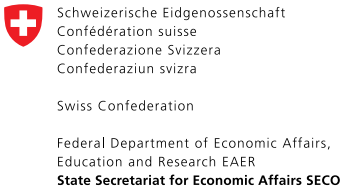
GWSP ANNUAL REPORT 2024

GLOBAL WATER SECURITY & SANITATION PARTNERSHIP

WORLD BANK GROUP



About the Global Department for Water

The World Bank Group's Global Department for Water brings together financing, knowledge, and implementation in one platform. By combining the Bank's global knowledge with country investments, this model generates more firepower for transformational solutions to help countries grow sustainably.

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GLOBAL WATER SECURITY & SANITATION PARTNERSHIP

ANNUAL REPORT 2024

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A Message from Our Global Director

Water is essential to people and the planet and, therefore, it is now integral to the mission of the World Bank Group. Water reduces poverty, boosts shared prosperity, fuels economic growth and climate resilience, and sustains ecosystems.

Moreover, water and climate change are fundamentally linked. Climate change amplifies water-related risks and affects the hydrological cycle. Nine of ten natural disasters are water-related and, by 2050, flood and droughts could cause $5.6 trillion in cumulative losses to the global economy.

The World Bank Group recognizes that without water security, countries will fail to achieve most Sustainable Development Goals (SDGs). In fiscal year (FY) 2024, we moved decisively on our water agenda and had a significant impact at different levels: on people's lives, on country-level policy and investments, and in the global arena. Consider the following achievements:

- World Bank Group-supported programs provided access to water or sanitation to 19 million people.
- The Bank's water portfolio expanded to $29.45 billion, and all new projects that entered the portfolio promoted sustainable and efficient water use.
- The Bank's Global Department for Water assisted the government of Indonesia in hosting the 10th World Water Forum in Bali in May 2024. This forum emphasized to a global audience water security's intrinsic link to shared prosperity, and it garnered high-level political support for the Bank's work.
- The Bank released two seminal reports that give policymakers a strong case for more investment in the water sector. *Water for Shared Prosperity* highlights global disparities in water access. *Funding a Water-Secure Future* quantifies government spending on water for the first time and identifies opportunities to catalyze private investment.

The Global Water Security and Sanitation Partnership (GWSP) is helping develop the framework, the partnerships, and the knowledge for achieving the World Bank Group's impact at scale. GWSP equips Bank teams to work with governments on diagnostics, project design, capacity building, and policy advice, and it addresses complex challenges with global expertise. In FY24, GWSP influenced $9.31 billion of new World Bank lending and conducted more than 240 activities in 70 countries and regions; 46 of these activities were in settings affected by fragility, conflict, and violence.

We are committed to scaling up our impact on water for people, water for food, and **water for the planet**.

The World Bank Group has made significant progress on our water agenda, but it is not enough. We are committed to scaling up our impact on water for people, water for food, and water for the planet, and we are working closely with business leaders, entrepreneurs, and civil society organizations.

In FY24, the Bank selected the Fast-Track Water Security and Climate Adaptation Global Challenge Program (GCP-W) as one of six global challenge programs to scale up urgent activities and amplify our impact in low- and middle-income countries. The program helps client countries create ambitious reform road maps and design projects with customized analytics to meet the

SDGs related to food, water, and climate. GWSP will support the GCP-W with a robust knowledge architecture that includes technical expertise, solutions, tools, and global and country diagnostics. Additionally, it will help build capacity in client countries to implement needed policy reforms and to sustain project results.

Of course, the World Bank Group cannot address today's myriad water challenges alone. We need the support of partners' strategic guidance, technical expertise, and financial contributions. We welcome more donors to join GWSP and invite existing donors to increase their contributions to respond effectively to the global water challenge.

We need to come together—all of us—to secure new sources of public and private funding and to find creative and effective solutions that safeguard water security for generations to come. That goal is foundational for achieving the World Bank's vision of a world free of poverty on a livable planet.

Saroj Kumar Jha
Global Water Director
World Bank Group

A Message from the Program Manager

Today's multifaceted challenges to water security cut across sectors and national borders. A holistic, collaborative approach is required—and that is what the Global Water Security and Sanitation Partnership (GWSP) offers.

GWSP is an action-oriented think tank and platform for collaboration, housed within the Global Department for Water of the World Bank Group. It is committed to creating innovative and timely solutions to global water issues and to helping countries meet their water-related Sustainable Development Goals. Over the past seven years, GWSP has invested in a robust knowledge architecture: country diagnostics, scientific data, global analytics, and implementation tools. By providing scientific data and analytics, the Partnership fosters a policy dialogue that influences how governments, businesses, and the public use, manage, and conserve this vital resource. GWSP also offers a variety of critical supports for World Bank Group initiatives: help with coordinating investments, support for countries to develop solid WASH programs to meet their SDG targets, and assistance with creating enabling environments for mobilizing private capital and establishing public-private partnerships.

A few of the ways, highlighted in this report, in which GWSP has contributed to fiscal year (FY) 2024 results include:

- GWSP supported 34 countries in strengthening the capacity of their water-related institutions for managing water resources or service delivery. This assistance helps utilities adopt digital solutions to achieve greater efficiency.

- Eighty-three percent of GWSP grants reported addressing climate adaptation, climate mitigation, or both. These grants include support for activities that aim to improve water quality in watersheds in countries such as Fiji.

- GWSP supported 31 countries in developing policies, strategies, and regulatory frameworks to improve the financial viability of their water and sanitation sectors, for example, helping Karachi Water Sewerage Corporation improve its enabling environment and mobilize private capital.

- GWSP helped design projects to overcome barriers to women's employment in the sector. Ninety-three percent of International Development Association-financed operations in the water sector approved in FY24 included actions to create employment opportunities for women in medium- and high-skilled water jobs.

By providing scientific data and analytics, the Partnership fosters a **policy dialogue** that influences how governments, businesses, and the public use, manage, and conserve this vital resource.

Implementing the World Bank Group's ambitious agenda for water security on a livable planet will require capacity development, scalable solutions, and new ways of partnering—all grounded in robust data

analysis, diagnostics, knowledge building, and financing. GWSP is well-placed to accelerate achievement of this agenda.

Overseeing GWSP's crucial role is the Partnership Council, a group of development partners dedicated to assisting countries in reaching their water-related SDGs. This past year, we were pleased to welcome the United Kingdom's Foreign, Commonwealth, and Development Office back to this group. Council members enabled the activities described in this report through their financial support, and they provided leadership, learning opportunities, and feedback to make our programs stronger and more effective. They played a tremendous role over the past year in helping us shape a collective vision for water security on a livable planet.

The progress noted in this year's annual report reflects the hard work and dedication of our client governments, the World Bank Group Water team across the globe, and our partners.

Sarah Nedolast
Program Manager
Global Water Security and Sanitation Partnership

About GWSP

The Global Water Security and Sanitation Partnership (GWSP) was launched in 2017 as an international partnership to support countries to meet the targets related to water and sanitation under the Sustainable Development Goals (SDGs), particularly those of SDG 6.

GWSP is a multidonor trust fund administered by the World Bank Group's Global Department for Water and is supported by the Australian Department of Foreign Affairs and Trade; Austria's Federal Ministry of Finance; the Bill & Melinda Gates Foundation; Denmark's Ministry of Foreign Affairs; the Netherlands' Ministry of Foreign Affairs; Spain's Ministry of Economic Affairs and Digital Transformation; the Swedish International Development Cooperation Agency; Switzerland's State Secretariat for Economic Affairs; the Swiss Agency for Development and Cooperation; the United Kingdom Foreign, Commonwealth, and Development Office; and the United States Agency for International Development.

GWSP is a platform for collaboration and support, providing client countries and development partners with global knowledge, innovations, and country-level technical support while leveraging World Bank Group resources and financial instruments.

GWSP-funded knowledge and technical assistance influence the design and implementation of government policies and programs, as well as water sector investments and reforms carried out by client countries with the support of the World Bank Group and other partners. GWSP expands the global knowledge base through broad dissemination of its knowledge and analytical work. This work is open source and available globally to all development partners.

Influence on World Bank Group Lending

GWSP's unique position within the Water Department enables it to influence, through knowledge and technical assistance, the design and implementation of water sector reforms and infrastructure projects financed by the World Bank Group. In FY24 alone, GWSP provided critical knowledge and analytical support to teams that delivered $9.3 billion in Bank lending.

GWSP Entry Points

GWSP supports World Bank Group task teams and clients through three distinct entry points:

Knowledge into Implementation

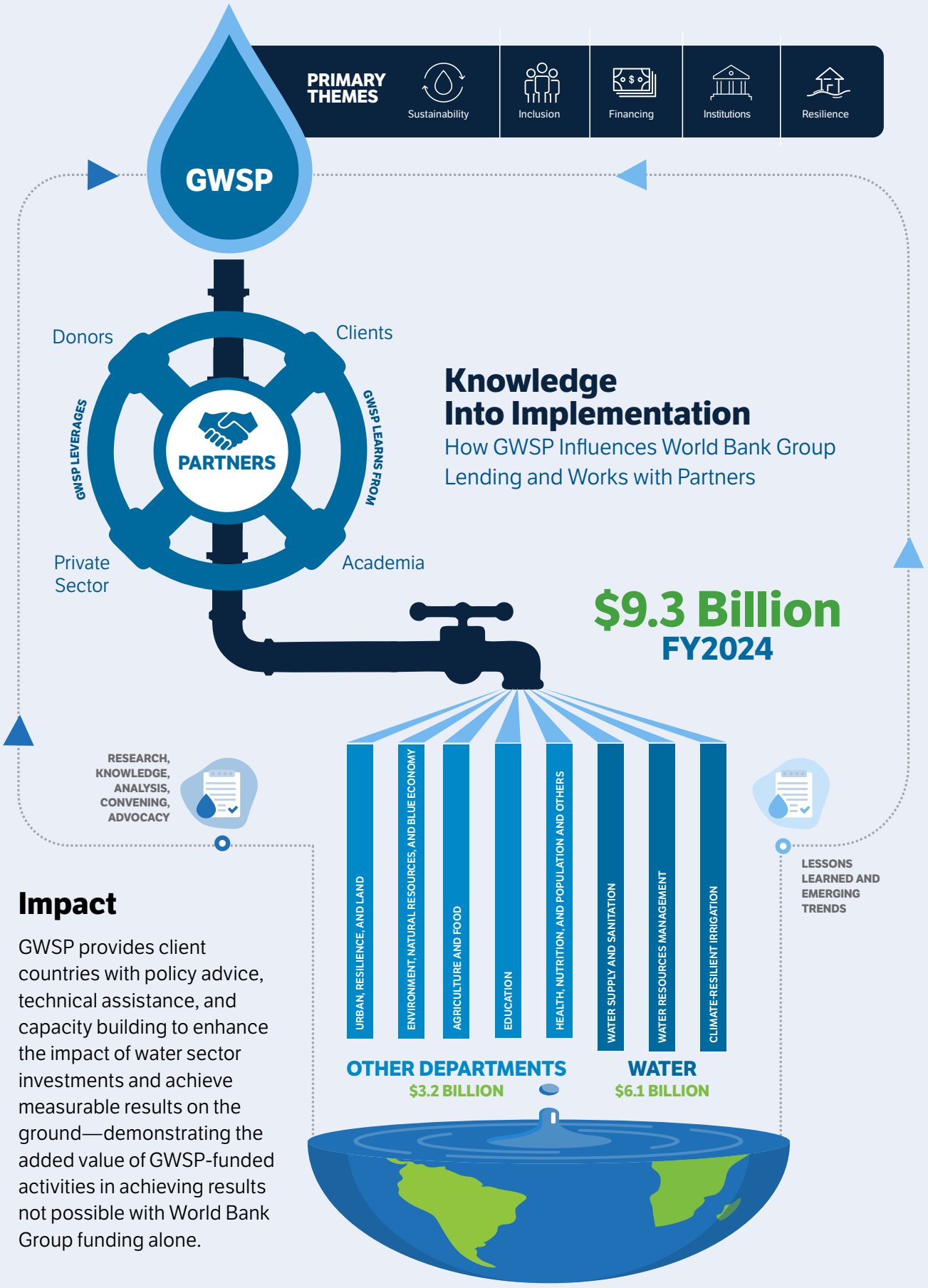
- Leverages the global reach of the Water Department, sharing lessons from one part of the world with another.
- Drives investments and innovation through cutting-edge analyses.
- Supports proof-of-concept applications.
- Shifts mindsets through advocacy and outreach.

Just-in-Time Technical Assistance

- Enhances project designs with highly specialized global knowledge.
- Offers rapid response to changing circumstances.
- Provides an unparalleled capacity-building model based on peer-to-peer learning.

Long-Term Country Engagement

- Lays the framework for country strategies between lending operations or before lending operations begin.
- Strengthens institutions before and during reforms.
- Provides project implementation support to agencies with lower capacity, especially in fragile and conflict-affected situations.



Impact

GWSP provides client countries with policy advice, technical assistance, and capacity building to enhance the impact of water sector investments and achieve measurable results on the ground—demonstrating the added value of GWSP-funded activities in achieving results not possible with World Bank Group funding alone.

Executive Summary

Access to the right amount and quality of water for health, livelihoods, ecosystems, and production—also known as water security—is the foundation for shared prosperity on a livable planet. However, burgeoning populations may produce a 40 percent shortfall between forecast demand and available supply of water by 2030—a shortfall that will have an outsize impact on the poor and those in conflict-affected regions. Realizing the benefits of water requires sustainable management and development of water resources, along with equitable and inclusive delivery of water services.

Heightened awareness of the importance of water security was evident at several major events throughout fiscal year 2024 (FY24), including the 28th United Nations Conference of the Parties to the Paris Climate Agreement in Dubai. Yet despite water's critical role, investments in the sector have not been a priority. Annual spending in the water sector would need to triple current levels to meet the Sustainable Development Goals (SDGs) targets for clean water and sanitation.

This fiscal year saw commitments from the World Bank Group, member countries, and donors to a more ambitious water agenda and to scaling up the Bank's impact. The Global Water Security and Sanitation Partnership (GWSP) continued its work of the past seven years in advancing global knowledge and building governments' capacity to support sustainable delivery of water services. GWSP leaned into three efforts:

SDGs and Universal Access. Despite some progress on a global basis toward achieving SDG 6—achieving clean water and sanitation for all—Africa has been losing ground. Recent reports reveal that 37 million more people are without basic water supply and 247 million more people are without basic sanitation than in the year 2000. Closing this widening access gap was the topic of the Eastern and Southern Africa Leadership Summit on WASH (water supply, sanitation, and hygiene), hosted by the World Bank Group and the Government of Ethiopia, with support from GWSP. Participating ministers of finance and of water, sanitation, and hygiene issued the Addis Communiqué, calling for accelerated progress on resilient and sustainable universal access to WASH.

This fiscal year saw commitments from the World Bank Group, member countries, and donors to a more ambitious water agenda and to **scaling up the Bank's impact**.

Global Facility for Transboundary Water Cooperation. The Global Facility for Transboundary Water Cooperation, which GWSP established in FY23, began operations in FY24. It published background papers, hosted two roundtables for river basin organizations with more than 100 participants, held its first advisory committee meeting, and developed a roster of experts who can give advice and work directly on issues relevant to specific basins and aquifers that span national boundaries.

Fast-Track Water Security and Climate Adaptation Global Challenge Program. The World Bank Group announced the Fast-Track Water Security and Climate Adaptation Global Challenge Program (GCP-W) as one of six Global Challenge Programs (GCPs) to help countries tackle major issues with greater scale, speed, and impact—with a line of sight to the SDGs—and to crowd in public and private sector solutions and financing. GWSP helped lay the groundwork for the GCP-W, which will roll out in FY25, by investing in a robust knowledge architecture, including technical expertise, solutions, tools, and global and country diagnostics. A key feature of the GCP-W will be government-led country platforms that will serve as the main vehicles for convening stakeholders to create a shared vision for achieving the SDGs. GWSP plans to expand its pivotal GCP-W support for Bank teams, partners, and client governments.

Key Themes

Water, Climate, and the Economy. Nine of ten climate change events are water-related, and climate impacts could push as many as 132 million people into poverty. One key World Bank Group diagnostic tool that integrates climate change and development is the Country Climate and Development Reports (CCDRs). GWSP funding provided analytical and diagnostic support to 23 CCDRs in FY24. Additionally, GWSP supported technical expertise to help design Bank projects so that all new lending for water sector investments align with the Bank's commitments under the Paris Agreement. In FY24, 68 percent of new World Bank lending commitments had climate change co-benefits, and 100 percent of projects had at least one climate-related indicator in their results framework. For example, a project in Senegal aims to improve access to sanitation services in priority water-scarce areas and to address water challenges through circular economy principles, such as reusing treated wastewater for irrigation.

Water and Social Inclusion. To achieve a water-secure world for all, water must be equitably and sustainably shared. GWSP supports technical assistance for World Bank Group project teams and client countries to integrate social inclusion into water projects to reach marginalized groups—women, youth, Indigenous people, and people with disabilities—and to engage all citizens. In FY24, GWSP provided this targeted support to 52 active projects and gave advice to 24 projects under design. To promote **gender diversity** in water sector jobs, the GWSP-supported Equal Aqua Platform assisted 12 projects, including in Tajikistan, where it analyzed gender-disaggregated human resources data for 17 institutions and proposed solutions. To encourage **citizen engagement** in water resources management, GWSP funded Bank efforts to implement a set of tools for an approach that involves all segments of society in decision-making, implementation, and monitoring. The tools were applied in East Africa and Türkiye and were included in the design of a program in Chile. Furthermore, 16 Bank projects in FY24 considered **persons living with disabilities** as key stakeholders. In Tanzania, GWSP supported a workshop to strengthen the capacity of local governments in inclusive WASH infrastructure and services, for example, by involving students with disabilities in design decisions such as the location of accessible handwashing facilities.

Water and Finance. New sources of finance must be tapped to meet the SDG targets for universal access to safely managed water supply and sanitation by 2030. In FY24, the Global Department for Water identified projects in its pipeline with the potential to attract private capital. Using the Bank's Water Sector Assessment Programs (WaterSAPs), the Water Department can detect binding constraints to scaling up finance for water investments and mobilizing private sector financing. GWSP funded pilot WaterSAPs in Bangladesh, Jordan, and Uzbekistan. Additionally, the Partnership supported technical assistance for 11 Water Department engagements in 10 countries to enable water service providers to tap private sector participation, commercial finance, or both. GWSP also supported several Bank training programs to focus on private sector participation, including the Water Utility Creditworthiness Course offered to clients in Ghana, Tanzania, and Zambia.

Sanitation. Despite progress over the last two decades, about 40 percent of the world's population lack access to safely managed sanitation services, and nearly 8 percent of the global population still practices open defecation. Therefore, GWSP places emphasis on boosting access to sanitation, which requires both significant investments and political prioritization. In rural settings, the Partnership supports the World Bank's collaboration with UNICEF, WaterAid, the Sanitation Learning Hub, and USAID to provide equitable, sustainable sanitation at scale and to inform rural program designs and implementation. In urban settings, GWSP promotes the Citywide Inclusive Sanitation (CWIS) approach to ensure that everyone has access to safely managed sanitation through tailored solutions. For example, in FY24, the Partnership supported a deep-dive workshop to inform a project in Indonesia that is expected to become the country's first Bank-financed investment with an exclusive focus on urban sanitation.

GWSP Activities in Water Resources Management

Prolonged water scarcity, hydrological uncertainty, and extreme weather events such as floods and droughts are some of the major threats to global prosperity and stability. The World Bank Group's water resources management initiatives focus on reducing hydroclimatic risks—particularly from floods and droughts—thereby increasing capacity to manage more variable water flows and improving sustainable water management at local, national, and transboundary basin levels. GWSP funds critical upstream analytical work that helps management activities achieve results.

In Europe and Central Asia, GWSP facilitated a new agile approach to water security diagnostics that resulted in a comprehensive and easily digestible water security narrative for internal and external audiences. The rapid diagnostic processes allowed the Bank's Europe and Central Asia water team to conduct productive dialogues at the country level. In Albania, the discussions prompted the government to secure European Union grants to address dam safety and to develop nationwide sanitation master plans that follow the CWIS approach. GWSP support also allowed the Bank to bring in outside technical expertise on nature-based solutions (NBS) for climate resilience—such as reforestation and creation of urban green spaces—to ensure that they are part of water investment projects globally. In Fiji, NBS training helped a Bank team design a proposed project to improve water quality in selected watersheds through methods including built wetlands for wastewater treatment. The project would aim to enhance the resilience to climate risks of 80,000 people and would contribute to the conservation and management of 400,000 hectares of terrestrial and aquatic areas. Additionally, GWSP supported Bank efforts to promote assessment and mitigation of sediment in reservoirs and dams in Central Asia.

GWSP Activities in Climate-Resilient Irrigation

About 35 percent of water-stressed rainfed croplands are suitable for sustainable irrigation, and about 1.4 billion more people could be fed if rainfed croplands were converted to sustainable irrigation. The World Bank Group has a range of strategies to support climate change adaptation: improved management of water stored in the soil, irrigation innovation and modernization, farmer-led irrigation development, water accounting, and irrigation governance and service delivery. GWSP-funded knowledge and technical assistance supported results achieved by World Bank Group climate-resilient irrigation projects in FY24.

In Nigeria, GWSP funds supported training for officials responsible for the country's water policy in river basins to understand, prioritize, and plan for dam safety and maintenance, helping ensure long-term food security. In India, GWSP funds supported training for the water resources ministry and state government staff to use two analytical remote sensing tools: one to assess which irrigation schemes are functioning and one to assess irrigation performance. In Indonesia, where GWSP funded research for a Bank project that improved irrigation service and promoted climate-smart agriculture practices, farmers' incomes have increased by 25 percent.

In FY24, GWSP disbursed **$30.2 million** and had an active portfolio of 243 activities.

GWSP Activities in Water Supply and Sanitation

Today, 2.3 billion people lack access to safely managed water, and 3.5 billion lack access to safely managed sanitation. The World Bank Group's water supply and sanitation activities focused on improving policies, institutions, and regulations in urban and rural contexts; developing effective policies for pricing and subsidies; building utilities that provide inclusive, resilient, and sustainable

services; and fostering innovation and reuse (to improve efficiency and address water scarcity). GWSP support for these initiatives extended around the world.

Globally, the Partnership helped build the capacity of utilities to adopt digital solutions for greater efficiency. In Zambia, GWSP funded technical assistance activities that complemented implementation of the Bank's Lusaka Sanitation Project and that will inform future projects to improve sanitation across the country by strengthening utilities. In the Pacific Islands, where GWSP has long helped some of the most vulnerable countries adapt to climate change, the Partnership supported strengthening water security and increasing low levels of access to water and sanitation services. In Mexico, through GWSP funding of the CWIS program, the Bank worked with partners to improve understanding of the magnitude and complexity of pollution of marine and freshwater environments from inadequate sanitation. In the Lake Victoria Basin in Eastern Africa, GWSP supported consensus-building on a regional sanitation strategy and provided assessments that informed plans to improve the delivery of sanitation and related urban services in sanitation "hot spots."

In FY24 GWSP informed **$9.3 billion** in newly reported lending and $44.8 billion in all lending projects.

Advancing Results

The GWSP Results Framework tracks how the Partnership helps client countries improve and deliver water services by enhancing the impact of the World Bank Group's water portfolio and achieving measurable results on the ground. FY24 results capture the added value of GWSP's "knowledge into implementation" model. GWSP informed $9.3 billion in newly reported lending projects and $44.8 billion in all lending projects (including previously reported projects). Among the

newly influenced lending projects, eight were linked to six countries (Burkina Faso, the Central African Republic, Comoros, Ethiopia, Nigeria, and Timor Leste) and one region (Eastern and Southern Africa) in fragile and conflict-affected situations.

More than a third (35 percent) of the lending projects influenced by GWSP were led by global departments other than the Global Department for Water. This is consistent with the role that water plays in all facets of the Bank's work, including in ensuring that clients are prepared to adapt to and mitigate climate change impacts. For example, GWSP informed approximately $1.2 billion in the lending portfolio of the Urban, Resilience, and Land Department and more than $750 million in the portfolio of the Environment, Natural Resources, and Blue Economy Department.

In FY24, GWSP supported the following achievements:

Inclusion. Ninety-three percent of water operations financed by the International Development Association, the World Bank organization that helps the world's poorest countries, included actions to create employment opportunities for women in medium- and high-skilled water sector jobs. More than half (58 percent) of the projects included disability-inclusive approaches in water supply, sanitation, and hygiene (compared with a target of 60 percent by FY30).

Resilience. As in FY23, all new projects incorporated resilience in the design of water-related activities. Additionally, the percentage of projects with climate change co-benefits increased from 65 percent in FY23 to 68 percent in FY24. Furthermore, newly approved projects incorporating a resilience lens in their design supported five countries affected by fragility and conflict (Burkina Faso, Comoros, Ethiopia, Mozambique, and the Solomon Islands).

Financing. GWSP helped 13 countries improve the financial viability and creditworthiness of their water sector institutions. The percentage of projects that supported reforms/actions to improve financial viability decreased (from 81 percent in FY23 to 77 percent in FY24). However, the percentage of projects focused on leveraging private finance increased (from 8 percent to 41 percent).

Results Reported By World Bank Lending Operations

GWSP's knowledge, analytics, and technical assistance influenced how policies and projects were designed and implemented, contributing to better project outcomes.

17.24
million people with access to an improved water source

4.13
million people with access to improved sanitation

5,404
schools and health centers with access to improved water and sanitation services

16.37
million people covered by risk mitigation measure (flood/drought)

2.9
million hectares under sustainable land/water management practices

24
Institutions with water resources management monitoring systems

Institutions. GWSP helped 34 countries strengthen the capacity of their water-related institutions for managing water resources or service delivery. All projects approved in FY24 supported reforms/actions that strengthen institutional capacity (up from 96 percent in FY23).

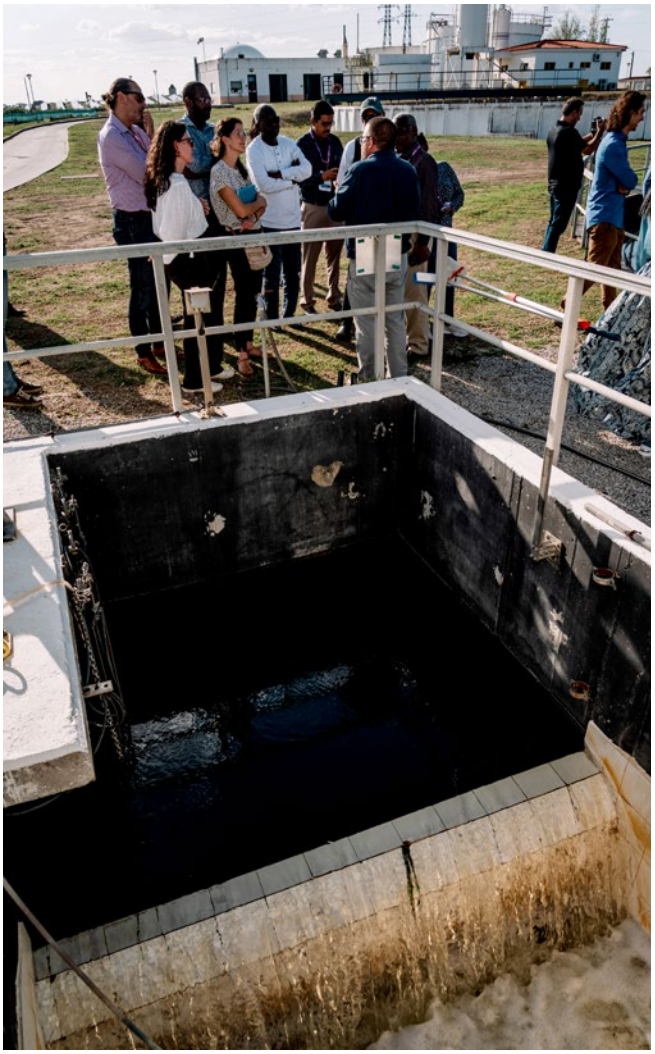
Sustainability. GWSP helped 31 countries develop policies and strategies that strengthen the sustainable management of water resources and built infrastructure assets. All 22 Water Department-approved projects promoted sustainable and efficient water use, in line with performance in FY23. Furthermore, the indicator for rural water supply and sanitation that measures the functionality of water points held steady at 100 percent in FY24.

From Knowledge Sharing to Engagement

GWSP's global knowledge activities supported World Bank Group engagements with strategic value and global reach. Communication activities were fundamental to the task of involving people in development initiatives, which helps ensure lasting impact.

Learning. The Water Department's staff and participants from client institutions engaged in more than 60 knowledge exchange programs and training sessions in areas ranging from desalination to financing of water security. Meanwhile, the World Bank Group Academy moved from traditional instructor-led training to peer-to-peer exchanges, creating content with top industry experts and clients, and establishing communities of practice. It will provide new avenues for disseminating GWSP-funded analytical work and encouraging uptake of GWSP-supported approaches and tools.

Data for Development. The Water Department helped clients put data to work in day-to-day planning and decision-making processes. GWSP supported the World Bank's design and launch of NewIBNET, a web-based platform for utilities to track their performance and learn from other utilities. In FY24, GWSP assistance allowed the platform to become more functional as well as available in multiple languages, which helped persuade another 250 service providers from 89 countries to register and share their data with it.



Connecting Teams and Clients with Expertise. The Water Department's Knowledge Management and Learning program connects operational teams with technical expertise and knowledge through the AskWater Help Desk and the Water Expertise Facility.

GWSP Communications. The communications team focused on the importance of water security on a livable planet and elevated this message in global fora. To demonstrate GWSP's capacity to help countries accelerate action on water, the team produced a suite of videos, interactive tools, blog posts, and stories. It released some of this content on Menstrual Hygiene Day and World Toilet Day.

Abbreviations

CCDR	Country Climate and Development Report
CRI	climate-resilient irrigation
CWIS	Citywide Inclusive Sanitation
FCV	fragility, conflict, and violence
GCP	Global Challenge Program
GCP-W	Fast-Track Water Security and Climate Adaptation Global Challenge Program
GDP	gross domestic product
IDA	International Development Association
JMP	Joint Monitoring Programme
MPA	multiphase programmatic approach
NBS	nature-based solutions
NRW	nonrevenue water
PIR	policy, institutional, and regulatory
PM&A	program management and administration
PPP	public-private partnership
SDG	Sustainable Development Goal
UA	umbrella authority
UNHCR	United Nations High Commissioner for Refugees
UoF	Utility of the Future
WASH	water supply, sanitation, and hygiene
WaterSAP	Water Sector Assessment Program
WEF	Water Expertise Facility
WICER	Water in Circular Economy and Resilience
WSS	water supply and sanitation

All dollar amounts are United States dollars unless otherwise noted.


2024
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1

Introduction

Water serves as the lifeblood of the planet, supporting lives, livelihoods, biodiversity and the environment, food and energy security, and economic growth and development. Yet, 1.81 billion people face significant flood risk, 2.3 billion lack access to safely managed water, and 3.5 billion lack access to safely managed sanitation. These challenges are exacerbated by the intensifying effects of climate change, rapid population growth, and rising food insecurity.

Burgeoning populations may produce a 40 percent shortfall between forecast demand and available supply of water by 2030. Lack of access to water supply, sanitation, and hygiene (WASH) services contributes to weak educational outcomes and is a major factor in the spread of disease.

These risks have an outsize impact on the poor and those in conflict-affected regions. Developing countries disproportionately rely on water-intensive sectors for employment. The poor are the most exposed to water-related risks and the least able to adapt. An estimated 1.4 million people die every year from lack of access to safely managed water and sanitation services. Around 66 percent of the global population live in a water basin that encounters water stress for at least part of the year, and the world's poorest and driest regions face the most severe scarcity and water-related challenges.

Realizing the benefits of water requires sustainable management and development of water resources, along with equitable and inclusive delivery of water services. Sustainable water management benefits both economic development and the planet. Nature-based solutions can boost carbon sequestration, replenish water resources, and benefit poor communities. Improved water and sanitation infrastructure can reduce the spread of waterborne diseases, promote better

Access to the right amount and quality of water for health, livelihoods, ecosystems, and production—also known as water security—is the **foundation for shared prosperity** on a livable planet.

health and education outcomes, and enable communities to better withstand the impact of droughts and floods. Climate-smart irrigation can significantly reduce methane emission from agriculture and enhance agricultural productivity.

Critically, investment in water security also supports job creation, livelihoods, and economic growth. Ensuring a reliable water supply can boost productivity and employment in water-intensive sectors, such as agriculture, energy, transportation, and manufacturing. Developing countries disproportionately rely on water-intensive sectors, which account for 55 percent of employment in low-income countries but less than 20 percent in high-income countries.

Access to the right amount and quality of water for health, livelihoods, ecosystems, and production—also known as water security—is the foundation for shared prosperity on a livable planet.

Prioritizing Water Sector Investment

Despite water's critical role, investments in the sector have not been a priority. Annual spending in the water sector for 130 developing countries is approximately US$164.6 billion. That spending would need to triple current levels to meet the Sustainable Development Goal (SDG) targets for clean water and sanitation. The share of public investment in the water and sanitation sector is an average of only 1.2 percent, compared with around 4 percent each for the transport and energy sectors.

More of the same is not an option. The past year saw commitments from the World Bank Group, member countries, and donors to a more ambitious water agenda and to scaling up the Bank's impact.

In fiscal year (FY) 2024, the World Bank Group announced six Global Challenge Programs (GCPs) to help countries tackle major issues with greater scale, speed, and impact and with a line of sight to the SDGs. The GCPs aim to crowd-in public and private sector solutions and financing. The Fast-Track Water Security and Climate Adaptation Global Challenge Program (GCP-W) aims to enhance water security and climate adaptation through systems change and targeted investments in water, sanitation, irrigation, water resources management, and measures to reduce the risks of floods and droughts. GWSP helped lay the groundwork for the GCP-W by investing in a robust knowledge architecture, including technical expertise, solutions, tools, and global and country diagnostics. The GCP-W will be rolled out in FY25.

Another change is the World Bank Group's new corporate scorecard, adopted in FY24. It captures results from the Bank's active portfolio related to water access, sanitation, irrigation, and water resources management for climate resilience through indicators on water supply, sanitation, and hygiene (WASH) (including safely managed level of service); food and nutrition security; enhanced climate resilience; and conservation/management of terrestrial and aquatic areas (box 1.1).

BOX 1.1

World Bank Group Results for Water Security, FY24

67 million people
provided with water, sanitation, and/or hygiene,* of which 2.7 million are provided with safely managed water and/or sanitation; 33 million are female; and 10 million are located in countries affected by fragility, conflict, and violence (FCV).

201 million people
with strengthened food and nutrition security, of which 97 million are female and 97 million are in FCV-affected countries.

123 million beneficiaries
with enhanced resilience to climate risks, of which 62 million are female and 47 million are in FCV-affected countries.

45 million hectares
of terrestrial and aquatic areas under enhanced conservation/management, of which 11 million are in FCV-affected countries.

* The number 67 million was calculated using the new World Bank Group scorecard indicator methodology adopted in FY24. The number includes the total number of results (cumulative) reported by the Bank's active portfolio as of the end of FY24. The scorecard also tracks net results achieved during the new corporate scorecard period (FY24–30). As of FY24, the net achieved number for this period is 20 million people. The cumulative and net results numbers reported in the scorecard differ from the number of results reported under the GWSP results indicators on number of people with access to improved water or to improved sanitation. The GWSP numbers reflect only the net results delivered by the Bank's active portfolio in FY24, and reports these separately for water and sanitation. The corporate scorecard indicator consolidates all water supply, sanitation, and hygiene subsectors into a single number, adopting a conservative approach by counting the highest result from either access to water or access to sanitation under each project.

Highlighting Water on the Global Agenda

Heightened awareness of the importance of water security was evident at several major events throughout the fiscal year, including the 28th United Nations Conference of the Parties to the Paris Climate Agreement in Dubai (November–December 2023). The World Bank Group participated in the conference's inaugural Water Day and co-convened sessions on various water-related topics, such as the private sector's role in combating climate change, water in the circular economy, climate-resilient approaches to mitigate floods and droughts, and youth engagement in climate and water management. The 10th World Water Forum in Bali (May 2024), hosted by Indonesia with the World Water Council, united leaders, experts, scholars, entrepreneurs, and policymakers to develop integrated strategies for water prosperity. At the 3rd Dushanbe Water Action Decade Conference in Tajikistan (June 2024), organized by the Republic of Tajikistan and the United Nations, the final declaration highlighted growing water-related challenges, the impact of climate change on water, and the need for international cooperation to achieve SDG 6 and other water-related targets.

In FY24, the Global Water Security and Sanitation Partnership (GWSP) leaned into several key areas, among them, addressing a renewed urgency for universal access to water supply and sanitation to meet the water-related SDGs and implementing the Global Facility for Transboundary Water Cooperation. Other priorities were to increase awareness and understanding of the centrality of water in climate and economic development dialogues (chapter 2, Water, Climate, and the Economy section) and to scale up finance for water sector investments (chapter 2, Water and Finance section).

Renewing Urgency for Universal Access

Almost a decade into the SDG era, the world is not on track to achieve the goals for water—especially SDG targets 6.1 and 6.2, which call for universal and equitable access to safely managed water supply and sanitation facilities, as well as basic hygiene. The World Bank Group is focused on finding solutions because universal access to water supply and sanitation will enable countries to grow and develop inclusively.

Despite some progress on a global basis toward achieving SDG 6, Africa has been losing ground. Recent reports reveal that 37 million more people are without basic water supply and 247 million more people are without basic sanitation than in the year 2000. This finding highlights the need for intensified efforts and targeted interventions to improve the continent's access to water and sanitation services. Closing this widening access gap was the topic of the Eastern and Southern Africa Leadership Summit on WASH, hosted by the World Bank Group and the Government of Ethiopia in Addis Ababa in November 2023, with support from GWSP. Participating ministers of finance and of water, sanitation, and hygiene issued the Addis Communiqué, calling for accelerated progress on resilient and sustainable universal access to WASH. The discussed strategies included the following: operationalizing five systems-change principles at the country level; creating country-level national WASH platforms to anchor joint planning, coordination, and monitoring of the sector; addressing sector-level governance bottlenecks; realigning sector-wide incentives for performance improvement; mobilizing additional funding, especially from the private sector and climate finance; and designing climate- and disaster-resilient WASH systems.

The Addis Communique calls for **accelerated progress** on universal access to WASH.

Fostering Transboundary Water Cooperation

Almost half the world's rivers span national boundaries, which makes transboundary cooperation a necessary and powerful instrument for building resilience to climate risks, improving water security, and preventing conflicts. Building on the World Bank Group's long engagement in the transboundary space, GWSP established the Global Facility for Transboundary Water Cooperation in FY23. This facility develops targeted knowledge, tools, and investments to support riparian cooperation. In addition, it serves as a venue for neighboring countries, the Bank, and its partners to share global expertise and to learn from one another.

In FY24, the global facility began operating. It published background papers, hosted two roundtables for river basin organizations ("Achieving Drought Resilience in Transboundary Water Cooperation" and "Instruments for Managing Climate Variability in Transboundary Basins") with more than 100 participants, conducted the first meeting of its advisory committee, and developed a roster of experts who can give advice and work directly on issues of specific basins and aquifers.

Looking Ahead

As the World Bank Group ramps up its levels of ambition and impact to reach significantly more people through the GCP-W, GWSP support will be pivotal for Bank teams, partners, and client governments. A key feature of the GCP-W is government-led country platforms that will serve as the main vehicles for convening stakeholders to create a shared vision for achieving the SDGs. GWSP expects to expand its efforts in this area. As an example, a new USAID-World Bank partnership, implemented through GWSP, will support the Democratic Republic of Congo Water and Sanitation Access Program (PASEA), a long-term, $1.25 billion Bank program that aims to provide at least basic water access to an additional 12 million people and basic sanitation access to 8 million people. The new partnership will support PASEA with global knowledge and initiatives such as Digital Water and will assist the government in creating a national platform to improve coordination and mobilization of resources. In FY25, GWSP will team up with the 2030 Water Resource Group to support the convening of multistakeholder platforms to advance dialogue about and commitment to prioritizing water-related investments and mobilizing private sector innovation, expertise, and capital.

This Year's Annual Report

Chapter 2: Key Themes

This chapter provides an in-depth look at pressing issues that GWSP actively addressed. This year, it looks at how GWSP helped design World Bank Group projects so that all new lending for water investments align with the Bank's commitments under the Paris Agreement. Additionally, the chapter describes how the Partnership helped Bank efforts to mobilize private sector financing for water investments, and it details GWSP's extra emphasis on boosting access to sanitation, particularly in rural areas. As in past years, this chapter also examines GWSP's activities related to social inclusion.

Chapter 3: Knowledge Into Action

This chapter offers highlights of GWSP's support to Bank activities at the country, regional, and global levels, and it shows how the Partnership contributed to progress and results in the Bank's client countries. The chapter is organized around GWSP's three business lines—water resources management, climate-resilient irrigation, and water supply and sanitation.

Chapter 4: Advancing Results

This chapter presents an overview of GWSP's accomplishments in FY24. These accomplishments capture the added value of the Partnership's "knowledge into implementation" model. In total, GWSP informed $9.3 billion in newly reported Bank lending projects and $44.8 billion in all lending projects (including previously reported projects).

Chapter 5: From Knowledge Sharing to Engagement

The report concludes by detailing GWSP's support for knowledge and learning activities and products and their dissemination. It describes communications content that raised awareness of the vital importance of water security on a livable planet.

Appendixes

The appendixes include a financial update and a results framework.

2

Key Themes

Water, Climate, and the Economy

Nine of ten climate change events are water-related, and climate impacts could push as many as 132 million people into poverty. Meanwhile, every $1 spent on climate-resilient infrastructure yields $4 in savings, and a shift to low-carbon, resilient economies could create more than 65 million new jobs globally by 2030. The World Bank Group is committed to pursuing measures to strengthen water security and related climate adaptation to mitigate the ruinous impacts of climate change.

Operational Support

To help client countries determine actions to meet their climate and development goals, the World Bank Group provides core analytics and analysis. One key diagnostic tool that integrates climate change and development is the Country Climate and Development Reports (CCDRs). The diagnostic assists countries in identifying and prioritizing the most effective resilience and adaptation actions, while reducing greenhouse gas emissions and delivering broad development outcomes. GWSP funding provided analytical and diagnostic support to 23 CCDRs in fiscal year (FY) 2024.

Analysis from the CCDRs considered the aggregate impact of water-related risks on growth and livelihoods. Some findings: In Argentina, annual losses in rainfed agriculture from water deficits or excesses are estimated at $2.1 billion (0.6 percent of gross domestic product, or GDP). In South Africa, drought in Cape Town in 2018 led to a loss of 20,000 jobs in agriculture, a decrease in numbers of tourists, and a direct economic impact of 3.4 percent of provincial GDP and 0.3 percent of national GDP. In Uzbekistan, a rising incidence of waterborne and heat-related illnesses could result in an increase in mortality of 0.6–1.2 percent by 2050.

GWSP supports technical expertise to help design World Bank projects so that all new lending for water sector investments align with the Bank's commitments under the Paris Agreement. In FY24, 68 percent of new World Bank lending commitments had climate change co-benefits, and 100 percent of projects had at least one climate-related indicator in their results framework. The projects' net reduction of greenhouse gas emissions in FY24 was −540,958.55 tCO_2eq. Some examples of GWSP technical assistance follow.

In FY24, **68 percent** of new World Bank Group lending commitments had climate change co-benefits, and 100 percent of projects had at least one climate-related indicator in their results framework.

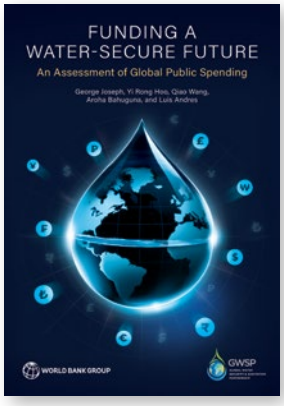
Burkina Faso. The Burkina Faso Water Security project aims to enhance the resilience to climate risks of 1 million people while securing 43 million cubic meters of surface water capacity to improve management of droughts, floods, or both. The Bank developed a multipronged set of activities, including fortifying dams vulnerable to floods, delivering more drought-resilient irrigation to farmers, installing climate early warning systems, and investing in restoration of vegetation cover to reduce erosion and runoff. Almost $70 million of the financing contributes to climate adaptation co-benefits, with an additional almost $14 million yielding mitigation co-benefits.

Cambodia. The core focus of the Water Supply and Sanitation Acceleration Project is building climate resilience. This resilience includes increasing access to piped water in water-scarce regions vulnerable to droughts and floods, as well as improving sanitation services in areas frequently impacted by climate extremes. Sixty-six percent of the project's lending commitments are aligned with climate co-benefits.

Senegal. The Integrated Water Security and Sanitation Project aims to improve access to sanitation services in priority water-scarce areas and to address water challenges through circular economy principles. It focuses on sustainable practices such as developing new water sources, restoring depleted or polluted ones, reusing treated wastewater for irrigation, and reducing water losses in the supply system. More than 90 percent of the financing ($183.22 million) is dedicated to climate co-benefits.

Knowledge Development

GWSP supports cutting-edge research on water issues and assists with knowledge generation by the World Bank Group's Global Department for Water. In FY24, the department published two flagship research publications related to water and economic issues. ***Water for Shared Prosperity*** highlights the disproportionate burden borne by the poor. They are the most exposed to water-related risks and the least able to adapt. They are more likely to depend on rainfed agriculture for livelihoods, to spend a high share of their income on food, and to have limited capacity to recover from shocks such as floods and droughts. ***Funding a Water-Secure Future: An Assessment of Global Public Spending*** is a global review of public expenditures in the water sector. It quantifies for the first time how much governments spend on water and the size of the financing and funding gaps that must close to meet people's needs.



Water and Social Inclusion

Environmental impacts threaten water security for many around the world, and they may be compounded by societal norms that are known to exclude people, further reducing water security. Some examples: In Latin America and the Caribbean, Indigenous communities face a 19 percent gap in access to piped water and a 25 percent gap in access to sanitation when compared with non-Indigenous populations. Worldwide, 15 percent of people live with a disability. Inability to independently access sanitation facilities places persons with disabilities at increased risk of sexual and financial exploitation. In Uganda, drought increases by 13 percent the amount of time that women and girls spend fetching water—an extra 1.9 hours a week—and raises the likelihood that they must pay user fees, which would worsen their existing financial and time burdens.[1]

To achieve a water-secure world for all, water must be equitably and sustainably shared. To enable World Bank Group project teams and client countries to effectively integrate social inclusion into water operations, GWSP supports technical assistance in the form of tools, training, capacity-building activities, and knowledge products. In FY24, GWSP supported a total of 52 projects and provided advice to 24 projects during their design stage.

Gender

In FY24, all 23 approved World Bank water projects conducted gender analysis and included gender actions that will be monitored during implementation. Of these 23 projects, 14 addressed voice and agency, 2 targeted gender-based violence, and 6 focused on

health.[2] In terms of employment, 12 projects included the creation of medium- and high-skilled job opportunities for women.

An annual portfolio review conducted as of FY24 provided valuable insights into implementation of social inclusion in the Bank's water portfolio. It found that 73 percent of projects (66 of 90) approved between FY17 and FY21 achieved their gender indicator in part or in full, a slight increase from 71 percent of projects in FY23. In FY 22, only 38 percent of projects showed progress toward achieving gender indicators.

The GWSP-funded *Women in Water Utilities: Breaking Barriers* report (2019) continued to influence World Bank Group operations. The report identified lack of quality childcare services as a key factor limiting women's participation in the water sector workforce. This finding has directly informed the Bank's engagement with water utilities, including in Latin America and the Caribbean, where the Bank was assessing childcare needs to identify inclusive solutions tailored to the local context for seven utilities in the Dominican Republic, Ecuador, El Salvador, and Peru. This ongoing impact exemplifies how GWSP's investment in inclusive project design has sparked a cycle of research, advocacy, and programmatic action, fostering gender diversity and inclusion in the water sector.

The Bank was increasing efforts to support water resources management institutions in becoming more diverse and participatory. These efforts included integrating GWSP-funded Equal Aqua knowledge resources and methodologies into World Bank Group lending operations and expanding knowledge about participatory approaches in water resilience (see box 2.1). The Equal Aqua Platform, established in 2019, offers tools, resources, and services to support gender equality efforts in water institutions around the world.

There was a growing focus on outcomes specific to women in World Bank Group projects that extend beyond broader water access. For example, in the Kyrgyz Republic, the Water Supply and Sanitation Universal Access Program was tracking the integration of trained female professionals into technical and decision-making roles, so that it could identify investments of significance to women. With this achievement, and other activities to increase the delivery of water supply, sanitation, and hygiene (WASH) services, the program aims for (usually lower-income) women to spend less time carrying water to their homes. The program includes surveys to assess the reduction of time required for off-site water collection.

BOX 2.1

Equal Aqua

In FY24, the Equal Aqua Platform made significant strides in promoting gender diversity and inclusion in water sector jobs. The Equal Aqua human resources survey was updated to include new questions for water resources management and irrigation-related institutions. For example, the East Africa Regional Climate Resilience Project in Mozambique worked on benchmarking gender diversity among employees and leadership in transboundary and national river basin agencies. Various water institutions completed 34 Equal Aqua surveys, providing insights into their performance on gender indicators and allowing for comparison with other institutions, both regionally and globally.

The Equal Aqua Platform provided support to 12 water projects in FY24, including extensive assistance for two projects in Tajikistan: the Strengthening Water and Irrigation Management Project and the Water Supply and Sanitation Investment Project. The support included analyzing gender-disaggregated human resources data for 17 institutions (national, river basin, local) and data on various workplace dimensions, as well as proposing solutions.

At the Equal Aqua Annual Forum in May 2024, some 200 participants from more than 30 countries addressed youth participation, social norms, and other topics.


Schneider
Electric

Citizen Engagement

In FY24, 19 of the 23 newly approved World Bank Group water projects included actions focused on civic engagement. The Bank's inclusion in water team developed a set of tools to operationalize a "whole of society engagement"—an inclusive approach that involves all segments of society in decision-making, implementation, and monitoring—in water resources management. GWSP funding supported work by Bank staff and consultants to develop and implement these tools. The tools have been applied in the East Africa Regional Climate Resilience Project and in the Türkiye Flood and Drought Management Project, and they have been included in the design of the Chile Water Transition Program.

With support from GWSP, the Bank's inclusion in water team provided technical advice to projects in Burkina Faso, Chile, and Nigeria to demonstrate ways to strengthen participatory governance, community engagement, and participation in river basin governance. As a result, these projects included an indicator for participatory water governance, which measures community participation and inclusive beneficiary engagement, signaling the importance of participatory governance in overall project success. The Chile Water Transition Project also included a target for female participation in jobs generated by public works contracts tendered by the Ministry of Public Works—jobs that will have an impact well beyond the project. Furthermore, the project included measures to track female participation in river basin working groups and to inform efforts to enhance women's voices in the process.

The number of disability-inclusive projects has increased exponentially. In FY24, **16 projects** considered persons living with disabilities as key stakeholders, and 4 projects conducted detailed analyses of disability inclusion.

Disability

The number of World Bank Group disability-inclusive projects (projects with actions that address the needs of persons living with disabilities) has increased exponentially in all regions since FY17. In FY24, 16 projects considered persons living with disabilities as key stakeholders, and 4 projects conducted detailed analyses of disability inclusion. Furthermore, 9 of the 12 projects with WASH components that identified disability as one of the main exclusion issues implemented specific actions to support persons living with disabilities.

For example, the Tanzania Sustainable Water Supply and Sanitation Program took steps to build more accessible infrastructure in schools and health care centers and to strengthen its collaboration with civil society. The project team and Bank's inclusion in water team partnered with WaterAid, UNICEF, and a local organization of persons with disabilities. In FY24, the groups organized a GWSP-supported workshop to strengthen the capacity of local governments in inclusive WASH infrastructure and services. The activity introduced accessibility and safety audits, which are participatory site visits that help identify opportunities to make infrastructure more accessible. As a result, program implementers encourage involving students with disabilities in design decisions, such as the location of handrails, ramps, and accessible handwashing facilities.

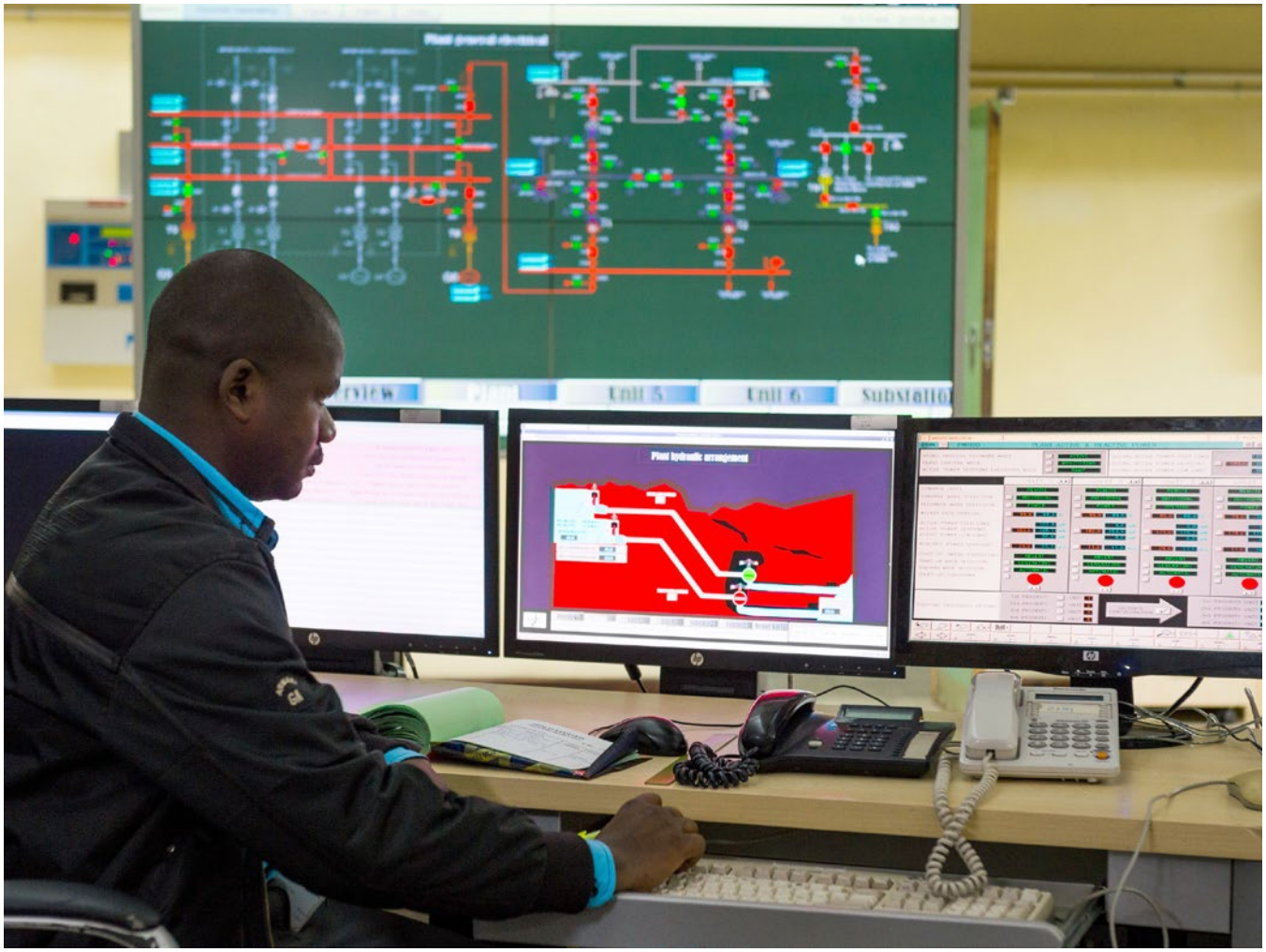
Water and Finance

Global levels of investment are inadequate to address water sector risks and achieve the Sustainable Development Goals (SDGs) by 2030. Annual spending in the water sector—encompassing the water supply and sanitation, irrigation, water transport, and hydropower subsectors—is estimated to be $164.6 billion in 2017 prices. To achieve the SDG targets for universal access to safely managed water supply and sanitation by 2030, countries must spend between $131.4 billion and $140.8 billion more—nearly triple their current levels of annual spending. Large, coordinated flows of public, concessional, and private capital are needed to compensate for decades of underinvestment in the water sector and to meet present and future challenges.

Crowding in new sources of finance to meet the SDGs in 2030 will require making public sector water service providers financially sustainable and creditworthy and bringing in private lenders and investors—not only to increase the total pool of financing, but also to transfer knowledge and broaden local financial markets.

In FY24, the Global Department for Water mobilized teams across the World Bank Group, including the International Finance Corporation and Multilateral Investment Guarantee Agency, to review its pipeline of projects and identify those with potential to attract private capital. The goal: combine measures that enable private capital (such as good governance in the water sector) to improve the sector's financial sustainability, with mobilization of private capital through tools such as blended finance, hybrid public-private partnerships (PPPs), and credit enhancement.

In Senegal, this approach led the World Bank Group to develop a joint implementation plan that will use various Bank instruments to support PPPs for wastewater treatment and reuse, desalination, and inter-basin water transfers as well as use capital expenditures for reducing nonrevenue water in phases. The outcome of the plan was an $800 million multiphase programmatic approach project—which allows for complex Bank engagements to be broken down into interconnected phases—to address water security in Senegal. The project was expected to leverage an additional $800 million in private capital.



To advance the finance agenda, the World Bank Group developed a key analytical tool in FY24, with support from GWSP: Water Sector Assessment Programs (WaterSAPs). These programs consider water operational and investment needs and funding gaps, propose reform and financing options to close the gaps, and identify binding constraints to scaling up finance for water investments and mobilizing private sector financing and expertise. GWSP funded three pilot WaterSAPs, in Bangladesh, Jordan, and Uzbekistan, that started in FY24 and were being finalized as of the end of the fiscal year. Another nine WaterSAPs were planned to start in FY25.

GWSP also supported technical assistance for 11 Global Department for Water engagements in 10 countries—the Arab Republic of Egypt, Bangladesh, Cambodia, Indonesia, Mozambique, Nepal, the Philippines, Tanzania, Uganda, and Zambia—with the aim of enabling water service providers to tap private sector participation, commercial finance, or both. Box 2.2 describes how such targeted support, paired with the Utility of the Future initiative, improved water utility performance in Pakistan.

Furthermore, under its new Scaling up Finance for Water strategic framework, launched in September 2023, the World Bank Group implemented various training programs to focus its operations on private sector participation. GWSP provided support for several of these programs, including the Water Utility Creditworthiness Course offered to clients in Ghana, Tanzania, and Zambia. GWSP also provided support for three events for World Bank staff: on the approaches and tools available to attract private financiers to the water sector; on corporate definitions, methodologies, and monitoring of private capital mobilization and private capital enabling; and on performance-based contracts for reducing nonrevenue water.

BOX 2.2

Improving Utility Performance and Creditworthiness in Karachi

Nearly 126 million people in Pakistan, about one-half of the population, lack safely managed water services, and 166 million, about three-quarters, lack safely managed sanitation services. Additionally, 36 million people lack basic hygiene services. In 2020, 61 percent of drinking water samples tested nationwide failed to meet national quality standards. Karachi, with more than 20 million inhabitants as of 2023, struggles to meet its rapidly growing water supply needs. Sindh Province, where Karachi is located, has the worst drinking water quality in the country, with 85 percent of samples failing to meet standards.

Water and sanitation utilities are crucial for providing safe drinking water and sanitation. As cities expand, utilities need innovative management approaches to ensure service quality, operational continuity, and sustainable business models. A partnership between the Government of Sindh, the Karachi Water & Sewerage Board (KWSB), and the World Bank, launched the Karachi Water and Sewerage Services Improvement Project (KWSSIP-1) to transform KWSB into a modern, efficient utility. The project aims to provide safely managed water and sanitation services, recover costs, and attract private finance.

GWSP's Utility of the Future initiative provided technical assistance to support the enabling environment, including utility reforms, starting with approval of the Karachi Water and Sewerage Corporation Act on June 8, 2023. The act converted KWSB into the Karachi Water and Sewerage Corporation (KWSC) and introduced core institutional reforms, including tariff-setting based on affordability and cost recovery. It included reforms for service delivery and financial viability, such as developing a private sector partnership strategy. GWSP support included a Utility Performance Improvement Assessment and training for KWSC staff. The training covered tariffs, human resources, institutional reforms, smart IT applications, enhanced revenue collections, reductions in nonrevenue water, and development of a manual with key performance indicators. KWSC now operates semi-autonomously and is improving its operational efficiency.

GWSP also supported efforts to mobilize private capital. A carbon financing initiative for KWSC aims to reduce greenhouse gas emissions through the Second Karachi Water and Sewerage Services Improvement Project (KWSSIP-2), expected to be approved in FY25. The project will develop rules and regulations to streamline operations, further strengthening the utility's autonomy, transparency, and efficiency. The reduction in emissions would earn carbon credits under the Transformative Carbon Asset Facility. Furthermore, KWSSIP-2 has identified $269 million from private financiers for wastewater and water treatment plants, including service improvements in adjoining informal settlements, to be mobilized during implementation of the project.

Sanitation

Despite progress over the last two decades, about 40 percent of the world's population (3.5 billion people) lack access to safely managed sanitation services, with rural areas disproportionately affected. Furthermore, despite 2.4 billion people gaining access to improved toilets or latrines between 2000 and 2020, nearly 8 percent of the global population still practices open defecation. World Health Organization/UNICEF data show that two-thirds of those without basic sanitation live in rural areas. As urbanization accelerates, cities and towns increasingly will face sanitation challenges.

Progress in sanitation access is insufficient to meet the Sustainable Development Goal, and in fact, some regions are regressing. The situation is exacerbated by climate change impacts. Improved sanitation significantly benefits human health, education, economic growth, social equity, and environmental sustainability. It reduces disease, improves nutrition, increases school attendance for girls, and enhances living environments and economic opportunities. Therefore, GWSP places an extra emphasis on boosting access to sanitation, given that both significant investments

and political prioritization are required for the sector.

In rural settings, the Partnership supports the World Bank's collaboration with UNICEF, WaterAid, the Sanitation Learning Hub, and USAID that aims for equitable, sustainable sanitation at scale and informs rural program designs and implementation. This initiative emphasizes government leadership, stakeholder alignment, area-wide programming, and adaptive implementation. In urban settings, GWSP promotes the Citywide Inclusive Sanitation (CWIS) approach to ensure that everyone has access to safely managed sanitation through tailored solutions. CWIS focuses on service provision and enabling environments, rather than on only providing infrastructure. Some examples of GWSP support to increase access to sanitation in rural and urban settings follow.

Indonesia

Since FY23, GWSP has helped strengthen the capacity of government institutions to design a sanitation project that was set to become the country's first World Bank-financed investment with an exclusive focus on urban sanitation. The $183.45 million Citywide Inclusive Sanitation Services Project, scheduled to be approved in FY25, would aim to provide wastewater treatment services for 2.3 million people and access to safely managed sanitation services for 1.8 million people by 2030.

In FY24, GWSP's support for this proposed project included the preparation and delivery of a technical deep-dive workshop for different levels of government officials, plus city sanitation operators and local consultants, on incorporating climate resilience and greenhouse gas emission reduction into the design and operation of wastewater and septage management.

The Bank coordinated these efforts with projects by Australia's Department of Foreign Affairs and Trade and the U.S. Agency for International Development.

Kenya

The World Bank's $330 million Water and Sanitation Development Project aims to improve water supply and sanitation services in select coastal and northeastern regions of the country and to improve the financial performance of water service providers affected by the COVID-19 pandemic, directly benefitting nearly 2 million people. The sanitation component involves building some of the country's first publicly owned fecal waste treatment plants. Additionally, the project supports the exploration of market-based models and PPP options for non-sewered sanitation systems, with a focus on providing technical support to inform the design of sanitation activities in Malindi County.

In FY22, GWSP's support contributed to a report about options for non-sewered sanitation and consideration of PPPs for operating and maintaining government-owned fecal waste treatment plants. Additionally, GWSP provided technical assistance in FY24 on results-based contracting for household on-site

The World Bank's $700 million Nigeria SURWASH Program aims to provide more than **6 million people** with basic drinking water and 1.4 million people with access to improved sanitation by 2030.

sanitation systems and on franchising for emptying and transportation services. This assistance informed strategies to strengthen the institutional environment for improved service delivery and sustainable infrastructure management.

Bangladesh

The World Bank's $194.5 million Bangladesh Municipal Water Supply and Sanitation Project has provided improved sanitation to more than 645,000 people (out of a target of 680,000 people by December 2024), including 67,221 people in 30 municipalities who have gained access to safely managed sanitation. Since FY21, GWSP support has helped build institutional capacity for service delivery, improved the financial viability of water institutions, and enhanced water institutions' ability to leverage private finance.

On the private sector front, GWSP-funded technical assistance in FY24 supported the use of contractors to help selected municipalities sustainably provide fecal sludge management services that cover the full value chain of sanitation. GWSP's assistance helped the Department of Public Health Engineering finalize the design of small-scale, simplified fecal sludge treatment systems and prepare an engagement model for the private contractors, including defining their scope of service and contract conditions. Furthermore, GWSP and the Gates Foundation jointly supported the evaluation of technical options, such as integrated waste management facilities, to improve fecal sludge treatment in selected municipalities.

Nigeria

The World Bank's $700 million Nigeria Sustainable Urban and Rural Water Supply, Sanitation, and Hygiene (SURWASH) Program aims to provide more than 6 million people (4 million in rural areas) with basic drinking water and 1.4 million people (more than 1 million in rural areas) with access to improved sanitation by 2030. Since FY21, GWSP has supported the design and implementation of the program's inclusive sanitation approach for all local government areas, covering urban and rural areas as well as small towns. In FY24, GWSP supported the delivery of peer-to-peer learning events, technical advice to strengthen the monitoring and evaluation systems under the program, the review of water sector strategies, and revision of performance improvement action plans in seven states. GWSP support has informed policies, strategies, and regulatory frameworks to strengthen the institutional environment and enhance water institutions' capacity to improve their delivery of water and sanitation services.

Notes

1. Akito Kamei, "Who Walks for Water? Water Consumption and Labor Supply Response to Rainfall Scarcity in Uganda," *Social Science Research Network Electronic Journal*, doi: 10.2139/ssrn.3396192.
2. While World Bank Group-supported projects are screened for gender-based violence risks and include actions to address them, the two projects targeting gender-based violence go beyond a risk mitigation approach.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Knowledge Into Action

Water Resources Management

Water security is a major—and growing—challenge for many countries today. The global population is quickly growing, and estimates indicate that the world likely will face a 40 percent shortfall between forecast demand and available supply of water by 2030. Prolonged water scarcity, hydrological uncertainty, and extreme weather events such as floods and droughts are considered some of the biggest threats to global prosperity and stability. Sustainable Development Goal (SDG) 6 indicators show that countries have made important efforts to tackle climate change and reduce disaster risk at basin levels, but critical additional work is needed. Only 14 percent of basins have adopted a joint climate change adaptation strategy, 20 percent have adopted a joint disaster risk reduction strategy, and 30 percent have developed alarm systems for droughts.

The World Bank Group's water resources management initiatives aim to sustainably develop and manage these resources. These efforts focus on reducing hydroclimatic risks, particularly from floods and droughts; increasing capacity to manage more variable water flows; and improving sustainable water management at local, national, and transboundary basin levels. Key activities include supporting institutional frameworks, information systems, and management measures to ensure that water can be used to fuel development in the near and long terms, rather than serving as a source of conflict and a loss of livelihood or wealth. Specific areas of focus are dam safety, sediment management, groundwater management, nature-based solutions, and systems planning. GWSP supports these efforts by funding critical upstream analytical work that informs these activities.

For example, in Europe and Central Asia, GWSP's work in FY24 included facilitating a new agile approach to water security diagnostics that resulted in a comprehensive and easily digestible water security narrative that is useful for internal and external audiences. Additionally, GWSP support allowed the Bank to provide capacity building for teams and clients, and to bring in outside technical expertise on topics such as nature-based solutions, to ensure that these solutions are part of water investment projects globally. To help improve sedimentation management, GWSP supported Bank efforts to promote assessment and mitigation of sediment in reservoirs and dams in the Central Asia region.

An Agile Approach to Assessing Water Security in Europe and Central Asia

Challenge

Europe and Central Asia face varying degrees of water security and a diversity of water-related challenges. Some similar challenges are of different magnitudes, given the different geographical, cultural, economic, and political characteristics of each country.

World Bank client countries in the region needed an agile diagnostic process to assess water security, both in their countries and regionwide.

Approach

To meet this need, the World Bank partnered with the International Institute for Applied Systems Analysis to develop a cost-effective and rapid water security diagnostic methodology, with funding from GWSP and the Danube Water Program. The resulting methodology gathers and analyzes existing data and ensures that a single assessment captures the intersections of all water subsectors and climate change impacts.

The output is a comprehensive and easily digestible water security narrative that is useful for internal and external decision-makers, practitioners, and stakeholders. The narratives include recommendations to strengthen water security, investments that could be effective, and potential steps that could advance a country's water security agenda and influence the next cycle of support and interventions.

Using this methodology, the World Bank completed, with GWSP and Danube Water Program support, the following deliverables in FY24:

- Europe and Central Asia regional water security report and Danube Region report
- Five deep-dive water security reports (for Albania, Bosnia and Herzegovina, Croatia, Montenegro, and Serbia)
- Eight general country water security assessments (for Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan)
- A database hosted on the World Bank Water Data portal, containing all information collected through the initiative

In the five countries that underwent a deep-dive analysis, the Bank consulted with government officials to ensure that the data collected accurately reflected the country's water security status, and with stakeholders from various subsectors to plan actions based on the results of the analysis. The Europe and Central Asia water team expected to use the country water security assessments for a variety of purposes: as the basis for further analysis in specific areas, for instance in areas with severe and prolonged droughts in the context of climate change; as a starting point for actions that could strengthen water security; and as a tool

Europe and Central Asia

RESULTS INDICATORS

BLOCK A

Sustainability: Water-related institutions supported to sustain water resources, built infrastructure assets, or both

Resilience: Diagnostics conducted or implementation undertaken to promote principles of freshwater-resilience building

Institutions: Policies/strategies/regulatory frameworks informed to strengthen the institutional environment for improved water resources management, improved water service delivery, or both

for engagement with government officials and other stakeholders. Water security actions include enhancing water sector monitoring and data management for informed decision-making; investing in improved water services infrastructure to increase climate resilience; and fostering transboundary cooperation in shared river basins.

Additionality

The effort to design and implement diagnostics for Europe and Central Asia provided a foundation for the Water Security Diagnostic 2.0 work that the World Bank Group planned to undertake globally in FY25. On a regional level, the rapid water security diagnostic processes allowed for the Europe and Central Asia water team to conduct dialogues at the country level, which raised awareness about the needs to sustainably manage water resources and to expand infrastructure, particularly for wastewater, across several countries.

In **Albania**, the stakeholder discussions highlighted the following issues: (1) it was necessary to improve dam safety and to manage dam sedimentation, (2) planning instruments had been prepared but not implemented, and (3) a lack of access to safely managed sanitation had a significant impact on overall development. These realizations prompted the Government of Albania to take the following actions:

- Request technical assistance from the World Bank to develop an investment strategy for the Ishem River Basin Management Plan.
- Establish a partnership with Switzerland's State Secretariat for Economic Affairs, SECO, to develop a sanitation roadmap for Tirana, the capital city.
- Request and secure grants from the European Union to work on dam safety (including dam sedimentation) and to develop sanitation master plans for the entire country, following the Citywide Inclusive Sanitation approach.

In **Montenegro**, the assessment and stakeholder discussions uncovered significant challenges related to sustainable sediment management that were affecting coastal water supply. Additionally, the tourism sector, a key pillar of the country's economy, was threatened by these challenges. Follow-up technical assistance led to creation of an action plan and identification of necessary investments. These priorities were incorporated into the newly established Montenegro–World Bank Group Country Partnership Framework.

In **Serbia**, national-level dialogue fostered local ownership of the assessment and concluded with stakeholders prioritizing issues to improve water security in the country. National stakeholders engaged the Government of Serbia in discussions, which led to planning for a future water supply and sanitation project.

Integrating Nature-Based Solutions in Projects to Improve Water Security and Climate Resilience Globally

Challenge

An estimated $200 billion to $600 billion in annual investment in water supply and sanitation services, flood protection, and irrigation is needed to meet the Sustainable Development Goals by 2030. Using only "gray" systems would result in figures at the higher end of this spectrum, whereas exploring natural "green" solutions could increase efficiency by optimizing the multiple co-benefits. Green infrastructure also could help improve water security, increase the availability and quality of water, and reduce the risks of floods and droughts.

As climate change intensifies and water balances change, countries face increasingly complex challenges related to water services. Nature-based solutions (NBS) for climate resilience, such as reforestation, protection of mangroves, and creation of urban green spaces and inland wetlands, offer opportunities to address these challenges in a more efficient manner, while also sustaining biodiversity and reducing the net emission of carbon dioxide.

Approach

The World Bank committed financing estimated at more than $10 billion to NBS between 2013 and 2023 for increasing climate resilience in its projects.

The Bank's Global Program on Nature-Based Solutions for Climate Resilience is a cross-sectoral effort to increase investments in its portfolio of solutions that integrate and strengthen natural systems. This effort involves multiple Bank departments: Environment, Water, and Urban Resilience, and Land. The program aims to lead a shift away from conventional—often gray-infrastructure—approaches for addressing climate resilience by providing operational support, creating targeted knowledge and tools, and forging strategic partnerships. The program assists with the development and transfer of knowledge on NBS both within and outside the Bank. Financing comes from the Global Facility for Disaster Reduction and Recovery, the Global Environment Facility, and GWSP.

The emphasis on the climate co-benefits of NBS creates an opportunity for the Global Department for Water to actively integrate green and gray infrastructure in its projects to provide adaptation and mitigation. Estimates suggest that NBS can provide 37 percent of the mitigation needed through 2030 to achieve the targets of the Paris Agreement. In FY24, the Water Department prepared guidelines for World Bank teams to assess the benefits and costs of NBS for climate resilience

Global

RESULTS INDICATORS

BLOCK A

Sustainability: Water-related institutions supported to sustain water resources, built infrastructure assets, or both; sustainability-focused knowledge products generated

Resilience: Diagnostics conducted or implementation undertaken to promote principles of freshwater-resilience building; resilience-focused knowledge products generated

Institutions: Policies/strategies/regulatory frameworks informed to strengthen the institutional environment for improved water resources management, improved water service delivery, or both

BLOCK B

Resilience: Percent of projects incorporating resilience in design of water-related initiatives; percent of new World Bank lending commitments with climate change co-benefits

Water Security and Integrated Water Resources Management: People in areas covered by water-risk mitigation measures (flooding/drought)

when developing projects. The goal was to make these guidelines available publicly in FY25.

In addition to environmental benefits, NBS can have significant economic benefits. For example, an analysis of solutions for a deteriorated and clogged primary stormwater drainage channel in San Salvador de Jujuy, Argentina, showed that NBS and hybrid gray/green options could generate between $940,000 and $3.7 million in net benefits for residents, businesses, and the city. In comparison, a gray-only solution would not result in a positive net benefit, according to the analysis conducted by the World Bank task team in collaboration with the International Institute for Sustainable Development.

Additionality

In FY24, GWSP supported country-level water institutions in using NBS to build resilience in water resources management or service delivery. These efforts included preparing fact sheets and knowledge products about NBS and providing training to integrate green infrastructure in water projects.

On the training front, GWSP, along with the Global Facility for Disaster Reduction and Recovery, supported a four-day NBS technical deep dive in Austria for delegations from six countries in Central Asia and the Caucasus. Participants explored the disaster and climate hazards facing their region, visited sites in Tirol to see the implementation of protective forests and other NBS, and shared their vision on plans to implement NBS. The Austrian Federal Ministry of Finance and the Swiss Agency for Development and Cooperation provided guidance and financial support, and the Austrian Research Centre for Forests and the Austrian Federal Service for Torrent and Avalanche Control provided technical contributions.

In some instances, GWSP support led Bank teams to integrate NBS solutions in projects. Three of these solutions stemmed from a GWSP-supported three-day virtual training course, in January–February 2024, conducted by The Nature Conservancy and hosted by the World Bank. Participants included Bank task teams and their clients from six countries, in addition to representatives of the International Finance Corporation and several water companies.

Fiji Blue Prosperity Project. In Fiji, the NBS training helped a Bank team design a proposed project to improve water quality in selected watersheds through riparian restoration, improved agricultural practices, buffer vegetation, and built wetlands for wastewater treatment. If approved, the upstream integrated watershed interventions would promote climate change resilience and adaptation in coastal and marine ecosystems. The interventions would be part of a project financed by the International Development Association, the Global Environment Facility, and the Climate Investment Funds' Nature, People, and Climate Programme, and they would be implemented in a collaboration with the Asian Development Bank. Once approved, the proposed project would aim to enhance the resilience to climate risks of 80,000 people and would contribute to the conservation and management of 400,000 hectares of terrestrial and aquatic areas.

Linear Park in Argentina. In Argentina, the NBS training provided an additional push for a green infrastructure subcomponent in the $200 million Climate Resilient Infrastructure for Urban Flood Risk Management Project. This subcomponent includes the creation of a linear park alongside a stream to reduce flood risks in a town in Misiones Province. At the end of FY24, the park was being designed with inputs from The Nature Conservancy. The project aims to reduce the exposure of 123,000 people to floods and to help 10 cities adopt, by 2029, improved and integrated practices for managing flood risks.

Interministerial Capacity for NBS Implementation in Chile. Government officials in Chile said the NBS training helped advance the formation of an interministerial working group on NBS. Three participants in the training became part of the working group. Additionally, as a follow-up to the training, The Nature Conservancy helped review and fine-tune the terms of reference for a consultant to identify regulatory, economic, and structural gaps that hinder the integration of NBS into Chile's hydraulic infrastructure portfolio and to propose private and public-private financing mechanisms to implement NBS for water security.

Focusing on Sedimentation in Central Asia's Reservoirs and Dams

Context

With a growing economy and population, Central Asian countries increasingly face competition for water. This competition is particularly evident in irrigation, which absorbs 90 percent of freshwater withdrawals. The transboundary links are significant in the region's south, where most river runoff originates in the highlands of Tajikistan and the Kyrgyz Republic, while the bulk of water withdrawals occur in the irrigated plains of Uzbekistan, Turkmenistan, and southern Kazakhstan.

Worsening the degree of water competition is the accumulation of silt in canals and reservoirs that causes loss of useful water storage capacity. Furthermore, sedimentation can cause dam breaches, which unleashes flooding.

The five Central Asian countries collectively have more than 300 dams with associated reservoirs of different sizes, mostly built 50–60 years ago, that have lost storage capacity due to sedimentation. Best international practice is to conduct bathymetric surveys of reservoirs every 5–10 years, but these high-cost

surveys haven't been done for most Central Asia reservoirs for almost 30 years. As a result, the true capacity of water storage is unknown, making it difficult to plan withdrawals.

The integrity of the dams also is affected by sedimentation. If the dams broke, 15 million to 20 million people could be affected in a region of about 70 million people.

Approach

To address these interrelated issues in Central Asia, the World Bank promotes measuring and mitigating sedimentation in reservoirs and dams and modernizing dams by installing early warning systems. With an accurate measurement of water stored, countries can calculate factors such as how many hectares they can irrigate, how much water they use for hydropower, and how much water they can dedicate to lucrative recreation purposes.

The World Bank's model, RESCON (REServoir CONservation), presents the most advanced economic and engineering evaluation of alternative sediment management strategies. The Bank recommends a variety of methods, from planting trees upstream to decrease erosion, to dredging, to using robots that place pipes underwater to suck out mud.

These strategies were the subject of a two-day technical workshop on integrated sediment management and dam safety for 40 water experts from the five Central Asian countries. The World Bank and the Ministry of Water Resources of the Republic of Uzbekistan organized the workshop in Tashkent in April 2024, with support from GWSP and the Austrian Government.

Additionality

In preparation for the workshop, GWSP supported technical assistance for use of the RESCON model. During the training, the World Bank emphasized that dam safety is an important aspect of sedimentation management. Most attendees were government employees specializing in dam safety and reservoir management at ministries of water, emergency management, and hydrometeorology. The training resulted in five water-related institutions being supported to build resilience in water resources management.

Following the workshop, the Government of Kyrgyz Republic engaged the World Bank in a technical dialogue on cleaning up existing reservoirs and constructing new small reservoirs with daily controllable water storage. This discussion was ongoing at the end of FY24, highlighting the region's need for further support for water storage solutions and climate resilience.

Building on this work, the World Bank was using remote sensing to create a database on dams in the Aral Sea basin and to estimate the number of people who would be affected by a dam failure. Additionally, a study was deploying the RESCON model to assess economic impacts due to sedimentation in Central Asia's reservoirs. At the GWSP-funded sedimentation workshop, government attendees verified the data from each of their own countries for the economic impacts study, further increasing a shared understanding of basin challenges. An earlier sedimentation study funded by GWSP would provide inputs. These follow-up studies were funded by the Central Asia Water & Energy Program, which is a partnership of the World Bank, the European Union, Switzerland (through SECO), and the United Kingdom.

Central Asia

RESULTS INDICATORS

BLOCK A

Sustainability: Water-related institutions supported to sustain water resources, built infrastructure assets, or both; tools and monitoring systems supported to strengthen sustainable management of water resources at the national, basin, and aquifer levels; built infrastructure assets; or both

Resilience: Water-related institutions supported to build resilience in water resources management or service delivery

Climate-Resilient Irrigation

With a business-as-usual scenario, food demand is expected to increase as much as 56 percent by 2050 when compared with 2010. Currently, about 80 percent of food consumed in the developing world is produced by 500 million small farms worldwide, most of which are rainfed croplands. Notably, irrigation covers only 22.7 percent of the arable land, and irrigated agriculture is three times more productive, with a gross value of 55 percent of global agricultural output. Meanwhile, rainfed agricultural production is threatened by the intensifying effects of climate change, which create both droughts and floods. Around 66 percent of the global population lives in a water basin that experiences water stress for at least part of the year.

In this context, climate-resilient irrigation (CRI) is a fundamental component of managing water for agriculture. About 35 percent of water-stressed rainfed croplands are suitable for sustainable irrigation, and about 1.4 billion more people could be fed if rainfed croplands were converted to sustainable irrigation, under both current and 3° Celsius warmer climate conditions—provided that adequate water resources management policies are in place. Sustainable irrigation that increases agricultural productivity is a prime source of economic growth, rising incomes and employment, and poverty reduction.

The World Bank Group's Global Department for Water has a range of strategies to support climate change adaptation: improved management of water stored in the soil (known as green water), irrigation innovation and modernization, farmer-led irrigation development, water accounting, and irrigation governance and service delivery. Beyond adaption, the Water Department also supports climate change mitigation through its work on water-saving and low-methane rice cultivation. At the World Water Forum in Indonesia, the Water Department highlighted successful low-methane rice initiatives in Bangladesh, China, India, Indonesia, the Philippines, and the Socialist Republic of Viet Nam. These initiatives have led to increased farmer profits, optimized yields, and better returns through carbon credits, while reducing greenhouse gas emissions and water use.

GWSP-funded knowledge and technical assistance supported various World Bank Group CRI projects in FY24. In Nigeria, a water management and irrigation infrastructure project will help increase food production. In India, GWSP funds supported training for India's water resources ministry and state government staff to use two analytical remote sensing tools: one to assess which irrigation schemes are functioning and one to assess irrigation performance. In Indonesia, where GWSP funded research for a Bank project that improved irrigation service and promoted climate-smart agriculture practices, farmers' incomes have increased by 25 percent.

Boosting Food Security Through Improved Irrigation and Sediment Management in Nigeria

Challenge

Agriculture contributes an estimated 25.58 percent to Nigeria's gross domestic product (GDP) and employs more than 60 percent of the workforce. Despite the urgent need to increase food production for the growing population of Africa's most populous country, only 20 percent of suitable land is farmed. The effects of climate change have reduced the reliability of rainfall, making agriculture more dependent on irrigation.

Of Nigeria's 38 million hectares under cultivation, only 0.2 million hectares are irrigated. To increase food security, raise farmer incomes, and reduce poverty, the government aims to have 0.5 million hectares of land under irrigation by 2030. However, dams, reservoirs, and irrigation canals in Nigeria require rehabilitation and upgrades. Of the country's 400 dams, many are either incomplete or require rehabilitation. Because of sedimentation, reservoirs have lost capacity. Irrigation canals are not adequately maintained, leading to inefficient water distribution for irrigation. This situation is due, in part, to dam management institutions'

inadequate budgets, human resources, and capacity to ensure adequate water infrastructure, management, operations, and maintenance.

Approach

The Federal Government of Nigeria, with financing from the World Bank, launched the Transforming Irrigation Management in Nigeria (TRIMING) Project in northern Nigeria in 2014—the Bank's first intervention in the water management and irrigation sector in that country. The project's comprehensive approach includes investment in both institutional capacity building and infrastructure rehabilitation.

The project aims to repair five existing irrigation and drainage systems on 30,000 hectares and to bring new irrigation to an additional 7,600 hectares while attracting private sector investment. This project has made tremendous progress in improving large-scale public irrigation, boosting food production, and driving economic growth in rural areas. As of the end of FY24, 33,005 hectares had been fully rehabilitated (exceeding the target), and the vast majority of the hectares had been turned over to farmers to operate and manage. The project's new or improved irrigation and drainage services have more than 1.12 million direct beneficiaries, of whom 47 percent are women.

For one TRIMING effort aimed at ensuring long-term food security through improved water management at the Ruwan Kanya Reservoir in Kano State, GWSP funding supported training for water sector managers in sediment management and dam safety. In FY24, the trainees included senior officials responsible for Nigeria's water policy in river basins. Tailored courses helped these officials understand, prioritize, and plan for dam safety and maintenance. The training, organized by the Universitat Fur Bodenkultur Wien,

Nigeria

RESULTS INDICATORS

BLOCK A

Inclusion: Policies/strategies generated or refined to enhance social inclusion of women in accessing jobs, markets, services, or decision-making roles in water resources/water supply and sanitation or other water-related service delivery

Sustainability: Water-related institutions supported to sustain water resources, built infrastructure assets, or both; tools and monitoring systems supported to strengthen sustainable management of water resources at the national, basin, and aquifer levels; built infrastructure assets; or both

Resilience: Water-related institutions supported to build resilience in water resources management or service delivery

BLOCK B

Sustainability: Percent of new projects that promote sustainable and efficient water use

Resilience: Percent of projects incorporating resilience in design of water-related initiatives

Climate-Resilient Irrigation: Area with new/improved irrigation services (million hectares)

Water Security and Integrated Water Resources Management: Water user associations created/strengthened

covered basic principles for setting up sediment monitoring plans.

Additionality

The training inspired participants to work toward establishing a national program for sediment management in Nigeria, with the goal of rehabilitating infrastructure. To advance this goal, GWSP supported a World Bank mission in January–February 2024 to the National Water Resources Institute (NWRI), which trains Nigerian government water professionals, to discuss sedimentation issues in reservoirs and to develop a roadmap for addressing challenges. Additionally, GWSP supported a preliminary assessment of NWRI's capacity to become a center of excellence for hydraulic engineering and sediment management in West Africa.

Regarding infrastructure, GWSP helped the Ministry of Water Resources identify which dams should be upgraded first. The analysis was expected to be finalized by the end of 2024. More generally, GWSP support strengthened the professionalism of the staff of Nigeria's Ministry of Water Resources, which handles all irrigation and dam safety issues. Consequently, these officials can provide better training to water industry managers, including dam managers at the national and regional levels.

Regarding agricultural productivity, TRIMING has increased agricultural production by a substantial 300,000 tons annually—enough food to feed approximately 700,000 people—in project areas. This achievement underscores the project's significant contribution to enhancing rural livelihoods and improving food security.

TRIMING activities contributed to the design of the World Bank's Sustainable Power and Irrigation in Nigeria project, which will provide future support for sediment management activities. The TRIMING Project was scheduled to end in January 2025.

Employing Remote Sensing to Assess Irrigation Performance in India

Challenge

Water demand in India is projected to double by 2050 because of population and economic growth. This increased demand will place pressure on agriculture, which accounts for 90 percent of water use. The sector employs 50 percent of the labor force and is critical to the socioeconomic fabric of the country.

Despite an abundance of water resources at the national level, less than half of India's cropland of 140 million hectares has access to irrigation. National programs such as the Prime Minister's Irrigation Scheme, which aims to ensure irrigation water supply to every field, are constrained by overexploitation of groundwater, limited water availability in surface storage, and growing demand for reallocation of agricultural water to other priority sectors.

Furthermore, an estimated 68 percent of India is drought-prone and 12 percent is affected by floods—problems that climate change will exacerbate. Drought preparedness is weakened by a lack of information that integrates both meteorological forecasts and assessments of water availability.

Addressing India's water resources challenges requires an integrated approach that considers all water uses and all water sources on the level of hydrologic/river basins. This information must be coupled with appropriate tools for analysis and decision-making.

Approach

In the dry western section of India's West Bengal state, farmers in five districts face challenges in accessing both surface water and groundwater. Only 37 percent of the cropland in the five districts has access to irrigation. To assess the situation, the World Bank, with support from GWSP, worked with India's water resources ministry (Ministry of Jal Shakti) to develop two tailored analytical tools that use high-resolution optical and

cloud-penetrating active microwave remote sensing.

One tool assesses which irrigation schemes are functioning. It can determine the types of crops grown and number of harvests per season on individual fields, and it can monitor the construction of new ponds to hold water. Farmers can use the tool to track their production and compare it with past production, and the government can use it to design new irrigation schemes. The technology can be employed by anybody with a smartphone and is scalable.

The other tool assesses irrigation performance—specifically, reliability (whether water arrives when needed), equity (whether everyone has access to water), and uniformity (whether water arrives at different endpoints at the same pace).

The World Bank made the state-of-the-art tools available to various users and institutions through Google Earth Engine applications and on state and national platforms' online geographic information systems.

Additionality

A complementary World Bank effort in India, the National Hydrology Project, aims to improve the extent, quality, and accessibility of water resources information and to strengthen the capacity of targeted water resources management institutions. This project serves as a platform to introduce the remote sensing initiative.

In FY24, GWSP funds supported training by experts in the new Google Earth Engine apps for 60 officials from the Ministry of Jal Shakti and for 40 water user association field workers who visit farmers. The training varied from virtual workshops offered by international consultants, to informal in-person sessions with small numbers of high-level officials, to in-the-field sessions with water user associations. This training was expected to persuade farmers to adopt improved technology and to strengthen water user associations.

Additionally, GWSP funding helped the World Bank develop a preliminary remote sensing-based scorecard to assess irrigation system efficiency and to inform water resources management at the scale of selected "command" areas (areas served by each irrigation scheme) across India. GWSP supported Bank consultations with relevant national and state agencies regarding the scorecard. The scorecard and related consultations were expected to result in new and improved irrigation services in the selected command areas.

The World Bank used these analytical tools to inform implementation of other World Bank-funded projects in India, including the National Hydrology Project, the Odisha Integrated Irrigation Project for Climate Resilient Agriculture, the West Bengal Accelerated Development of Minor Irrigation Project—Phase II, and state-run operations/schemes.

India

RESULTS INDICATORS

BLOCK A

Sustainability: Water-related institutions supported to sustain water resources, built infrastructure assets, or both; tools and monitoring systems supported to strengthen sustainable management of water resources at the national, basin, and aquifer levels; built infrastructure assets; or both

Resilience: Water-related institutions supported to build resilience in water resources management or service delivery

BLOCK B

Sustainability: Percent of new projects that promote sustainable and efficient water use

Resilience: Percent of projects incorporating resilience in design of water-related initiatives

Advancing Irrigation Service Delivery and Climate-Smart Agriculture in Indonesia

Challenge

Indonesia is highly vulnerable to climate change, with potential GDP losses of 1.24 percent by 2030, escalating to 6.97 percent by the 2060s, under a scenario of a 3°C temperature rise. The poorest populations often reside in areas prone to water-related disasters. Agriculture, which uses 80 percent of the country's water resources, is critical to the economy. The country is the fourth-largest rice producer globally; however, 35 percent of rice production occurs in river basins with severe water stress, and nearly half of the irrigation systems are in poor condition. Without intervention, climate change could reduce agricultural productivity by almost 18 percent by the 2080s. Additionally, Indonesia is among the top emitters of methane from rice cultivation. In Southeast Asia, rice farming contributes 25 percent to 33 percent of the region's methane emissions. In Indonesia, the agriculture sector accounts for 59 percent of national emissions, with rice fields contributing 19 percent of global methane emissions. Major contributors include irrigation and fertilizer use. Therefore, modernizing irrigation services is essential to adapt to climate risks and enhance farmers' income.

Approach

To address this need, the Government of Indonesia and the World Bank launched, in 2018, the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP), which aims to improve irrigation services, enhance water use efficiency, modernize infrastructure, and boost agricultural productivity and farmers' incomes. As of the end of FY24, it had rehabilitated more than 250,000 hectares of irrigation and drainage systems, benefiting nearly 860,000 farmers across 10 provinces.

In support of this project, GWSP funded research, in FY23, for Indonesia's Ministry of Public Works and Housing that analyzed global experiences with service agreements between irrigation service providers and water user associations. Based on this research, the ministry began requiring these agreements for the government-owned entities that manage the provision of irrigation services: river basin organizations and enterprises that operate dams. The goal was to improve the quality, accountability, and dependability of irrigation services. In addition, the new requirement strengthens the financial sustainability of Indonesia's irrigation service providers and makes them more climate-resilient.

In FY24, GWSP supported efforts by the Ministry of Public Works and Housing to promote irrigation service agreements and monitor their implementation in the field. As of the end of FY24, 13 agreements had been signed and were being implemented.

Additionality

The combined effect of GWSP's support for the Ministry of Public Works and Housing was to strengthen

its capacity to manage water resources and irrigation service delivery.

Meanwhile, SIMURP has led to increased productivity, with climate-smart agriculture practices scaled up across 10 Indonesian provinces, resulting in an average yield increase of 6.02 tons to 7.44 tons per hectare. Farmers using alternate wetting and drying methods reported water savings of 12 percent, and climate-smart agriculture practices reduced greenhouse gas emissions by 35 percent. Farmers' incomes increased by 25 percent, enabling investments in education and other opportunities.

Furthermore, the project promoted gender inclusion, with 80 percent female participation in water user associations and successful agribusiness development by women farmers' groups in the 10 provinces. These efforts have improved gender equity and strengthened the resilience of farming communities.

Indonesia

RESULTS INDICATORS

BLOCK A

Inclusion: Policies/strategies generated or refined to enhance social inclusion of women in accessing jobs, markets, services, or decision-making roles in water resources/water supply and sanitation or other water-related service delivery

Sustainability: Water-related institutions supported to sustain water resources, built infrastructure assets, or both

Resilience: Water-related institutions supported to build resilience in water resources management or service delivery

BLOCK B

Sustainability: Percent of new projects that promote sustainable and efficient water use

Resilience: Percent of projects incorporating resilience in design of water-related initiatives

Climate-Resilient Irrigation: Area with new/improved irrigation services (million hectares)

Water Security and Integrated Water Resources Management: Water user associations created/strengthened

Water Supply and Sanitation

Water is a critical source of prosperity, yet the world is not on track to achieve Sustainable Development Goal 6 by 2030. Investment in clean water and sanitation can prevent deaths and transform lives. In the early stages of life, access to water resources and water services can have long-lasting positive effects. Healthier children become healthier adults who tend to grow more prosperous, as demonstrated in the World Bank Group's *Water for Shared Prosperity* report. Utilities are one key to achieving universal access to water and sanitation services, and resilience and adaptation measures are necessary given that 9 of 10 climate change events are related to water.

The global priority for the World Bank Group's water supply and sanitation (WSS) activities is universal access to safe, resilient, and sustainable services. In FY24, efforts focused on improving policies, institutions, and regulations in urban and rural contexts; developing effective policies for pricing and subsidies; building utilities that provide inclusive, resilient, and sustainable services; and fostering innovation and reuse (to improve efficiency and address water scarcity). Some of the diagnostic tools, approaches, and initiatives include Policy, Institutional, and Regulatory (PIR); Utility of the Future (UoF); Citywide Inclusive Sanitation (CWIS); Water in Circular Economy and Resilience (WICER); Digital Water; New Water Community of Practice; and work on financing and innovation. GWSP facilitates all these mechanisms.

In FY24, GWSP support for World Bank Group WSS initiatives extended around the world. Globally, the Partnership helped build the capacity of utilities to adopt digital solutions for greater efficiency. In Zambia, GWSP funded technical assistance activities that complemented implementation of the Bank's Lusaka Sanitation Project and that will inform future projects to improve sanitation across the country by strengthening utilities. In the Pacific Islands, where GWSP has long helped some of the most vulnerable countries adapt to climate change, the Partnership supported strengthening water security and increasing low levels of access to water and sanitation services. In Mexico, through GWSP funding of the CWIS program, the Bank worked with partners to improve understanding of the magnitude and complexity of pollution of marine and freshwater environments from inadequate sanitation. In the Lake Victoria Basin in Eastern Africa, GWSP supported consensus-building on a regional sanitation strategy and provided rapid sanitation assessments that informed the development of plans to improve the delivery of sanitation and related urban services in sanitation "hot spots."

Guiding Utilities on the Journey to Water Digitalization

Digitalization of the water cycle is a reality, and the Digital Water team of the Bank's Global Department for Water worked on several fronts in FY24 to advance that process for water supply and sanitation utilities worldwide. In addition, the Water Department organized "Digital Water Training Weeks" to build client capacity in adopting digital solutions and collaborated with the Bank's Digital Transformation vice presidency to develop guidance on cybersecurity for the Bank's task teams and their clients in the water sector.

The Water Department's support for digitalization, with funding from GWSP, the Quality Infrastructure Investment Fund, and the Cybersecurity Trust Fund, has taken three forms:

Operational Support

As of the end of FY24, GWSP had supported the assessment of the digital maturity of 20 water supply and sanitation utilities and two regulators worldwide. In addition, the Water Department worked with those clients to develop tailored digital roadmaps and strategies, incorporating considerations of cost-benefit analysis, return on investment, or both. The utilities included 10 in Latin America and the Caribbean, 4 in Africa, 3 in Europe and Central Asia, 2 in the Middle East and North Africa, and 1 in South Asia. In certain countries, these discussions were elevated to national-level engagements

in partnership with a national technical regulator (for example, Organismo Técnico de la Administración de los Servicios de Saneamiento in Peru) to scale digital transformation efforts across the country. Two utilities in Peru—SEDAPAR and Aguas de Lima Norte—benefited from the support and identified areas to improve using digital solutions.

Global Knowledge Sharing and Capacity Building

GWSP supported the development of "Digital Recipes" to provide utilities with practical guidance on applying digital solutions to their turnaround efforts, including management of nonrevenue water, customer engagement, and cybersecurity. At the end of FY24, two utilities had volunteered to pilot the application of the first Digital Recipe, focusing on reduction of nonrevenue water.

Capacity-building work included organizing numerous global webinars and sessions on digital water topics, in collaboration with knowledge partners such as the American Water Works Association and the Stockholm International Water Institute. The first **Digital Water Training Week**, in Valencia, Spain, in May 2024, was held in partnership with digital expert Idrica and Valencia's water utility, Aguas de Valencia. All participants, eight utilities and one regulator from Africa (Burundi, the Democratic Republic of Congo, Guinea, and Zambia) and Latin America and the Caribbean (Argentina, the Dominican Republic, El Salvador, and Peru) were either applying digital solutions in their day-to-day operations or considering steps to do so. These solutions include smart metering, e-billing, predictive maintenance, and digitally enhanced leak detection. Nevertheless, many of the participants required a structured way to transition from operating in a planned and reactive mode to adopting a data-driven and proactive vision. Manual interventions were still numerous, with personnel frequently resorting to paper-based records or merging multiple spreadsheets for analysis and reporting.

Half of the participating utilities identified nonrevenue water reduction as the key challenge for which they wished to mobilize digital expertise. Among the mechanisms and strategies discussed were real-time monitoring and leak detection, including with the support of advanced analytics and artificial intelligence, and predictive maintenance and asset management, also using strategies based on data analysis and algorithms.

Water Digitalization

RESULTS INDICATORS

BLOCK A

Institutions: Water-related institutions supported to strengthen capacity for managing water resources or service delivery

Financing: Institutions supported to improve their financial viability and creditworthiness

Resilience: Water-related institutions supported to build resilience in water resources management or service delivery

A second training week, planned for Daejeon, South Korea, in December 2024, will be offered in partnership with the Korea Water Resources Corporation.

Cybersecurity Integration/ Internal Partnership Building

In collaboration with the World Bank's **Digital Transformation vice presidency**, the Water Department worked on developing the Sectoral Cybersecurity Maturity Model, which is tailored for the water sector at the national level, to enable comprehensive assessments of cybersecurity and identification of vulnerabilities. With funding from GWSP, the Quality Infrastructure Investment Fund, and the Cybersecurity Trust Fund, the Digital Water Team plans to continue this effort in FY25 and to provide direct support to utilities that wish to incorporate cybersecurity measures. Using cybersecurity as a foundational step, the Water Department aimed to expand its collaboration with the Digital Transformation vice presidency to encompass broader digitalization efforts within the water sector.

Supporting the Sanitation Sector in Zambia

Challenge

Improving sanitation countrywide will help Zambia achieve its goal of becoming a middle-income country by 2030. The water supply and sanitation (WSS) sector plays a critical role in Zambia's economy: according to a conservative World Bank estimate (2012), the country loses 1.3 percent of its GDP every year due to poor sanitation. The Government of Zambia has made improvement of sanitation a focal point of two national flagship programs, but it has struggled to improve access to sanitation.

Access to improved drinking water and sanitation varies across the country's rural and urban areas, but insufficient access to sanitation facilities has long been an issue in the capital, Lusaka, where the Lusaka Water Supply and Sanitation Company (LWSC) serves more than 2.3 million people. The access gap leads to waterborne diseases, environmental degradation, and negative impacts on the economy.

Approach

In 2015, the Government of Zambia and the World Bank embarked on an ambitious initiative, the $68.5 million Lusaka Sanitation Project, to improve sanitation services, increase the overall access rate, and strengthen the capacity of the LWSC to manage sanitation services.

GWSP supported technical assistance that complemented the project's implementation. It funded a sector diagnostic that produced recommendations about how the design and implementation of the government's flagship WSS programs could be improved to enhance their effectiveness and outcomes. The diagnostic was prepared through a systematic review of relevant documents and interviews with national and local government agencies, water utilities, development partners, and private sector actors.

In addition, GWSP funded an analysis of the risk of cholera in Lusaka, using geospatial data from a recent outbreak to develop investment options for water and sanitation interventions to reduce the risk, and to determine the potential impact of each option. The analysis compared financial cost with health benefits for

individual and combined investments across a range of water and sanitation interventions. The analysis drew attention to where the greatest health benefits could be achieved for the lowest cost.

Furthermore, GWSP supported technical assistance to LWSC's information technology (IT) department for the utility's mobile payment system. Prior data collection established that only 60 percent of households had a resident with a smartphone, but more than 80 percent had residents with more basic phones. Guided by this research, an expert worked with the IT department to develop a short message system-based mobile payment system that could motivate households to connect to sewer services, while at the same time improve monthly billing and increase payment rates.

Additionality

The Lusaka Sanitation Project ended in FY24 after improving sanitation for approximately 345,000 people (50 percent of them women), exceeding the targeted number of beneficiaries. Notably, the project contributed to greater sanitation access in peri-urban areas, where most of the city's poor reside. In addition, the project improved fecal sludge management in Lusaka and increased the sewerage network and connections to it. One result was lower rates of waterborne diseases.

The GWSP-funded Water Supply and Sanitation Sector Diagnostic highlighted inefficiencies hindering the government's goal of achieving universal access to water and sanitation by 2030. The findings indicated the need for a shift from investing in infrastructure to improving efficiency, reducing nonrevenue water, and enhancing financial viability through operational improvements and technological innovations. The diagnostic's findings and recommendations have been instrumental in developing a new project in Zambia to strengthen commercial utilities by improving their operational and financial efficiencies.

The GWSP-funded analysis of cholera risk informed WSS sector programming in the context of limited WSS funding and nearly annual cholera outbreaks. The

Zambia

RESULTS INDICATORS

BLOCK A

Sustainability: Policies/strategies/regulatory frameworks informed to strengthen sustainable management of water resources, built infrastructure assets, or both

Financing: Institutions supported to improve their financial viability and creditworthiness

BLOCK B

Water Supply and Sanitation: People with access to improved water sources; people with access to improved sanitation

analysis evaluated the capacity of various investment options to reduce outbreaks. Its recommendations resulted in a restructuring of the Lusaka Sanitation Project to ensure that investments were targeted to the most effective and efficient initiatives. Recommendations that the project only partially addressed remain available for other investors to implement.

Seed funding from GWSP for technical assistance to LWSC's IT department provided the design basis for a mobile payment system, strengthened LWSC's capacity to collect revenue from sewer connections, and improved the user experience. This technical assistance led German development agency Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) to support expansion of the mobile payment system service for non-network sanitation payments.

Building Climate-Resilient Water Security in Pacific Island Countries

Pacific Island countries are highly vulnerable to climate change effects, which destabilize the countries' economic growth and human development. These effects, coupled with population growth, rapid urbanization, and a reliance on climate-vulnerable water sources such as rainwater, are slowing achievement of Sustainable Development Goals (SDGs), including SDG 6 (Clean Water and Sanitation), SDG 13 (Climate Action), and SDG 14 (Life below Water). GWSP has funded activities in the Pacific Islands region since 2017 to deliver analytical work, build institutional capacity, and support policy reforms.

In Kiribati, which is especially susceptible to climate change, the World Bank is working with the government on the $58.12 million South Tarawa Water Supply Project and the $19.45 million South Tawara Sanitation Project, both of which were built on GWSP-funded analytical groundwork. In FY24, the Bank conducted a detailed

Pacific Island Countries

RESULTS INDICATORS

BLOCK A

Sustainability: Policies/strategies/regulatory frameworks informed to strengthen sustainable management of water resources, built infrastructure assets, or both

Resilience: Diagnostics conducted or implementation undertaken to promote principles of freshwater-resilience building

review of the policies, institutions, and regulations in the water supply and sanitation (WSS) sector. The Bank review found that the sector was affected by a weak regulatory framework and limited capacity in key organizations. The Bank began collaborating with the Government of Kiribati to strengthen the policy environment, including through training of the regulator, as well as to act on specific opportunities identified by the review to integrate water and natural resources management with WSS policies.

In Fiji, GWSP supported the country's water authority in developing the country's first national long-term WSS strategy in FY24. Water Sector Strategy 2050, which was approved by the Government of Fiji, identifies priority projects and programs through 2050 that are focused on transforming service delivery, increasing resiliency, retrofitting aging water and wastewater infrastructure, contributing to the circular economy, and improving the natural environment. The World Bank convened stakeholder workshops to bring together government representatives, private sector actors, and development partners to create and agree on the plan.

Regionwide, GWSP supported an ongoing assessment of water security based in part on Household Water Insecurity Experiences Surveys in selected countries. The assessment captures the many ways in which lack of water access can be problematic—for example, for people's health and dignity. Given that the Pacific Islands region has the world's lowest levels of access to basic WSS, the assessment will be essential to inform future investments. The recommendations will align with Pasifika strengths and traditional ways of managing water. Early survey results in Papua New Guinea and Fiji indicated that 67 percent of households with disruptions in water service are water insecure. Final study results were expected in FY25.

Modeling the Intersection of Ocean Health, Sanitation, and Investment in Mexico

Challenge

Gaps in wastewater collection and treatment, as well as inappropriate on-site sanitation, add to contamination on Mexican coastlines. This discharge creates serious problems for freshwater and marine ecosystems.

Mexico seeks to improve the overall management of marine ecosystems along its nearly 6,000 miles of coastline. One aspect of improved management is a comprehensive assessment of ocean health to strengthen sanitation-related decision-making. Another is robust planning or prioritization mechanisms for investments in wastewater or sanitation-related investments that are critical to securing funding. Mexico's National Water Commission (CONAGUA) requested World Bank support in expanding its sanitation planning options, including options for protecting ocean health and improving water quality.

GWSP funding enabled the Bank to work with partners, through the project Support to Advance Citywide Inclusive Sanitation in Mexico, to improve the country's understanding of the magnitude and complexity of marine and freshwater pollution due to inadequate sanitation. This effort brought together environmental sector and sanitation sector perspectives, and it identified helpful tools and approaches.

Approach

A research team from the University of California, Santa Barbara (UCSB) developed a model based on major sources of nitrogen pollution (sanitation, crop production, and livestock production) to measure inputs and impacts from watersheds on the health of oceans. The Bank partnered with UCSB, Montana State University, Mexico Autonomous National University (UNAM), and the National Public Works Bank of Mexico to assess Gulf of California coastlines. With GWSP support, UCSB transferred technical knowledge about the ocean health model to UNAM, which adapted the approach for the Gulf of California and used it to assess ocean water.

In addition, GWSP supported creation of a sanitation investment model that uses the results of the ocean health model to prioritize areas for investment. Using the model, the project team simulated different investment scenarios that can prioritize investments in areas where discharges are highest or critical habitats are at greatest risk. The scenarios allow decision-makers to pinpoint where investments such as wastewater treatment plants can have the greatest impact.

The National Public Works Bank of Mexico plans to fund monitoring and evaluation activities in the Gulf of California. The GWSP-funded sanitation investment model will use real-time data collected through the ocean health model, providing for dynamic information sharing and resulting in the most current information regarding the health of the coast. That information will allow CONAGUA to monitor improvements in water quality and ocean health due to investments.

Mexico

RESULTS INDICATORS

BLOCK A

Sustainability: Policies/strategies/regulatory frameworks informed to strengthen sustainable management of water resources, built infrastructure assets, or both

Resilience: Diagnostics conducted or implementation undertaken to promote principles of freshwater-resilience building

Institutions: Water-related institutions supported to strengthen capacity for managing water resources or service delivery

Additionality

Successful implementation of the ocean health and sanitation nexus approach, and the partnership between the World Bank and academic and public institutions, prompted UNAM to develop a network of stakeholders with a shared interest in the Gulf of California's ecosystems and water quality. The network is open to nongovernmental organizations and private sector and public sector institutions. The Bank aimed to be part of this network, contributing technical expertise for the continued application of the ocean health and sanitation investment simulations.

This pilot project demonstrated the power of partnership at the convergence of human health and ocean health. CONAGUA planned to build on successful applications of the sanitation investment model in the Gulf of California, with the potential for the applications to scale up nationally to the entire Mexican coastline. The project supported and advanced the World Bank's agenda for applying the Citywide Inclusive Sanitation initiative in Mexico to an assessment of sanitation's impact on ocean health, an emerging area of work.

GWSP support strengthened the capacity of institutions to monitor the impact of investments and provided tools to support this effort. The ocean health and sanitation investment models may become the basis for innovative financing mechanisms such as blue bonds, allowing private sector financing to complement public financing. The Bank team in Mexico shared the collaborative approach for sanitation investment based on ocean health with other country teams, and as of the end of FY24, there was potential for its replication in other countries.

Promoting Lakewide Integrated Sanitation Services in the Lake Victoria Basin

Challenge

Lake Victoria is the second-largest body of freshwater on Earth and the primary source for drinking water, irrigation, food, and transport for roughly 40 million people in a basin that covers parts of Kenya, Tanzania, and Uganda and extends to Burundi and Rwanda. The Lake Victoria Basin faces rapid population growth and urbanization, both of which negatively affect the lake's critical environmental, social, and economic services for the region.

A 2020 World Bank study found that the water quality of Lake Victoria was deteriorating. The study, funded by Cooperation in International Waters in Africa, identified three key sources of pollution: unsustainable land management, untreated industrial effluent, and untreated human waste from urban settlements. Given rapid urbanization within the basin, addressing the sanitation challenge on a regional basis emerged as a priority to protect the vital water resource. Consequently, the Bank began to work with the five Lake Victoria Basin countries to apply principles of the GWSP-supported Citywide Inclusive Sanitation (CWIS) initiative to the basin. CWIS focuses on service provision and its enabling environment, rather than on building infrastructure.

Approach

The World Bank helped lay the foundation for addressing sanitation as a driver of pollution of Lake Victoria using a proposed multiphase, multisectoral approach. The approach required two key activities: (1) convene representatives from each of the five basin countries and the Lake Victoria Basin Commission to understand the key sanitation and related issues and to agree to collaborate to better manage them, and (2) develop a plan for improving sanitation and related urban services in the basin.

To start, key stakeholders from the five basin countries conferred about the sanitation problems. With the GWSP-funded support of the not-for-profit Water & Sanitation for the Urban Poor, the stakeholders developed the "Lakewide Inclusive Sanitation" strategy, drawing on CWIS principles that were adjusted to the realities of the basin. The 22nd Sectoral Council of Ministers for

Lake Victoria Basin endorsed and adopted the strategy in February 2024, allowing the five countries to jointly seek financing to implement the plan.

The next step was a series of assessments of the region's sanitation landscape. GWSP funded an expert consultant to conduct rapid sanitation situation analyses in 57 urban settlements across the five countries to understand the issues in different "hot spots." The findings became the foundation for strategic sanitation action plans for four selected cities in Kenya, Uganda, Tanzania, and Rwanda. Those locations represent the different typologies of cities within the basin. The action plans, which were jointly prepared by the countries and Water & Sanitation for the Urban Poor, provided environmental insights about the different settings and identified interventions to improve the delivery of sanitation and related urban services. The plans also identified the costs involved and made suggestions for the types of investments needed. An assessment for a city in Burundi was scheduled to be completed in FY25.

Additionality

Developing a robust regional strategy for the multifaceted challenges posed by lack of access to safely managed sanitation required collaboration with multiple stakeholders within the World Bank. To strengthen the integrated sanitation approach, the Bank team identified Bank-funded, national-level projects in the basin countries that could accommodate the sanitation interventions.

As a result of GWSP's support, a roadmap for advancing the Lakewide Inclusive Sanitation strategy was developed and, at the end of FY24, the five basin countries and the Lake Victoria Basin Commission were using it to advocate for corresponding sanitation investment programs.

GWSP's support extended to knowledge-sharing and capacity-building activities for the initiative. The Bank produced two GWSP-funded papers. *Framing Lakewide Inclusive Sanitation Engagement in the Lake Victoria Basin* examines integrated environmental sanitation responses and outlines a results-based approach for contracting support for the basin countries to prepare and implement integrated sanitation interventions. *Reviving Lake Victoria: A Regional Approach to Inclusive Sanitation* outlines the overall strategy and specific activities for providing safely managed integrated sanitation services in the basin, thereby reducing the impact of poorly managed human and solid waste on the lake.

GWSP's support served to strengthen the capacity of basin-wide, national, regional, and local institutions within Lake Victoria Basin to plan and design integrated and inclusive sanitation interventions. The activities have provided robust foundations for a proposed long-term World Bank multiphase programmatic approach (MPA)—a Bank financing approach that allows for large, complex engagements to be broken down into manageable, interconnected phases. If approved by basin countries and the Lake Victoria Basin Commission, the Bank engagement would continue to provide CWIS services to improve Lake Victoria's water quality and the well-being of basin communities. The Lake Victoria Basin Commission, in coordination with the basin countries, prepared a pre-concept note for the sanitation engagement, which they were refining in the context of the proposed MPA at the end of FY24.

Lake Victoria

RESULTS INDICATORS

BLOCK A

Sustainability: Policies/strategies/regulatory frameworks informed to strengthen sustainable management of water resources, built infrastructure assets, or both

Resilience: Policies/strategies/regulatory frameworks developed or implemented to strengthen the resilience of freshwater basins, the delivery of services for communities dependent on these basins, or both; water-related institutions supported to build resilience in water resources management or service delivery

Financing: Institutions supported to improve their financial viability and creditworthiness

Inclusion: Water-related institutions trained in gender issues or HR practices related to diversity and inclusion

BLOCK B

Institutions: Percentage of projects that support reforms/actions that strengthen institutional capacity

Water Supply and Sanitation: People with access to improved water sources; people with access to improved sanitation

4

Advancing Results

The Global Water Security and Sanitation Partnership is dedicated to advancing a water-secure world for all by sustaining water resources, delivering water services, and building resilience. In pursuit of this mission, GWSP supports client governments in achieving water-related Sustainable Development Goals (SDGs) by leveraging global knowledge, providing on-the-ground assistance, influencing World Bank financing mechanisms, and fostering global dialogue and advocacy with key partners and clients to enhance its reach and impact.

This chapter provides an overview of the accomplishments in fiscal year 2024 (FY24). A comprehensive set of tables in Appendix B details the indicators, targets, and results performance for both Block A and Block B of the GWSP Results Framework. GWSP's theory of change is illustrated in figure 4.1.

The GWSP Results Framework

The GWSP Results Framework streamlines the tracking and reporting of results using standardized indicators across five priority themes: inclusion, resilience, financing, institutions, and sustainability. Indicators are grouped into three blocks. Block A looks at the multiyear knowledge and technical assistance activities supported by GWSP. Block B considers how GWSP-supported knowledge and technical assistance has influenced newly approved and active World Bank lending operations in terms of design and outcomes. Block C includes qualitative and quantitative assessments of the influence and impact of knowledge and technical assistance on lending operations of the Global Department for Water in nine priority countries, based on agreed-upon indicators, at intervals over the life of GWSP (box 4.1).

BOX 4.1

GWSP Results Framework's Three Components

BLOCK A **Knowledge, Analytics, and Technical Assistance**

- Institutions, policies, or both strengthened in support of the five priority themes
- Amount (in US dollars) of World Bank lending influenced by GWSP-supported knowledge and technical assistance

BLOCK B **Influence on World Bank Lending**

- Design features of the World Bank's Water Department lending that address GWSP's five priority themes (sustainability, inclusion, finance, institutions, and resilience)
- Access/availability of services and number of strengthened institutions across all water subsectors, as reported by the active World Bank lending portfolio in the water sector

BLOCK C **Combined Results**

- Results from technical assistance, knowledge work, and lending operations in priority countries and country groupings. Phase 1 included the following countries: Arab Republic of Egypt, Bangladesh, Benin, Bolivia, Ethiopia, Haiti, Pakistan, the Socialist Republic of Viet Nam, and Uganda. Phase 2 (to be launched in FY25) includes the following countries/country groupings: Bangladesh, Ethiopia, Haiti, Jordan, Mozambique, Nigeria, Central Asia (Amu Darya River Basin covering Tajikistan, Turkmenistan, and Uzbekistan), Senegal and Niger River basins, and Pacific Islands.
- Baseline data reported in FY18 (phase 1) and FY25 (phase 2) and results reported at midterm (FY20 and FY22 for phase 1; annual learning exercises for phase 2) and end of term

FIGURE 4.1

GWSP's Theory of Change

GWSP's "Knowledge Into Implementation" Brings About Results Across All Water Subsectors

The GWSP Results Framework tracks how the Partnership helps client countries improve and deliver water services by working to enhance the impact of the World Bank's water portfolio and to achieve measurable results on the ground.

In particular, the Results Framework demonstrates the additionality of GWSP support—the added value that could not be achieved with World Bank lending alone.

GWSP

PROBLEM ANALYSIS

KEY PROBLEMS & EFFECTS

LACK OF ACCESS

Lack of access to water supply, sanitation, and hygiene underlies public health, economic, and environmental challenges across the developing world.

WATER SHOCKS

Increasing demand, variable supply, widespread pollution, and water-related disasters are resulting in water stress and scarcity.

FOOD INSECURITY

Growing demand for food and fiber, unsustainable resource use, and vulnerability of smallholder farmers are affecting agricultural productivity.

UNDERLYING CHALLENGES

POLICY, INSTITUTIONAL, & REGULATORY DRIVERS

- Weak planning processes and water sector management
- Conflicting policies and misaligned incentives
- Weak institutional capacity and collaboration on sector goals
- Low participation and inclusion of stakeholders and land users

TECHNICAL DRIVERS

- Lack of knowledge and data
- Insufficient sharing of best practices
- Knowledge gaps in sustainable water supply and resource management
- Fragmented and poorly targeted financing
- Poorly planned infrastructure/resilience/sustainability

CONTEXTUAL FACTORS

Climate change; fragility, conflict, and violence; weak governance; biodiversity loss; etc.

INTERVENTIONS

GWSP ENTRY POINTS

LONG-TERM COUNTRY ENGAGEMENT

KNOWLEDGE MOBILIZATION

JUST-IN-TIME SUPPORT

CROSS-CUTTING THEMES

Inclusion, Sustainability, Financing, Institutions, and Resilience

RESULTS

GOALS & IMPACTS

KEY OUTPUTS

- Water sector stakeholders engaged (including platforms)
- Water-related institutions supported
- Policy, strategies, and regulatory frameworks developed, informed
- Proof-of-concept pilots undertaken

- Plans, strategies, policy notes, handbooks, manuals, and approaches drafted and disseminated
- Tools and monitoring systems developed and supported
- Global knowledge and advocacy campaigns delivered

- Capacity building and training delivered
- Policy and technical advice provided
- Diagnostics and analytics conducted
- Innovative approaches piloted

INTERMEDIATE OUTCOMES

Influenced development finance investments in the water sector

Strengthened in-country water sector dialogue

Enhanced capacity of service delivery institutions to design and implement sustainable, inclusive, and resilient water sector reforms and investment programs

Enhanced capacity of service delivery institutions to raise commercial finance

LONG-TERM OUTCOMES

Institutions strengthened and country policy, legal, and regulatory frameworks in place, contributing to sustainable, resilient, and inclusive water management and service delivery

Infrastructure investment programs implemented, contributing to sustainable, resilient, and inclusive water management and service delivery

Water sector investment programs implemented through a broad range of financing options

ENHANCING ACTIVITIES

INTERNAL
Training, project quality assurance, fit-for-purpose lending instruments, etc.

EXTERNAL
Advocacy, knowledge dissemination, dialogue and communication, etc.

BUSINESS LINES

- Climate-Resilient Irrigation
- Water Resources Management
- Water Supply and Sanitation

OBJECTIVE

To achieve a water-secure world for all by sustaining water resources, delivering services, and building resilience

GOAL 1
SDG 6 and other water-related SDGs

GOAL 2
World Bank Group Twin Goals
End extreme poverty and boost shared prosperity on a livable planet

BLOCK A **BLOCK B1** **BLOCK A** **BLOCK B1** **BLOCK B2**

BLOCK C

Supported by our clients, partners, and World Bank staff

BLOCK C validates the knowledge-into-implementation model across the results chain in select priority countries.

Knowledge and Technical Assistance Supported by GWSP

BLOCK A Block A comprises intermediate outcomes that are directly achieved by GWSP's analytical and advisory activities. As seen in the various stories presented in chapter 3, these activities include engaging stakeholders (e.g., **Promoting Lakewide Integrated Sanitation Services in the Lake Victoria Basin**), informing sector policies and strategies (e.g., **An Agile Approach to Assessing Water Security in Europe and Central Asia**), providing technical assistance (e.g., **Improving Utility Performance and Creditworthiness in Karachi**), publishing and disseminating knowledge products and developing tools (e.g., **Employing Remote Sensing to Assess Irrigation Performance in India**), and piloting innovative approaches (e.g., **Guiding Utilities on the Journey to Water Digitalization**). Through these activities, GWSP influences investments in the water sector, both within and outside the World Bank.

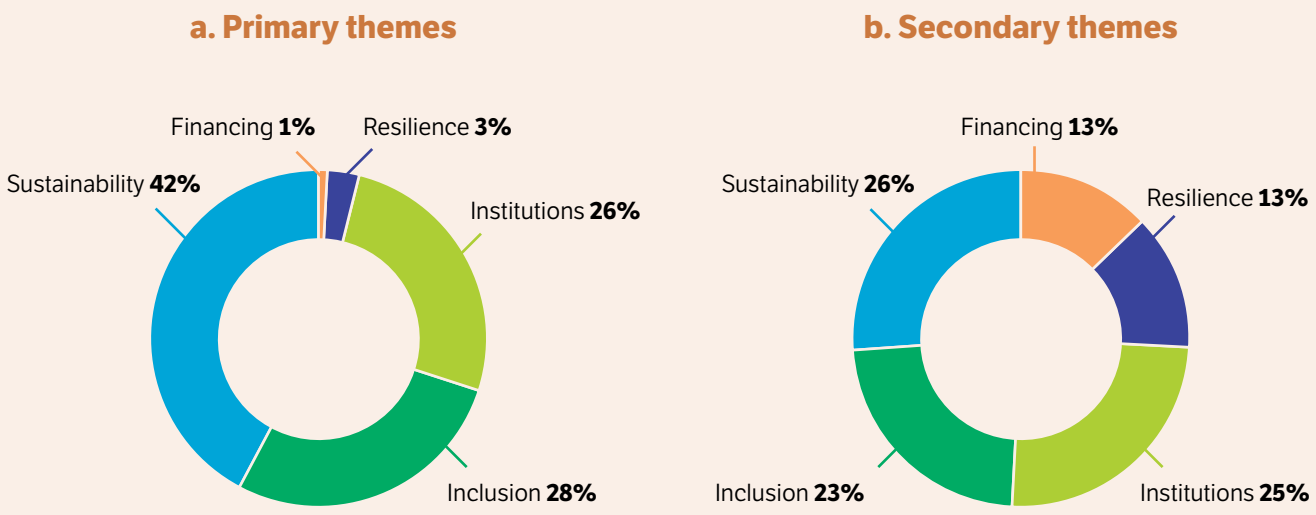
In FY24, the GWSP portfolio contributed results across all five priority themes. Each GWSP activity was assigned a primary theme to which it was expected to contribute results. Given the cross-cutting nature of the themes, most activities contribute results to the primary theme and to other themes, which are recorded as secondary themes. Activities are expected to deliver results under all applicable themes (primary and secondary).

Regarding primary themes (figure 4.2, panel A), the portfolio's contribution in FY24 was heavily focused on sustainability, resilience, and institutions. For secondary themes, the portfolio's overall contribution to the five priority themes was more balanced across sustainability, institutions, and resilience. Additionally, the extent to which the active grant portfolio addresses climate adaptation, climate mitigation, or both can now be identified. In FY24, 83 percent of grants reported addressing climate adaptation, climate mitigation, or both. The secondary theme analysis also showed a larger share of grants contributing to inclusion and financing (figure 4.2, panel B) when compared with the priority theme breakdown.

Block A includes 23 indicators that measure

FIGURE 4.2

The Cross-Cutting Nature of Financing and Inclusion, as Percentage of Portfolio, FY24



expected results at the intermediate outcome level across the five priority themes. Of the 204 active grants this year, 81 percent were reported to have achieved one or more intermediate outcomes according to Block A indicators (figure 4.3). The remaining 19 percent were expected to start achieving results by the end of the grant period (FY25–26).

Box 4.2 summarizes some grants results. A detailed breakdown of Block A-related results is included in appendix B, table B.1.

BOX 4.2

Example of Results, FY24

31 countries
(compared with 26 countries in FY23) were supported to develop policies and strategies that strengthen the sustainable management of water resources and built infrastructure assets.

13 countries
(compared with 11 in FY23) were supported to improve the financial viability and creditworthiness of their water sector institutions.

13 countries
(compared with 8 in FY23) were supported to develop policies/strategies to enhance social inclusion of women, persons with disabilities, or other excluded groups in the management of water resources or service delivery.

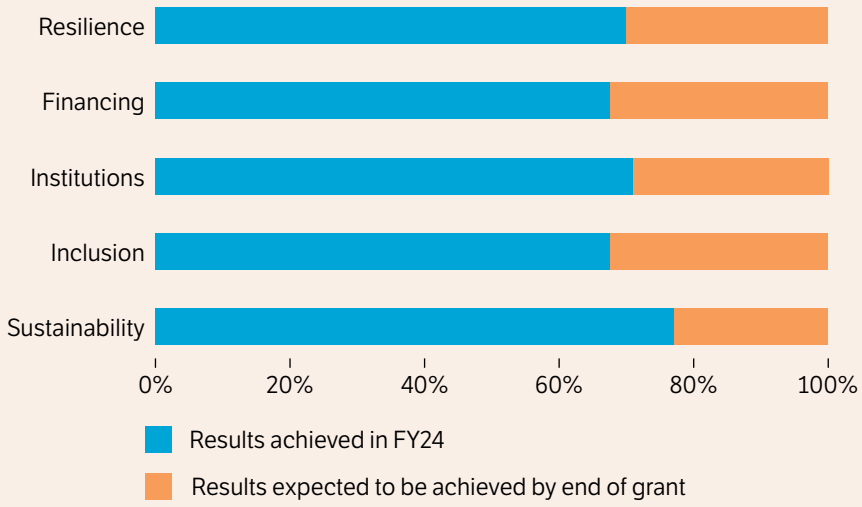
34 countries
(compared with 28 in FY23) were supported to strengthen the capacity of their water-related

institutions for managing water resources or service delivery.

31 countries
(compared with 12 in FY23) were supported to develop policies, strategies, or regulatory frameworks to improve financial viability.

FIGURE 4.3

Intermediate Outcomes Achieved Through Active Grants, FY24



In FY24, **83 percent** of grants reported addressing climate adaptation, climate mitigation, or both.

GWSP's Direct Influence on World Bank Water Lending

GWSP's unique value proposition enables GWSP to influence, through knowledge and technical assistance, the design and implementation of water sector reforms and infrastructure projects financed by the World Bank.

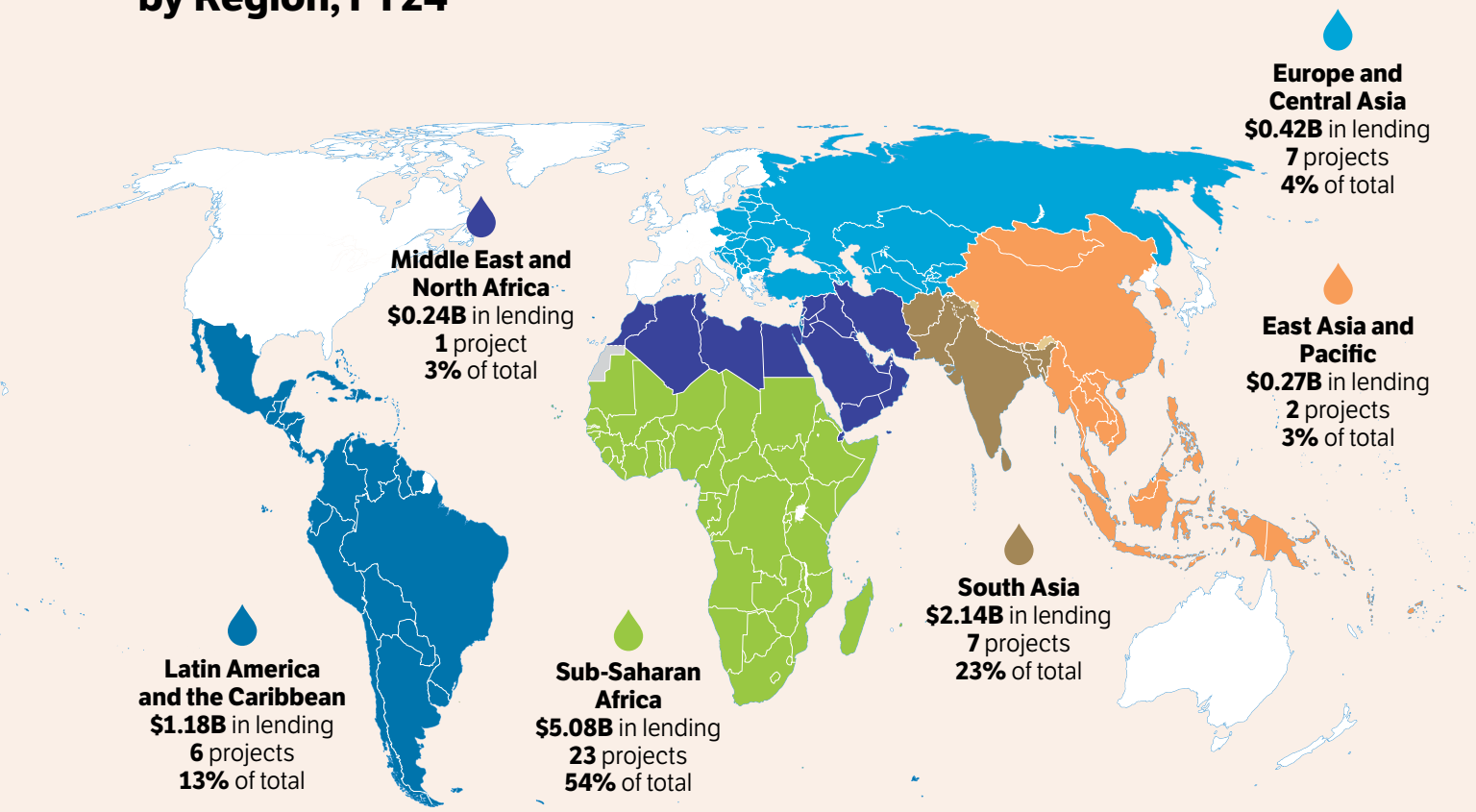
In FY24, GWSP informed lending projects totaling $44.8 billion; of this amount, $9.3 billion was for newly reported projects, reflecting the multiyear nature of GWSP activities, which may influence any one project at different points in the project's lifetime.[1]

Among the newly influenced lending projects, which represent commitments of more than $2.8 billion, eight were linked to six countries (Burkina Faso, the Central African Republic, Comoros, Ethiopia, Nigeria, and Timor Leste) and one regional project (Eastern and Southern Africa) in fragile and conflict-affected situations. Map 4.1 shows that more than half of the newly influenced lending projects were for projects in Africa (54 percent), followed by South Asia (23 percent).

GWSP's influence extended beyond the Global Department for Water. In FY24, more than a third (35 percent) of the lending projects influenced by GWSP were led by departments other than the Water Department. This finding is consistent with the role that water plays in all facets of the World Bank's work, including in ensuring that clients are prepared to adapt to and mitigate climate change impacts. For example, and as displayed

MAP 4.1

GWSP-Influenced Global Water-Related World Bank Lending by Region, FY24



Source: GWSP portfolio monitoring data.

in figure 4.4, GWSP informed approximately $1.2 billion in the Urban, Resilience, and Land Department's FY24 lending portfolio, and more than $750 million in the portfolio of the Environment, Natural Resources, and the Blue Economy Department. Figure 4.5 shows sources of financing for GWSP-influenced World Bank lending. Of this lending, 61 percent ($5.7 billion) was in countries eligible to be financed by the International Development Association (IDA), the part of the World Bank that helps the world's poorest countries.

FIGURE 4.4

GWSP-Influenced World Bank Lending by Department

US$ billions/percentage of total

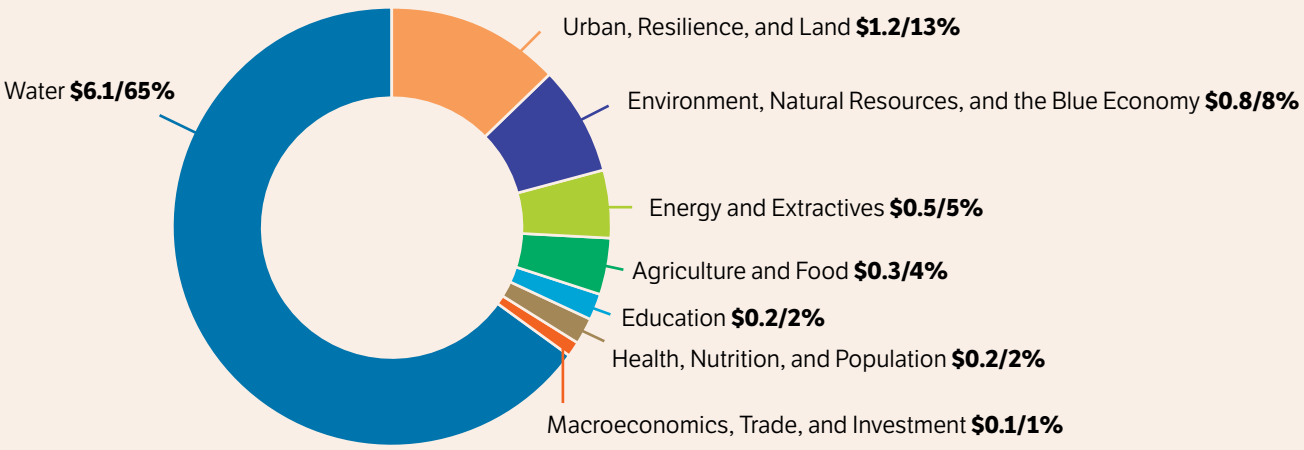
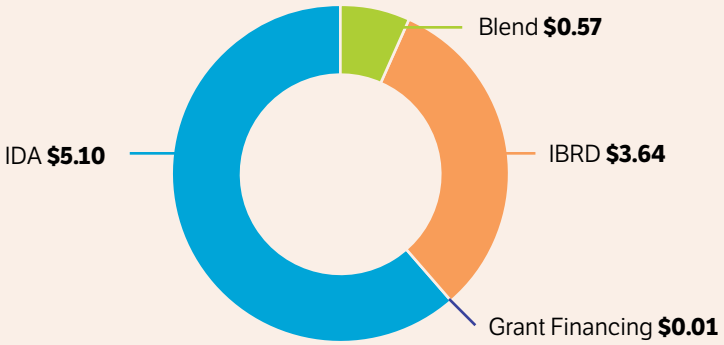


FIGURE 4.5

GWSP-Influenced World Bank Lending by Financing Source Eligibility, FY24

US$ billions



In FY24, **61 percent** of GWSP influence was in IDA-eligible countries.

Reporting on Portfolio Shifts and Project Results

BLOCK B

As illustrated in the GWSP theory of change, GWSP's knowledge, analytics, and technical assistance influence how policies and projects are designed and implemented so that they are positioned to deliver better outcomes. Progress along this results chain is reported through Block B indicators.

One set of indicators (Block B1) is used to document both the performance of new Water Department lending across GWSP's five priority themes and the ways that thematic priorities are reflected in projects' design and monitoring (appendix B, table B.2). A second set of indicators (Block B2) is used to document the results of all active World Bank water-related lending operations, most of which were influenced by activities funded by GWSP or its predecessors—the Water Sanitation Program and the Water Partnership Program (appendix B, table B.3).

Newly Approved Water Global Department Lending Projects

In FY24, total approved financing for water, led by the Water Department, was $3.64 billion, almost a billion less than in FY23. This financing corresponded to 22 projects spanning GWSP's three main business lines: water supply and sanitation (11 projects), water resources management (7 projects), and climate-resilient irrigation (4 projects).

In FY24, projects improved or maintained their performance against 11 of 14 Block B1 indicators tracking GWSP's influence in the design of new water lending (table 4.1). Under the theme of sustainability, all 22 projects approved in FY24 scored positively against

TABLE 4.1

BLOCK B

Block B1 Indicators: Progress and Targets Summary

Indicator		Baseline FY22	Progress FY23	Progress FY24	Target
Number of new projects		24	26	22	—
Sustainability	% of projects that promote sustainable and efficient water use	100	100	100	95
	% of rural WSS lending projects that measure functionality of water points	100	100	100	90
Inclusion	% of projects that are gender tagged*	100	100	100	85
	% of projects with other social inclusion aspects†	88	73	74	75
	% of IDA-financed infrastructure operations in water, including actions to create employment opportunities for women in medium- and high-skilled jobs in this sector‡	—	89	93	65
	% of water projects with disability-inclusive approaches in WASH‡	—	54	58	60

Indicator		Baseline FY22	Progress FY23	Progress FY24	Target
Institutions	% of projects that support reforms/ actions that strengthen institutional capacity	100	96	100	100
Finance	% of projects that support reforms/ actions for improving financial viability	89	81	77	85
	% of projects with explicit focus on leveraging private finance	22	8	41	20
Resilience	% of projects incorporating resilience in design of water-related initiatives	100	100	100	100
	Number of fragile and conflict-affected states supported with a resilience lens§	7¶	9**	5††	20
	% of new World Bank lending commitments with climate change co-benefits	58	65	68	60
	% of projects that have at least one climate-related indicator in their results framework‡	—	100	100	100
	Net GHG emissions ($tCO_2eq/year$)‡	—	-732,508	-540,959	-900,000

Source: GWSP portfolio monitoring data.

Note: GHG = greenhouse gas; WASH = water supply, sanitation, and hygiene; WSS = water supply and sanitation; — = not available.

* Measures the percentage of projects that demonstrate a results chain by linking gender gaps identified in the analysis to specific actions tracked in the results framework.

† Projects that target poor, vulnerable, or underserved communities or areas. Excludes citizen engagement, which is included under corporate monitoring.

‡ Indicator added in FY23.

§ In FY24, 38 countries and 1 economy were classified as having fragile and conflict-affected situations, per corporate guidelines. Target is cumulative for the period FY23–30.

¶ 20 cumulative FY18–22.

** 8 countries and the economy of West Bank and Gaza.

†† 14 cumulative FY23–24.

the indicator documenting the inclusion of measures that promote sustainable and efficient water use, and all four water and sanitation projects in rural areas included activities to measure the functionality of water points. One of these projects is the Côte d'Ivoire Water Security and Sanitation Support Program. This $825 million multiphase programmatic approach program aims to strengthen the management of water resources and to increase access to safely managed water and sanitation services in selected regions of Côte d'Ivoire. The program's first phase ($250 million) will support sustainable and efficient water use by helping the Government of Côte d'Ivoire improve the knowledge and management of water resources and implement

integrated water resources management for the first time in the country's Bandama Basin, which traverses the entire country from north to south and is shared with eight other riparian countries. It will also support the transformation of the national water utility into an asset-holding firm, strengthen the regulation of private sector service delivery, and develop institutional mechanisms for the management of rehabilitated dams.

Projects have not yet met the FY30 targets for 4 of 11 indicators under the themes of inclusion, financing, and resilience, but they are showing progress. Under the financing theme, 77 percent of newly approved projects supported reforms/actions to improve financial viability, falling short of the 85 percent target. This shortfall is primarily due to portfolio variability, with a focus on water resources management projects, which are less likely to support financial viability reforms or actions for water management institutions. Under the inclusion theme, 58 percent of newly approved projects included disability-inclusive approaches in water supply, sanitation, and hygiene (WASH), against a target of 60 percent. Despite not meeting the target, FY24 performance improved from 54 percent in FY23, indicating progress.

In FY24, GWSP supported the following achievements:

Inclusion: In FY24, 100 percent of projects were gender-tagged, meaning that during implementation, they demonstrated a results chain by linking gender gaps identified in the design phase analysis to specific actions tracked in the GWSP Results Framework. In addition, 93 percent of IDA-financed operations in water included actions to create employment opportunities for women in medium- and high-skilled water sector jobs. More than half (58 percent) of the projects in FY24 included disability-inclusive approaches in WASH (compared with a target of 60 percent by FY30).

Resilience: All new projects incorporated resilience in the design of water-related activities, in line with the FY30 target. Furthermore, the percentage of projects with climate change co-benefits increased from 65 percent in FY23 to 68 percent in FY24. However, the total net greenhouse gas (GHG) emissions expected to be reduced by the projects was lower this year than in FY23. The reason: official GHG calculations did not include four projects funded through the Program for Results instrument. This financing instrument was not part of the methodology used by the third party that verified the World Bank's GHG emissions data for the corporate scorecard in FY24. Inclusion of unofficial GHG figures from these excluded projects would raise the annual net GHG emission reductions in FY24 by 573,472 tCO_2eq/year. Additionally, newly approved projects incorporating a resilience lens in their design were supporting five countries affected by fragility and conflict (Burkina Faso, Comoros, Ethiopia, Mozambique, and the Solomon Islands).

Financing: The percentage of projects supporting reforms/actions to improve financial viability decreased from 81 percent in FY23 to 77 percent in FY24, but the percentage of projects focusing on leveraging private finance increased from 8 percent to 41 percent. One such project is the $150 million Burkina Faso Water Security Project, which aims to improve dam safety, access to irrigation and watershed services, and climate resilience. Despite the challenge of making dam safety projects privately profitable, the project seeks to attract private sector participation by assisting the government in promoting financial sustainability through the establishment of a water fund to implement the National Strategy for Maintenance and Safety of Dams.

Institutions: All projects approved in FY24 supported reforms/actions that strengthen institutional capacity (compared with 96 percent in FY23). One of these projects is the $350 million Morocco Water Security and Resilience Program, which aims to strengthen water sector institutions and increase water availability in selected areas of Morocco. The program will support

the government in enhancing the sector's governance for sustained water resources management. This goal will be achieved by preparing and adopting the National Water Plan, which is based on a long-term strategy that addresses increasing uncertainties due to climate change. The plan will also define principles of water valuation. Additionally, the program will support the development, adoption, and implementation of regulatory instruments and consultative processes to improve the implementation of participative aquifer management contracts, among other initiatives.

Sustainability: In FY24, all 22 approved water projects promoted sustainable and efficient water use, in line with performance in FY23. Furthermore, the indicator for rural water supply and sanitation that measures the functionality of water points held steady at 100 percent in FY24.

Of the 11 WSS projects approved in FY24, all included activities, results indicators, or both covering different dimensions of the safely managed level of service in the water or sanitation service ladders. Eight projects (in Brazil, Cambodia, Côte d'Ivoire, Ethiopia, Mozambique, Senegal, and the Socialist Republic of Viet Nam) included results indicators aligned with SDG 6.1, SDG 6.2, or both. One project in Kenya included results indicators compliant with SDG objectives on WASH in schools and healthcare facilities. The $458 million Kenya Water, Sanitation, and Hygiene Program aims to increase sustainable access to improved water and sanitation services, eliminate open defecation, and improve the financial performance of water services in selected counties, including two refugee-hosting counties: Turkana and Garissa. The program aims to provide 900 rural public early-childhood development centers and primary schools and 900 rural healthcare facilities with adequate WASH facilities by 2029.

Active World Bank Lending Projects in the Water Sector

Better-designed projects and enhanced technical assistance during implementation were expected to result in better project outcomes. A total of 207 ongoing lending operations in the World Bank's water-related portfolio reported their results in FY24. Most of these operations were influenced by activities funded by GWSP and its predecessors, the Water Sanitation Program and the Water Partnership Program. Figure 4.6 highlights some of the results achieved in FY24.

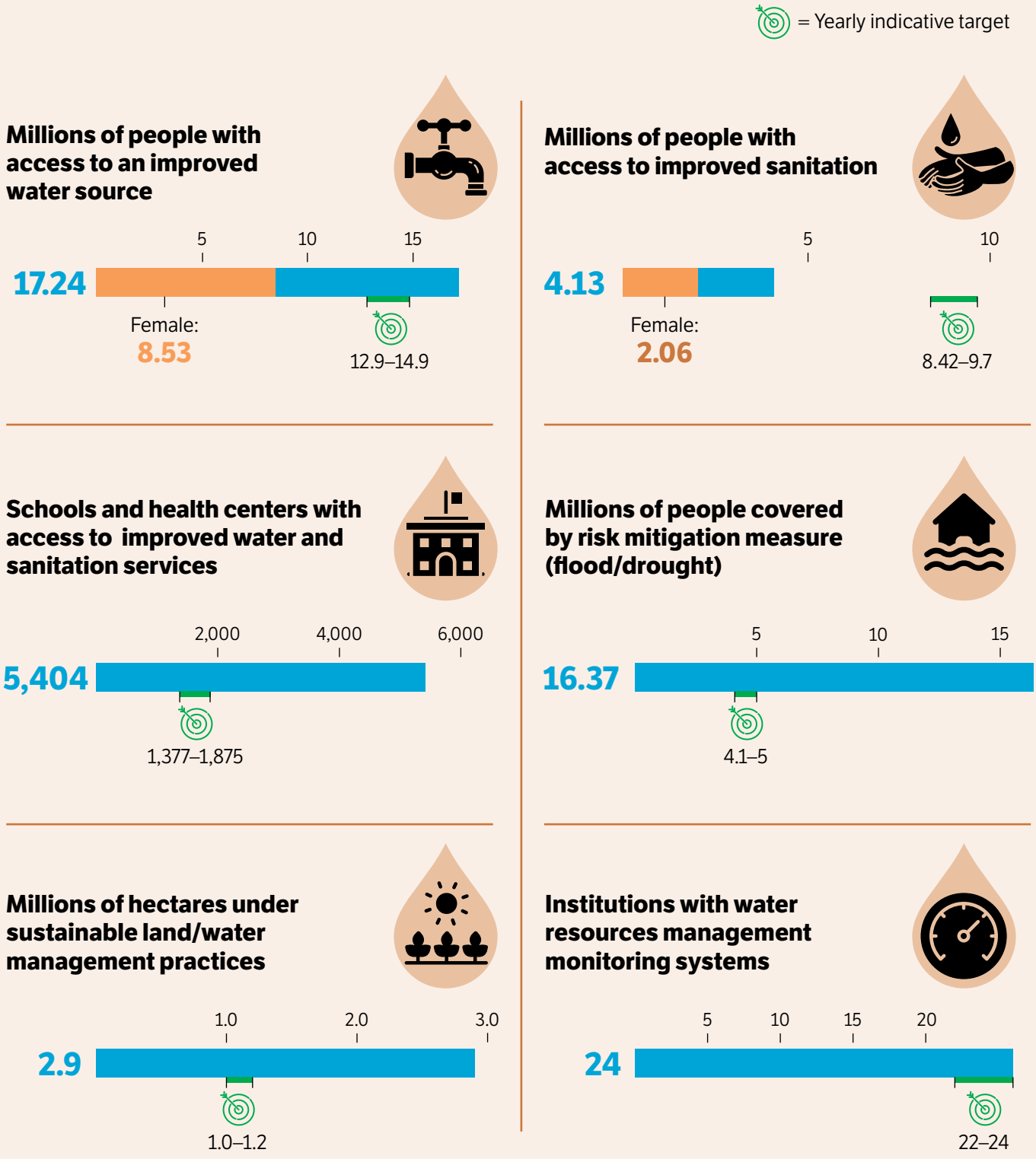
In FY24, **16.37 million people** benefited from water risk mitigation methods, including measures against floods and droughts.

In terms of performance, three of five indicator targets for water supply and sanitation met or exceeded the yearly target range. The number of people provided with access to improved water in FY24 was 17.24 million, 16 percent above the upper bound of the yearly target range. This over-performance was mainly due to results reported by the Karachi Water and Sewerage Services Improvement Project in Pakistan, which provided access to 7.26 million additional people in FY24, exceeding its own target. Twenty-two percent of the people provided with access to sanitation in FY24 through World Bank projects were in IDA-eligible countries.[2] Thirteen percent of total results were in countries affected by fragility and conflict (Burkina Faso, the Democratic Republic of Congo, Ethiopia, Guinea-Bissau, Haiti, Iraq, Mali, Mozambique, Nigeria, Papua New Guinea, the Solomon Islands, Somalia, and Yemen).

On the other hand, the number of people provided with access to improved sanitation in FY24 was 4.13 million, which is 51 percent below the lower bound of the yearly target. This shortfall is due to variability in the maturity of the portfolio, causing results to materialize unequally from year to year. However, when considering the average yearly performance for FY23–24, an average of 10 million people have been provided with access to improved sanitation, which is 3 percent above the upper target range. More than half of the people who gained access to improved sanitation (54 percent) in FY24 did so in IDA-eligible countries, while

FIGURE 4.6

Results Reported by World Bank Lending Operations, FY24



34 percent of total results were in countries affected by fragility, conflict, and violence (Ethiopia, Iraq, Lebanon, Mozambique, and Yemen).

Of the indicator targets focused on water in agriculture and on water resources management, six of eight performed within or above the target range. In FY24, 2.48 million farmers adopted improved agricultural technology; of these farmers, 80 percent were in IDA-eligible countries and 21 percent of total results were in countries affected by fragility and conflict (Burundi, Cameroon, Chad, the Democratic Republic of Congo, the Republic of Congo, Ethiopia, Haiti, Mozambique, Nigeria, Somalia, and South Sudan).

In FY24, 16.37 million people benefited from water risk mitigation methods, including measures against floods and droughts. Notably, 9.5 million of these people benefited from Poland's Vistula Flood Management Project. Among the total beneficiaries reported under this indicator, 29 percent were in IDA-eligible countries, and 17 percent were from countries affected by fragility, conflict, and violence (Chad, Ethiopia, Haiti, Mozambique, Myanmar, Somalia, South Sudan, and Yemen).

Countries have expressed their commitment to accelerating progress toward achieving the Sustainable Development Goals, including those related to water. Given the essential nature of water for people, food security, planetary sustainability, and the economy, GWSP's role is now more crucial than ever. Countries will require increased technical assistance, convening, innovation scale-up, capacity building, and the strengthening of water institutions. Ensuring that all voices are heard and that everyone can benefit from advancements in the water sector is vital.

Reporting on the Combined Results of GWSP Technical Assistance and World Bank Lending in Nine Countries

BLOCK C

In FY24, GWSP conducted the final monitoring round for the first group of Block C countries: the Arab Republic of Egypt, Bangladesh, Benin, Bolivia, Ethiopia, Haiti, Pakistan, Uganda, and Viet Nam. This monitoring followed midterm assessments in FY20 and FY22. A separate compendium summarizing the results achieved as of the end of FY24 in these nine Block C countries will be available by December 2024.

In FY24, the GWSP Council endorsed a new Block C approach, focusing on six countries and three regional groupings: Bangladesh, Ethiopia, Haiti, Jordan, Mozambique, Nigeria, Central Asia (Amu Darya River Basin covering Tajikistan, Turkmenistan, and Uzbekistan), the Senegal and Niger River basins, and the Pacific Islands. This approach emphasizes learning, sustainability, resilience, fragility, reaching the poor, and the interlinkages between GWSP-supported work and the Fast-Track Water Security and Climate Adaptation Global Challenge Program. It also aims to leverage partnerships.

In FY25, GWSP will conduct a baseline assessment to identify key sustainability and resilience challenges in the water sector for each country/grouping. This assessment will create theories of change to describe how GWSP-funded technical assistance will achieve sustainability and resilience results; design a results framework with indicators, baselines, and targets for FY30; and develop context-specific learning questions for the new Block C engagement period.

Notes

1. Influenced lending is calculated on the basis of (1) approved and pipeline lending projects that were informed in a given fiscal year by active grants for the first time and (2) all active lending projects in a given fiscal year that were informed by active grants (including those previously reported). This figure is based on information collected through the annual monitoring process and on the dollar value of World Bank projects that were influenced. If GWSP-supported knowledge was used in the design or implementation of a World Bank operation, the value of that operation is counted in its totality.
2. To access IDA resources, a country must lack creditworthiness for borrowing from the International Bank for Reconstruction and Development, have a per capita income below the IDA operational cutoff ($1,315 in FY24), or both. IDA funds are allocated to the recipient countries on the basis of their income levels and record of success in managing their economies and their ongoing IDA projects. IDA credits carry no- or low-interest charges.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5

From Knowledge Sharing to Engagement

GWSP's established knowledge-into-implementation approach positions the World Bank Group to help countries accelerate action on water issues by disseminating and building capacity for the latest diagnostics, tools, and sector approaches and by drawing expertise from around the world to troubleshoot complex challenges.

Knowledge Management and Learning

GWSP's global knowledge activities have supported engagements with strategic value and global reach. Key among these activities in FY24 was training for World Bank Group staff and client countries.

Building on a learning needs assessment conducted in 2022, the Global Department for Water's staff and participants from client institutions engaged in more than 60 knowledge exchange programs and training sessions in technical areas, with the objective of improving project design and achieving better outcomes.

The World Bank Group Academy: A New Approach to Engagement

The World Bank Group Academy aims to elevate capacity development as a core service, alongside analytics and solutions that are localized and grounded in best practice. This Bank initiative will provide new avenues for disseminating GWSP-funded analytical work and encouraging uptake of GWSP-supported approaches and tools. In FY24, the academy advanced from a traditional model of instructor-led, presentation-based training to explicitly recognize the importance of developing peer-to-peer exchanges, creating content with top industry experts and clients and establishing communities of practice. With two cohorts of utility leaders from 18 countries, the academy built a curriculum to respond to specific capacity needs in client countries.

The training areas included Urban NEWater Security, desalination, financing of water security, creditworthiness, transboundary water management, and nature-based solutions, among others.

One notable effort in client capacity building was a foundational course aimed at improving water utilities' access to private capital. The **Water Utility Creditworthiness Course** explores water utility financing and actions needed for water utilities and governments to enhance their performance and efficiency in order to attract private capital. In fiscal year (FY) 2024, the World Bank Group piloted this 8-to-10-week course, with local facilitators, in Ghana, Tanzania, and Zambia. The completion rate for the course was 95 percent.

Co-Creating Solutions to Water Issues

The World Bank Group partnered to advance work on transboundary water cooperation, to engage youth in water solutions, and to implement circular economy principles in the water sector.

Several events addressed the vital issue of transboundary cooperation on shared bodies of water. At the **UN 2023 Water Conference**, stakeholders ranging from regional economic communities to river basin agencies and civil society organizations committed to advance this cooperation. The Bank's Water Department held the **Global Forum on Transboundary Water Cooperation for Climate and Development,** in Washington, DC, July 11–12, 2023. The first biannual forum was followed by two roundtables with river basin organizations: **Achieving Drought Resilience**

Through Transboundary Water Cooperation on November 29, 2023, and **Instruments for Managing Climate Variability in Transboundary Basins** on March 30, 2024.

To unlock the potential of the next generation of youth "aquapreneurs," the Bank held the **Youth Innovation Challenge: Water Solutions for a New Climate Reality** competition. A joint initiative of GWSP, the Bank's Solutions for Youth Employment, and more than 30 private sector companies, the competition attracted more than 300 applications from more than 90 countries. CEO mentors helped 20 finalist teams improve their business cases in preparation for a demonstration day for potential investors in October 2024.

A workshop to help countries integrate circular economy principles into their water management strategies—particularly wastewater reuse strategies—attracted delegates from Angola, Barbados, Belize, Botswana, India, Jamaica, Senegal, and Türkiye. The Bank's **Water in Circular Economy and Resilience** (WICER) team, in collaboration with Aguas de Portugal, hosted the **Implementing Circular Economy Principles in the Water Sector** event September 18–21, 2023. The delegates were introduced to the new **WICER online quick assessment tool**, which can help users evaluate a project's circularity and resilience.

Data for Development

High-quality data are the foundation of good decision-making. The World Bank Group's Water Department is moving rapidly to help clients put data to work in day-to-day planning and decision-making processes. The overall aim of this growing area of work is to develop platforms that support these processes, as illustrated in box 5.1.

As a first step, the Water Department is working to mobilize data previously disseminated through Bank reports. The data will be presented in different ways and be made available in formats that support manipulation, download, and localization. The second step is to allow integration of the data with other data sets to unlock relationships among variables. The Water

BOX 5.1

Redesigning IBNET to Support Utility Performance Improvement

The gap in annual investment for water utilities to meet global needs is estimated at $1 trillion annually, with one of five utilities unable to cover its operational costs. To optimize scarce resources to improve services, utility operators must make decisions based on reliable data.

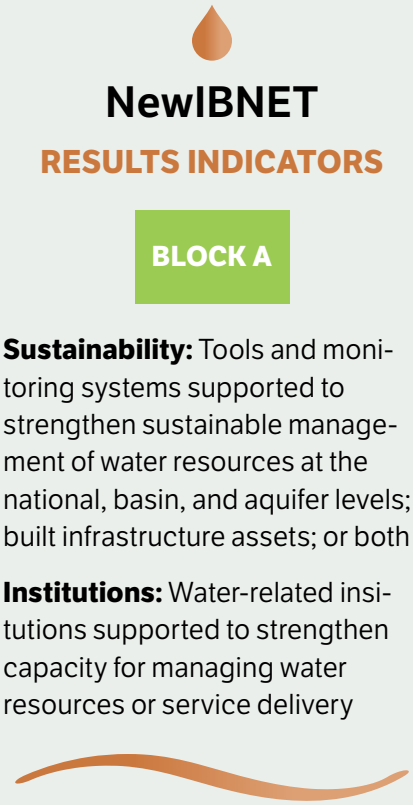
To address the need for data, GWSP supported the World Bank's design and launch of NewIBNET, a web-based platform for utilities to track their performance and learn from other utilities around the world using 15 key performance indicators and 7 categories of management practice indicators. Notably, the indicators allow for international comparisons of climate adaptation and mitigation efforts.

NewIBNET offers a friendlier data collection and usability experience than the original IBNET. The new platform's analytical tools and visualization features allow utilities to compare their performance against sector standards and best practices. The platform's communications mechanisms enable users to learn from peers and engage in learning groups organized around specific topics. The benchmarking tool is free of charge for water and sanitation operators; academics, regulators, and development workers can explore the publicly available data visualizations.

Since its launch more than two decades ago, IBNET has collected data from more than 5,000 water and sanitation service providers in more than 150 countries.

In FY24, GWSP support allowed the platform to become more functional as well as available in multiple languages. A World Bank campaign backed by the GWSP communications team encouraged utilities around the globe to register their data and become members of the IBNET community. Since the relaunch of the platform at the UN Water Conference in March 2023, an additional 250 service providers from 89 countries have registered their data. New utilities that joined the platform included the Caribbean Water Association, the Ethiopian Urban Water Federation, the Malaysia Water Association, and the Pakistan Water Utility Association. As its data points increase, the platform will generate more valuable insights and correlations for utilities.

Using NewIBNET's knowledge products, the World Bank prepared a portfolio benchmarking report for the Ethiopian Urban Water Federation. In addition, the Bank facilitated three webinars on NewIBNET's open social platform to connect utilities on topics such as data-driven decision-making and creditworthiness. Moreover, the Bank helped water sector agencies enhance or develop their own benchmarking systems.



Department is supporting the Bank's Data360 Initiative, which aimed to provide, in early FY25, a global view of key indicators. The initiative would bring together all the Water Department's major data sets, including Climate and Economic Analysis of Resilience data and a comprehensive database of Bank-financed dam-related investments. These data mobilization efforts are critical to maximize development outcomes and ensure compliance with operational policies, while managing associated risks and optimizing resource allocation.

The Water Department continued to expand efforts to support client dialogue about and investments in water accounting and hydroinformatics through technical support to operations teams for data-driven approaches to water management challenges. This push is illustrated in the chapter 3 story about how India used remote sensing technologies to assess irrigation system efficiency and inform water resources management.

Global and Regional Events

GWSP informed several global and regional events with its latest knowledge and research on topics including water sector financing, water security, and climate resilience. These events raised awareness, promoted dialogue, and encouraged more ambitious commitments among sector leaders.

During **Stockholm World Water Week 2023**, GWSP supported the Water Department in convening and participating in more than 30 in-person and online sessions on issues including the water-climate nexus, digital solutions, climate-resilient sanitation, water storage, and resilience to floods and droughts.

The **High-Level Panel Campaign on Water Investments for Africa**, Mind the Gap – Invest in Water event at the United Nations General Assembly highlighted that the world is not on track to meet the Sustainable Development Goals in Africa and stressed the urgency for systems change. Participants discussed the need for investment programs to address institutional and financial capacities, intergovernmental coordination, and oversight and reporting.

The **Eastern and Southern Africa Leadership Summit on WASH** focused on enabling and mobilizing private capital. The World Bank and Ethiopia's Ministry of Finance, with support from GWSP, co-hosted the summit in Addis Ababa for water and finance ministers

from 21 countries. Development partners and private sector leaders also participated.

During **COP28**—the 28th Conference of the Parties for United Nations Framework Convention on Climate Change—in Dubai, GWSP played a key role in framing the climate crisis as fundamentally a water crisis, with 8 of 10 climate-related events tied to water. The conference's **Fast-Tracking Water Security for Climate Adaptation and Climate Mitigation** event provided an opportunity to introduce the World Bank Group's new Global Challenge Program on water security and climate adaptation. The event featured a discussion of senior government officials from India, Nigeria, and Senegal and private sector leaders.

At the **2024 World Bank-International Monetary Fund Spring Meetings**, a side event, **Addressing the Investment Gap to Foster Water Security and Climate Resilience**, featured a keynote presentation by Nobel Prize-winning economist Michael Kremer, who underscored the link between access to water and child mortality and presented cost-effective solutions to address this critical issue.

At the **2024 World Water Forum,** co-organized by Indonesia and the World Water Council, the Water Department and GWSP highlighted the need for collaborative water-security action. They launched the *Water for Shared Prosperity* report, which emphasizes pro-poor interventions to improve water security and climate resilience. The report was disseminated through a **flagship publication page** and was publicized with a press release, a short **video** (which drew nearly 100,000 views on YouTube), data visualizations, and a social media package.

Connecting Teams and Clients with Expertise

The AskWater Help Desk, which connects operational staff with a global network of subject matter experts and resources, is a cornerstone of the Water Department's Knowledge Management and Learning support for operational staff. In FY24, demand for this resource grew by 10 percent. Of a total of 126 queries, 28 percent came from Africa, 16 percent from Latin America and the Caribbean, 12 percent from East Asia and the Pacific, and 10 percent from South Asia. Queries consistently reflected users' need to access good practice/contextual advice (37 percent), terms of reference (25 percent), and curriculum vitae (18 percent).

The Water Expertise Facility (WEF) provides just-in-time support to Bank water operations by enabling teams to draw on external experts for timely, often urgent, advice to overcome project bottlenecks, address complex challenges, and support client governments. In FY24, WEF made 16 grants (table 5.1), spanning all geographic regions.

The Water Expertise Facility (WEF) provides **just-in-time support** to Bank water operations by enabling teams to draw on external experts for timely, often urgent, advice.

TABLE 5.1

Examples of Just-in-Time Support, FY24

Country/ Region	Supported Project/ Initiative	Expertise Provided
Africa, Eastern and Southern		
Zimbabwe	Online open-source management information system for dams and irrigation infrastructure in a fragile and conflict-affected context	Support to develop the Dam Rehabilitation Prioritization Tool and a management information system to enhance dam safety, data collection, and disaster risk assessment.
Burundi	Farmer-led irrigation (FLID) diagnostics	Funds to evaluate existing FLID practices, assess FLID opportunities and constraints, and make recommendations for interventions to be included in a project proposed to scale up integrated landscape management and enhance livelihood resilience in fragile rural communities.
Burundi, Democratic Republic of Congo	Technical support for water supply, sanitation, and hygiene (WASH) in schools and health care facilities	Support for consulting services to ensure inclusion in project design of (1) WASH services; (2) strengthening of the enabling environment and of operation and maintenance, management, and measurement and evaluation systems; and (3) climate resilience, accessibility, and other cross-cutting measures.
Zambia	Diagnostic to ensure long-term sustainability of urban sanitation investments	Funds for a diagnostic to identify potential barriers to and opportunities for the long-term sustainability of the Lusaka Sanitation Project and to identify ways the utility can improve (1) sewer network management and maintenance, (2) fecal sludge emptying, and (3) customer treatment of the sewer network and onsite sanitation facilities. See chapter 3 for more details.
Malawi	Biodiversity assessment expert in canal design	Funds for a biodiversity expert to support the canal design for the Shire Valley Transformation Project in Malawi by reviewing biodiversity assessments and ensuring compliance with the Environmental and Social Management Plan. The government chose a more expensive canal alignment to protect critical habitats.
Africa, Western and Central		
Togo	Performance-based contract to manage nonrevenue water (NRW)	Provision of a NRW expert to fast-track the launch of a new bidding process for a NRW performance-based contract by offering technical and strategic advice for the revision of the bidding documents and advice during the bid evaluation stage.
Ghana	Characterization of water security and integrated rural development program sites in Northern Ghana	Support of data provision to identify areas in northern Ghana for water storage and flood control, prioritizing flood-sensitive areas and enhancing the region's resilience and sustainable development.

Country/ Region	Supported Project/ Initiative	Expertise Provided
East Asia and Pacific		
Lao PDR	Quality assurance and best practice review of the irrigation dam safety and management assessment	Mobilization of an international firm to conduct quality assurance for an irrigation dam safety assessment providing critical technical inputs, best practices, and recommendations for rehabilitating Nam Houm and Nam Suang dams in Vientiane Province.
Island Countries of the Caribbean	Groundwater management and governance in island countries	Support for an in-depth review of groundwater governance for small and medium-size island countries, aiding policy dialogue on groundwater management and evaluating conditions for technological options such as desalination.
Middle East and North Africa		
Morocco	Gender inclusion analysis in water in agriculture operations	Funds for consultants who analyzed a completed project on gender activities, reviewing documents and conducting focus groups to understand barriers to and opportunities for women's access to irrigation and advisory services in rural Morocco as well as providing guidance for future training and leadership in water user associations.
South Asia		
India	Risk-informed dam safety management	Facilitation of global dam safety experts' participation in a three-day conference organized by India's Ministry of Jal Shakti, using the unique gathering to motivate officials to implement risk assessment activities.
India	Enhancing WSS service delivery in secondary cities in India	Support for development of a water supply and sanitation service delivery framework for secondary cities in India, combining institutional performance and user-level improvements, applied at scale, with consulting services for the Tamil Nadu Climate Resilient Urban Development Program.
Latin America and the Caribbean		
Mexico	Support to study saline agricultural return flow reuse	Support for a study on the hydrological feasibility of reusing saline agricultural return flows in northern Mexico—a study forming the technical basis for potential desalination investments to redirect freshwater for human consumption and to modernize institutions.
Colombia	WASH implementation in schools and health centers	Provision of best practices in WASH implementation for schools and health centers, reviewing national standards and developing a strategy to pilot institutional WASH facilities in participating municipalities.
Honduras	Support to policies, institutions and regulations in the Honduras water sector	Support for a rapid assessment of water sector policies, institutions, and regulations, identifying technical assistance needed to improve water supply, sanitation, and resource management.

Communications

GWSP Communications

Development initiatives can realize their full potential only when information, knowledge, and technology are shared effectively. Communication is fundamental to the task of involving people in these initiatives, which helps ensure lasting impact.

In FY24, GWSP's communications focused on the importance of water security in achieving the World Bank Group's mission of ending extreme poverty and boosting shared prosperity on a livable planet. These communications showcased the ways in which GWSP's global knowledge mobilization, long-term country engagements, just-in-time support, and implementation and scale-up of reforms and investments are enabling people to live better lives through access to water. Some of these impact communications include blog posts on **Viet Nam's water security transformation**, **Nigerian women's economic empowerment through irrigation farming**, and **the Democratic Republic of Congo's efforts to improve water access**.

Affecting Change Through Storytelling

GWSP's country-level activities contribute to outcomes consistent with the countries' development goals. To demonstrate how the Partnership is well-placed to help countries accelerate action on water, its communications team produced a suite of videos, interactive tools, blog posts, and stories in FY24.

The immersive story "**Transforming Lives Through Climate-Resilient Irrigation**" illustrates how, through GWSP's support, the World Bank Group is advancing sustainable and climate-resilient irrigation globally. In Senegal, Ami Ndiaye shares how she is now able to farm even in the dry season. In the Socialist Republic of Viet Nam, Duong Van Tuan is using a smartphone to precisely monitor water levels. In Indonesia, Sukeni, who owns a paddy farm with her husband, has ample water access thanks to the GWSP-supported Strategic Irrigation Modernization and Urgent Rehabilitation Project. This story was published as part of the **Game Changers for a Livable Planet** series and, at the end of FY24, was being promoted on GWSP, World Bank Water, and World Bank corporate and regional channels.

The website story "**In Southern Angola, a Race to Manage Scarce Water While Promoting Economic Growth**" details the challenges facing households, agriculture, and tourism because of inadequate water access in Lubango Province. Through support provided by GWSP, Elementary School Number 98 will not have to close its toilets due to lack of water. Furthermore, the support will improve the knowledge base for decision-making, help reduce water losses and increase water storage, and improve monitoring and management of groundwater resources.

The interactive story "**Droughts and Deficits**" highlights the impact of drought on economic growth, with a deep dive on desertification hot spots and a timeline of rainfall shocks and their economic effects. The story highlights the GWSP-supported publication *Droughts and Deficits: Summary Evidence of the Global Impact on Economic Growth*, which uses state-of-the-art empirical research to present new estimates of the effects of rainfall shocks and droughts on GDP growth.

To coincide with the Annual GWSP Council Meeting in February 2024, the communications team produced content showcasing GWSP's support in the meeting's host country, Ghana. This content included a social media campaign; a **blog post** authored by the Water Department's global director and the World Bank country director for Ghana, Liberia, and Sierra Leone; and a **video** featuring Ghana's chief director of sanitation and water resources.

Campaigning for a Cause

Cause marketing is one of the most effective ways to increase awareness of GWSP's key development issues, enhance its brand reputation as a trusted partner, and secure credible partners to accelerate action on water.

On the 10th anniversary of **Menstrual Hygiene Day**, the World Bank reflected on its menstrual health and hygiene strategy, adopted with support from GWSP and including infrastructure development, information dissemination, stigma reduction, and provision of menstrual products. GWSP marked the day with a **blog post** co-authored by World Bank Group Global Water Director Saroj Kumar Jha, World Bank Global Director for Gender Hana Brixi, Founder and CEO of WASH United Thorsten Kiefer, and author and television personality Janet Mbugua. In addition, a **feature story** and **video** demonstrating the impact of GWSP's support of Ethiopia's One WASH program were published. The campaign generated 293,000 social media contributions and 23,400 pieces of media coverage,

attracted 1,157 partner organizations, and reached 966 million people globally. The countries generating the most conversation on the topic included India, Nigeria, and Peru.

Nearly 250 years after the invention of the flush toilet, 3.5 billion people still lack access to safe sanitation facilities. To draw attention to this crisis, GWSP supported the production of a feature story and two blog posts for **World Toilet Day**. "**Cleaner Cities, Brighter Futures: Ethiopia's Journey in Urban Sanitation**" highlights an International Development Association-supported water and sanitation project that is transforming cities in Ethiopia. "**Getting Sanitation Back on the (Global) Agenda**," by the Climate Resilient Sanitation Coalition, calls for sustainable sanitation solutions to tackle climate change. "**Transforming Sanitation in Benin: A Tale of Resilience and Renewal**" describes a new treatment plant in the Grand Nokoué metropolis that is laying the foundation for a healthier, sustainable urban future.

GWSP marked 2024's **World Water Day** with a website showcasing the World Bank Group's various water-related activities. The site included blog posts authored by the Bank's senior leadership and stories (some in video form) on **climate-resilient irrigation in the Sahel**, **transboundary cooperation**, and **financing for water**, as well as highlighted an event organized in partnership with UNESCO. The accompanying social media campaign drew more than 80,000 impressions, 400 retweets, and more than 100 likes. This effort also attracted 300-plus new visitors to the website's landing page.

On **International Women's Day**, the GWSP communications team supported the production of a blog post about **the need to diversify the water sector** and a feature story, accompanied by a video, about **economic empowerment for women in Nigeria** through irrigated farming.

Transparency Through Digital Transformation

To highlight the projects it supports as well as the active Water Department portfolio, GWSP created and began hosting on its website an **online interactive dashboard**. The dashboard provides information about grant objectives, allocations, and supported countries and regions.

Featured Publications

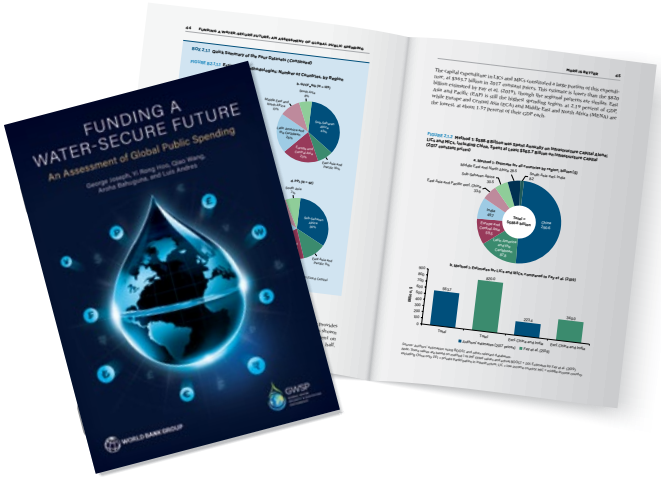
GWSP's support has allowed the Water Department to develop an extensive body of knowledge for policymakers, development specialists, and other partners working at the global, regional, national, and subnational levels. GWSP continued to reach new audiences by translating its flagship reports into Arabic, French, and Spanish.

Highlighted here are a few GWSP-supported, global publications released in FY24. Like all GWSP's analytical work, these publications were expected to help transform government policy and implementation and to influence World Bank Group engagements to achieve results that could be sustained over multiple years.

Scaling Up Finance for Water

A WBG Strategic Framework and Roadmap for Action

The framework presented in this report arose from the first concerted effort across the World Bank Group (including the International Bank for Reconstruction and Development, the International Development Association, the International Finance Corporation, and the Multilateral Investment Guarantee Agency) to jointly engage on programmatic- and project-level opportunities to unlock private sector expertise, innovation, and capital for the water sector. The framework provides a set of strategic directions and a customizable roadmap for the public sector, private sector, international organizations, intermediaries, and others to collaborate on catalyzing financing and innovation.



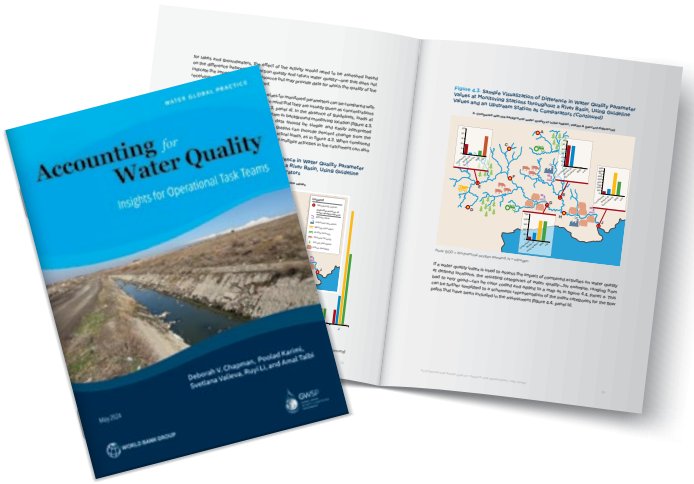
Funding a Water-Secure Future

An Assessment of Global Public Spending

This groundbreaking new report quantifies for the first time how much governments spend on water and the size of the financing and funding gaps that must close to meet people's needs. The report finds that, despite considerable spending gaps, the water sector does not fully spend the funds allocated to it; 28 percent of water funds, on average, go unspent each year. In addition, inefficiencies among water service providers lead to substantial hidden losses. The report offers practical steps that countries can take to spend better so that they can spend more on water. It also provides key insights on how to catalyze increased long-term financing for the sector.

Water for Shared Prosperity

Water security supports job creation, livelihoods, and economic growth. The poor are the most exposed to water-related risks and the least able to adapt. Realizing the benefits of water requires sustainable management and development of water resources, along with equitable and inclusive delivery of water services. These are the main findings of the Water Department's analysis of the connections among water, economic growth, and shared prosperity. This flagship report highlights global inequalities in water access and recommends pro-poor and inclusive interventions to improve water security and strengthen climate resilience while reducing poverty and boosting shared prosperity.



Accounting for Water Quality

Insights for Operational Task Teams

For centuries, management of freshwater resources has focused on monitoring and managing water quantity to ensure supplies for domestic, agricultural, and industrial use and to mitigate the potential effects of floods and droughts. However, water quantity is inextricably linked to water quality. This report presents a framework to help water accounting teams incorporate water quality monitoring into their operations. The framework introduces a step-by-step approach to defining work scope and objectives and to identifying data needs and monitoring approaches. Data analysis and presentation options are also explored. Three water accounting scenarios illustrate implementation of the framework.


2024

APPENDIX

A

Financial Update

GWSP Donor Contributions

From inception through June 30, 2024, total signed contributions to GWSP were $362.2 million (table A.1), of which $354.3 million is new funding, complementing $7.9 million rolled over from the Water and Sanitation Program and the Water Partnership Program.[1]

Through the end of FY24, 11 active GWSP donors contributed to GWSP. The United Kingdom rejoined the GWSP family in December 2023. The 11 active donors are Australia's Department of Foreign Affairs and Trade, Austria's Federal Ministry of Finance, the Bill and Melinda Gates Foundation, Denmark's Royal Ministry of Foreign Affairs, Netherland's Minister for Foreign Trade and Development Cooperation, Spain's Ministry of Economic Affairs and Digital Transformation, the Swedish International Development Cooperation Agency, the Swiss Agency for Development and Cooperation, the Swiss State Secretariat for Economic Affairs, the United Kingdom's Foreign, Commonwealth and Development Office, and the United States Agency for International Development.

The last 12 months saw increasing interest in GWSP from development partners in terms of fundraising. In

TABLE A.1

GWSP Donor Contributions as of June 30, 2024

Donor Name	US$ millions	Share (%)
Netherlands—Minister for Foreign Trade and Development Cooperation*	128.6	35.5
Swedish International Development Cooperation Agency (Sida)	75.9	21.0
Bill and Melinda Gates Foundation	41.0	11.3
Australia—Department of Foreign Affairs and Trade	25.9	7.1
Denmark—Royal Ministry of Foreign Affairs	22.3	6.1
Swiss Agency for Development and Cooperation (SDC)	18.4	5.1
Swiss State Secretariat for Economic Affairs (SECO)†	16.7	4.6
Spain—Ministry of Economic Affairs and Digital Transformation	8.5	2.3
United States Agency for International Development (USAID)	8.3	2.3
Austria—Federal Ministry of Finance	6.8	1.9
United Kingdom—Foreign, Commonwealth and Development Office	6.1	1.7
Norway—Ministry of Foreign Affairs	2.4	0.7
Rockefeller Foundation	1.6	0.4
Ireland—Minister for Foreign Affairs/Irish Aid	0.02	0.01
Total Commitments	**362.2**	**100.0%**

* The Minister for Foreign Trade and Development Cooperation falls under the Netherland's Ministry of Foreign Affairs.

† The Swiss State Secretariat for Economic Affairs also provided an additional Sw F 10 million (about US$ 11.2 million) to support the Utility of the Future Center of Excellence trust fund. Although this trust fund is currently mapped to the Europe and Central Asia region, it will also support global coordination for GWSP's Utility of the Future initiative.

FIGURE A.1

GWSP Funding Status, FY25–30

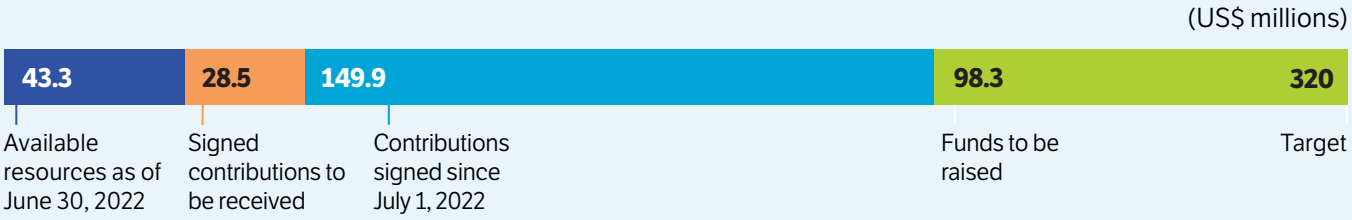
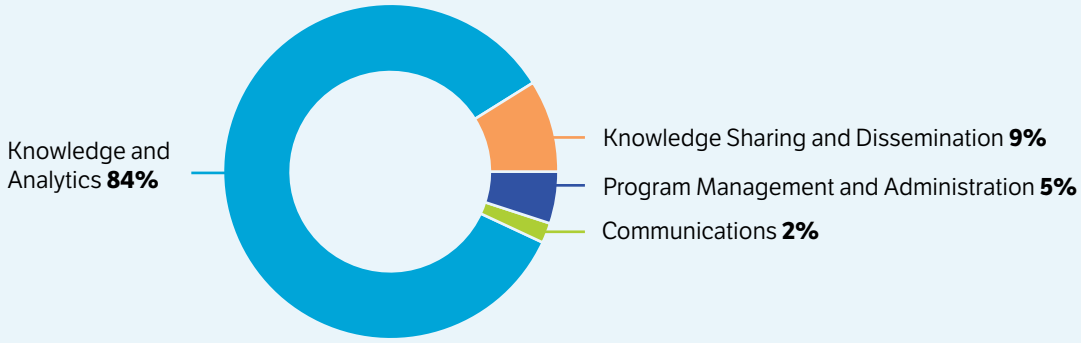


FIGURE A.2

GWSP Disbursements by Activity, FY24



FY24, GWSP signed new contributions totaling $94.5 million. New contributions included $80.3 million from Netherland's Minister for Foreign Trade and Development Cooperation, $11.7 million from Denmark's Royal Ministry of Foreign Affairs, and $2.5 million from the United Kingdom's Foreign, Commonwealth and Development Office.

The GWSP Council–endorsed 2022 GWSP Strategy Update includes a target budget of $320 million for the FY23–30 period. Fundraising efforts were stepped up following endorsement of the strategy with existing and new partners. At the end of FY22, GWSP had $48.3 million available for allocation. In addition, $28.5 million in signed contributions were scheduled for payment in FY23 and beyond. An additional $149.9 million in contributions was signed in FY23 and FY24. A gap in funding of $98.3 million is to be raised in the FY25–30 period (see figure A.1).

FY24 Disbursements

In FY24, GWSP disbursed $30.2 million to support its work program activities and had an active portfolio of 243 activities in 70 countries and regions—22 in settings of fragility, conflict, and violence.[2] Of the total 243 activities, 82 were newly activated in FY24, and 161 were from previous fiscal years.

GWSP continues to support innovative technical assistance and analytical work for sustainable delivery of water services. In F24, 84 percent of disbursements went to knowledge and analytics that are global, regional, or country based (see figure A.2). Of this amount, 60 percent of the disbursements for knowledge and analytics were in regional units, while the remaining disbursements (40 percent) were global. Much of that global work was rooted in country-based analysis that was then translated into overarching summaries,

findings, and recommendations. GWSP's global analytical work provides direct expertise and advice to regional teams in addressing complex design and implementation issues.

More than $15.1 million was disbursed by regional units in FY24. The funds supported both lending activities and advisory services and analytics. These activities include country-level knowledge and technical assistance that influence policy dialogue and project design. The Africa region accounted for the largest percentage of regional disbursements in FY24 (see figure A.3). GWSP disbursed $10.1 million to knowledge and analytics categorized as global. These activities include developing and refining tools for use by country teams as well as curating and expanding cutting-edge research, such as the World Bank flagship publication *Water for Shared Prosperity*, that is directly applicable to the current challenges our clients are facing. The disbursements to activities were managed globally and again drew heavily on expertise at the regional and country levels.

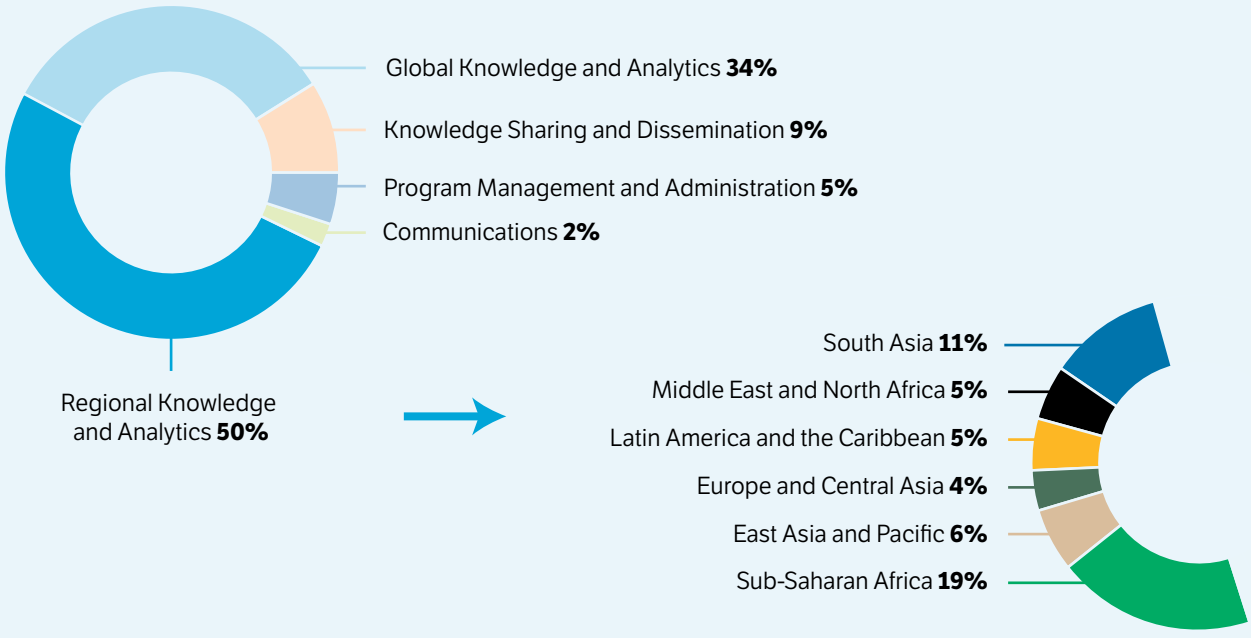
To maximize the use of the analytical work by clients and other key development partners, $3.5 million, accounting for 11 percent of the total, was disbursed for communications and knowledge dissemination activities.

Communications, partnerships, learning, and knowledge dissemination activities all drive the knowledge-into-implementation agenda and are what makes the GWSP model unique. These critical inputs into the program help get cutting-edge research and analytics into the hands of staff, clients, and partners to influence policy, improve implementation, and build capacity. In addition, these inputs enhance GWSP's critical interventions through lending from the World Bank and other international finance institutions. The inputs also include services delivered through the AskWater Advisory Service (Help Desk) and Water Expertise Facility, which connects task teams with technical experts on a just-in-time basis. Chapter 5 highlights some of the activities delivered through these entities.

The program management and administration (PM&A) functions ensure the Partnership's smooth, efficient, and effective management. These functions include day-to-day program management and administration, program monitoring and evaluation, and council

FIGURE A.3

GWSP Disbursements by Activity and by Region, FY24



engagement. GWSP's lean program management team plays an important role in administering trust fund operations and in monitoring and reporting results. Approximately $1.5 million, about 5 percent of the total program disbursements in FY24, corresponded to PM&A activities.

Financial Trends

Disbursements over the past seven fiscal years have shown an overall upward trend, though with a slight decrease in FY22 to FY24 (see figures A.4 and A.5). Although disbursements in FY24 contracted slightly due to geopolitical instability and various operational and political challenges, future disbursements and demand from regional teams for GWSP resources, both analytical work and lending, are expected to grow. At the country level, additional resources are needed to sustain upstream analytical support for diagnostics, capacity building, and convening to help countries plan investments and take actions needed to mobilize financing and position them for operations under the Fast-Track Water Security and Climate Adaptation Global Challenge Program. The Global Water Department is also

FIGURE A.4

GWSP Annual Disbursements, FY18–24

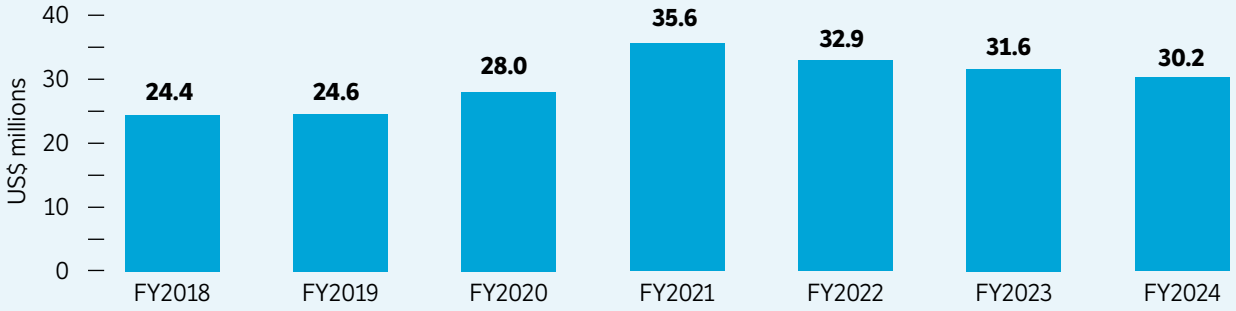
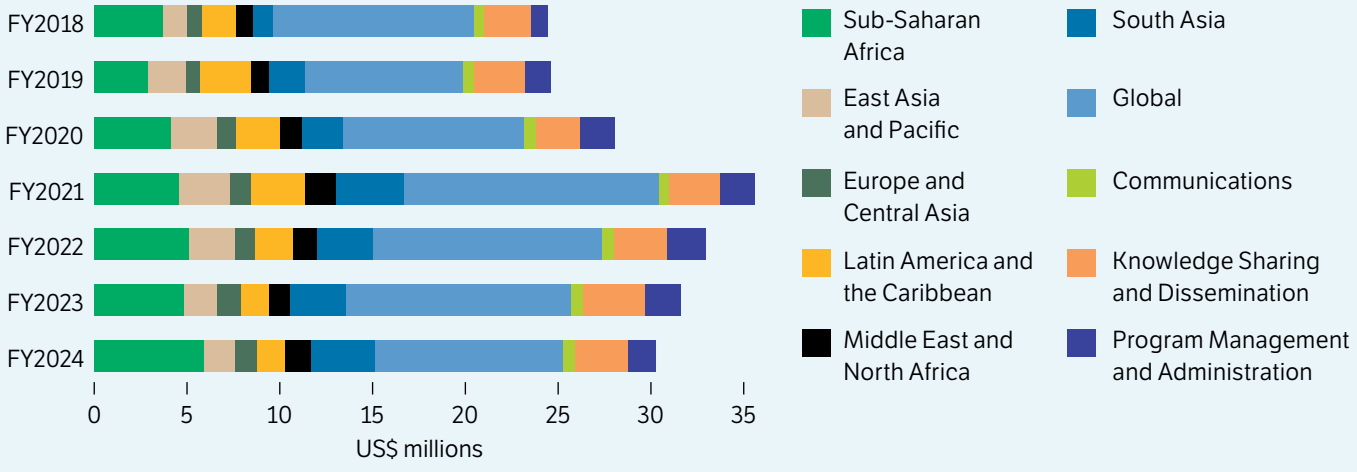


FIGURE A.5

GWSP Disbursements by Activity and by Region, FY18–24



committed to expanding its collaboration with other global departments to expand delivery of water with and through partners. At the global level, recognition of the centrality of water to climate change adaptation and mitigation is increasing.

Collaboration with Other Trust Fund Programs

GWSP coordinates closely with the following water-focused trust funds: the Cooperation in International Waters in Africa, the 2030 Water Resources Group, the Danube Region Water Security, and Utilities of the Future-Center of Excellence. These funds are managed by Water Department staff, and the overall approaches and strategies are coordinated globally.

Collaboration with other trust fund programs outside the Water Global Department offers an avenue for expanding the Water Global Department's reach and

Collaboration with other trust fund programs outside the Water Global Department offers an avenue for expanding the Water Global Department's **reach and influence** in other sectors.

TABLE A.2

Top 10 Trust Fund Programs Disbursing Through the Water Units, FY18–24

No.	Program
1	Global Facility for Disaster Reduction and Recovery (GFDRR)
2	Public-Private Infrastructure Advisory Facility (PPIAF)
3	Quality Infrastructure Investment Partnership (QII)
4	South Asia Water Initiative (SAWI)*
5	Korea Green Growth Trust Fund (KGGTF)
6	International Finance Corporation-Hungary Partnership
7	Global Partnership for Results-Based Approaches (GPRBA)
8	Energy Sector Management Assistance Program (ESMAP)
9	Western Balkans Investment Framework Program
10	Australian Trust Fund for Indonesia Infrastructure Support

* The SAWI multidonor trust fund closed in June 2021, after more than a decade of work to increase regional cooperation in managing major Himalayan river systems and building climate resilience.

influence in other sectors. From FY18 to FY24, $10.9 million was disbursed by water units from the Global Facility for Disaster Reduction and Recovery; $9.6 million was disbursed by water units from the Public-Private Infrastructure Advisory Facility; and $9.6 million was disbursed by water units from the Quality Infrastructure Investment Partnership. In Angola, the Public-Private Infrastructure Advisory Facility is providing support to the Second Water Sector Institutional Development Project to strengthen the institutional capacity of selected water sector agencies and to increase water service coverage in target cities. Another example of collaboration is in Tanzania. A public-private partnership (PPP) project drew on from the Tanzania Accelerating Solar Water Pumping via Innovative Financing Project and the Sustainable Rural Water Supply and Sanitation PforR Program. GWSP supported technical assistance to develop the concept for the PPP, drawing on experience with mobile money-enabled pre-paid meters, blended finance, and private sector service contracts. Building on this program, the Energy Sector Management Assistance Program is providing grant resources to lower the transaction costs for energy sector projects. The aim is to set up a PPP contract for at least 206 water schemes countrywide. Table A.2 lists the largest collaborating trust funds based on disbursements between FY18 and FY24.

Notes

1. Funding from Norway, the Rockefeller Foundation, and Ireland was rolled over from the two preceding programs. These donors have since exited the GWSP trust fund.
2. Of 243 activities, 204 were monitored for results using the GWSP results monitoring and evaluation system. The remaining 35 activities were not monitored because they were too new (approved in the last quarter of the fiscal year); focused on knowledge sharing, dissemination, or communications; or involved program management and administration.


2024

APPENDIX

B

Results Progress

BLOCK A

GWSP-Funded Knowledge and Analytics Activities

TABLE B.1

Summary of Results Achieved as of June 30, 2024

Reported by 204 Active GWSP-Funded Activities Reporting Results in FY24

Indicator		% of Projects with Indicator	
		Results to be achieved by end of grant	FY24 results achieved
Sustainability	Policies/strategies/regulatory frameworks informed to strengthen sustainable management of water resources, built infrastructure assets, or both	51	31
	Tools and monitoring systems supported to strengthen the sustainable management of water resources at the national, basin, and aquifer levels; built infrastructure assets, or both	35	26
	Water-related institutions supported to sustain water resources, built infrastructure assets, or both	50	38
	Knowledge products generated on sustainability	37	24
Inclusion	Policies/strategies generated or refined to enhance SOCIAL INCLUSION OF WOMEN in accessing jobs, markets, services, or decision-making roles in water resources/water supply and sanitation or other water-related service delivery*	19	10
	Policies/strategies generated or refined to enhance SOCIAL INCLUSION OF PERSONS WITH DISABILITIES in accessing jobs, markets, services, or decision-making roles in the management of water resources or in water supply and sanitation or other water-related service delivery	3	1
	Policies/strategies generated or refined to enhance SOCIAL INCLUSION OF OTHER EXCLUDED GROUPS† in accessing jobs, markets, services, or decision-making roles in the management of water resources or in water supply and sanitation or other water-related service delivery (beyond gender and disability inclusion)	4	3
	Initiatives that develop approaches, including integrated cross-sectoral approaches where relevant to address water, sanitation, and nutrition issues	16	11

Indicator		% of Projects with Indicator	
		Results to be achieved by end of grant	FY24 results achieved
Inclusion *(continued)*	Water-related institutions trained in GENDER ISSUES, HR practices related to diversity and inclusion, or both	8	6
	Water-related institutions trained in issues and practices related to PERSONS WITH DISABILITIES	1	0
	Water-related institutions trained in issues related to OTHER EXCLUDED GROUPS† (beyond gender and disability inclusion)	2	1
	Knowledge products generated on inclusion	13	9
Institutions	Policies/strategies/regulatory frameworks informed to strengthen the institutional environment for improved water resource management, water services delivery, or both	46	31
	Fragility, conflict, and violence (FCV)–affected states supported to develop and implement a water sector transition strategy	8	5
	Water-related institutions supported to strengthen capacity for managing water resources or service delivery	29	37
	Institution-focused knowledge products generated	54	14
Financing	Policies/strategies/regulatory frameworks developed to improve financial viability	19	12
	Institutions supported to improve their financial viability and creditworthiness	16	11
	Knowledge products generated on financing	16	10
Resilience	Policies/strategies/regulatory frameworks developed or implemented to strengthen resilience of freshwater basins, delivery of services for communities dependent on them, or both	31	21
	Diagnostics conducted or implementation undertaken to promote principles of freshwater-resilience building	26	19
	Water-related institutions supported to build resilience in water resource management or service delivery	36	33
	Resilience-focused knowledge products generated	47	21

* Of 243 activities in the FY24 GWSP active portfolio, 204 activities were monitored for results using the GWSP results monitoring and evaluation system. The remaining 35 activities were not monitored because they were too new (approved in the last quarter of the fiscal year); focused on knowledge sharing, dissemination, or communications; or involved program management and administration.

† These groups refer to people excluded on bases other than gender and disability.

BLOCK B

Water Global Department Outcomes

TABLE B.2

Portfolio Influence Indicators

Indicator		Baseline FY22	Progress FY23	Progress FY24	Target
Number of new projects		24	26	22	—
Sustainability	% of projects that promote sustainable and efficient water use	100	100	100	95
	% of rural WSS lending projects that measure functionality of water points	100	100	100	90
Inclusion	% of projects that are gender tagged	100	100	100	85
	% of projects with other social inclusion aspects[†]	88	73	74	75
	% of IDA-financed infrastructure operations in water, including actions to create employment opportunities for women in medium- and high-skilled jobs in this sector[*]	—	89	93	65
	% of water projects with disability-inclusive approaches in WASH[‡]	—	54	58	60
Institutions	% of projects that support reforms/ actions that strengthen institutional capacity	100	96	100	100
Finance	% of projects that support reforms/ actions for improving financial viability	89	81	77	85
	% of projects with explicit focus on leveraging private finance	22	8	41	20
Resilience	% of projects incorporating resilience in design of water-related initiatives	100	100	100	100
	Number of fragile and conflict-affected states supported with a resilience lens[§]	7[¶]	9[**]	5[††]	20
	% of new World Bank lending commitments with climate change co-benefits	58	65	68	60

Indicator		Baseline FY22	Progress FY23	Progress FY24	Target
Resilience *(continued)*	% of projects that have at least one climate-related indicator in their results framework‡	—	100	100	100
	Net GHG emissions (tCO_2eq/year)‡	—	-732,508	-540,959	-900,000

Source: Analysis of the FY24 Global Department for Water portfolio approved by the GWSP Monitoring and Evaluation team.

Note: GHG = greenhouse gas; WASH = water supply, sanitation, and hygiene; WSS = water supply and sanitation; — = not available.

* Measures the percentage of projects that demonstrate a results chain by linking gender gaps identified in the analysis to specific actions tracked in the results framework.

† Projects that target poor, vulnerable, or underserved communities or areas. Excludes citizen engagement, which is included under corporate monitoring.

‡ Indicator added in FY23.

§ In FY24, 38 countries and 1 economy were classified as having fragile and conflict-affected situations, per corporate guidelines. Target is cumulative for the period FY23–30.

¶ 20 cumulative FY18–22.

** 8 countries and the economy of West Bank and Gaza.

†† 14 cumulative FY23–24.

TABLE B.3

Sector Results Indicators

		Baseline		Progress			Indicative Targets	
		FY 18–22	Yearly avg	FY 23	FY 24	Yearly avg	FY 23–30	Yearly avg
Water Supply and Sanitation								
1.1	People with access to improved water sources (million)	64.3	12.86	11.34 of which female: 5.65	17.24 of which female: 8.53	14.29	103.2–119.1	12.9–14.9
1.2	People with access to improved sanitation (million)	201.11	40.22	15.87 of which female: 7.96	4.13 of which female: 2.06	10	67.38–77.6	8.42–9.7
1.3	Biochemical oxygen demand pollution loads removed by treatment plants (tons/year)	86,891	17,378	8,136	18,562	13,349	139,000–164,000	17,400–20,500
1.4	Number of schools and health centers with access to improved water and sanitation services			2,559	5,404	3,982	11,000–15,000	1,375–1,875
1.5	Utilities with improved working ratio	118	23.6	25	23	24	192–240	24–30
Water for Agriculture								
2.1	Area with new/improved irrigation services (million hectares)	3.66	0.73	0.53	2.16	1.345	5.84–7.62	0.73–0.95
2.2	Farmers adopting improved agricultural technology (million)	11.84	2.37	2.79 of which female: 1.13	2.48 of which female: 0.68	2.635	19.2–19.94	2.37–2.4
2.3	Water user associations created/strengthened	15,854	3,170	5,158	4,962	5,060	25,368–56,000	3,171–7,000

		Baseline		Progress			Indicative Targets	
		FY 18–22	Yearly avg	FY 23	FY 24	Yearly avg	FY 23–30	Yearly avg
Water Security and Integrated Water Resources Management								
3.1	People in areas covered by water-risk mitigation measures (flooding/ drought) (million)	21.77	4.35	2.15	16.37	9	33.1–40	4.1–5
3.2	Basins with management plans/stakeholder engagement mechanisms	91	18	35	17	26	144–160	18–20
3.3	Institutions with WRM monitoring systems	109	21.8	23	24	24	176–192	22–24
3.4	Area under sustainable land/water management practices (million hectares)	4.82	0.96	2.9	2.9	3	8–9.4	1–1.2
3.5	Hydropower generation capacity constructed/ rehabilitated (megawatts)	2,100	420	375	50	213	11,088–13,600	1,386–1,700

Note: WRM = water resources management.

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