



Increasing Resilience to Water Risks

USAID Sustainable Water Partnership
Annual Report 2019 - 2020

TABLE OF CONTENTS

- LIST OF ACRONYMS 1

- CHAPTER 1: THE USAID SUSTAINABLE WATER PARTNERSHIP 2
 - Message from the project director2

- CHAPTER 2: WHAT SWP DOES 4
 - Support to USAID Missions4
 - Water Security Improvement Pilots9
 - Communications and Knowledge Management14

- CHAPTER 3. WHAT'S NEXT 15

LIST OF ACRONYMS

CoP	Community of Practice
DSI	Department of Science and Innovation
DFSA	Development food security activity
FEWS	Flood Early Warning Systems
FEWSNET	Flood Early Warning System Network
FWUCs	Farmer Water User Committees
ISC	Irrigation Service Center
IUCN	International Union for Conservation of Nature
IWMA	Integrated Watershed Management Activity
JTC	Joint Technical Committee
LoP	Life of Project
LVBWB	Lake Victoria Basin Water Board
MoU	Memorandum of Understanding
PAHAL	Promoting Agriculture, Health, and Alternative Livelihoods
RISE	Resilience in the Sahel Enhanced
SADC-GMI	Groundwater Management Institute of the Southern African Development Community
SEED	Social, Environmental & Economic Development
SC-RBMC	Stung Chinit River Basin Management Committee
SWM	Sustainable Water for the Mara Activity
SWP	Sustainable Water Partnership
TEV	TerresEauVie Activity
USAID	United States Agency for International Development
WAP	Water Allocation Plan
WASH	Water, Sanitation, and Hygiene
WRUA	Water Resources Users Association (Kenya)
WSI	Water Security Improvement
WUA	Water User Association (Tanzania)

CHAPTER 1: THE USAID SUSTAINABLE WATER PARTNERSHIP

Message from the project director

The worldwide spread of the COVID-19 pandemic led to complications and challenges that combined to make 2020 an unprecedented year. Despite these difficult circumstances, we are grateful for the health and hard work of our teams in Burkina Faso, Cambodia, Kenya, Nepal, Niger, South Africa, Tanzania, and the U.S., and we appreciate the continued collaboration of our partners. Even with temporary lockdowns in SWP countries, we continued with activities by following country and local protocols for social distancing and with the use of applied remote monitoring tools to aid in the supervision of field activities. Through these great efforts, we were able to make significant progress in our field activities and thought leadership initiatives.

In 2020, SWP achieved two important milestones in the pilot activities in the Mara River Basin and in Cambodia. First, a water allocation plan (WAP) for the lower Mara River Basin in Tanzania was finalized and approved by the government of Tanzania. This groundbreaking agreement was the culmination of three years of scientific studies, data collection, and stakeholder engagement. The WAP is a key governance instrument which provides basin managers with the tools to manage water abstractions for multiple uses in order to maintain flows for environmental and basic human needs, and evaluating critical uncertainties identified by stakeholders such as climate change and upstream developments. Second, following the establishment in 2019 of the Stung Chinit River Basin Committee (SC-RBMC) in Cambodia, SWP helped establish the SC-RMBC Secretariat—an office that manages the body's operations—and applied our [Water Security Improvement \(WSI\) process](#) to support the development of a five-year strategic action plan (SAP) to increase resilience to water security risks in the basin.

SWP also made advancements in key thought leadership products, including the preparation of water security profiles for the 18 USAID Water for the World Act high-priority countries; the development of case studies based on SWP field pilot activities, such as the use of scenario analysis to assess water security under an uncertain future due to climate change; and the update of the water security toolkits. SWP looks forward to disseminating these thought leadership products next year.

This annual report describes our achievements and the lessons learned in applying the WSI process, which has continued to inform our work and efforts to increase resilience to water risks and improve the livelihoods of communities around the world.

Rodolfo Camacho,
SWP Project Director



“Our vision is a water secure world, where people have sustainable supplies of water of sufficient quantity and quality to meet human, economic, and ecosystem needs while managing risks from floods and droughts.”

156,736

Number of people benefiting from the adoption and implementation of measures to improve water resources management as a result of USG assistance

\$3,616,266

Value of new funding mobilized to the water and sanitation sectors as a result of USG assistance

2,059

Number of people educated on tools, approaches, and/or methods for water security, integrated water resource management and/or water source protection as a result of USG assistance

348

Number of people trained in climate change adaptation supported by USG assistance

4

Number of policies, laws, agreements, regulations, or investment agreements (public or private) that promote access to improved water supply and sanitation

17

Number of tools and methodologies on water security risks developed or shared





CHAPTER 2: WHAT SWP DOES

Over the past four years, SWP has carried out USAID Mission support activities, implemented field-based pilot activities, created partnerships for leveraging resources to implement action plans, and managed and shared knowledge around best practices and lessons learned. This chapter summarizes current and completed SWP activities under each of these objectives.

Support to USAID Missions

SWP continued to provide support to USAID/Southern Africa under the leader award and under two associate award activities with USAID/Nepal and USAID's Sahel Regional Technical Office. Support to USAID included capacity-building and technical assistance on assessing, planning, implementing, monitoring and evaluating activities to increase resilience to water security risks. SWP's Mission Support activities are described in further detail below.

NEPAL

February 2020 marked the completion of an innovative USAID project aimed at improving cooperation between USAID projects in Nepal around the shared goal of water security. Facilitated by SWP, the two-year [Integrated Water Management Activity \(IWMA\)](#) worked with 10 USAID projects, which are implemented by a diverse group of USAID implementing partners (IPs), to improve water security in two target watersheds in western Nepal.

Though Nepal has more than 6,000 streams and rivers, a combination of factors including deforestation, climate change, insufficient water infrastructure and ineffective water management contributes to water insecurity.

rity risks. USAID Nepal has a broad portfolio of activities in which water plays a role, including work on multiple-use water systems, disaster risk management, biodiversity, and maternal and child health. Until IWMA, these projects had limited collaboration. To change this, IWMA created a five-step water security integration process based on SWP's Water Security Improvement (WSI) process and the Integrated Watershed Management Framework developed by USAID Nepal's Social, Environmental and Economic Development (SEED) office.

Reorienting collaboration through the lens of water security helped break down silos, enabling IPs to see themselves as complementary parts of USAID Nepal's broader goals in the two target watersheds. IWMA facilitated five workshops with USAID IPs to develop a water security integration plan for each watershed. During the workshops, IPs identified water security risks that they could work together to address, then designed six field-level water security activities to address those risks. These activities, which involved two or more IPs, allowed the IPs to pool resources and knowledge to improve local water security. Two of these activities are illustrated below.

The field-level water security collaboration between the Suaahara II (suaahara means "good nutrition" in Nepali) project and the Promoting Agriculture, Health, and Alternative Livelihoods (PAHAL) project helped improve water security for local communities. Suaahara II recognized that nutrition challenges in a village called Hamtdad were linked to poor agricultural practices. The Suaahara II team engaged the PAHAL project for financial and technical assistance, which resulted in PAHAL matching funds contributed by the local ward and community for construction of a soil cement water tank for a micro-irrigation system. To complement the new infrastructure, community members received training on water-saving technologies and permagardening. As a result of the project, community members had the resources and tools needed to further improve their nutrition through increased access to irrigation for vegetables and training in climate-smart agricultural techniques.



IWMA also facilitated an important partnership between KISAN II and a local farm supply store, called an agrovet, to help extend agricultural input and supply networks to more remote areas. PAHAL and Suaahara II recommended a local agrovet with which both projects had independently collaborated. KISAN II provided a grant which enabled the agrovet to expand its business by facilitating extension services to Suaahara II and PAHAL beneficiaries in farmer groups. As a result, local farmers built and diversified their capacity, and the farmer groups increased fresh vegetable yields.

Following [the conclusion of IWMA](#), USAID Nepal is taking steps to build on the activity's accomplishments. Specifically, the SEED Office is applying lessons learned and best practices identified by IWMA to improve water security integration within USAID Nepal programs with practices such as:

- Establishing integration working groups led by the mission;
- Using watersheds as the unit of geographic focus for future water-related projects;
- Prioritizing collaboration with local governments to build their capacity to address water security risks;
- Developing and incorporating water security integration language to be included in future awards; and
- Sharing a record of collaboration activities among IPs to facilitate the design of future activities.

SOUTHERN AFRICA

The Big Data Analytics and Transboundary Water Collaboration for Southern Africa ("the Collaboration"), which SWP has been coordinating since the first quarter of 2018, concluded in December 2020. USAID partnered with the Government of South Africa's Department of Science and Innovation (DSI), the Groundwater Management Institute of the Southern African Development Community (SADC-GMI), the IBM Africa Research Lab, the Water Research Commission of South Africa, and the U.S. Geological Survey to provide financial and technical support for four research projects exploring the use of big data analytics to improve knowledge creation and evidence-based management for regional transboundary aquifers. Three of the four Collaboration research projects closed in December 2020, with a fourth concluding in January 2021.

The research projects addressed how big data analytics and transboundary data-sharing can be used to enhance transboundary water management in alignment with USAID's regional focus on natural resources and water management. Leveraging IBM Research Africa's interest in the application of big data analytics to water management, the research projects seek to explore new or relevant big data analytics methodologies to enhance current understanding of shared groundwater resources; improve transboundary groundwater management and collaboration; and provide big data skills development, capacity-building, and networking opportunities for young Southern African researchers and professionals.

All four research projects focus on the Ramotswa, a shared sub-basin that spans Botswana and South Africa and is a subsidiary of the wider Limpopo River Basin. One of the projects also focuses on the Shire River Basin, shared by Malawi and Mozambique. The projects each follow a key thematic area and are led by research teams comprised of experts from local universities, international consultants, and multinational organizations that are based in South Africa, Botswana, the Netherlands, and Germany.

The outcomes of the research projects are: 1) a validated sustainability framework and supply strategy for groundwater management in transboundary aquifers; 2) a master dataset suitable for big data analytics; 3) a suite of analytics tools for integrated decision-making; and 4) tools for localized governance approaches. These outcomes will be useful for both the Limpopo River Basin Commission and the related government departments in the two countries of reference. Furthermore, with one project testing its analytic tool in a dolomitic aquifer in South Africa, neighboring the Ramotswa, there is a potential for application to other aquifers with similar geology and land uses.

As the partnership's coordinator, SWP facilitates decision-making and consensus-building on critical issues that influence timely, consistent, and effective implementation of the Collaboration activities. Through this process,



SWP has been able to help broaden the scope of the Collaboration and create an inclusive process for regional partnerships, including the South African Department of Water and Sanitation and the Centre for Scientific and Industrial Research. SWP has also provided planning support for the organization of joint events; fostered the creation and continued engagement of a Community of Practice in Southern Africa on transboundary water management and big data; and contributed to the technical reviews of the four research projects.

SWP helped organize two webinar series in 2020. The first series in February and March, titled “Crash Course on Big Data for Water Security,” featured seven seminars with experts from IBM Research Africa. The series included seminars on the potential for big data analytics to enhance water security, with a special focus on East Africa and Southern Africa and the proposal for a blockchain data-sharing platform for the region.

In August and September, SWP and the International Union for the Conservation of Nature’s (IUCN) Global Water Program and Environmental Law Centre presented a [series of six webinars on transboundary water governance](#). The webinars covered a variety of topics relating to transboundary water governance, such as international law on the subject, the future of transboundary water governance in Southern Africa, and the potential role of big data. The webinars were well-attended, with ample geographic participation from other regions outside Africa including the Middle East, Asia and South America.

In the last months of Year 4, SWP has facilitated dialogue among members of the Collaboration for continued engagement beyond SWP’s support. An important focus of the Collaboration going forward will be on big data analytics and regional data sharing.

NIGER/BURKINA FASO

In February 2019, USAID’s Sahel Regional Office awarded the TerresEauVie (TEV) Activity to Winrock as an associate award under SWP. TEV is part of the USAID Resilience in the Sahel Enhanced (RISE) II project. As a five-year activity, TEV is the primary implementing mechanism dedicated to achieving RISE II’s first objective to “Enhance social and ecological risk management systems” through three components: 1) improved water security, 2) enhanced sustainable productive land use, and 3) improved management of shocks, risks and stresses. The activity covers 25 communes in Niger (Maradi, Tillaberi, and Zinder regions) and 15 communes in Burkina Faso (Centre Nord, Est, and Sahel regions). Within RISE II, TEV is a leading activity on water security improvement and shocks and stress management, and a driver for collaboration with USAID RISE II partners. During the reporting period, TEV completed the “Refine and Implement” period leading to the submission of the revised Life of Project (LoP) design and workplan, and made the transition to implementation in early 2020.



Combatting COVID-19 pandemic and supporting multi-risk contingency planning

The COVID-19 pandemic disrupted planned activities. In response, TEV adapted the way the activity works with the team/staff, communes, partners, and other activities. TEV shifted to remote work while offices were closed, until offices reopened in the last quarter. Through Component 3, TEV supported communes to plan and manage a pandemic response in line with government directions and collaborated with other RISE II activities on response efforts. As a result of TEV's support, 25 communes in Niger and 12 in Burkina Faso developed response plans; shared them with partners; and monitored their implementation.

In both countries, this commune-led initiative resulted in the implementation of strong COVID-19 mitigation measures such as handwashing stations and informational posters at public gathering areas. TEV also developed and disseminated COVID-19-related media messages highlighting COVID-19 symptoms and mitigation measures such as handwashing, social distancing and wearing masks. These media messages were disseminated through organized call-in shows through community and regional radio, as well as established WhatsApp groups in all targeted communes. TEV also distributed sensitization posters produced by the government to the communes.

In Niger, TEV trained religious, traditional, and elected authorities on how to implement and communicate COVID-19 mitigation measures to their respective communities. TEV also expanded COVID-19 response plans into more comprehensive communal multi-risks plans in collaboration with SP/CONASUR in Burkina Faso (the national structure for disaster risk management) and the regional Early Warning System in Niger.

Advancing data for informed decisions for implementation of the Water Security Improvement (WSI) process

Providing good data and information from the field is a key element in helping communes launch long-term groundwater resource management programs and immediate remediation of local water points and sources. To improve the decision-making process at local, regional and national levels, TEV launched a groundwater study of 18 communes in Niger (Maradi and Zinder regions) with the involvement of the USAID partner projects and local water authorities. This study contributes to all stages of the WSI approach. In addition, the Burkina Faso team built on this experience to design its groundwater study.

Information collected will be shared through a GIS web-mapping platform designed and promoted by TEV for Niger and Burkina Faso. This platform will be accessible to all RISE II implementers, government, communes,



other development agencies and the public. It will include key information on land use, land occupation, sub-watersheds, Piezometric array/network, rainfall, and dams. The platform will be a unique tool to allow municipalities, departmental, regional, and national services and companies to use web maps for better planning of resources accounting for climate change and other natural and human risks.

Moreover, starting in April 2020, TEV developed a commune-targeted climate and weather information bulletin with the Famine Early Warning System Network (FEWSNET) and the AGHYMET Center. The seasonal forecast and mid-season information were disseminated in local languages through regional radio broadcasts, local WhatsApp Groups, community-based services providers and city hall, in collaboration with the National Early Warning System (EWS), development food security activities (DFSAs), and other RISE II partners.

Improved water resources management

In Burkina Faso, more than 40,000 people benefited from the adoption and implementation of measures to improve water resources management such as: the rehabilitation of 20 water points (under Crisis Modifier 1) in Barsalogo; the signature and implementation of a flagship, ten-year management contract for a potable water supply system between the commune of Barsalogo and Association Impulsion; and the measures taken around the water resource of the dam of Tougouri and Yalgo (Centre-Nord). TEV also improved household potable water through the development of the Aquatabs supply chain by connecting 10 Aquatabs promoters to a supplier, which led to more than 46,000 tablets sold. In Niger, using 18 community and regional radio stations and WhatsApp groups, TEV worked with the Ministry of Hydraulics and Sanitation, as well as the Permanent Secretariat of the Rural Code, to produce and disseminate more than 450 messages in local languages on sustainable water management for drinking and productive uses.

Supporting government's rural water policy popularization and implementation and improving communal potable water systems functionality

TEV also increased awareness and implementation of government rural water policy. In Burkina Faso, four communes developed actions plans for public water utility management. TEV will support and monitor their implementation throughout FY21. In Niger, TEV surveyed 18 User Associations of the Public Water Service (AUSPE), 17 Delegates and five Municipal "Water and Sanitation" Services (SMEA) to assess their functionality and capacities. TEV also designed capacity building to IWRM bodies on the roles, responsibilities and knowledge related to water regulations and IWRM system functioning.

Building responses to floods

In the last quarter of 2020, TEV supported responses to floods affecting 19 of the targeted communes in Niger and four in Burkina Faso. Flood responses, which included media messages, identification and preparations for repair and rehabilitation of flood damage water sites through the development of a crisis modifier in each country, will continue into the new fiscal year.

Water Security Improvement Pilots

SWP's pilot activities are testing innovative methods for improving water security in the Stung Chinit Watershed in Cambodia and in the Mara River Basin in Kenya and Tanzania. These pilot activities apply SWP's Water Security Improvement (WSI) process to data collection and analytics for water security assessments; stakeholder engagement for water security planning; implementation of interventions needed to achieve tangible outcomes to improve water security and increase resilience to water security risks including climate variability and change; and documenting lessons learned.

STUNG CHINIT WATERSHED (CAMBODIA)

The Stung Chinit ("stung" means river in Khmer), located primarily in Cambodia's Kampong Thom Province, is a major tributary of the Tonle Sap Lake, the country's largest and most important lake in terms of economy and water supply. The river is around 260 kilometers long, merging downstream with the Tonle Sap River, and its watershed is approximately 8,000 square kilometers in size.

Water security is essential for the people living in this area of central Cambodia. At least 75 percent of households in the Stung Chinit watershed report having access to improved water sources, which is higher than the provincial average of 63 percent. Groundwater is widely used for domestic water supply and is increasingly being used for small-scale irrigation. The watershed's population is growing by two percent per year, which is increasing stress on the landscape and its water resources. Land use changes in the watershed have reduced forests by 43 percent between 2000 and 2018, primarily for agricultural purposes. Ninety percent of agricultural land in the watershed is used for rice production.





Seasonal distribution of rainfall, increased evapotranspiration, and increased frequency and intensity of extreme events due to climate change could significantly alter the Stung Chinit watershed's hydrology. In 2018, SWP conducted a water security assessment of the Stung Chinit and found a high risk of over-abstraction from agriculture and that surface water quality is being affected by deforestation, lack of soil management, river-bank erosion, and contamination from agrochemicals and human excreta.

To address these issues, SWP is facilitating a stakeholder-driven water security improvement process. While field activities were briefly suspended due to the COVID-19 pandemic, SWP was able to continue its efforts to improving water security in the watershed. A few highlights from SWP's work in Cambodia during this year include:

- SWP supported the Stung Chinit River Basin Management Committee and its operationalization. At the beginning of the reporting period, SWP and members established a Committee Office, brought on board its first employee, the Secretariat Coordinator, and standardized operations.
- SWP facilitated the development of a Strategic Action Plan (SAP) with the Stung Chinit River Basin Management Committee to address priority water security risks in the watershed. The SAP contains priority actions along with anticipated funding requirements based on stakeholder-identified needs and water security assessments. The Stung Chinit River Basin Management Committee appointed a task force which held two key workshops to develop the objectives and brainstorm priority water security actions and a second workshop to discuss the final outline and the draft priority actions and activities. In the first quarter of Year 5, SWP will support the preparation of the final draft of the SAP, which will be submitted to the Committee Chair for final approval. SWP also anticipates supporting the SC-RBMC to seek funding for these priority actions in Year 5.
- SWP engaged the Irrigation Service Center (ISC), a non-governmental organization that promotes the sound development of irrigation schemes in the country, to map two irrigation schemes, develop water distribution schedules for the two schemes, and train the schemes' farmers on FWUC legislation and management. [ISC facilitated workshops in March and July of 2020](#) using an innovative, interactive game to facilitate discussions on how their scheme should be maintained and operated, as well as how to optimize scheduled water releases to diminish conflict among neighbors. The goal was to enhance farmers' understanding of how their irrigation scheme works, and identify who is using water, and how much, as well as promote outcomes such as improved water allocation and scheduling of water releases.

MARA RIVER BASIN (KENYA/TANZANIA)

Originating from the Mau Escarpment in Kenya's Great Rift Valley, the transboundary Mara River Basin (MRB) covers approximately 13,750 square kilometers (of which 65 percent is in Kenya and 35 percent is in Tanzania). Home to wildlife in the Maasai Mara National Reserve in Kenya and the Serengeti National Park in Tanzania, the MRB holds global significance for conservation efforts and is important for the economic development of local communities in the MRB and for the national economies of Kenya and Tanzania. Risks to water availability and quality in the MRB are growing and threatening development and conservation gains. Population growth is estimated to be more than three percent annually and land use changes from increased agriculture are affecting the basic hydrology and ecosystem functions in the MRB, impacting seasonal availability of water and water quality. Water pollution caused by unregulated wastewater discharge and lack of solid waste management from urban centers, mining, and agricultural activities is contaminating surface and groundwater supplies, potentially hampering access to WASH services, negatively impacting health, livelihoods, and overall development outcomes.

SWP's three-year Sustainable Water for the Mara (SWM) activity in the MRB is implementing strategic interventions at the transboundary, national, and sub-catchment levels to address these critical risks and improve water security. SWP's activity strategically builds on past and current USAID investments in the MRB (in particular, USAID/Kenya and East Africa's PREPARED Program) to directly support the Memorandum of Understanding (MOU) for Joint Water Resources Management in the Mara Basin. Throughout our activities, we are working with key governance institutions in the MRB, including the Lake Victoria Basin Commission, Ministries of Water in Kenya and Tanzania, Kenya's Water Resource Authority and the Lake Victoria Basin Water Board (LVBWB) in Tanzania, Kenyan water resource user associations and Tanzanian water user associations, and service delivery providers.

During this reporting period, SWP made progress in the following areas:

- SWP worked with the World Wildlife Fund and the Lake Victoria Basin Commission to draft a preliminary white paper on transboundary water-sharing principles in the MRB. The intention of this document is to inform negotiations between the governments of Kenya and Tanzania through the Joint Technical Committee, as stipulated in the Mara River Basin Memorandum of Understanding. This paper highlights different examples of water-sharing arrangements around the world and provides scenarios related to transboundary water-sharing arrangements in the Mara River Basin for the Joint Technical Committee to consider. This draft paper was shared with the Lake Victoria Basin Commission, which serves as the interim secretariat of the Joint Management Committee, for initial input.
- Facilitated the final approval of the Tanzania Water Allocation Plan (WAP). The WAP was arrived at after three years of scientific studies and stakeholder consultations and addresses threats to water security by providing guidance water distributions and water permitting under different water availability





scenarios. The plan contains multiple options for allocating water depending on water availability and current, medium- and long-term demand, taking account of changes and associated uncertainties due to increased demand and climate variability and change.

- Progress was achieved in strengthening the self-reliance of the Mara North and Mara South water user associations (WUA) in Tanzania and the Nyangores and Talek water resources users associations (WRUA) in Kenya for catchment conservation in the Mara River Basin. SWM used grant mechanisms and partnered with the Maasai Beekeeping Institute (MBI, Kenya) and the Tanzania Forest Service (TFS) to set up beekeeping demonstration sites and provide trainings in apiary management and artisanal beehive manufacturing, as well as establishing indigenous tree nurseries and providing technical assistance to propagate indigenous tree seedlings. Beekeeping will provide the WUAs and WRUAs with three sources of revenue: 1) sale of honey and honey products produced at demonstration sites, 2) beekeeping trainings delivered to interested community members at the demonstration sites, and 3) sale of artisanal beehives manufactured by the WUAs and WRUAs. Using revenues from beekeeping, the WUAs and WRUAs will maintain the indigenous tree nurseries and fund catchment conservation and reforestation efforts using their propagated seedlings.
- Through the grant agreement, the WUAs and WRUAs were able to manufacture 366 beehives, establish business plans which were reviewed by a specialist in beekeeping, produce 81kg of honey, and propagate 39,300 seedlings. SWP also facilitated Letters of Agreement between MBI, the WRUAs, and the Water Resources Authority in Kenya, and the TFS, WUAs, and Lake Victoria Basin Water Board to ensure long-term commitment to provisions of technical support in beekeeping and basin-level oversight of the WUA and WRUA commitments to catchment conservation. These letters also documented WUA and WRUA commitment to reinvest at least 10 percent of revenues generated through beekeeping activities into their management of indigenous tree nurseries and catchment conservation activities.
- During this reporting period, SWP continued working with local counterparts to support source water protection improvements and improved water security for local communities. SWP organized focus group discussions to understand demand needs, water use practices, and other concerns in an effort to inform source water protection and capacity building measures. Through this effort, SWP is helping to rehabilitate and protect springs and boreholes in 11 sites in Kenya and Tanzania using a combination of green and grey infrastructure to separate water access and use among domestic users, washing, and livestock watering, while protecting the integrity of the spring and surrounding vegetation. In late September 2020, SWP commenced site preparation and mobilization of resources for the protection and rehabilitation of the sites.

Communications and Knowledge Management

Over the past four years, SWP has developed and refined water security tools and methodologies and documented best practices, lessons learned, and other technical resources to support water security programming and implementation.

In 2019-2020, SWP published the following pieces of content on its platform at [SWPwater.org](https://www.swpwater.org) as well as other media platforms and channels:

- 4 quarterly SWP newsletters
- 9 stories on topics such as the use of [big data](#) to improve transboundary water governance.
- 4 blogs/partner cross-posts about topics such as the [role of water in economic prosperity](#).
- Two appearances by SWP leaders on podcasts to discuss water security, such as [SWP Director Dr. Rodolfo Camacho's appearance](#) on the Wilson Center's Water Stories podcast.
- [Five studies](#) about evidence-based decision-making in the Mara River Basin.
- Studies on [using water-related data](#) for solving different types of water security problems, [water balance](#) in Cambodia's Stung Chinit Watershed, and a [water security case study](#) from SWP's work with the Integrated Watershed Management Activity (IWMA) in Nepal.



During this period, SWP also prepared water security country profiles for USAID's 18 high-priority Water for the World Act countries as well as commenced drafting key case studies and white papers documenting lessons learned and best practices from SWP's pilot activities in Cambodia and the MRB. The water security country profiles, case studies, and white papers will be published in Year 5.

Since its launch in 2017, [SWPwater.org](https://www.swpwater.org) has been accessed over 31,000 times, with over 116,000 pageviews. SWP has further disseminated its content through its newsletter and social media channels. The program has more than 3,000 followers across Facebook, Twitter, and LinkedIn, and 1,486 newsletter subscribers.



CHAPTER 3. WHAT'S NEXT

In Year Five, SWP will focus its efforts on documenting lessons learned about critical assumptions, challenges, and strategies in the implementation of the water security improvement (WSI) process to accomplishing SWP's goal to increase resilience to water security risks. SWP will focus its efforts to closeout activities and develop sustainability plans for the field pilots in the Mara River Basin and Cambodia. In addition, SWP will publish the water security country profiles for the 18 high-priority countries designated in the Water for the World Act.

Additional activities in Year Five are:

1. Support the development of an integrated report of the research projects and sustainability plan for the Big Data Analytics and Transboundary Water Collaboration in Southern Africa.
2. Advance the WAP process in the MRB by raising awareness on water-sharing principles.
3. Complete construction of source water protection sites in Kenya and Tanzania, train local communities, and formally hand over the protected sites.
4. Develop and work with WUAs and WRUAs to prepare plans for long-term sustainability of beekeeping and tree nurseries for catchment conservation in the MRB.
5. Support first-year implementation of the Strategic Action Plan (SAP) for the Stung Chinit Basin and the development of its sustainability plan.
6. Finalize and publish updated WSI toolkits.
7. Finalize and publish water security case studies illustrating lessons learned from the pilot activities in the MRB, Cambodia and Southern Africa.
8. Finalize and publish learning briefs including water security and WASH linkages and lessons learned from the Mara and Cambodia pilot activities.
9. Conduct activity closeout webinars for the Mara and Cambodia field pilots.
10. Implement a closeout conference for SWP.



USAID
FROM THE AMERICAN PEOPLE

