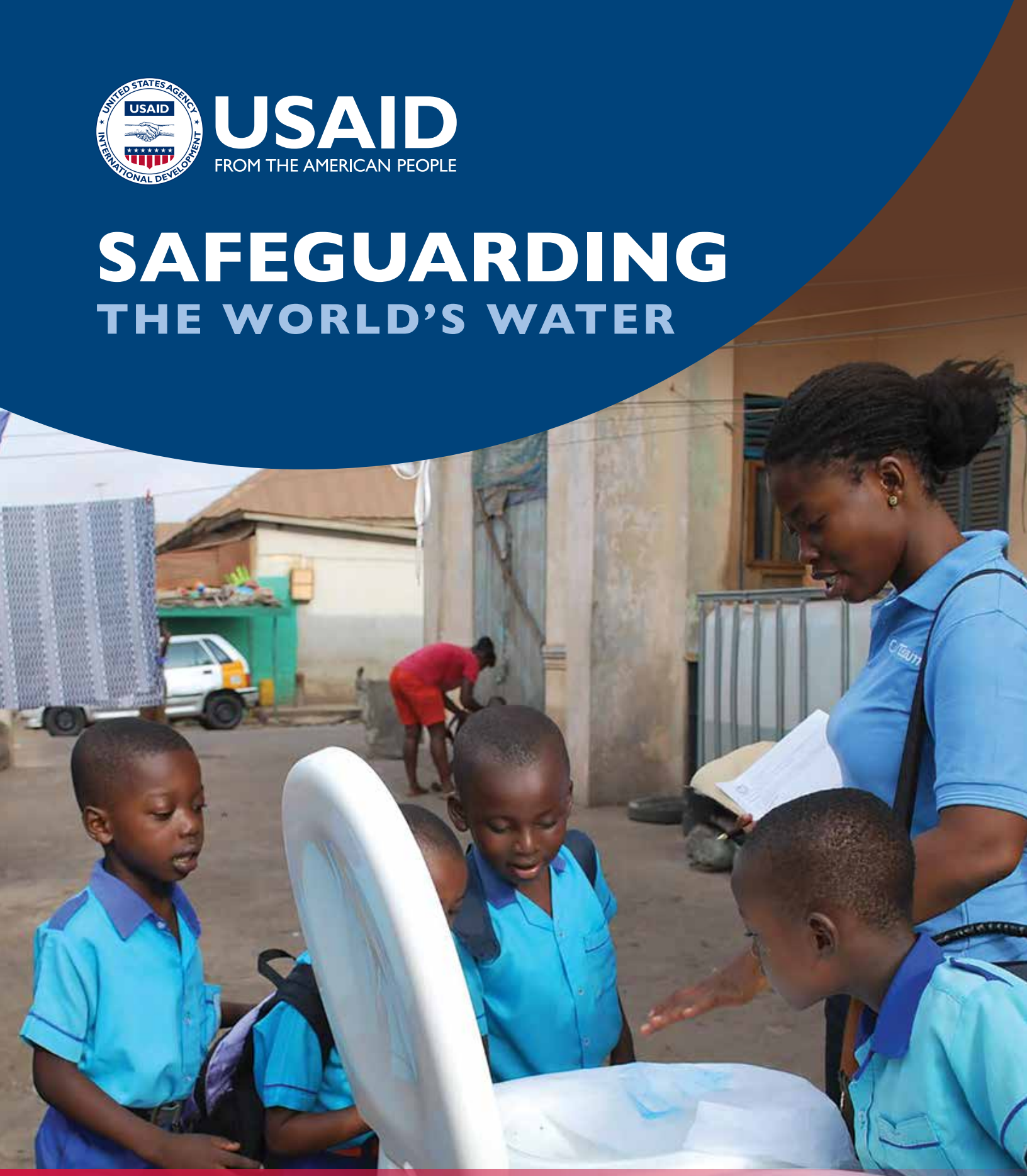
USAID
FROM THE AMERICAN PEOPLE

SAFEGUARDING
THE WORLD'S WATER



Report of Water Sector Activities
FISCAL YEAR ***2015***

"If we continue to leverage partnerships and new financing, promote sustainability, harness innovation, and pursue integrated strategies, I am confident we can put ourselves on a path toward a water future defined not by scarcity but by security."

Gayle Smith, USAID Administrator

In Mozambique, FutureWater, a Securing Water for Food innovator uses drones with near-infrared sensors to provide information that helps smallholder farmers detect crop stress before it is observable to the human eye. With this, farmers improve their application of limited water, seed and fertilizer resources.

Photo Credit: FutureWater

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COVER PHOTO: **As part of USAID's Sanitation and Service Delivery program, the Clean Team Ghana delivers new toilets and demonstrates how they work.**

Photo Credit: Clean Team

This publication was produced for review by the United States Agency for International Development.
It was prepared by ECODIT.

A NEW GENERATION OF WATER AND DEVELOPMENT

Water security is one of the greatest challenges facing the developing world. Without adequate water, sanitation and hygiene for health, food security, energy, and resilience in the face of weather variability humans are at enormous risk. The United States Agency for International Development (USAID) is focused on the fragility of adequate water supply, the increasing scarcity of those supplies and the far-reaching impact this uncertainty has on economic development. As we work to secure sustainable access to safe water and sanitation services, we are dedicated to ensuring today's decisions and investments in infrastructure and service delivery will not be jeopardized by water scarcity or water quality for decades to come.

In Fiscal Year (FY) 2015, the Agency invested more than $499,995,179 towards water-related programming in 54 countries. These programming investments were driven by two strategic objectives defined by USAID's Water and Development Strategy (2013-2018). Those objectives are first, to improve health outcomes through the provision of sustainable drinking water, sanitation and hygiene (WASH); and second, to manage water for agriculture sustainably and more productively to enhance food security. To keep us on target, the Strategy also set goals for minimum numbers of people to reach in our efforts, those being: 10 million provided with sustainable access to improved water supply, 6 million provided with sustainable access to improved sanitation, and 2 million benefiting from improved water management for agriculture to enhance food security.

I'm pleased to announce that we have, in just two years, made huge strides towards achieving these targets. As of 2015 more than 7.6 million people have received improved access to drinking water supply; more than 4.3 million people have received improved access to sanitation facilities; and more than 3.1 million people have benefited from improved agricultural water management. There is no denying substantial progress has been made, but much remains to be done. Even though the number of people currently living without dependable access to improved sources of drinking water is at an all-time low, there are still 660 million people facing this struggle and at risk of illness, lost income, and malnourishment, and approximately 2.4 billion people lack access to adequate sanitation.

As part of the global development community, USAID is ready to address these challenges. Water and sanitation for developing countries has been a policy objective of United States (U.S.) foreign assistance since the enactment of the Senator Paul Simon Water for the Poor Act of 2005. We have continued to build on that programming direction with the Senator Paul Simon Water for the World Act of 2014, USAID's Water Strategy, the Millennium Development Goals, and now the Sustainable Development Goals. Since 2008, USAID has allocated more than $2.9 billion on WASH and has continually worked to increase the effectiveness and sustainability of that programming.

USAID's Strategy and policy efforts have increased funding for water programs and the number of people reached globally, but the story doesn't stop there. Implementation has gone beyond measuring the number of people who have access to water and moved into water-related areas that cannot be easily measured, such as how to evaluate the linkages between development challenges including: water access and stunting, water resource management and water quality, and WASH and neglected tropical diseases, just to name a few.

As we look ahead, we will continue to develop new approaches to meet global water challenges. In this regard, we are actively engaged with partners in securing new sources of finance for WASH; systems-based approaches to strengthening service delivery; and conducting rigorous monitoring, evaluation, and

learning to ensure our investment are sustainable. We are committed to improving our understanding of the long-term sustainability and viability of our projects and applying that knowledge to project development and evaluation.

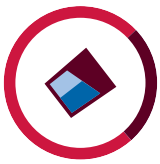
We work in partnership with other U.S. government agencies and groups, such as the Sanitation and Water for All Partnership and the Coca-Cola Company Water and Development Alliance, to bring together governments, donors, civil society organizations, and development partners to deal with water-related issues. Together we will work to explore and address the inequalities in access between groups – such as rich and poor, rural and urban, or disadvantaged groups versus the general population.

Through the new generation of water-related programming under the Strategy, we will continue to focus on investments that are sustained through local ownership of goals and results as we work to make water and sanitation services that last.

Christian Holmes
USAID Global Water Coordinator

USAID Water & Development Strategy: 5 Year Target

Number of people gaining access to an improved drinking water source



Results to Date (FY14/15)
Remaining Target (by FY18)

TARGET:

by 2018

Number of people gaining access to an improved sanitation facility

Results to Date (FY14/15)
Remaining Target (by FY18)

TARGET:

by 2018

Number of people gaining access to improved Agricultural Water Management

Results to Date (FY14/15)
Remaining Target (by FY18)

TARGET:

by 2018

Exceeded our FY 2018 goal by 1.1 million people

= 1 Million People

WATER AT USAID

KEEPING A STRATEGIC FOCUS

The USAID Water Strategy responds to the need for the Agency to focus investments and identify priorities within the wider role water and watershed management play in health, energy, conflict, weather variability, education, biodiversity, ecosystems, and economic growth. To do this, USAID works in priority countries designated for water assistance based on greatest needs and opportunities. These countries are in four regions: Africa, Asia, Latin America and the Caribbean, and the Middle East.

More than 83 percent of USAID FY 2015 water related investments, $416,610,268 went toward water, sanitation, and hygiene (WASH) programs, as compared to $352,120,324 in FY 2014. In FY 2015, 49.5 percent of WASH programming was allocated in Africa, up 17 percent from FY 2014.

The Agency also worked in the areas of water for food, water resources management, water productivity, and water related disaster risk reduction, investing $36,383,525 in these important efforts to make a more water-secure world. (More information on water programming investments can be found on page 7.)

Along with this increased focus, five key areas of strategic importance have emerged: WASH and nutrition; agricultural water management; sustainability of WASH services; sanitation; and water quality. Definitions for these key areas can be found on page 25.

This report describes a wide range of programs consistent with the Strategy's focus on maintaining human health and growing food through water. It is organized by region and shares FY 2015 achievements and investments as well as illustrative examples of country-specific programs related to these key issues and other Agency priorities.

WATER FUNDING AT USAID

While USAID launched new programs and refined program design under the Strategy, water activities continue to be reported in five major categories: WASH, water for food, water productivity, water resources management, and disaster risk reduction. The Agency integrates water across agriculture, health, and environmental programming by:

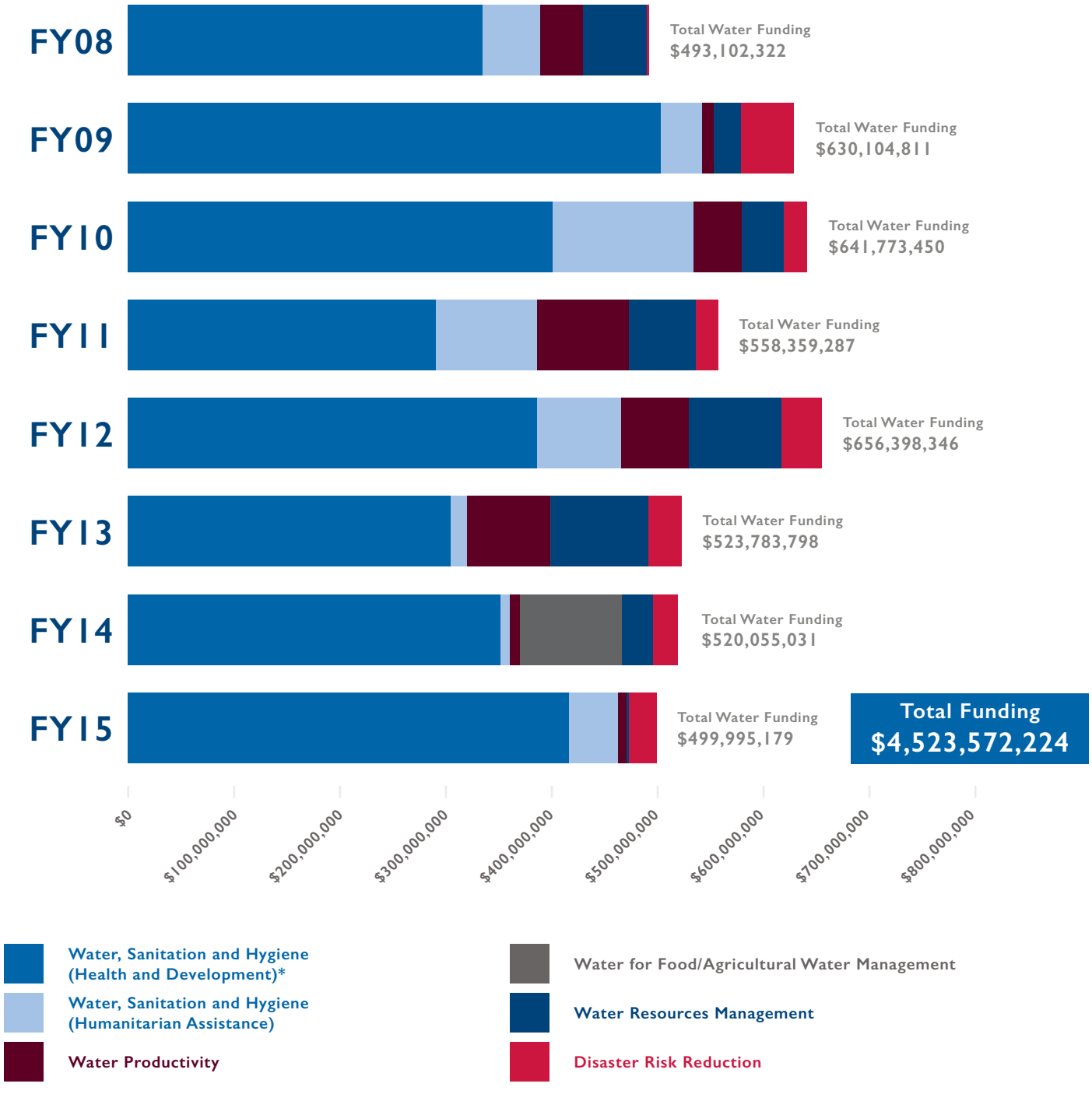
- Expanding access to WASH to promote better hygiene and fight preventable disease, especially to vulnerable communities;
- Improving water resource management and reforming governance and regulations to equitably share access and diffuse competition;
- Increasing water productivity in agriculture and industry to boost output while conserving a precious resource; and
- Strengthening water-related disaster risk reduction to help countries to adapt.

USAID's total funding according to water issue areas for FY 2015 equals:

- WASH (Health and Development) – $416,610,268
- WASH (Humanitarian Assistance) – $47,001,386[1]
- Disaster risk reduction – $26,613,362
- Water Productivity – $7,819,127
- Water Resources Management – $1,833,938
- Agricultural Water Management – $117,098[2]

USAID: WATER FUNDING

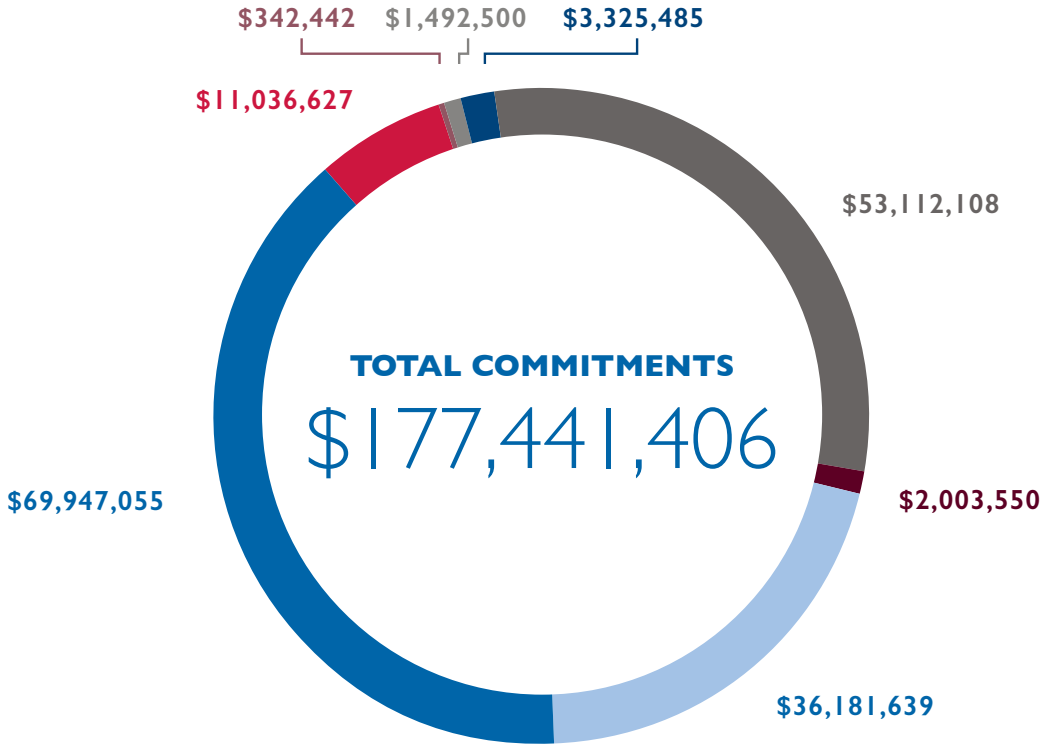
ISSUE AREA



* Funding allocated to the Water, Sanitation and Hygiene Congressional Directive.

PARTNER COMMITMENTS
BY TYPE (FY 2015)

USAID works with a range of resource partners that includes the private sector, foundations and multilateral development banks to leverage funding and expertise for water and sanitation programs. Over the past decade, USAID's resource partners have committed to contribute more than $177 million of non-U.S. government funding to the Agency's water and sanitation alliances that were active in FY 2015.



* Includes total lifetime commitments for active Public-Private Partnership in FY 2015.

Mother in Nepal teaches her child about handwashing, safe disposal of feces, and other WASH-nutrition topics.

Photo Credit: USAID/Nepal

AFRICA

TOTAL FUNDING SINCE 2008

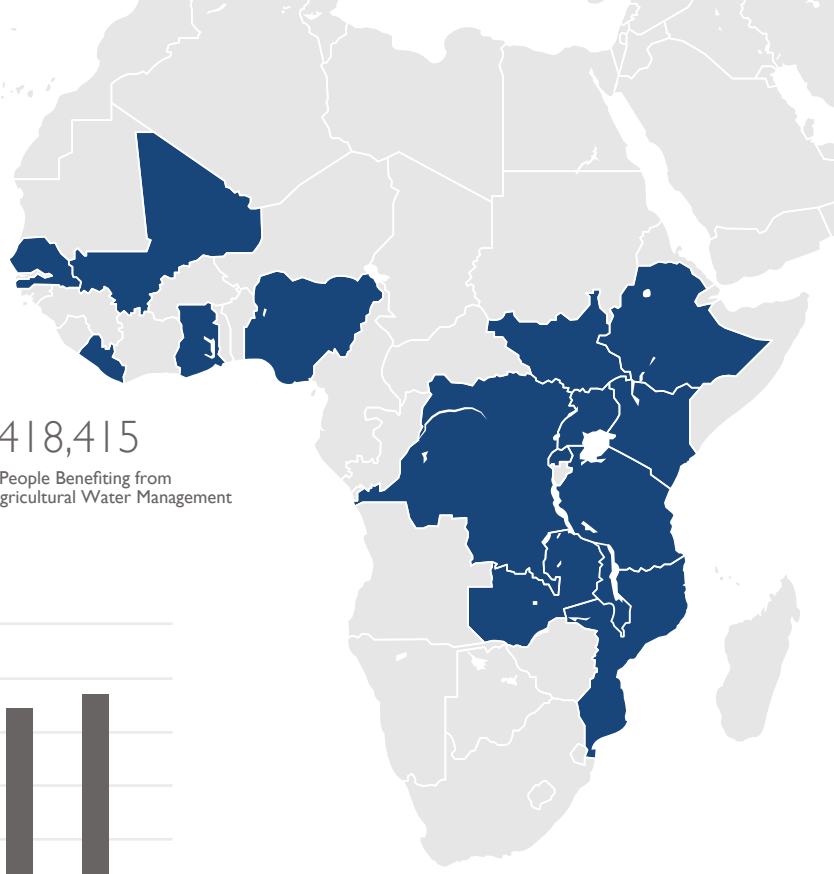
$1,809,232,083

FY 2008 - 2015

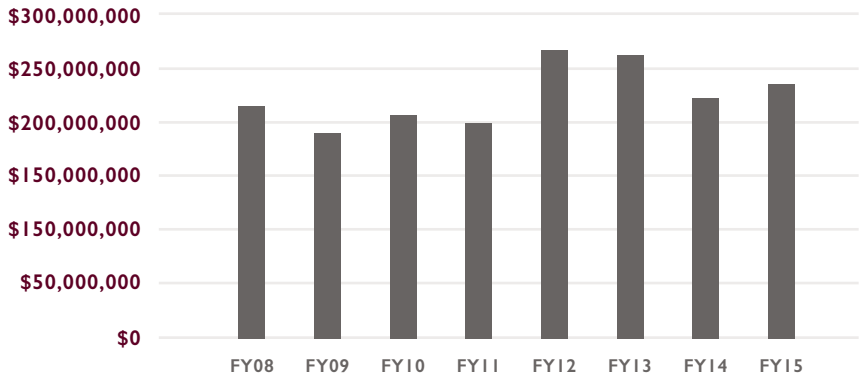
10,978,293
Number of People With Access to Improved Drinking Water Supply

8,052,126
Number of People With Access to Improved Sanitation Facilities

2,418,415
Number of People Benefiting from Improved Agricultural Water Management



ALLOCATED FUNDING BY YEAR



● PRIORITY COUNTRIES

FY 2015 Country/Operating Unit	WASH (Health and Development)	All Other Water Programming	Number of People with Access to Improved Drinking Water Supply	Number of People with Access to Improved Sanitation Facilities	Number of People Benefiting from Improved Agricultural Water Management
Ethiopia	$19,971,166	$9,617,098	194,367	5,748	768,216
South Sudan	$17,411,343	$13,391,451	109,321	41,275	-
Kenya	$14,680,772	$50,086	306,568	366,302	123,880
Liberia	$13,969,560	$-	6,393	-	45,492
Nigeria	$13,398,609	$380,445	29,244	-	-
Uganda	$12,178,000	$-	-	-	181,509
Democratic Republic of the Congo	$11,175,000	$2,300,000	324,934	332,854	-
Zambia	$10,081,000	$-	48,973	39,609	615,715
Tanzania	$9,896,000	$-	46,297	4,107	13,679
Ghana	$9,433,500	$-	14,588	1,818	65,071
Mali	$8,298,283	$-	436,948	365,170	7,300
Senegal	$7,553,000	$-	8,400	23,038	13,090
Mozambique	$6,812,702	$24,634	42,988	15,708	-
Rwanda	$5,721,000	$-	20,721	-	-
Malawi	$4,304,432	$1,597,894	-	-	-
Nonpriority Countries/Regional Programs	$41,402,985	$8,321,585	423,765	469,036	-
Total	$206,287,352	$35,683,193	2,013,507	1,664,665	1,833,952

AFRICA

EXPANDING AND DEEPENING PARTNERSHIPS

Nowhere in the world is the U.S. more committed to improving water and development than in Africa. The Agency's water programs are investing in Africa's greatest resource – its people – and calling on African leaders, thinkers, entrepreneurs, and innovators to work to end extreme poverty and sustain development for this and future generations. USAID is deepening and expanding partnerships with African governments, businesses, universities, and civil society organizations in an effort to meet the goals of the Water Strategy and the global WASH community. In FY 2015, water programming in the region totaled $241,970,545 in 29 countries.

IN FOCUS: AFRICA

The programs highlighted here are illustrative of the work and accomplishments in the region.

INCREASING ACCESSIBILITY, INCOME, AND EMPOWERMENT

West Africa Water Supply, Sanitation and Hygiene project

Funding Level: $24 million
Duration: 2011–2017

Women and girls are primarily responsible for the collection of water for their families, an activity that is time-consuming and limits their ability to make money or attend school. For this reason, it is especially important for them have a voice in WASH policies and activities.

The West Africa Water Supply, Sanitation and Hygiene (WA-WASH) program is working to develop practical models of sustainable WASH service delivery and to introduce innovative and low-cost water and sanitation technologies in Burkina Faso, Ghana, and Niger. As of August 2015, the program enhanced access to potable water by constructing or rehabilitating water points and delivering improved water sources for more than 65,000 people.

The program has also had significant success in promoting gender equality. As of August 2015, WA-WASH had trained 7,198 people on mainstreaming gender into WASH. The program helped hundreds of women gain access to plots for gardening and identified male gender champions, men who see value in working with women to address water access and management issues. Discussions have focused on the roles and positions of women in the management and maintenance of water infrastructure and village savings and loan associations. As a result, WA-WASH supported the establishment of 203 village savings and loan associations.

"In the past, we (women) wasted lots of time to fetch water. Currently, most of the women use the same time to carry out activities such as livestock or to practice trade that enable them to generate income," said Binta Keita, a woman whose village in Burkina Faso benefited from a public tap installed by the program.

To further these efforts, WA-WASH has engaged stakeholders at the local and national levels to discuss strategies, national policies, and WASH in its target countries. The program has increased the involvement of women in water point management committees, with women now accounting for nearly 40 percent of the membership in those groups.

SUSTAINABLE ACCESS TO SAFE DRINKING WATER AND SANITATION

Integrated Water Supply, Sanitation and Hygiene – Tanzania

Funding Level: $18.4 million
Duration: 2010–2016

Inadequate access to water and sanitation services has enormous health, economic, and social consequences. Each year approximately 600,000 children under the

age of 5 die from diarrheal disease related to lack of clean water and sanitation. Tanzania is one of the 15 countries responsible for 74 percent of the global burden of diarrhea and pneumonia mortality in these young children. A significant proportion of diarrheal disease can be prevented through safe drinking water and adequate sanitation and hygiene. The Tanzania Integrated Water Supply, Sanitation and Hygiene (iWASH) program focused on activities to increase access to safe drinking water, sanitation facilities, and hygiene services for rural communities in three districts in southern Tanzania.

In FY 2015, iWASH used Open Data Kit, a tool that allows data collection using mobile devices, to monitor and verify sanitation data. This new data showed that more than 4,000 people gained access to improved sanitation facilities, mostly through the construction and rehabilitation of school latrines. The project strengthened the capacity of the private sector to provide WASH-related products and services that stimulate the supply side of the WASH services delivery chain, a critical component for sustainability. The project led to the creation of rope-pump fabrication workshops and low-cost drilling companies active in Tanzania, and the use of approximately 10,000 rope pumps, 60 percent of which are due to iWASH.

INNOVATION IMPROVING AGRICULTURAL WATER MANAGEMENT

Third Eye – Mozambique

Funding Level: $500,000
Duration: Up to 3 years, launched in 2014

The Agency has long recognized that science, technology, and innovation can be powerful tools in advancing development. At World Water Week in Stockholm in 2013, the search began for innovations that could enable the production of more food with less water and make more water available for food production, processing, and distribution. The $34 million Securing Water for Food: A Grand Challenge for Development is led by USAID and jointly funded by the Swedish International Development Cooperation Agency, the Ministry of Foreign Affairs of the Kingdom of the Netherlands, and the Department of Science and Technology, South Africa.

One of the new innovations to come from the Grand Challenge is the Third Eye project in Mozambique. Third Eye uses a network of "flying sensors" (drones) to monitor crops and provide information to farmers. The high-resolution drones are equipped with near-infrared sensors able to detect crop stress up to two weeks before it is observable by the human eye. This technology can provide smallholder farmers with insights critical to improving their application of limited resources, such as water, seeds, and fertilizer.

In 2015, approximately 2,000 households made use of the sensor technology with flyovers of 660 hectares of land. Seventy percent of these users were women. During this first year of implementation, the project upgraded the sensors' software and cameras. The improved system is more user-friendly, has a longer battery life, is faster, and can fly greater distances at almost the same cost as the previous system. Third Eye predicts the flying sensors will eventually lead to improved irrigation and a 10 percent crop yield increase for approximately 8,000 farmers.

REDUCING STUNTING AND IMPROVING NUTRITION

Empowering New Generations with Improved Nutrition and Economic Opportunity – Ethiopia

Funding Level: $62.5 million
Duration: 2011–2016

Over the last decade, Ethiopia has made tremendous development gains in education, health, and food security, but it remains one of the 10 poorest countries in the world. Roughly 30 percent of Ethiopians live below the poverty line of $1.25 a day and are vulnerable to food insecurity. In addition, 29 percent of Ethiopian women are malnourished, consequently many children start life with nutritional deficiencies. More than 40 percent of Ethiopian children suffer from stunting, a debilitating, lifelong condition that occurs when children are severely malnourished before their second birthday. Stunting not only affects children's bodies, but also their cognitive development. That means these children are unlikely to grow, learn, and eventually earn as they would have with adequate nourishment. Safe drinking water, proper sanitation,

USAID's Sanitation Service Delivery project holds partner meetings with municipalities in Ghana.
Photo Credit: SSD

and hygiene contribute to the prevention of stunting and undernutrition.

The Empowering New Generations with Improved Nutrition and Economic Opportunity (ENGINE) program is USAID's flagship nutrition program in Ethiopia and part of the Feed the Future, the U.S. Government's initiative to end hunger, poverty, and malnutrition.This program was designed to improve the nutritional status of Ethiopia's women and young children through direct nutrition and livelihood interventions at the household and community level in 116 *woredas* (districts) of five regions.

By 2015, the project had reached 3.2 million children under 5 with nutrition-specific interventions and scaled up WASH interventions to 10 woredas. ENGINE promoted handwashing through the use of handwashing stations, now in use in thousands of households with young children, and sold subsidized water filters. The project trained members of WASH committees, nearly half of whom were women, on water point management and maintenance.

Participants are hopeful that being a part of this program will improve their fortunes and help their children thrive. "My family has learned technical information about farming, how to milk our new goats, and how to prepare food for the children from the ENGINE trainings," said Tirawork Ayele, an ENGINE beneficiary and mother of four.

MAKING SANITATION MARKETABLE

Sanitation Service Delivery project – Benin, Côte d'Ivoire, and Ghana

Funding Level: $15.8 million
Duration: 2015–2018

Sanitation is a top priority for the global WASH community and USAID. Goal 6 of the Sustainable Development Goals renews the commitment to ensure access to adequate and equitable sanitation and hygiene for all and end open defecation by 2030. To help reach this goal, USAID is using lessons learned to adapt its WASH programs to focus on key sustainability constraints that have been identified in West Africa.

FY 2015 marked the start-up of the Sanitation Service Delivery project (SSD), one of the most ambitious sanitation projects in the region. The project is working to create a self-sustaining, private sector-fueled sanitation market in urban and peri-urban areas of Benin, Côte d'Ivoire, and Ghana to increase the use of improved sanitation. Some of the lowest rates of improved sanitation in the world are in Benin (13 percent), Côte d'Ivoire (14 percent), and Ghana (28 percent). SSD will also increase the use of safely managed fecal waste services at scale and share learning on market-based approaches to the provision of sanitation services throughout West Africa. The goal is to bring first-time sanitation to one million people within five years. SSD plans to work closely with government officials in the targeted countries to strengthen policies, assist with the development of stronger sanitation strategies, and enforce sanitation laws.

ASIA

TOTAL FUNDING SINCE 2008

$1,115,445,770

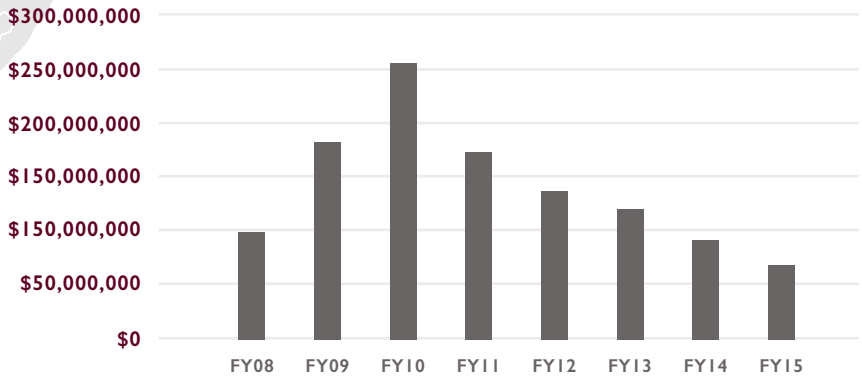
FY 2008 - 2015

13,134,137
Number of People With Access to Improved Drinking Water Supply

4,121,525
Number of People With Access to Improved Sanitation Facilities

681,756
Number of People Benefiting from Improved Agricultural Water Management

ALLOCATED FUNDING BY YEAR



● PRIORITY COUNTRIES

FY 2015 Country/Operating Unit	WASH (Health and Development)	All Other Water Programming	Number of People with Access to Improved Drinking Water Supply	Number of People with Access to Improved Sanitation Facilities	Number of People Benefiting from Improved Agricultural Water Management
Afghanistan	$15,153,276	$0	-	-	-
Indonesia	$10,524,000	$0	821,305	141,556	-
India	$7,729,000	$0	73,726	151,547	-
Pakistan	$4,930,397	$2,168,240	-	-	-
Philippines	$4,578,000	$0	259,648	133,681	-
Bangladesh	$3,087,123	$2,400,000	36,646	70,352	168,390
Nepal	$2,919,405	$1,422,607	-	-	275,948
Cambodia	$3,500,000	$1,000,000	-	-	139,144
Nonpriority Countries/Regional Programs	$6,625,822	$205,000	358,517	27,700	-
Total	$59,047,023	$7,195,847	1,549,842	524,836	583,482

ASIA
HARNESSING INNOVATION

Asia is the fastest-growing region on earth and home to more than half the world's population. Water service providers in the region struggle to adequately deliver services, especially to underprivileged communities and women. Currently, more than 340 million people in Asia do not have access to safe water supplies and more than 680 million lack sustainable sanitation services. USAID's water programs in the region are focused on promoting health, ending hunger, reducing weather variability impacts, and helping communities better manage their natural resources. Through partnerships with Asian governments, civil society, businesses, and nonprofits, USAID is working to harness the innovation and ideas that can tackle these challenges. In FY 2015, water programming in Asia totaled $66,242,870 in 13 countries.

IN FOCUS: ASIA

The programs highlighted here are illustrative of the work and accomplishments in the region.

PARTNERING FOR SUSTAINABLE WASH SERVICES AND RESILIENCE

Indonesia Urban WASH Program

Funding Level: $40.7 million
Duration: 2011–2016

Partnerships are at the core of USAID's Indonesia Urban WASH Program (IUWASH). This program has brought together 261 government agencies and civil society organizations to provide sustainable water and sanitation services to vulnerable populations in more than 50 cities across Indonesia. The program worked with local and national stakeholders to improve the performance of water utilities, helping to facilitate improved access to safe piped water for more than 2.5 million. IUWASH also developed and introduced a framework and supporting tools for the planning and implementation of improved sanitation services to serve as a platform to help more than 300,000 people obtain access to improved sanitation facilities. The framework provides for an integrated approach to addressing key issues related to behavior change, sanitation infrastructure, finance, and institutional development. It was widely adopted as a means for sanitation development planning, prompting 16 local governments to establish new governmental units to oversee sanitation programming on a long-term, sustainable basis.

IUWASH also worked to recharge essential springs and aquifers to secure raw water for water utilities and to help make communities more resilient during times of drought or unpredictable rainfall. One of the techniques used was the development of infiltration ponds, a simple way to collect rain and return it to groundwater aquifers. The small ponds are 2 meters deep and wide and are designed to capture rainwater that would otherwise be lost as runoff into streams and rivers. This simple technique traps the rainwater in the ground, thereby increasing the amount of water infiltrating the surrounding soil and thus recharging the aquifer. Each time an infiltration pond fills, it provides about 8,000 liters of water to the subsurface. This water can be extracted by the utility through pumping systems or spring catchments, and delivered to consumers to meet their daily needs, including in some cases agriculture.

Suwarno, a farmer from a village with an infiltration pond, says he knew the pond was a good thing when he noticed the soil neither hardened nor cracked during the dry season. "The infiltration ponds have brought real changes for the farmers in our community," he said. "Now the soil stays black and fertile even during the dry season and we can grow more crops. Until a few months ago, I wasn't 100 percent convinced that they could catch the water, but I can see now that my cassava is growing better than usual."

The project completed a total of 3,770 infiltration ponds, including 3,334 funded by Coca-Cola Foundation Indonesia, 100 funded by Nestle Indonesia, 307 constructed with IUWASH support, and 29 ponds by other parties.

INCREASING IRRIGATION EFFICIENCY

MyRain's Rainmaker – India

Funding Level: $500,000
Duration: Up to 3 years, launched in 2014

In India, 41 million smallholder farmers rely on flood irrigation, a method that stunts crops and washes away valuable soil nutrients. Securing Water for Food Grand Challenge innovator MyRain is working to help farmers change this practice and move toward drip irrigation. Unlike flood irrigation, drip irrigation may increase yields by more than 30 percent, preserving nutrients in the soil and increasing land longevity. MyRain's Rainmaker (patent pending) is a point-of-sale and design application that makes it easy for retailers to customize drip irrigation systems for small-plot farmers just by entering a few parameters into the app. The intuitive app removes the barrier of retailer engineering expertise; helps farmers to plan their own irrigation systems; and increases the ease and opportunity to advise, sell, and order drip irrigation components.

In 2015, farmers used MyRain-supplied irrigation products on 162 hectares of fields, and MyRain sold more than $80,000 worth of irrigation and hardware products. The Rainmaker app helped save more than 235 million liters of water and reached 660 beneficiaries.

Because MyRain is a drip irrigation wholesaler, it can promote sustainability by facilitating continued use of drip irrigation for subsidized farmers who have missing or broken parts in their systems and no support from the government to fix them. This innovation also has the potential to allow female family members to take an expanded amount of responsibility on farms, as the drip systems tend to decrease the use of outside laborers to irrigate and apply fertilizer to the fields.

EFFECTIVE NUTRITION PROGRAMMING

Integrated Nutrition Hygiene and Sanitation Program – Cambodia

Funding Level: $16.3 million
Duration: 2015–2020

Poor access to safe water, inadequate sanitation, and a lack of hygiene are the main drivers of diarrheal disease in Cambodia and also contribute to malnutrition and stunting. To address this complex public health challenge, the U.S. government has undertaken a coordinated, multisector approach. The $16.3 million Integrated Nutrition Hygiene and Sanitation Program (NOURISH) is a Feed the Future and USAID WASH and nutrition program designed to address high rates of malnutrition among mothers and children under 2.

The USAID-funded Be Secure Project is bolstering urban resiliency in the Philippines by promoting improved water demand management. To more effectively conserve scarce water supplies, for example, children brushing their teeth are being taught to use a glass of water instead of a running tap.

Photo Credit: USAID/Philippines

FY 2015 was the first year of operation for this five-year project. During the year, NOURISH supported community outreach activities to inform mothers and caregivers about the importance of drinking safe water, sanitation, and adopting good hygiene practices. Local health volunteers reached children and pregnant women in rural areas with nutrition messages, teaching mothers and caregivers about hygiene.

WATER SECURITY TO IMPROVE RESILIENCE

Water Security for Resilient Economic Growth and Stability – Philippines

Funding Level: $21.6 million
Duration: 2013–2017

Changing weather patterns have derailed livelihoods and agricultural productivity in rural areas of the Philippines and worsened water insecurity in cities, where 45 percent of the population lives. In response, USAID launched the Water Security for Resilient Economic Growth and Stability (Be Secure) project to improve resilience to weather and increase sustainable access to water and sanitation.

Partnering with local governments and communities, the four-year project is improving capacities to adapt to weather variability, upgrading water supply infrastructure, and promoting more efficient water use. As of October 2015, the project helped improve access to drinking water for nearly 380,000 Filipinos, a third of the 1.2 million Filipinos it aims to support in Be Secure-assisted areas. More than half of these beneficiaries live in Mindanao, a region mired in armed conflict.

The project also helped leverage approximately $8.74 million of public and private funds to enable water utilities to construct or expand water systems for underserved populations. Additionally, in 2015, as a strong El Niño worsened an ongoing three-year drought in southern Mindanao's Zamboanga City, USAID supported the city's water district in establishing a water demand management program, making Zamboanga the first city to adopt such a program. This undertaking manages water demand as a strategy for making the most of available water and engaging local stakeholders in water conservation. "Our program aims to lead our consumers to value water and conserve this precious resource," says Fernando "Ding" Camba, Division Manager of Zamboanga City Water District's Corporate Planning Department.

Of the city's groundbreaking initiative, USAID/Philippines Mission Director Dr. Susan Brems says, "Zamboanga's program to manage water demand is an excellent example of how cities can prepare to alleviate future water shortages and become more resilient."

ADDRESSING GROWING URGENCY OF URBAN SANITATION

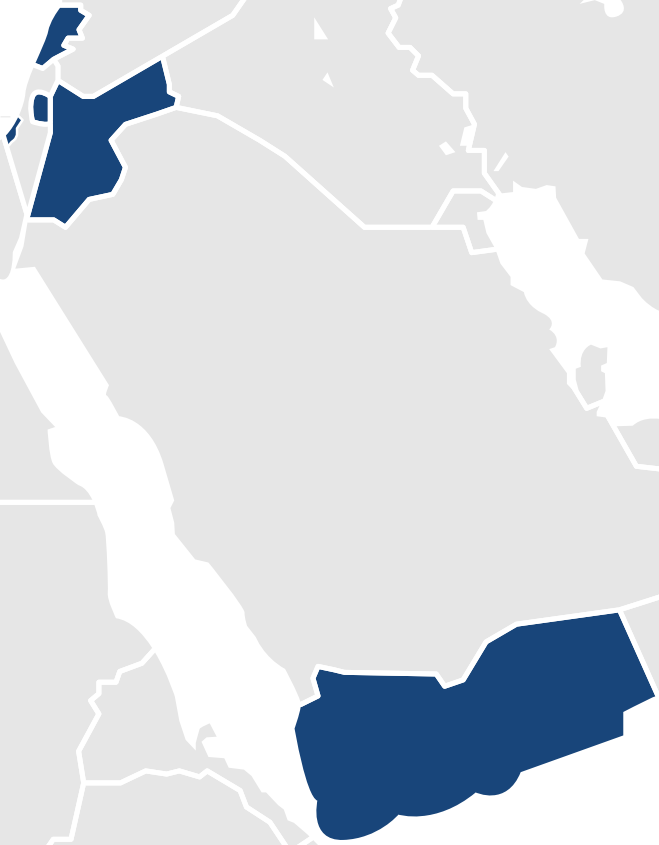
Clean India Campaign

Funding Level: $10 million
Duration: 2015–2020

Rapid urbanization is an increasing development challenge. Projections indicate 2.5 billion people will move into urban areas over the coming 30 years, with the majority of them in Africa and Asia. To address growing WASH needs, USAID has made urban sanitation a global priority.

Currently, more than 300 million people live in India's urban areas, a number that is quickly increasing. The growing population of city dwellers is straining the country's ability to provide safe drinking water and sanitation services. In 2015, USAID signed an agreement with the Government of India's Urban Development Ministry to help strengthen sanitation and hygiene in India's urban areas through support to establish an urban Clean India campaign program management unit within the ministry. The Agency support will help build capacity and share best practices, innovations, and technologies to achieve India's sanitation targets. Swachh Bharat (Clean India) Mission is the Government of India's most significant sanitation program with a target of making the country clean and healthy by October 2, 2019, the 150th birth anniversary of Mahatma Gandhi.

MIDDLE EAST



TOTAL FUNDING SINCE 2008

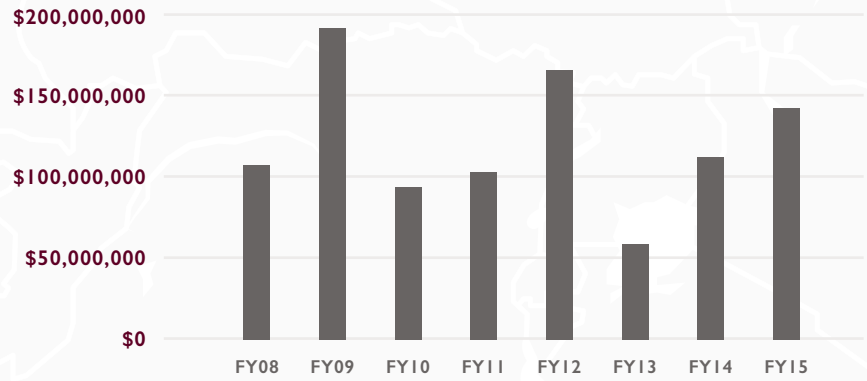
$966,639,357

FY 2008 - 2015

8,095,665
Number of People With Access to Improved Drinking Water Supply

8,312,517
Number of People With Access to Improved Sanitation Facilities

ALLOCATED FUNDING BY YEAR



● PRIORITY COUNTRIES

FY 2015 Country/Operating Unit	WASH (Health and Development)	All Other Water Programming	Number of People with Access to Improved Drinking Water Supply	Number of People with Access to Improved Sanitation Facilities	Number of People Benefiting from Improved Agricultural Water Management
West Bank and Gaza	$40,700,000	$0	81,530	3,150	-
Jordan	$39,959,234	$15,959,243	-	196,860	-
Lebanon	$11,536,000	$0	-	-	-
Yemen	$3,291,288	$1,904,282	-	-	-
Nonpriority Countries/Regional Programs	$3,661,997	$38,191,589	-	41,700	-
Totals	$99,148,519	$40,095,871	81,530	241,710	-

MIDDLE EAST
INVESTING FOR RESILIENCE

The Middle East is home to 12 of the world's 15 most water-scarce countries. USAID water programs respond to needs in the region by promoting inclusive economic growth and addressing cross-border issues including water scarcity and the regional impact of conflict. The Agency works with the public and private sectors to develop and implement new "water-smart" technologies and looks for ways to improve sustainable access to water for 20 million people in the region. Programs target local and cross-border issues that hinder efficient and equitable management of water resources and promote education campaigns encouraging citizens to be responsible stewards of limited water supplies. In FY 2015, water programming in the region totaled $139,244,391 million in 6 countries.

IN FOCUS: MIDDLE EAST

The programs highlighted here are illustrative of the work and accomplishments in the region.

INCREASING EFFICIENCY AND SAVING ENERGY

Amman Water System Improvement Phase II – Jordan

Funding Level: $34,151,802
Duration: 2014–2015

While the water system coverage is extensive throughout Jordan, water supply is not always consistent. Jordan's water utilities and municipal water services face non-revenue water losses caused by theft, leaks, and poor metering and billing. These losses, which are at times excessive, are also problematic in combination with persistent water shortages.

In 2015, USAID's Amman Water System Improvement Phase II improved water supply in several of Amman's northern neighborhoods and resulted in the more efficient distribution of water. The project built a new pump station in west Amman, improved an existing pump station, and installed new valves and 6 kilometers of pipeline.

One of the primary advantages of the improvement project is energy savings. As the water supply will enter the system at a higher elevation than its delivery point in Amman, much of the city's water is now delivered by gravity.

To sustain improvements to water system infrastructure USAID is working with the Water Authority of Jordan and the Jordan Water Company.

MAKING DRINKING WATER RELIABLE

Nahaleen, Deir Sha'ar, and Deir Sharaf Pipelines – West Bank and Gaza

Nahaleen Pipeline
Funding Level: $12.2 million
Duration: 2013–2015

Deir Sha'ar Pipeline
Funding Level: $6.9 million
Duration: 2013–2015

Deir Sharaf Pipeline
Funding Level: $16.5 million
Duration: 2013–2015

Since 2000, USAID has invested more than $300 million dollars in hundreds of water and wastewater projects in the West Bank and Gaza to ensure a sustainable supply of potable water and increase capacity of distribution networks throughout the region. USAID continues to be the largest international donor to the Palestinian Authority for developing water and sanitation infrastructure in the West Bank and Gaza to help meet the needs of a growing population and support economic growth.

The Agency's support for the construction and maintenance of vital water and sanitation infrastructure

Members of women-led self-help groups in the city of Visakhapatnam (Vizag), India work to help their communities reach open defecation free status as part of Swachh Bharat (Clean India) Campaign.

Photo Credit: USAID/India

has been instrumental in increasing access to clean water and improving the reliability of service for thousands of Palestinian households. USAID's assistance has included the installation of 900 kilometers of water pipelines, construction or renovation of 28 reservoirs, drilling or renovation of 29 wells and pump stations, and upgrade of bulk water supply pipelines and networks. These projects also connected 130,000 Palestinians to running water for the first time, and improved access to clean water to more than a million people.

In FY 2015, three pipeline projects, the Nahaleen Main Pipeline in the Bethlehem Governorate, the Deir Sha'ar Main Pipeline in the Hebron Governorate, and the Deir Sharaf Main Pipeline in the Nablus Governorate, led to substantial improvements in the volume, quality, and reliability of water service for more than 200,000 Palestinians. These pipelines, the backbones of the West Bank's infrastructure, are crucial to reducing water losses, improving access to clean drinking water, and enabling the Palestinian Authority to address issues of extreme water scarcity in the southern part of the West Bank. Additionally, these pipelines will save up to three million cubic meters of water per year and increase transmission capacity to meet the needs of the growing population through the year 2035.

USAID is committed to making its nutrition initiatives more effective by integrating key hygiene actions like washing food.

Photo Credit: USAID/Nepal

LATIN AMERICA

TOTAL FUNDING SINCE 2008

$240,893,446

FY 2008 - 2015

2,186,154
Number of People With Access to Improved Drinking Water Supply

505,711
Number of People With Access to Improved Sanitation Facilities

41,135
Number of People Benefiting from Improved Agricultural Water Management

ALLOCATED FUNDING BY YEAR

● PRIORITY COUNTRIES

FY 2015 Country/Operating Unit	WASH (Health and Development)	All Other Water Programming	Number of People with Access to Improved Drinking Water Supply	Number of People with Access to Improved Sanitation Facilities	Number of People Benefiting from Improved Agricultural Water Management
Haiti	$12,772,000	$0	-	-	-
Honduras	$-	$0	-	-	18,868
Guatemala	$430,374	$0	-	-	5,227
Nonpriority Countries/Regional Programs	$-	$-	6,068	-	-
Totals	$13,202,374	$-	6,068	-	24,095

LATIN AMERICA AND THE CARIBBEAN
IMPROVING WATER MANAGEMENT AND SUSTAINABILITY

Over the past 20 years, poverty in Latin American and Caribbean countries has declined and economies have grown. The region has also experienced a number of free elections, vibrant civil society, and responsive governments. But weather variability poses an ever-increasing risk, especially in Central America and the Caribbean. To address this, many countries in Latin America are working to find ways to improve watershed management and sustainably use freshwater resources. In FY 2015, water programming in the region totaled $13,202,374 in two countries. Much of USAID's water work in this region centers on agriculture, which remains an important sector for many of these countries.

IN FOCUS: LATIN AMERICA AND THE CARIBBEAN

The programs highlighted here are illustrative of the work and accomplishments in the region.

STABILIZING FRAGILE WATERSHEDS

Rivière Grise Water Diversion System – Haiti

Funding Level: $10 million
Duration: 2009–2015

For decades, Haiti has faced serious watershed degradation issues, mostly due to inappropriate land use, deforestation, biodiversity erosion, and uncontrolled runoff. Twenty-five out of the 30 major watersheds in the country are under pressure. At the same time, agriculture remains the most important sector in Haiti, accounting for approximately 60 percent of the workforce and 25 percent of gross domestic product. Agricultural productivity has systematically declined in recent years due to antiquated farm practices and limited access to irrigation water. To address these challenges, Agency efforts in Haiti are focused on improving smallholder farmer livelihoods and agricultural markets while stabilizing fragile watersheds.

In 2015, the $127 million Feed the Future West program inaugurated the new Rivière Grise water diversion system in partnership with the Government of Haiti. The new system will sustainably improve irrigation water access, reduce the risk of floods, and increase agricultural productivity. The network of rehabilitated irrigation canals will allow year-round high-value agricultural production for 10,000 farmers working on 8,500 hectares of land. These new structures are designed to withstand a stronger hurricane than Haiti has seen in the last 50 years.

MULTISECTORAL APPROACHES TO NATURAL RESOURCE MANAGEMENT

Feed the Future North – Haiti

Funding Level: $56 million
Duration: 2013–2017

A shift to annual cropping on steep slopes in Haiti has caused erosion and exacerbated flooding that affects the slopes, as well as the productive plain areas. As the flooding has increased, water supplies have become much more erratic, and both lives and livelihoods are under threat. At the same time, groundwater levels in the plains have dropped substantially due to growing urban demand, and water has become increasingly brackish as seawater replaces fresh water.

The Feed the Future North project was launched in 2013 to increase agricultural outcomes of at least 20,000 rural households in Haiti's Northern Corridor. The partnership hopes to achieve this through key investments in farm productivity, natural resource management, marketing systems, agribusinesses, and agricultural infrastructure. Some key water-related focuses of Feed the Future North are introduction of innovative technologies, rehabilitation of irrigation systems, and improvements in watershed stability above selected plains. In addition, the program has improved natural resources management in more than 1,000 hectares to date.

PROGRAMMING
THEME DEFINITIONS

FY 2015 USAID Programming for the Water Sector by Theme

WASH ACTIVITIES FOCUS ON:

Access to appropriate hardware and supplies: National, municipal, and community water supply systems and sewers; household and institutional sanitation facilities; and other household-level technologies and products, such as soap and handwashing devices.

Hygiene and sanitation behavior change: Community mobilization for sustained management of drinking water supply and sanitation services; social marketing of products to facilitate behaviors like point-of-use drinking water treatment and safe feces disposal; dissemination of messages through mass media and other communication channels; building capacity for improved hygiene practices; and hygiene promotion through schools and health care facilities and at the household level.

An improved enabling environment: Improved policies, institutional support, community organization, finance and cost recovery, utility reform, governance and regulatory improvements, improved operations and maintenance, and public-private partnerships.

WATER RESOURCE MANAGEMENT ACTIVITIES FOCUS ON:

Meeting human needs: Promoting the conservation and sustainable use of water resources, thereby protecting the quantity and quality of surface water and groundwater for drinking, irrigation, and other uses.

Protecting environmental resources: Preserving ecosystem services provided by rivers, lakes, aquifers, fisheries, wetlands, and coastal environments.

Balancing competing uses for water: Promoting environmentally sound technologies and clean production practices that reduce the amounts of water used in agricultural, industrial, manufacturing, and other production processes.

Bolstering resilience to global weather variability: Supporting efforts to manage and/or adapt to hydrological variability and the risks of floods and droughts.

WATER PRODUCTIVITY ACTIVITIES FOCUS ON:

Ensuring food security: Increasing farmers' adoption of improved production technologies, systems, and appropriate crops, while stemming losses in water systems and developing demand management programs.

Improving water-use efficiency: Working with public and private extension services to better manage agricultural, urban, and industrial water use.

Supporting pollution prevention: Teaching businesses to incorporate environmental considerations into daily operations, including best practices and other measures to improve natural resource and water management.

Supporting resiliency: Helping countries vulnerable to weather variability associated with floods, droughts, and other extreme weather events by reducing exposure and sensitivity and increasing adaptive capacity.

Expanding productive fishe ies: Improving the sustainability and protection of this abundant source of protein.

DISASTER RISK REDUCTION ACTIVITIES FOCUS ON:

Reducing risk and vulnerability: Identifying, monitoring, understanding, and forecasting hydro-meteorological hazards and strengthening early warning capacity and information dissemination.

Building capacity to increase resilience: Working closely with communities, national and local governments, international and regional organizations, and nongovernmental organizations on global flood hazard mapping, community-based flood and drought management, global flash flood guidance systems, and the dissemination of hydro-meteorological information.

FIVE KEY WATER AREAS
ARE DEFINED AS

WASH and Nutrition – Positive nutritional outcomes are dependent upon both WASH and nutrition improvements. Integration of WASH and nutrition provides an opportunity for health gains that are greater than the sum of the parts.

Sanitation – Sanitation encompasses the facilities, behaviors, and services that safely prevent human contact with excreta.

Agricultural Water Management – Agricultural water management uses water in a way that provides crops and animals the amount of water they need, enhances productivity, and conserves natural resources for the benefit of downstream users and ecosystem services.

Sustainability of WASH Services – When host country partners and communities take ownership of the development processes and when the local systems and resources are in place to deliver and maintain results beyond the life of external support, WASH services become sustainable.

Water Quality – The chemical, biological, and radiological characteristics of water determine water quality.

ACRONYMS
AND ABBREVIATIONS

BE SECURE	Water Security for Resilient Economic Growth and Stability
ENGINE	Empowering New Generations with Improved Nutrition and Economic Opportunity
FY	Fiscal Year
IUWASH	Indonesia Urban Water, Sanitation, and Hygiene
IWASH	Integrated Water Sanitation and Hygiene
NOURISH	Integrated Nutrition Hygiene and Sanitation
SSD	Sanitation Service Delivery
U.S.	United States
USAID	United States Agency for International Development
WA-WASH	West Africa Water Supply, Sanitation, and Hygiene
WASH	Water, Sanitation, and Hygiene

REFERENCES

1. Food For Peace funding is appropriated via Title II of the Farm Bill, which is separate from the Appropriations Act for Foreign Operations. Food For Peace funding is therefore not counted toward the Congressional directive on WASH.

2. Through the work under Global Weather Variability adaptation, Feed the Future, and other relevant programs, the Agency spent $117,098 on agricultural water management for food security.

RESOURCES

Amman Water System Improvement Phase II – Jordan
https://www.usaid.gov/jordan/fact-sheets/water-and-wastewater-infrastructure-project

Bureau for Food Security (BFS)
http://www.usaid.gov/who-we-are/organization/bureaus/bureau-food-security

Clean India Campaign
http://www.cleanindia.org

Empowering New Generations with Improved Nutrition and Economic Opportunity (ENGINE)
https://ethiopia.savethechildren.net/ENGINE

Feed the Future
http://www.feedthefuture.gov

Feed the Future North
https://www.usaid.gov/haiti/fact-sheets/feed-future-north-0

Feed the Future Rivière Grise Water Diversion System – Haiti
https://www.feedthefuture.gov/article/better-irrigation-systems-strengthen-agricultural-production-and-resilience-haiti

Flying Sensors – Futurewater
http://securingwaterforfood.org

Improved Water Sanitation and Hygiene (iWASH)
http://www.globalwaters.net/projects/current-projects/inrmw-new/

Indonesia Urban Water, Sanitation, and Hygiene (IUWASH)
http://iuwash.or.id

Innovation Lab for Adapting Livestock Systems to Climate Change – Nepal
http://crsps.net/resources/by-crsp/livestock-climate-change/

Integrated Nutrition Hygiene and Sanitation Program (NOURISH)
http://www.savethechildren.org/atf/cf/%7B9def2ebe-10ae-432c-9bd0-df91d2eba74a%7D/CAMBODIA%20NOURISH%20PROJECT%20BRIEF.PDF

Millennium Development Goals
http://www.un.org/millenniumgoals/

Multisectoral Nutrition Strategy
http://www.usaid.gov/nutrition-strategy

Nahaleen and Deir Sha'ar pipelines
https://www.usaid.gov/west-bank-and-gaza/press-releases/nov-4-2014-usaid-supports-water-and-infrastructure-projects

Office of U.S. Foreign Disaster Assistance (OFDA)
http://www.usaid.gov/who-we-are/organization/bureaus/bureau-democracy-conflict-and- Basin-Program.aspx

MyRain LLC
http://securingwaterforfood.org/innovators/design-tool-and-distribution-myrain-llc

Sanitation and Water for All Partnership
http://sanitationandwaterforall.org

Sanitation Service Delivery (SSD) – Benin, Côte d'Ivoire, Ghana
https://www.usaid.gov/west-africa-regional/fact-sheets/sanitation-service-delivery-ssd

Securing Water for Food
http://securingwaterforfood.org

Sustainable Development Goals
http://www.un.org/sustainabledevelopment/sustainable-development-goals/

United States Agency for International Development (USAID)
http://www.usaid.gov

Water and Development Strategy
http://www.usaid.gov/what-we-do/water-and-sanitation/water-and-development-strategy

Water and Development Strategy Implementation Field Guide
http://www.usaid.gov/sites/default/files/documents/1865/Strategy_Implementation_Guide_web.pdf

Water and Development Strategy Webinar Series
http://www.usaid.gov/what-we-do/water-and-sanitation/water-and-development-strategy/webinar-series

Water for the World Act 2014
https://www.usaid.gov/sites/default/files/documents/1865/WfW_fact%20sheet_2.27.TH_.pdf

West Africa Water Supply, Sanitation, and Hygiene (WA-WASH)
https://www.usaid.gov/west-africa-regional/fact-sheets/west-africa-water-supply-sanitation-and-hygiene-program-wa-wash

Water Security for Resilient Economic Growth and Stability (Be Secure)
https://www.usaid.gov/philippines/energy-and-environment/be-secure

Water flows for irrigation at the inauguration of the Rivière Grise water diversion structure in Haiti in February 2015.

Photo Credit: Emile Manigat

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