implementation of existing policies, providing clarity in the legal and regulatory framework, and bolstering support for decentralized planning and management, Mozambique can create an environment that attracts

i Local, regional, or national government institutions such as District Water Offices, National Ministries, regulators, basin organizations or water user associations, service providers contributing to WSSH services and civil society organizations that support government policymaking and implementation.

private investment, promotes sustainable growth in the water sector, and significantly improves access to safe water and sanitation services for all its citizens.

Sector financing opportunities, particularly for rural sanitation. Insufficient public funding for the WASH sector poses a significant challenge for the GRM. UNICEF estimates that in 2019, the government allocated only about 2.5 percent of the state budget for WASH services, which is less than 0.5 percent of the gross domestic product (GDP).³ This insufficiency affects various aspects of the WASH sector, including infrastructure development, operation, maintenance, and the mobilization of qualified staff. The country's limited budgetary resources, competing priorities, and other pressing needs contribute to the shortfall in funding for WASH initiatives. To achieve universal access to safe water and sanitation services by 2030, the GRM now estimates that approximately \$9.5 billion in WASH sector financing is required: \$4.1 billion to build new WASH infrastructure, and \$5.4 billion to maintain existing infrastructure. Seventy-five percent of these funds would be allocated to water and 25 percent to sanitation.⁴ However, Mozambique faces numerous barriers to finance, including high interest rates and a lack of diversification in funding sources. Over the last seven years, about 80 percent of the country's funding for the WASH sector came from external resources. Another challenge is the collection of tariffs, because societal assumptions hinder private water providers' ability to generate sufficient revenue. To address these funding challenges, it is crucial for the GRM to explore innovative financing mechanisms, including public-private partnerships (PPPs) and blended finance, to diversify funding sources, and to attract private investments. By prioritizing WASH financing, exploring alternative funding mechanisms, and promoting a mindset shift regarding the value of water services, Mozambique will be better able to secure the necessary resources to develop, operate, and maintain sustainable WASH infrastructure and services, ultimately improving the quality of life for its citizens.

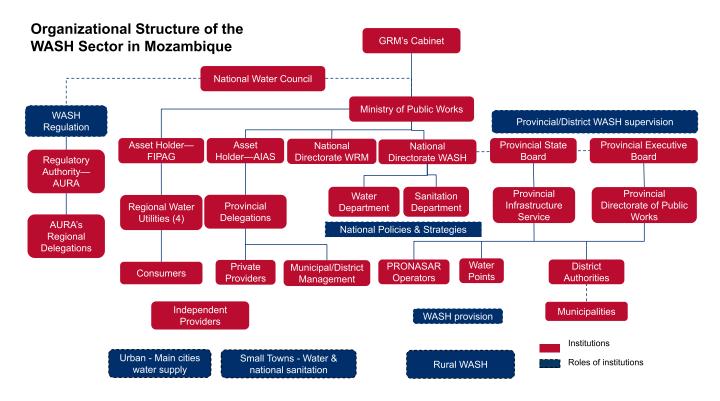
Inadequate water and sanitation infrastructure. The current infrastructure in Mozambique lacks the resilience to withstand the effects of climate change and the internal displacement of over I million peopleⁱⁱ fleeing the violence in Cabo Delgado. Recent cyclones and floods have caused extensive damage to homes and water systems, resulting in deadly cholera outbreaks. Much of the existing infrastructure is not well maintained or is insufficient to meet the needs of the growing population. Maintenance is a significant challenge and many water systems are inoperational due to a shortage of parts or capacity, resulting in widespread contamination of water sources and limited access to clean water services. Prioritizing the construction and maintenance of robust and resilient WASH infrastructure is imperative to address these challenges. By investing in infrastructure that is capable of withstanding the escalating climate impacts, Mozambique can reduce the risks of future disease outbreaks and ensure the provision of safe and reliable water and sanitation services to its vulnerable population.

Sustainability of water and sanitation service delivery. The low sustainability of water and sanitation services in Mozambique can be attributed to multiple factors, including inadequate infrastructure maintenance, limited technical and institutional capacity, minimal community ownership and involvement, financial constraints, and the impact of climate change and natural disasters. Around 30 percent of water points⁵ in Mozambique are nonfunctional at any given time, and piped water systems face significant challenges with non-revenue water. One of the main reasons is the lack of routine monitoring and maintenance by District Water Management, which leaves communities responsible for system upkeep. This is especially challenging in remote areas with low population density. To address these sustainability challenges, it is crucial to engage the private sector in developing and scaling up sustainable business models that can improve access to WASH services and ensure their long-term viability. This presents a significant opportunity for USAID to play a pivotal role, especially in small towns and peri-urban areas where private sector involvement can have a transformative impact.

NATIONAL PRIORITIES

In Mozambique, the Ministry of Public Works, Housing, and Water Resources (MOPHRH) determines WASH sector priorities through the Water and Sanitation National Directorate (DNAAS), which is responsible for policy development, strategy, and investment mobilization for the sector. The government has implemented reforms, including a new Water Law and Water Policy, to address the service deficit and engage the private sector through the Delegated Management Framework. The organizational structure of the water and sanitation services sector is diverse and fragmented, leading to complexity and a lack of clarity. To address this, the GRM is drafting a new Drinking Water and Sanitation Law to streamline and clarify the sector's priorities and management structure. USAID has been actively involved in building the GRM's capacity at both the national and provincial levels.

ii During the conflict, over I million people were displaced. In 2023, 420,200 displaced people returned to Cabo Delgado, leaving around 800,000 still displaced.



The GRM National Strategy for Development (2015–2035) includes the following WASH and water resources management goals:

- Increase access to basic water and sanitation services by 2035;
- · Service pricing that ensures full cost recovery and increased service coverage; and
- Sustainable sharing of international river basins and integrated water resources management.

In addition, the GRM's "Action Plan for the Implementation of the Sustainable Development Goals (SDGs) in the Water Supply and Sanitation Sector 2015–2030" prioritizes the following objectives:

- End open defecation by 2025;
- Achieve universal access to basic drinking water, sanitation, and hygiene services, for households, schools, and health facilities;
- · Increase household access to safely managed drinking water and sanitation services by 50 percent; and
- · Progressively end water supply and sanitation access inequity.

USAID APPROACH AND RESULTS FRAMEWORK

USAID/Mozambique's HPC plan represents a whole-of-Mission approach to achieving all four Strategic Objectives (SOs) within the GWS. Activities are concentrated in the three focus provinces of Cabo Delgado, Nampula, and Zambezia, which have been prioritized by USAID/Mozambique due to their pressing need for basic services and infrastructure. These activities support improving governance, mobilizing finance for the sector, improving access to safe drinking water and sanitation, promoting healthy hygiene behaviors, and building national and local institutional capacity to manage water resources in a resilient and sustainable manner. These activities outlined below, financed by both development and humanitarian assistance funds, also contribute to the Mission's Feed the Future (FTF) Country Strategy, Resilience Strategy, and Multi-Sectoral Nutrition Country Plan. They are divided into two broad categories:

Development-focused activities: Transform WASH, 2022–2027, Small Town Sanitation (STS), 2022–2026, National Programme for Rural Water and Sanitation (PRONASAR) joint donor fund, 2019–2023, Small Town Sanitation (STS), 2022–2026, WASH in Health Facilities, 2018–2023, WASH Infrastructure (Architecture and Engineering task order, Construction task orders), 2023–2027, Transform Nutrition, 2019–2023, Resilient Gorongosa, 2022–2025, Local

Governance Strengthening (LOGOS), 2021–2026 and Integrated Nutrition and Agriculture Activity (FTF RESINA), 2022–2027

Humanitarian assistance-focused activities: Solidarite International, 2022–2023, UNICEF Emergency Grant, 2021–2023, International Organization for Migration (IOM), 2021–2023, Catholic Relief Services, 2022–2024, Mentor, 2022–2024, Johanniter, 2022–2023, Okhokelamo ni Solha/Resilience Food Security Activity (RFSA), 2022–2027, Tsima-Tsima, 2021–2024 and Farmer Resilience and Rebuilding Initiative (FRRI), 2021–2024.



STRATEGIC OBJECTIVE I

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

IR 1.1 Develop, strengthen, and implement inclusive laws, policies, and regulations: To support strengthening WASH governance, USAID/Mozambique will support water management institutions and water and sanitation providers to improve the policy and regulatory frameworks, strengthen institutional capacity at the national and provincial levels, and improve the investment and business climate to attract private sector investment toward achieving universal access and sustainable service delivery. For example, Transform WASH will support the GRM in updating its legal and regulatory framework, including the new Water Law. This law will streamline the GRM's WASH sector institutional arrangements and organization, which will help improve the management of water systems and increase WASH PPPs. STS will facilitate inclusive discussions among women and men, enabling communities to better comprehend the roles and responsibilities associated with various WASH tasks within households. It will also focus on enhancing the capacity of local partners, districts, and municipalities.

IR 1.2 Effectively mobilize and target public and private financing: Efforts to mobilize public and private financing will take place under multiple investments by USAID/Mozambique. The Transform WASH Activity will work with the GRM, the private sector, and other key stakeholders to support the development of a locally led, sustainable, blended Water Fund. It will also support private providers, particularly women- owned/led providers, to access financing and will develop and test innovative financing mechanisms for delivering water and sanitation services. Transform WASH will scale up PPPs and other business models for water services, and improve the enabling environment for WASH finance mobilization and tracking. Small Town Sanitation will increase access to consumer and enterprise financing and build the capacity of private and public actors to secure diverse financing for sanitation infrastructure, especially at the household level. STS will consider a variety of tactics to reduce the risk of sanitation lending, including establishing a partial risk guarantee fund, supporting the development of mobile money payments, and supporting the costs of marketing new loan products for private providers. FTF RESINA will support engineering design solutions and improvement of system governance, including fees to operate and maintain systems and protect water sources.

IR 1.3 Improve the capacity and performance of national, and subnational institutions: The Mission will continue to support both the central and local GRM entities to improve their performance in key areas such as planning (including investment planning), budget execution, management, and monitoring of services. The LOGOS Activity will help local government engage with local WASH groups through a provincial platform for coordination, planning, communication, and discussion of pressing issues in the WASH sector. The PRONASAR investment supports strengthening water and sanitation sector institutions to manage water resources and improve water supply and sanitation services, including provision of technical assistance in procurement techniques, data collection to update the national water and sanitation sector information system (SINAS), and monitoring activities. Transform WASH will also provide training to local government entities to enhance their capacity for services supervision, planning, and business development.

IR 1.4 Advance transparency, accountability, equity, and efficiency through participatory, data-driven decision-making: USAID/Mozambique will work to increase transparency, accountability, and equity, and to facilitate data-driven decision-making for water and sanitation service delivery and products. Transform WASH will support the GRM in developing staff technical capacity to manage the SINAS system to enable greater accountability and data-driven decision-making. The STS Activity will support the GRM to update guidelines, regulations, and enforcement mechanisms around the design and management of public infrastructure, to ensure that they are responsive to the entire population, including women, young children, and persons with disabilities. The LOGOS Activity will provide training for DNAAS and provincial and municipal leaders on the management of decentralized funds, with an emphasis on transparency and accountability.



STRATEGIC OBJECTIVE 2

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

IR 2.1 Increase area-wide access to safe, equitable, and affordable sanitation services: USAID/

Mozambique will increase access to sanitation in small towns and peri-urban areas by driving consumer demand through market-based sanitation and social and behavior change (SBC) interventions. The STS Activity will also work to strengthen the supply chain for desirable, inclusive sanitation products, including adapted toilet seats for the elderly, children, and people with physical disabilities. To address financing, Village Savings and Loan Associations (VSLAs) will be mobilized to support households with loans for WASH products and services and connect them to microfinance institutions for larger loans to small businesses. The Mission, through its IDIQs for Architecture and Engineering, and Construction, will increase public sanitation facilities in schools, hospitals, and markets.

IR 2.2 Increase access to equitable, safe, reliable, and affordable drinking water services: The Mission will increase access to equitable, safe, reliable, and affordable drinking water services through the construction and rehabilitation of water systems in 10 targeted towns, via its IDIQs for Architecture and Engineering, and Construction. Transform WASH will also support towns to award private sector performance-based water management contracts that emphasize quantity, quality, and continuous expansion of water provision in urban and peri-urban areas. The PRONASAR joint donor fund continues to finance WASH infrastructure in rural areas, a Public International Organization grant is financing the building of WASH facilities in health centers, and the FTF RESINA will increase access to clean water through multi-use water systems (MUS).

IR 2.3 Improve performance and climate resilience of water and sanitation service providers: USAID/ Mozambique will work with private water providers, as well as the national and local GRM, to improve the performance and climate resilience of water provision in small towns, peri-urban areas, and rural growth centers. The STS Activity will strengthen the financial viability of sanitation services provided by municipal governments at schools and health care facilities, in communities, and within public spaces, thus improving the breadth, quality, equity, and sustainability of sanitation services. The improved sanitation products promoted by STS will be resilient to the increasingly dynamic weather systems in Mozambique, decreasing latrine collapse and cholera. The WASH activities will provide planning and construction/rehabilitation to create climate-resilient infrastructure. The WASH systems will also include solar energy, which is more affordable, more reliable, and more resistant to the types of severe climate conditions prevalent in Mozambique.

IR 2.4 Increase adoption of key hygiene practices: USAID/Mozambique recognizes the importance of improved behaviors in the success of its development activities, as evident in the integration of SBC within the key WASH components of Transform WASH, STS, FTF RESINA and Transform Nutrition. These activities promote key WASH behaviors including safe water storage and treatment, ceasing open defecation, latrine adoption, hygienic latrine use, handwashing with soap, menstrual hygiene management, and safe disposal of child and animal feces. Transform Nutrition will continue to work through district and provincial authorities to increase the number of certified open-defecation free (ODF) communities in Nampula province, while the FTF RESINA activity will integrate both SBC and social marketing to promote healthy diets and WASH behaviors.

Mozambique faces dual challenges of water scarcity and floods due to climate change and lack of sufficient water resources management (WRM). The absence of appropriate physical infrastructure, such as dams and reservoirs, creates a cycle of excess and scarcity year by year. The Mission will address some of these challenges through the Resilient Limpopo Activity, a regional project that will work in South Africa, Zimbabwe, Botswana, and Mozambique to improve management of the Limpopo River Basin.



STRATEGIC OBJECTIVE 3

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

IR 3.2 Enhance reliability and quality of water resources through watershed management,

including protection, restoration, and nature-based solutions: USAID will implement activities to enhance transboundary natural resource management, improve water security, foster resilient communities and ecosystems, and strengthen climate change adaptation in southern Mozambique. This includes conserving biodiversity and ecosystems in river basins, managing transboundary water resources, increasing access to safe drinking water and sanitation, and building adaptive capacity. Collaboration with the GRM's water resources authorities, river basin organizations, and transboundary authorities will be crucial to enhance the country's preparedness for addressing recurring climate events, ensuring water security, and improving environmental sustainability.

Mozambique is among the top five countries most affected by extreme weather events in the world,⁶ namely floods, cyclones, and heavy rainfall.⁷ The country's southern region is also recurrently affected by drought. Armed conflict in the northern province of Cabo Delgado, ongoing since 2017, has led to a complex emergency with over 800,000 internally displaced persons (IDPs) across the northern region, with the majority in Cabo Delgado. Water infrastructure in the northern part of the province has been significantly affected by the armed conflict, creating a catastrophic need for increased investments in emergency water and sanitation. The situation also puts further strain on the few operational services, and pressures the population to resort to using an unsafe water supply and sanitation practices, with negative results including a cholera outbreak in late 2022. USAID/Bureau of Humanitarian Assistance (BHA) Mozambique is funding partners to supply safe water, critical medical supplies for water-borne diseases, and critical WASH items with hygiene promotion, as well as rehabilitate key water points and supply systems in both Cabo Delgado and cyclone/flood-affected areas. Furthermore, RFSA will work to improve WASH behaviors such as handwashing with soap, latrine adoption, etc. to improve nutrition outcomes in rural communities of Zambezia Province, Central Mozambique.



STRATEGIC OBJECTIVE 4

Anticipate and Reduce Conflict and Fragility Related to Water

IR 4.1 Strengthen capacity to predict, prepare for, and adapt to shocks impacting water and sanitation systems in fragile settings: The Mission will work with the humanitarian cluster system in Mozambique to strengthen humanitarian actors' capacity to prepare and respond to emergencies that affect WASH. The cluster system and BHA's implementing partners work in line with the disaster risk management plan of the National Disaster Management Institute, the main governmental agency in charge of emergency response. Additionally, BHA will continue to coordinate the capacity-building approach with the other in-country humanitarian donors.

In the drought-affected southern region of Mozambique, farmers' groups will learn the innovative irrigation techniques of climate-smart agriculture to reduce the risk of drought for their livelihoods. Because WASH support is critical in the aftermath of cyclones and floods, in areas of the country that are likely to be affected by the 2024 cyclone season and rainy season, WASH items and water supply will be provided as needed. BHA's implementing partner is working with the Meteorological Institute, the Disaster Management Institute, and the Provincial Government to prepare a district-level Anticipatory Action Plan for Drought. Furthermore, the RFSA will conduct a participatory community-mapping exercise that will cover WASH services, and create a Community Action Plan that will include risk assessment. The MUS under FTF RESINA creates an opportunity for sustainable local farmers' organizations to manage systems that reduce transaction costs, and for government, the private sector, and development projects to engage with communities and facilitate climate adaptation planning.

IR 4.2 Address humanitarian water, sanitation, and hygiene needs: In Cabo Delgado, USAID/BHA Mozambique and its implementing partners will continue the ongoing work to rehabilitate water points and water supply systems/water networks; provide need-based water trucking; construct emergency and household latrines,

showers, and rainwater-harvesting systems; distribute WASH items including products for water treatment and purification, hygiene kits, and dignity kits; and carry out hygiene promotion. BHA is also financing the rehabilitation of water infrastructure in northern Cabo Delgado and increasing WASH access for IDPs and host communities in southern Cabo Delgado.

IR 4.4 Strengthen coherence across humanitarian, development, and peacebuilding approaches to water and sanitation programming: USAID/Mozambique and its implementing partners for both humanitarian and development interventions will collaborate on joint work planning, learning, and information sharing. Through the cluster system, USAID/BHA Mozambique will stay informed of the security and peacekeeping work in the north and continue to pursue communication with the main actors, to address the impact of their work on humanitarian assistance.

PRINCIPLES

USAID/Mozambique integrates the GWS Operating Principles throughout its programming. In addition to the two flagship projects that include capacity-building components for the GRM, the Mission's cross-cutting WASH, Agriculture, Nutrition, and Governance activities work to **strengthen national, provincial, and local systems**. USAID/Mozambique's WASH activities will work to create **equity and opportunities for women, youth, and vulnerable populations** to both use and manage water and sanitation facilities; help with decision-making and prioritization; and attract private sector investment. The SBC activities under STS will focus on **gender equity and inclusion**, empowering women to have full involvement in and lead sanitation and hygiene decisions in their households. USAID/Mozambique **uses data and evidence** to guide decision-making while also addressing critical sector data gaps. The Mission also shares WASH data through the WASH donor coordination group (co-leading the urban sector subgroup) and the WASH humanitarian cluster to improve coordination for WASH service provision in shock-affected communities. Given Mozambique's high susceptibility to weather-related shocks (cyclones and flooding) and conflict shocks (Cabo Delgado and surrounding areas), resilience is incorporated at all levels of activity design and implementation.

The goal of the Mission's 2020–2025 Country Development Cooperation Strategy is to support and help shape a resilient Mozambique that is prepared for the future. USAID/Mozambique will achieve this goal through three Development Objectives (DOs):

DO I: Healthier and better educated Mozambicans, especially the young and vulnerable;

DO 2: Diversified and inclusive economic growth; and

DO 3: Increased resilience of vulnerable populations to key shocks.

MISSION RESULTS FRAMEWORK

USAID/Mozambique's WASH activities will support DO 3 by increasing the sustainable management and use of water and sanitation, improving the well-being and resilience of vulnerable communities, especially women and girls (Mission IR 3.2). To achieve this purpose, USAID will strengthen WASH sector governance through participatory dialogue with GRM counterparts, coupled with a focus on strengthening local systems; expand the availability of water and sanitation services by catalyzing domestic private sector resources, including establishing an enabling environment for women entrepreneurs' business development to complement public sector investments; address harmful gender norms that prohibit women and girls from benefiting equally from WASH investments; and accelerate adoption of key WASH behaviors that not only lead to improved health outcomes, but also address sustainability by ensuring that investments in physical infrastructure are used and maintained.

Mozambique has many potential risks to its WASH programs, and the Mission considers climate change and internal conflict/instability to be the main risks. USAID/Mozambique assumes that floods, droughts, annual cyclones, the conflict in and around Cabo Delgado, and other shocks will continue, but with support from USAID and other donors, the GRM, private sector, and households can adapt and take appropriate actions to more effectively manage them.

KEY RISKS AND MITIGATION STRATEGIES

Climate Change

Climate change poses significant risks to water and sanitation infrastructure in Mozambique. The country is expected to experience more frequent periods of heavy rainfall and seasonal cyclones, which may increase flooding, erosion, and landslides, damaging water infrastructure and compromising surface water quality. Recent cyclones, combined with minimal and poorly built sanitation infrastructure, have led to cholera outbreaks. To mitigate the impacts of climate change, USAID/Mozambique will prioritize the climate resilience of any new water and sanitation infrastructure more resilient to climate impacts.

Conflict and Instability

Regional conflict, instability, migration, and food insecurity will continue to challenge the development of the WASH sector in Mozambique. In Cabo Delgado, much of the WASH infrastructure in the insurgency zones has been destroyed or stopped working due to lack of maintenance. IDPs have overburdened WASH systems in host communities and IDP camps that were already strained. Budgeting and tariff collection, essential for the sustainable management of water systems, are affected by both households' actual ability to pay and the perception that water is an essential service provided by the government. USAID/Mozambique will work closely with the GRM and the private sector to ensure a commitment to post-construction support, private sector engagement, and collaboration between the national and provincial governments. The Mission will assist Mozambican households to increase their resilience to these stressors through inclusive agricultural growth programs that strengthen value chains for food commodities and encourage private sector growth and competitiveness.

BUDGET

This plan is costed based on prior year resources that are still available for programming, the FY 2022 allocation of \$15.5 million, and the FY 2023 President's Budget Request of \$14.5 million.

EXPECTED RESULTS

From 2023 to 2027, USAID Activities are estimated to provide Mozambique with:



Endnotes

- I Boletim da Republica, Decree no. 18/2009, Alargamento do QGD aos Sistemas, Drenagem de Águas Residuais
- 2 USAID Sustainable Water Partnership, Water Resources Management Profile Series: Mozambique, n.d.
- 3 UNICEF, Budget Brief: WASH Mozambique, 2019.
- 4 360 Mozambique, Mozambique Needs \$9.5 B to Improve Water and Sanitation, 2022; Club of Mozambique, Mozambique needs 9.5 billion US dollars to improve water and sanitation—AIM, 2022.
- 5 Claire Still, Sustainability of Water and Sanitation Interventions in Rural Communities of Northern Mozambique, 2014.
- 6 GermanWatch, Global Climate Risk Index, 2021.
- 7 National Meteorological Institute (INAM), Estado do clima em Moçambique em 2022, 2023.