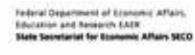


CENTRAL ASIA WATER AND ENERGY PROGRAM

CAWEP
Annual Report
2020



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1818 H Street NW, Washington, DC 20433
Telephone: +1 (202) 473-1000
Internet: www.worldbank.org

2020 CAWEP Team

William Young, CAWEP Program Manager
Azad Abdulhamid, Water Security Pillar Leader
Husam Mohamed Beides, Energy Security Pillar Leader
John Bryant Collier, Water-Energy Linkages Pillar Leader
Togzhan Alibekova, Program Liaison

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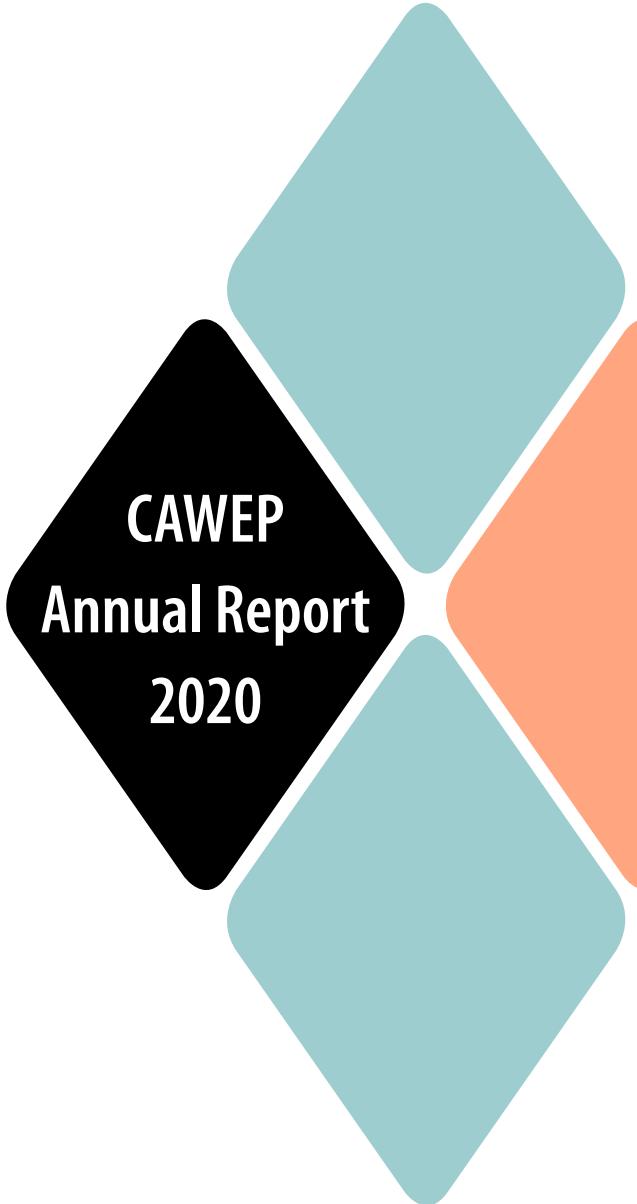
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ACRONYMS AND ABBREVIATIONS

ADB	Asian Development Bank
AF	Afghanistan
BETF	Bank-Executed Trust Fund
CA	Central Asia
CAFEWS	Central Asia and Afghanistan Flood Early Warning System
CAMP4ASB	Climate Change Adaptation and Mitigation Program for Aral Sea Basin
CAWEP	Central Asia Water and Energy Program
CAREC	Central Asia Regional Economic Cooperation
COP	Conference of Parties
CDC Energia	Coordinating Dispatch Center Energia
DABS	Da Afghanistan Breshna Sherkat
EC-IFAS	Executive Committee of the International Fund for Saving the Aral Sea
ESCC	Energy Sector Coordinating Committee
EU	European Union
FCDO	United Kingdom Foreign, Commonwealth and Development Office
HPP	Hydropower plant
IFAS	International Fund for Saving the Aral Sea
IWRM	Integrated water resource management
JSC	Joint-stock company
KZ	Kazakhstan
KG	Kyrgyz Republic
MOU	Memorandum of Understanding
PACT	Program for Asia Connectivity and Trade
RETF	Recipient-Executed Trust Fund
SECO	State Secretariat for Economic Affairs of Switzerland
TJ	Tajikistan
TM	Turkmenistan
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
UZ	Uzbekistan
WSS	Water supply and sanitation



EXECUTIVE SUMMARY

This report describes the activities and management of the Central Asia Water and Energy Program (CAWEP) for the period January 1–December 31, 2020. It is the third Annual Report for the 3rd phase (2018–2022) of the program. CAWEP commenced in 2009 as the Central Asia Energy-Water Development Program and was renamed in 2019. It is a multi-donor trust fund managed by the World Bank with a US\$12.6 million funding envelope, comprising (chronologically) US\$3.5 million from the Swiss State Secretariat for Economic Affairs (SECO), US\$1.0 million from the United Kingdom Foreign, Commonwealth and Development Office (FCDO), and €7.0 million from the European Union.

Program design for the 3rd phase was informed by lessons from prior phases, and the program development objective was adjusted to emphasize water security more broadly as well as enabling environment strengthening at both regional and national levels. The program development objective is *to strengthen the enabling environment to promote water and energy security at regional level and in the beneficiary countries*. This aligns with the World Bank's regional engagement framework that aims to strengthen connectivity and increase the economic value of water and energy resources in the region.

CAWEP's long-term vision is to promote sustainable development and livelihood security across the region. It thus finances initiatives that (i) support improvements in water and energy management and development, (ii) strengthen national and regional institutions, and (iii) facilitate regional dialogue on water and energy security in order to advance regional cooperation on sustainable development and climate resilience. By the end of December 2022, the program aims to have:

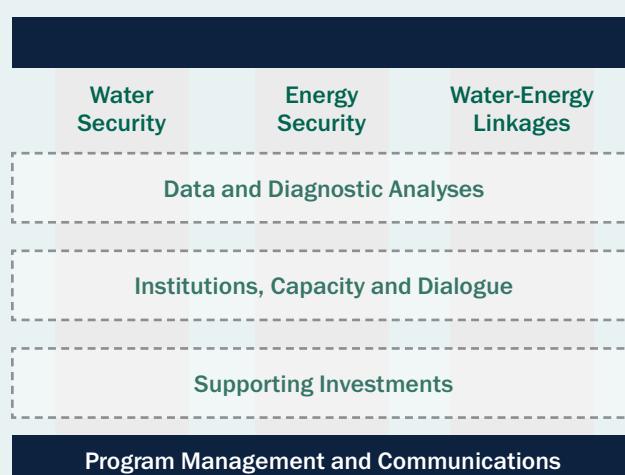


FIGURE 1. PROGRAM STRUCTURE

CAWEP BY THE NUMBERS

US\$12.6 MILLION

in Bank-executed and Recipient-executed grants

to strengthen the enabling environment to promote water and energy security regionally and in beneficiary countries



- Improved national policy frameworks that guide water and energy security;
- Informed a regional framework for water and/or energy security;
- Strengthened national and regional institutional capacity for water and energy management; and
- Leveraged/informed US\$2.5 billion (US\$0.8 billion for the 3rd phase) of World Bank investments that improve national and regional water and energy security.

The program has three pillars and three cross-cutting themes (Figure 1). Pillar structure and content focus on facilitating water and energy security, and the linkages between them. The Water Security Pillar promotes sustainable and efficient use of shared water resources and integrated water resources management (IWRM).

The Energy Security Pillar promotes the security and economic efficiency of energy supply from national to regional level, and the Water-Energy Linkages Pillar guides management of the water-energy nexus and climate-change adaptation efforts that link two or more countries.

The cross-cutting themes are (i) data and diagnostics, (ii) institutions, capacity and dialogue, and (iii) supporting investments. National activities are recognized as important building blocks for regional water and energy security, and Afghanistan has been formally included as a beneficiary country.

Regional Context

2020 was dominated by the COVID-19 pandemic, and the associated major and ongoing economic and social impacts. The pandemic focused government efforts on emergency health responses, targeted social assistance, and food security investments. Countries across the region collaborated to provide humanitarian assistance to those in need. In the Kyrgyz Republic, protests followed the October parliamentary elections that were widely seen as fraudulent; the government was removed from power and the election results were abandoned. Ongoing deliberation on electoral reform prior to new parliamentary elections, as well as transformation of the country's political system have moved the focus away from important sectoral reforms. In Uzbekistan, the May 2020 failure of Sardoba Dam with impacts in both Uzbekistan and Kazakhstan, focused attention on safety of hydraulic structures and the need for regional cooperation to prevent water conflicts.

In the energy sector, key priorities were development of regional electricity trade, and diversification of electricity generation capacity. Climate change received increasing attention as all countries began preparations for the twenty-sixth session of the Conference of the Parties (COP26) of the United Nations Framework Convention on Climate Change (UNFCCC) scheduled for late 2021 in Glasgow, Scotland.

Progress in 2020

The CAWEP portfolio increased to 29 activities (ten under the Water Security Pillar, twelve under the Energy Security Pillar, and seven under the Water-Energy Linkages Pillar) as well as program management and communications. Four new activities (two of which are recipient-executed) were added. Five activities were completed during the year. Common themes across pillars include improving knowledge exchange, improving resource management, and building capacity.



FIGURE 2. CAWEP FOCUS AREAS IN 2020

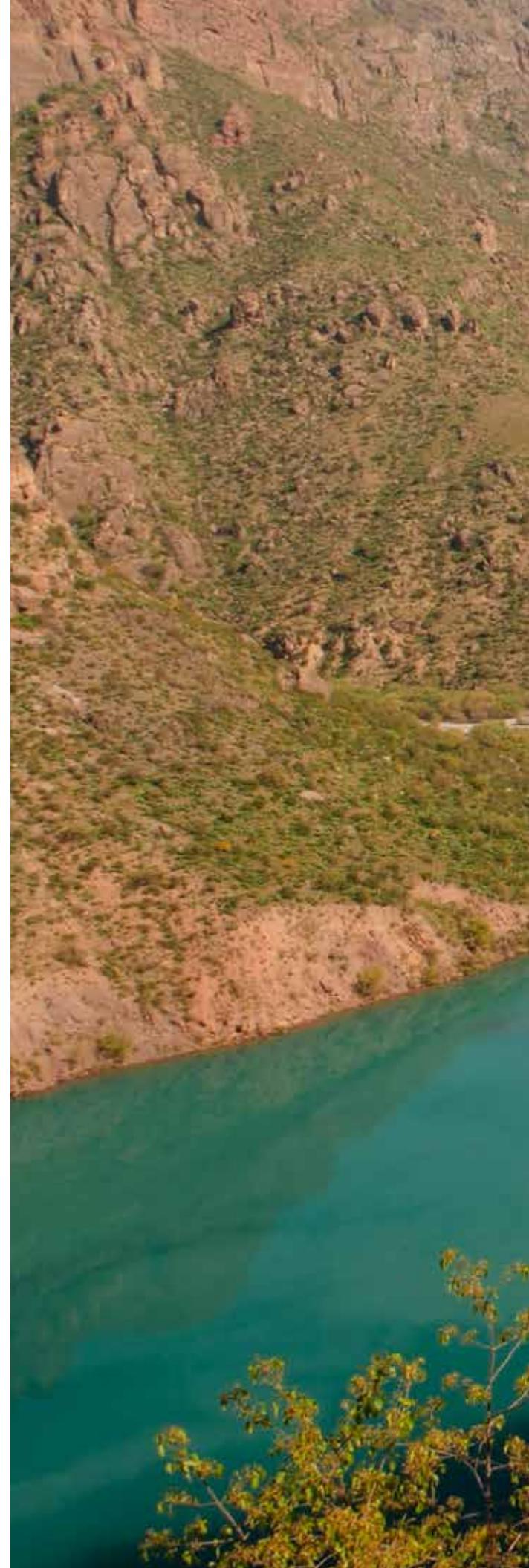
CAWEP continues to emphasize national activities as the building blocks for regional security, with regional dialogue supported under *Facilitation of Regional Dialogue and Development Partnerships on Water & Energy Security in Central Asia*. Under this activity, the *Towards Water-Secure Sustainable Economies* (2019) brochure was used to frame consultations on water security in the Central Asian countries in 2020. These consultations sought to better understand national priorities and opportunities, and to gauge country perspectives on regional water cooperation. A regional strategy for engagement on water security will be finalized in 2021 to guide ongoing CAWEP efforts on this agenda.

At the policy level, a regional multi-system platform concept was developed for improved flood and landslide forecasts, warnings and advisory services, in the Amu Darya (including Afghanistan) and Syr Darya River basins. The proposed platform would support data sharing, strengthen data processing, and improve real-time hydrometeorological monitoring and forecasting.

CAWEP has informed investments totaling US\$1.29 billion including World Bank financing of US\$0.56 billion. This includes new water operations in Kazakhstan and Tajikistan, landscape restoration projects in Kazakhstan and Tajikistan, and energy development investments in Tajikistan and Uzbekistan.

Allocations and Disbursements

In 2020, CAWEP allocated US\$6.48 million to activities, bringing total allocations to US\$11.1 million. Disbursement in 2020 was double the 2019 level, despite pandemic restrictions that slowed implementation. Implementation delays caused by pandemic restrictions meant nearly half of current activities were extended beyond their original planned completion date. Relative allocations by pillar are Water Security (41 percent), Energy Security (26 percent), Water-Energy Linkages (23 percent), and program management and communications (10 percent).



The background image shows a wide river with turquoise water winding through a valley. The banks of the river are covered in green vegetation, and the surrounding hills and mountains are a mix of brown and green, suggesting a semi-arid or dryland environment. The lighting suggests it's either early morning or late afternoon.

REGIONAL AND COUNTRY CONTEXT

A graphic element in the bottom right corner of the slide. It consists of several overlapping diamond shapes. The largest diamond is black. Behind it are two teal diamonds, one oriented vertically and one horizontally. To the right of the black diamond is an orange diamond.

CHAPTER 1

CAWEP promotes water and energy security and recognizes that the distribution of water resources across Central Asia makes regional collaboration essential to maximizing shared benefits. In 2020, the ongoing COVID-19 pandemic had major impacts, causing the 1st economic contraction in Central Asia in over 25 years. The World Bank estimates that in 2020, an additional 1.6 million people¹ in Central Asia fell into poverty, increasing the importance of water and energy security for the region's poorest. Regional meetings continued apace (although mostly shifted online) with new bilateral agreements and regional commitments on energy sharing, transboundary resources, and knowledge exchange. 2020 was also an important year for climate change policy, as the nationally determined contributions of the Paris Agreement on climate change entered into effect and preparations began for the UNFCCC COP26 scheduled for late 2021 in Glasgow, Scotland commenced. All countries in the region are signatories of the Paris Agreement.

Regional Context

Water Security. Following a decade without high-level water engagement, the five Central Asian leaders met in 2018 and then again in 2019, reflecting a marked shift in regional politics. The meeting planned for October 2020 was postponed because of COVID-19, but regional leaders participated in an extraordinary meeting of the Cooperation Council of Turkic-Speaking States in April, and in the Shanghai Cooperation Organization's Council of the Heads of State summit in November. The US-led C5+1 High-Level Dialogue featured all five Central Asian states, and discussed environmental and energy policy, as well as trade, investment, and borders. The China-Central Asia Foreign Ministers' Meeting convened an inaugural event in October, and frequent bilateral talks between national leaders occurred across the region during the year.

In 2020, Tajikistan commenced its chairmanship of the Executive Committee of the International Fund for Saving the Aral Sea (EC-IFAS), with Sulton Rakhimzoda appointed the new Chairman in September. The key priorities for the Tajikistan chairmanship are reform of IFAS institutional structures and processes, and implementation of the 4th Aral Sea Basin Program.

In December, the UN General Assembly unanimously adopted a draft resolution introduced by Tajikistan and the Netherlands, entitled “United Nations Conference on the Midterm Comprehensive Review of the Implementation of the Objectives of the International Decade for Action “Water for Sustainable Development”, 2018–2028”. The draft resolution highlighted climate change, global water stress, and the link between sustainable development and water, and welcomed Tajikistan’s offer to convene a high-level international conference to support preparation for the comprehensive mid-term review.

Disasters affecting the region in 2020 included floods in Uzbekistan, Kazakhstan, and Afghanistan. Natural disasters cost the region an average of US\$10 billion annually, and this will continue to rise without sustained action. The Sardoba Dam failure in Uzbekistan displaced more than 100,000 people in Uzbekistan and Kazakhstan, affected more than 35,000 hectares of land in both countries and led to six deaths². In July, Kazakhstan and Uzbekistan signed a water cooperation roadmap³ to improve transparency in water allocation. The roadmap regulates joint inspection and monitoring of post-1990s water facilities, as well as joint measures on water allocations from upstream reservoirs. A bilateral treaty between Kazakhstan and Uzbekistan on joint management, use and protection of transboundary water facilities was drafted⁴ and is under negotiation.

Energy Security. In February, the 4th Annual International Congress and Exhibition Hydropower for Central Asia and Caspian was held in Bishkek, and the 2nd Central Asia Renewable Energy Summit was held in Nur-Sultan. The Central Asia Regional Economic Cooperation (CAREC) Energy Sector Coordinating Committee (ESCC) met later in the year. ESCC praised regional successes in renewable energy and adopted the CAREC Energy Strategy 2030. CASA-1000 remains a key effort for regional energy security and the Central Asia – South Asia Regional Energy Market. Conceived in 2016, this US\$1.17 billion investment will enable transmission of 1300 MW of hydroelectricity from the Kyrgyz Republic and Tajikistan to Afghanistan and Pakistan. Early in 2020, Afghan President Ashraf Ghani inaugurated CASA-1000 work in Afghanistan. Uzbekistan and Tajikistan are implementing projects to balance energy and water resources, including reconstruction of the 500 kV power transmission line Guzar–Regar in Uzbekistan. Early

1 Bierde, Anna. 2021. Envisioning Central Asia's Green Recovery (opinion). July 1, 2021. <https://www.worldbank.org/en/news/opinion/2021/07/01/envisioning-central-asia-s-green-recovery>.

2 Global Observatory for Water and Peace. 2020. Hydrodiplomacy in Rapid Action: Early Insights from the Sardoba Dam Disaster in Central Asia. September 9, 2020. <https://www.genewawaterhub.org/news/hydrodiplomacy-rapid-action-early-insights-sardoba-dam-disaster-central-asia>.

3 Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan. 2020 Казахстан и Узбекистан заключили документ, регулирующий ряд вопросов в водной сфере. July 2, 2020. <https://www.gov.kz/memlekет/entities/ecogeo/press/news/details/77624?lang=ru>

4 Report of the Minister of Ecology, Geology and Natural Resources on Water Security (Nur-Sultan, November 6, 2020). https://online.zakon.kz/Document/?doc_id=35821446#pos=5;-106

in 2020, Kazakhstan and Uzbekistan signed water and energy cooperation agreements valued at US\$500 million, and Kazakhstan leased 100 hectares of public land for solar energy development.

Water-Energy Linkages. The 9th meeting of the EU-Central Asia Working Group on Environment and Climate Change was convened in Brussels in February, to present the priorities of the new EU Strategy on Central Asia and the priorities of the Platform on Environment and Water Cooperation. Several bilateral agreements on environmental cooperation were signed during 2020, including a five-year Afghanistan-Tajikistan Memorandum of Understanding (MOU) on environmental protection of the shared mountain ecosystem of the Panj – Amu Darya rivers. The key areas for cooperation under the MOU are: (i) climate change adaptation, (ii) biodiversity conservation, (iii) water quality monitoring, (iv) environmental assessment, and (v) knowledge and expertise sharing for ecosystem management.

At the start of 2020, the five Central Asian countries and Afghanistan, hosted by Germany in Berlin, signed a Joint Declaration of Intent on climate cooperation within the framework of Green Central Asia. In October, the 3rd Central Asian Conference on Climate Change was convened virtually by the *Climate Adaptation and Mitigation Program for the Aral Sea Basin* (CAMP4ASB). Kazakhstan, Tajikistan, and Uzbekistan accessed Green Climate Fund financing to support various initiatives including modernization of hydrometeorology agencies. Reduced winter snowfall in Tajikistan and subsequent low meltwater inflow to hydropower reservoirs led to reduced energy exports and domestic energy restrictions.

Country Context

Afghanistan

Afghanistan faced several additional challenges and uncertainties during 2020. Despite the signing of a peace agreement between the United States and the Taliban in February, active conflict between Taliban and government forces continued, with no clear path to sustained and comprehensive peace.

In January, a presidential decree split the Ministry of Energy and Water into two independent regulatory bodies for water and energy. The new National Water Affairs Regulation Authority (NWARA) is responsible for the development and management of water resources, and the implementation of water sector reform, water resources infrastructure, and water supply. The government identified infrastructure rehabilitation and expansion as one of its priorities. The Water Regulatory Law was amended to clarify sector responsibilities, confirming the Supreme Council of Water, Land and Environment as the highest leadership, policy, and decision-making authority, and expanding and strengthening the role of NWARA in developing policy, strategy, and legislation.

In December, The World Bank provided a US\$50 million grant for the *Afghanistan Water, Sanitation, Hygiene, and Institutional Support Project* to improve the access to and quality of water supply in Kabul, Kandahar, and Herat, and to strengthen the capacity of the Afghanistan Urban Water Supply and Sewerage Corporation to deliver sustainable services.

Following the presidential decree, project implementation and renewable energy were transferred to Da Afghanistan Breshna Sherkat (DABS). In April, the connection work of 500 KV Turkmenistan-Afghanistan transmission line under the TUTAP Project was completed. The Asian Development Bank (ADB) approved a US\$110 million grant to boost power supply and strengthen the national energy sector. This will finance construction of a ~200 km, 500 KV overhead transmission line from Uzbekistan to Afghanistan and provide a key interconnection node to receive power from Tajikistan, Turkmenistan, and Uzbekistan. DABS signed contracts totaling US\$160 million for four renewable power projects involving the private sector. Two agreements with the Uzbekistan National Electric Grid include the purchase of electricity for 2021 and the construction of the ADB-funded 500 KV transmission line. Under the agreement, Uzbekistan will export 2.2 GWh of electricity to Afghanistan in 2021. In August, Uzbekistan signed a separate ten-year agreement to supply electricity to Afghanistan.

Kazakhstan

In January, Kazakhstan approved a Concept for Water Resources Management Program for 2020–2030. Priorities include international cooperation, institutional and governance reforms, and infrastructure modernization, amongst others. The Ministry of Industry and Infrastructure Development – responsible for drinking water supply – announced a goal of universal access to good quality drinking water for all citizens by 2025. Current access is at 97.5 percent in urban areas and 87.7 percent in rural areas.

Kazakhstan signed the UN Sustainable Development Cooperation Framework for 2021–2025, that includes human capital development, effective institutions, and gender equality, together with environmental sustainability commitments. In December, the Kazakh Parliament adopted a new Environmental Code that comes into force in July 2021. The Code introduces the “polluter pays” principle and gives responsibility to local authorities to direct 100 percent of the resulting revenue to nature protection. Large enterprises will be obligated to adopt best available technology to reduce their carbon footprint.

Renewable energy was added to the national list of priority investment projects, with a view to lessening the tax burden from expensive costs that is a barrier to renewable energy expansion. Nineteen renewable energy projects were approved, valued at US\$1.1 billion. Although 70 percent of electricity is still produced from burning coal, the government has made a strong commitment to renewable energy, and by September, 108 renewable energy power stations with a total installed capacity of 1500 MW had been added, more than double the capacity added during the same period last year. Over half of the renewable generation capacity is from solar, and one quarter is from wind. Kazakhstan’s solar power potential is estimated to be 3.9–5.4 GWh, or around 5 percent of current annual consumption. Current commitments are for renewable energy to account for ten percent of total power generation by 2030 and 50 percent by 2050.

Kyrgyz Republic

In addition to the widespread health and related economic crises of 2020, the Kyrgyz Republic was disrupted by political upheaval following disputed parliamentary elections in October, the results of which were annulled. President Sooronbay Jeenbekov resigned amid protests, and Sadyr Japarov acquired political momentum and came to power.

Several institutional changes occurred in the water and energy sectors. The State Water Resources Agency was transferred to the Ministry of Agriculture, Water Resources and Regional Development, while the Department of Drinking Water Supply and Wastewater Disposal was

first transferred to the Ministry of Transport, Architecture, Construction and Communication, and subsequently returned to the State Agency on Architecture, Construction, Housing and Communal Services. The State Committee for Industry, Energy and Subsoil Use was replaced by a new Ministry of Energy and Industry.

In September, the State Water Resources Agency hosted a WSS conference in Bishkek. The Department of Drinking Water Supply and Wastewater Disposal plans to develop a new WSS law and to update design norms and rules for water supply and wastewater systems, with support from the World Bank-financed *Sustainable Rural Water Supply and Sanitation Development Project*, and international expert guidance financed by CAWEP.

During 2020, the government developed and approved a regulation “on the conditions and procedure for the implementation of activities for the generation and supply of electricity using renewable sources of energy”. The regulation sets out the roles, rights, and obligations of all participants in the energy market.

A Coordination Council on Green Economy and Climate Change was formed to merge the coordination on climate change and green economy. The Climate Finance Centre acts as the secretariat for the new council.

Tajikistan

In 2020, President Emomali Rahmon was re-elected for his 5th seven-year term, and the ruling People’s Democratic Party retained control of the lower house of parliament.

The government continued its broad water sector reforms, with coordinated support from multiple development partners. Based on a river basin approach enshrined in the recent Water Code, the reforms include strengthening of water user associations, irrigation service providers, and river basin organisations. The government signaled its intentions to prepare a national irrigation strategy.

At the start of the year, Tajikistan published a ‘Use of Thermal Energy’ policy on domestic heating, that ties into broader power industry reforms that aim to increase the financial viability, efficiency, and governance of state power utility Barqi Tojik by 2025.

During the summer, the government announced a reduction in hydropower generation as a result of low inflows to Nurek Reservoir. Nurek Hydropower Plant generates around half of the energy used in Tajikistan. The reductions affected both electricity export and domestic consumption. Rogun Dam and Hydropower Plant remains controversial. In 2020, lawmakers agreed to allow foreign investors to buy shares in Rogun, but with funding maintained on-budget, there is a risk of serious macro-fiscal distress.

Turkmenistan

In July, Turkmenistan hosted the 1st meeting of the Interdepartmental Working Group on working out the National Strategy of Turkmenistan on the Development of Renewable Energy. This was a virtual meeting with participation from several international organizations. Discussions covered topics such as global trends and prospects for the use of renewable energy sources in Turkmenistan and using international experience to develop the National Strategy of Turkmenistan on the development of renewable energy. In September, the Cabinet of Ministers established a new center for conservation of the Aral Sea. The government has earlier committed to planting ten million trees during the calendar year.

Uzbekistan

In July, Uzbekistan adopted the Concept for the Development of Water Resources of the Republic of Uzbekistan for 2020–2030, with nine priorities: (i) rational use of water resources, (ii) scaling-up water-saving technologies, (iii) safe and efficient management of water infrastructure, (iv) improved condition of irrigated land, (v) adoption of market principles in the water sector (including PPP), (vi) improved governance in water resource management and service delivery, (vii) improved transboundary water management, (viii) adoption of information and communications technologies in water management, control and accounting, and (ix) capacity building and research for improved sector performance. To ensure full implementation, a responsible department will be established within the system of the Ministry of Water Resources.

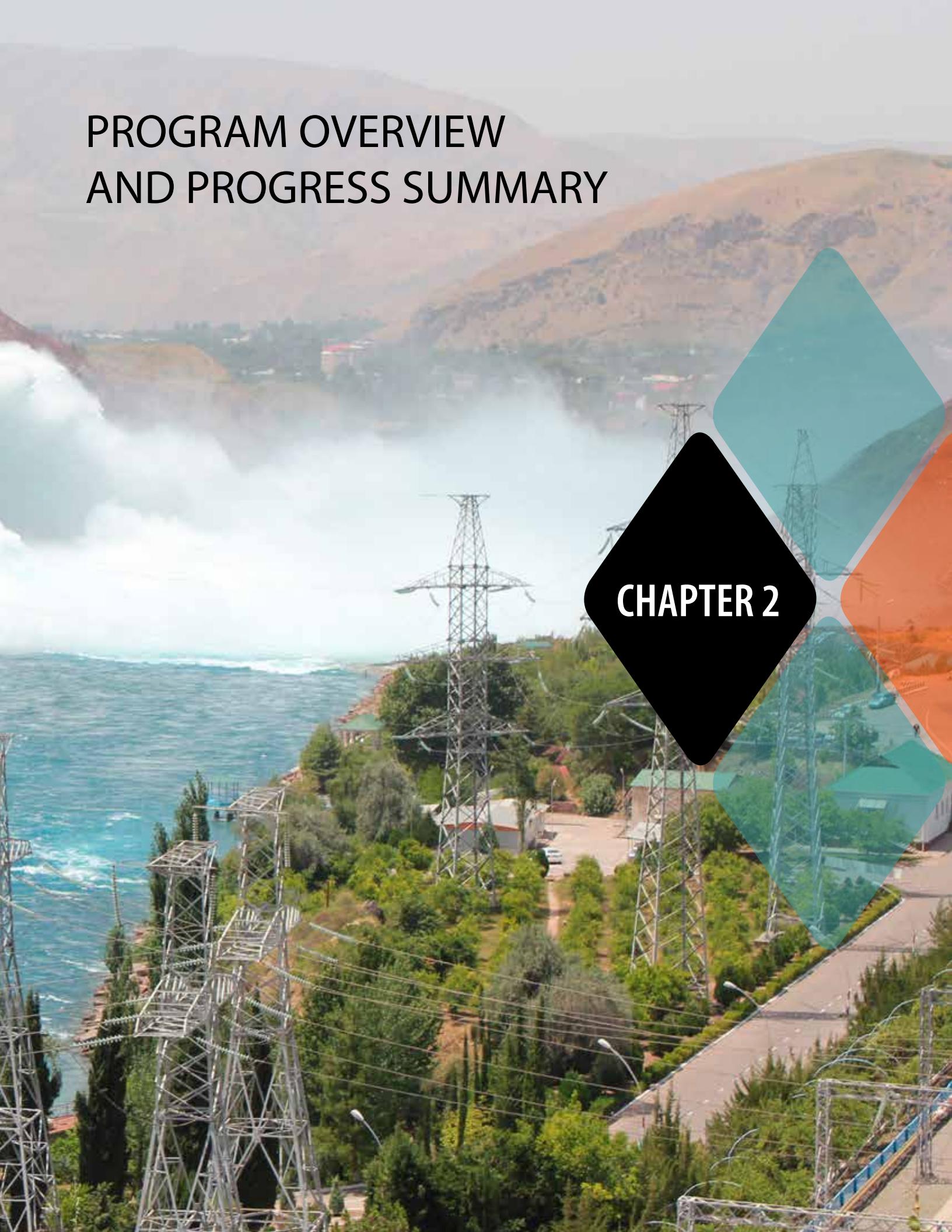
Early in May, the recently built Sardoba Dam in the Syrdarya region failed, causing flooding downstream that led to six deaths and displaced more than 100,000 people in Uzbekistan and Kazakhstan. The failure highlighted the need for increased attention to dam safety and the maintenance of hydraulic structures in general.

In May, Uzbekistan published the Concept for the Provision of the Republic of Uzbekistan with Electric Energy for 2020–2030, with recommendations for both thermal and renewable energy, power demand outlooks, and key sector priorities including: (i) increasing generating capacity from 12.9 GW to 29.3 GW by 2030 (including 5 GW of solar); (ii) reducing natural gas consumption and reducing transmission; (iii) modernizing power plants and constructing new ones; (iv) improving power metering systems; and (iv) diversifying fuel and developing renewables.

The same month, the Ministry of Energy signed three energy generation deals worth more than US\$2 billion. ADB approved a loan to finance three new hydroelectric power plants. The World Bank and the International Finance Corporation approved financing for a photovoltaic solar station in the Navoi region. These investments are part of an ambitious national energy strategy that aims to generate a quarter of all electricity from renewable sources by 2030, including 3.8 GW from hydropower. CAWEP supported these efforts through institutional strengthening of the newly established Uzbekhydroenergo that will design and implement small and medium hydropower projects.



PROGRAM OVERVIEW AND PROGRESS SUMMARY

The background image is an aerial photograph of a coastal town. In the foreground, there are several tall, silver-colored electrical transmission towers with multiple cross-arms and wires. A paved road runs along the right side of the frame. To the left, the town is built on a hillside overlooking a large body of water with white-capped waves crashing against a rocky shore. In the distance, more hills and mountains are visible under a clear blue sky.

CHAPTER 2

Program Objective and Structure

CAWEP is a multi-donor trust fund administered by The World Bank, with financing from the European Union, Switzerland, and United Kingdom. The 3rd phase of CAWEP commenced in January 2018 with a US\$3.5 million commitment from SECO, followed in August 2018, by a US\$1.0 million commitment from FCDO, channeled through the Program for Asia Connectivity and Trade (PACT). The United Kingdom contribution supports electricity trade with South Asia and energy sector activities in Afghanistan, Kyrgyz Republic, Tajikistan, and Uzbekistan. In May 2019, the European Union committed €7.0 million, bringing total program funding to US\$12.6 million.

The program development objective is to *strengthen the enabling environment to promote water and energy security at regional level and in the beneficiary countries*. CAWEP's long-term vision is to promote sustainable development and livelihood security in Central Asia and Afghanistan.

CAWEP supports activities to increase regional cooperation to advance sustainable development and climate resilience. Initiatives financed by the program are designed to improve water and energy management, develop, and strengthen national and regional institutions, or facilitate regional dialogue on water and energy security.

By the end of December 2022, CAWEP aims to have:

- Improved policy frameworks for water and energy security that are adopted at national level;
- Informed a framework for regional water and/or energy security;
- Strengthened regional and national institutional capacity for water and/or energy management; and
- Leveraged/informed US\$2.5 billion (US\$0.8 billion for the 3rd phase) of World Bank investments that improve national and regional water and energy security.

CAWEP work with development partners to expand efforts to establish the parameters for cooperation at technical and institutional levels, to strengthen availability of data and information, and to harmonize sectoral policies and regulations to facilitate cross-border connectivity and trade.

CAWEP supports (i) data and diagnostic analyses, (ii) institutions, capacity, and dialogue, and (iii) relevant investments; under three pillars:

- Water Security – promoting sustainable and efficient use of shared water resources and IWRM;
- Energy Security – promoting security and economic efficiency of energy supply from national to regional level; and
- Water-Energy Linkages – guiding management of the water-energy nexus and climate change adaptation efforts that link two or more countries.

Annex 1 lists current activities, Annex 2 presents the summary of activities, and Annex 3 summarizes achievements against the program Results Framework.

Allocation of Program Funds

Of the total portfolio of 29 activities in the 3rd phase of the program to-date, 28 activities were active in 2020, of which three were recipient-executed, and 25 were Bank-executed. Two activities supported program management and communications. In 2020, four new activities commenced, and five activities concluded. Table 1 shows the distribution of activities and funding by pillar and theme, Figure 3 shows the distribution across the region, and Figure 4 illustrates the focus areas of the pillars.



FIGURE 3. REGIONAL DISTRIBUTION OF FUNDING

TABLE 1. DISTRIBUTION OF ACTIVITIES AND FUNDING BY PILLAR AND THEME

Pillar	Data and Diagnostics		Institutions, Capacity Building, & Dialogue		Supporting Investments		Total	
	No.	US\$M	No.	US\$M	No.	US\$M	No.	US\$M
Water Security	1	0.23	7	2.59	2	1.80	10	4.62
Energy Security	3	0.69	5	0.93	4	1.25	12	2.87
Water-Energy Linkages	4	1.27	3	1.25	0	0.00	7	2.52
Total	8	2.19	15	4.77	6	3.05	29	10.01



FIGURE 4. CAWEP FOCUS AREAS ACROSS THE PILLARS. CLOSED ACTIVITIES SHOWN IN ITALICS.

Progress in 2020

Implementation in 2020 was slowed by COVID-19 restrictions, especially for activities involving field data collection and international consultant travel. In response, the scope of some activities was revised and the closing dates of twelve activities were extended. Knowledge sharing, training and consultation efforts moved to online formats, which generated significant cost savings. Over 600 people attended 15 CAWEP online events. While this modality was generally effective, internet connectivity challenges, time zone differences, and disruptions from illness and lockdowns, caused frustration for many stakeholders.

During 2020, CAWEP successfully completed five activities – two under the Water Security Pillar and three under the Energy Security Pillar. Four new activities commenced: two recipient-executed activities and two Bank-executed.

Vakhsh Integrated River Basin Management provided the first consolidated basin characterization and assessment to guide rational and systematic water resources development and management in the Vakhsh, especially in the lower basin. The reports and maps produced are guiding dialogue between the Tajikistan Ministry of Energy and Water Resources and development partners, to secure financing for, and to inform the design of, priority investments. The World Bank and EU financed Tajikistan *Resilient Irrigation Project*, that will strengthen the capacity for water resources planning and irrigation management at national and basin levels, and improve performance of selected irrigation schemes in the Vakhsh river basin, is using the activity outputs in the project design process.

Sharing Information and Exposure Visit to Pave the Way to Irrigation Modernization activity took stock of the challenges in irrigation service delivery in Central Asia, and identified areas for potential support: (i) development of policy and regulatory frameworks; (ii) institutional reforms; (iii) irrigation and drainage system modernization; (iv) strengthening agricultural services and practices; and (v) knowledge and information systems. The activity helped define the scope of a new regional activity – *Strengthening Irrigation Management Across Central Asia* – that will conduct public and institutional expenditure reviews to inform irrigation strategies particularly in Tajikistan and Uzbekistan.

A 2nd new regional activity – *Strengthening Water Resources Management at Regional Level* – will enhance capacity and raise awareness of safety and rehabilitation of shared hydraulic infrastructure, and on conjunctive use of groundwater and surface water. The work is aligned with CAWEP objectives and client priorities expressed in recent consultations.

Capacity Development for Regional Cooperation in Power System Planning and Operations concluded a series of trainings for regional power system operator Coordinating Dispatch Center (CDC) Energia and national dispatch centers. Training needs were identified for: dispatching, power system planning studies, outage coordination, protection studies, telecommunications, cybersecurity, information technology, and supervisory control and data acquisition (SCADA) / energy management systems. A phased approach is proposed for longer-term capacity development of CDC Energia. CAWEP will continue to support CDC Energia using new recipient-executed and Bank-executed grants. The recipient-executed work will enhance the capacity for power system planning and operations, as well as the uptake of digital technologies. The Bank-executed work will define the scope, preliminary design, and cost of digitalization of the electricity transmission network. This will inform design of an *Electricity Sector Transformation and Resilient Transmission Project* that will guide development of a digitalization strategy and increase transmission network capacity for integration of renewable energy.

Two other energy activities completed in 2020 – *Uzbekistan Small and Medium Hydropower Development Program and Kyrgyz Republic: Integrated Hydropower Development in the Naryn River Basin* – explored hydropower potential in Uzbekistan and the Kyrgyz Republic. Uzbekistan is one of the most energy-intensive economies in the world, with electricity generation is dominated by natural gas with renewable energy potential underdeveloped. In 2017, the government established the Joint-Stock Company (JSC) Uzbekhydroenergo and adopted programs to develop hydropower pilots to diversify generation capacity. The *Small and Medium Hydropower Development Program* conducted trainings and a study tour for Uzbekhydroenergo and its affiliated Hydroproject Institute and developed a capacity building plan. A method for assessing the hydropower potential of river basins and a spreadsheet-based financial model were developed to guide hydropower pilots and pre-feasibility studies. *Integrated Hydropower Development in the Naryn River Basin* identified and ranked potential large and medium-sized hydropower projects in the Kyrgyz Republic, considering financial costs and environmental and social risks. The assessment highlighted areas for strengthening institutional arrangements including legal and regulatory frameworks for private sector participation.

A US\$1.5 million recipient-executed grant was established to support preparation of Kazakhstan's *North Aral Sea Development and Revitalization Project*, which will improve the Aral Sea environment and provide local livelihood opportunities; biodiversity and human health benefits are expected. The grant will finance the project's feasibility study and its environmental and social impact assessments.

Another new activity – *Options for Leveraging Commercial Financing for Power Generation in Tajikistan* – is reviewing bottlenecks to private financing of construction and rehabilitation projects in the power sector and developing a roadmap for greater commercial financing under the Tajikistan Generation Expansion Plan.

Program Results

CAWEP has made steady progress towards its final Results Framework targets (Figure 5), with the greatest progress on improving institutional performance. CAWEP activities are closely linked to broader World Bank engagement, and provide key technical support to sector reforms, and strengthening the enabling environment and institutions. CAWEP brought international best practice and global technical knowledge to the Kyrgyz Republic to support development of a new WSS law, and to update outdated design norms in water supply and wastewater. CAWEP supported the extension of the MOU on environment protection between Afghanistan and Tajikistan and is contributing to work under the MOU through the Afghanistan Hydromet Atlas, training curricula development, and a forthcoming joint consultative workshop on regional collaboration.

Half of the CAWEP portfolio focuses on enhancing the capacity of national institutions (Figure 6). Through technical

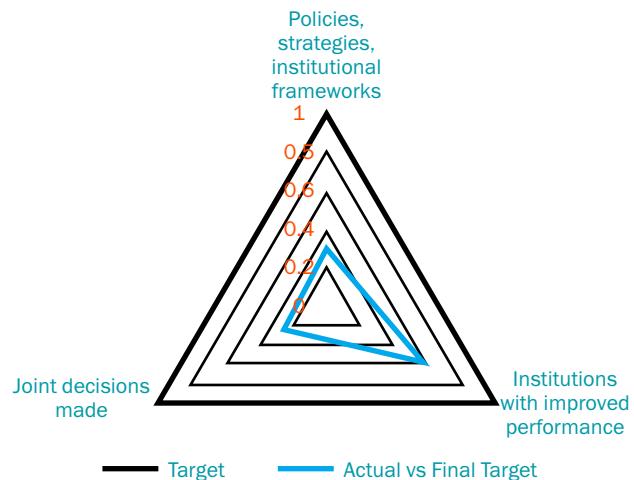


FIGURE 5. 2020 PROGRAM RESULTS

workshops and webinars, analysis and recommendations for institutional development, and support for strategies, procedures, guidelines and methodologies, CAWEP contributes to improving the skills of decision makers and technical professionals in the water and energy sectors.

CAWEP has informed the design of nine investment operations totaling US\$1.29 billion in development finance, including US\$0.56 billion of World Bank financing (Figure 7).

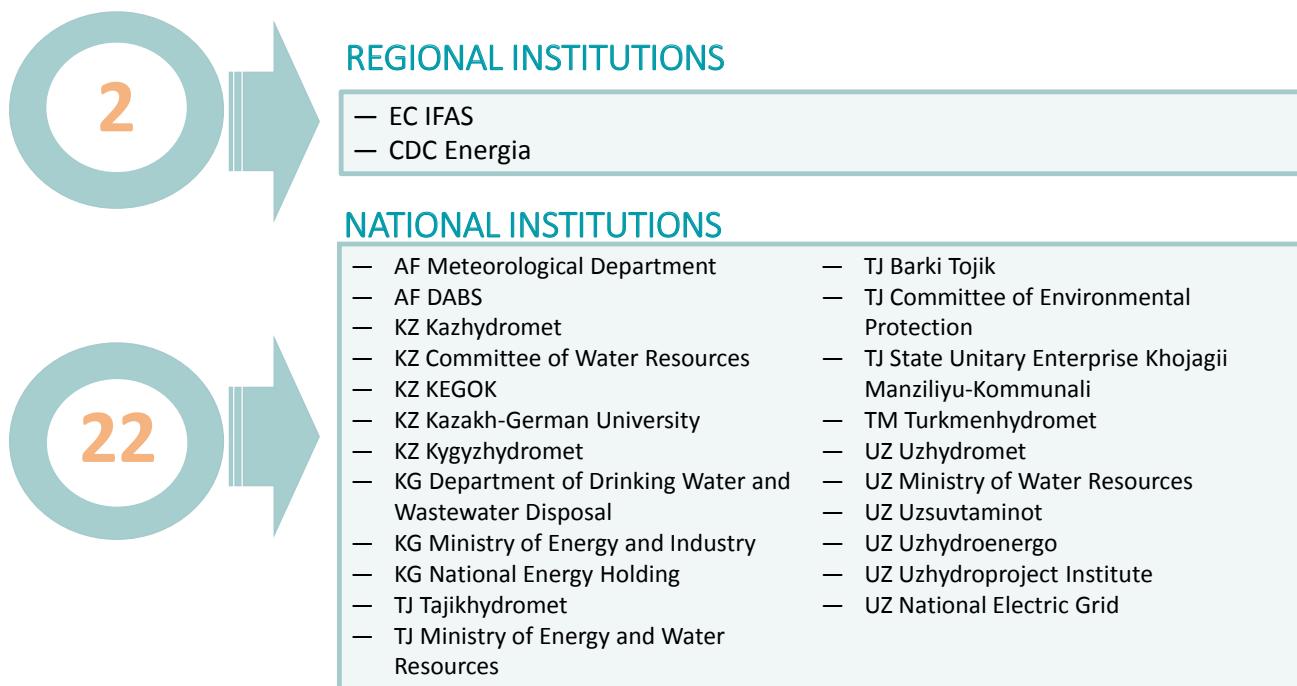


FIGURE 6. INSTITUTIONS BENEFITING FROM CAWEP ACTIVITIES

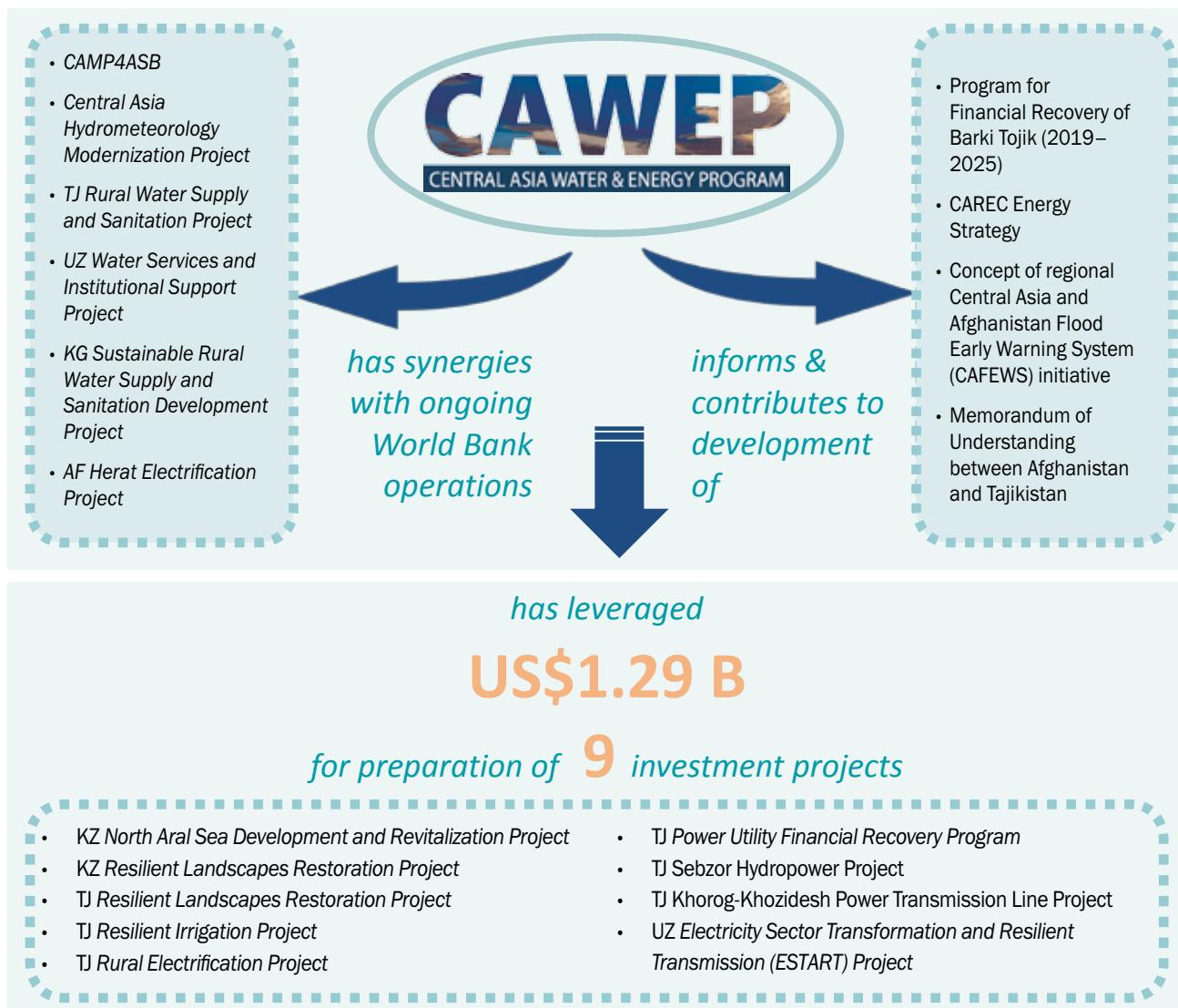


FIGURE 7. LINKAGES WITH INVESTMENTS

Building Climate Resilience

Central Asia is one of the regions most vulnerable to the impacts of climate change. Tajikistan and the Kyrgyz Republic are the most vulnerable countries within Europe and Central Asia. Climate models project average temperatures will increase 2.5–6°C by the end of the century – more than the global average. Climate change is expected to increase the frequency and severity of floods and landslides, and droughts and temperature extremes. While precipitation projections are very uncertain, warming is accelerating glacier melting, and shifting the seasonal timing of snow and glacier meltwater flows. Without proactive action, climate change will have profound consequences across the region, with greatest impacts on the poor.

CAWEP efforts are aligned with the new Climate Change Action Plan of The World Bank Group, and all Bank-financed investments prepared with CAWEP support integrate climate change considerations in their designs. The *Towards Water-Secure Sustainable Economics* (2019) brochure identified adaptation measures to build economic and social resilience to climate change as one of three key action areas for improving water security in the region.

Improved early warning systems will be critical for climate change adaptation in Central Asia. By supporting national hydrometeorology agencies in all five Central Asian countries as well as Afghanistan, CAWEP is contributing to improved transboundary weather and flood forecasting. The Central Asia and Afghanistan Flood Early Warning

System (CAFEWS) concept has been developed to support a regional multi-system platform delivering improved predictions for floods, droughts, and landslides. Such a platform would generate advanced hydrometeorological information products, including seasonal forecasts, and support decision making and IWRM. Hydrometeorological agencies will have access to high resolution forecasts from the ICON numerical weather prediction model – a newer and more robust model than the typically used Consortium for Small-scale Modeling (COSMO) model. Hydrological forecast modules can be improved through incorporation of a new snowmelt module developed for data scarce regions, that captures spatial patterns of snow storage to improve real-time flash flood forecasts as well seasonal flow predictions. The module has been piloted in Central Asia in the Nura and Karadarya River Basins.

Fostering Green Growth

Green growth is a development priority for all Central Asian countries and Afghanistan, and all are parties to the 2015 Paris Agreement that commits to reducing greenhouse gas emissions by 2030. CAWEP is supporting countries in progressing efforts towards greening their economies. A major focus to-date has been promoting renewable energy through analytical work and capacity building. In Tajikistan, an important study was launched to incorporate environmental and social criteria into power sector expansion plans. CAWEP contributes to green employment, landscape restoration, and climate-smart agriculture in Kazakhstan, Kyrgyz Republic, and Tajikistan.

Social Inclusion and Gender

CAWEP promotes gender and social inclusion including encouraging gender balance in capacity building events and stakeholder consultations. The Central Asia Knowledge Network (CAKN) promotes gender and youth inclusion in water resource management across the region by raising awareness and creating opportunities for knowledge exchange among academics and expert communities. In 2020, CAKN convened a [series of online conferences](#) on gender in water resource management including: Women and Access to Water, Women and Water Education, Women, Water and Health, Women, Water and Climate Change, and Women and Disaster Risk Reduction. These conferences provided opportunities for young scientists, researchers, students, and international and regional experts, to discuss gender issues in water resource management and to promote capacity development. Video presentations are available on the [CAKN website](#) and on [YouTube](#). CAKN helped compile a collection of annotated articles providing a [Practical Outlook on Gender Issues in the Water Resources Sector](#), and supported preparation of four scientific articles



that were published in the [Central Asian Journal of Water Research](#). In 2021, CAWEP will analyze rural perceptions of gender differences in the context of climate change.

CAKN takes an inclusive approach to engaging with higher education institutions across the region and contributing to professional youth development in IWRM. In 2020, efforts included developing unified curricula and water management glossaries for Central Asian technical universities, student contests and summer schools. Webinars for teachers and young researchers were conducted online, covering academic writing, approaches to conducting online exams, and conducting interviews and assessments.

Regional Engagement

Through 2020, CAWEP undertook bilateral consultations with government agencies and development partners in Kazakhstan, Kyrgyz Republic, Tajikistan, and Uzbekistan, under the *Facilitation of Regional Dialogue*. Consultations spanned multiple ministries and agencies including water, agriculture, environment, energy, finance, and foreign affairs. These consultations sought to understand national perspectives on water security priorities, policies, and program, in the content of climate change and economic development, as well as attitudes and official positions relating to regional water cooperation. Consultations commenced in Tajikistan, in March 2020, and continued in the Kyrgyz Republic later that month. COVID-19 disrupted continued face-to-face consultations, and virtual consultations with Uzbekistan took place in August 2020, and with Kazakhstan in October and November 2020.

During the consultations, the [Towards Water-Secure Sustainable Economies](#) brochure was discussed with government officials, including the identified action areas. Two of the action areas – WSS and irrigation modernization – were agreed by government officials to be areas primarily for national action. These areas are supported by separate and ongoing CAWEP activities.



Uzbek Consultations: Virtual Meeting with the Ministry of Agriculture, August 6, 2020

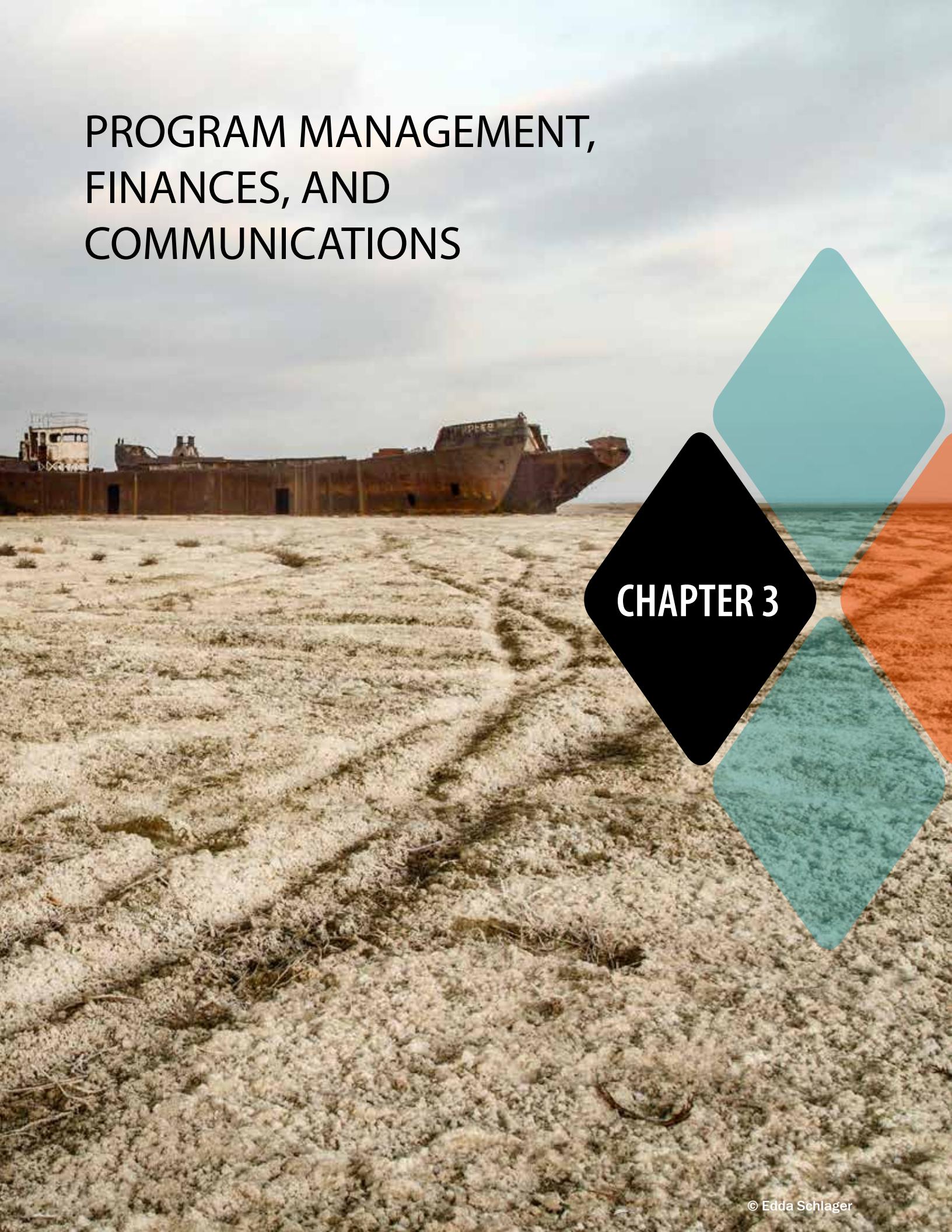
Climate change was endorsed as a priority issue for all countries, and one that requires strong regional cooperation. All countries noted the importance and value of IFAS institutions for regional cooperation, but equally, all noted the urgent need for institutional reform of IFAS. CAWEP will explore opportunities to assist mainstreaming climate change considerations into national policies, as well as opportunities to support IFAS institutional reforms.

Under the *Facilitation of Regional Dialogue* CAWEP continues to coordinate and collaborate with development partners. Regional development partner meetings are

convened periodically, and Almaty-based development partner representatives meet more regularly. Discussions focus on water security, but also embrace climate change and nexus issues. The focus is on sharing knowledge, news, and information; identifying collaboration opportunities; and building a shared institutional memory of regional water cooperation. For the energy sector, CAWEP facilitates World Bank engagement in the [CAREC ESCC](#) and other high-level meetings.

CAWEP has also been active in technical networking and cooperation across the region, including on WSS, irrigation, hydrometeorology, renewable energy, connectivity, and landscape management. A key focus is building trust and confidence between professionals across countries. CAWEP continues to promote knowledge sharing, capacity building and cross-border collaboration among key sector agencies, universities, and research institutes.

In the energy sector, CAWEP facilitates engagement with national energy institutions and the regional power system operator. A CAWEP study estimated that the economic benefits from increasing regional electricity trade within Central Asia could be as high as US\$6.4 billion (net present value) between 2020–2030. CAWEP is connecting Afghanistan and Central Asian energy institutions and contributing to consultations on synchronization of grid codes.



PROGRAM MANAGEMENT, FINANCES, AND COMMUNICATIONS



CHAPTER 3

Program Management

CAWEP is managed by a program manager, pillar leaders, and a liaison officer (Figure 8). The program manager oversees program implementation, reporting, dissemination, and outreach, as well as leading coordination with donor partners and ensuring CAWEP stakeholders are kept informed. Pillar leaders provide advice implementation of activities and liaise with task teams to ensure timely and qualitative delivery of activities. The liaison officer supports program coordination, trust fund management, donor coordination, monitoring and evaluation, and coordination of communications. The program management and administration costs for 2020 were US\$122,461, or six percent of total 2020 disbursements.

Strategic guidance is provided to CAWEP by an Advisory Committee of donor partners and World Bank management. The Advisory Committee met in May and December in 2020, and approved updates to the CAWEP work plan, as well as the scope, timeline and terms of reference for a mid-term review (MTR) of the program. Implementation is overseen by a team of World Bank relevant managers and directors (Figure 8).

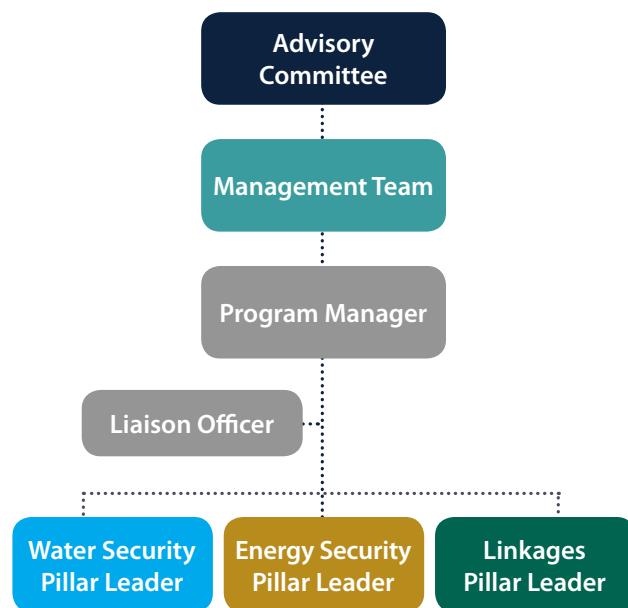


FIGURE 8. CAWEP GOVERNANCE AND MANAGEMENT

Financial Overview

During 2020, US\$2.26 million was allocated to new activities bringing total allocations to US\$11.1 million, or 88 percent of the total program budget. US\$8.6 million has been allocated to bank-executed activities and around US\$2.5 million to three recipient-executed activities to support preparation of investments in Kazakhstan, Tajikistan, and Uzbekistan.

41 percent of allocations to-date (Figure 9) are to the Water Security Pillar (with over one-third of this being a single recipient-executed grant); 26 percent of allocations are to the Energy Security Pillar, and 23 percent to the Water-Energy Linkages Pillar. Disbursements and commitments to-date indicate steady progress (Figure 10), with the apparent slower implementation of Water Security Pillar activities a result of approval late in 2020 of a large recipient-executed grant. Cumulative disbursements reached US\$4.2 million (38 percent of allocated funds), and disbursements for the calendar year were double those in 2019, despite COVID-19 impacts (Figures 11 and 12).

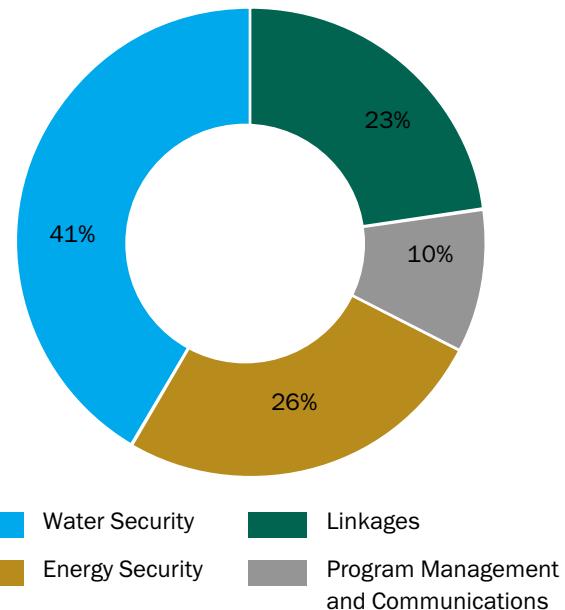


FIGURE 9. 2020 FUNDS ALLOCATION BY PILLAR

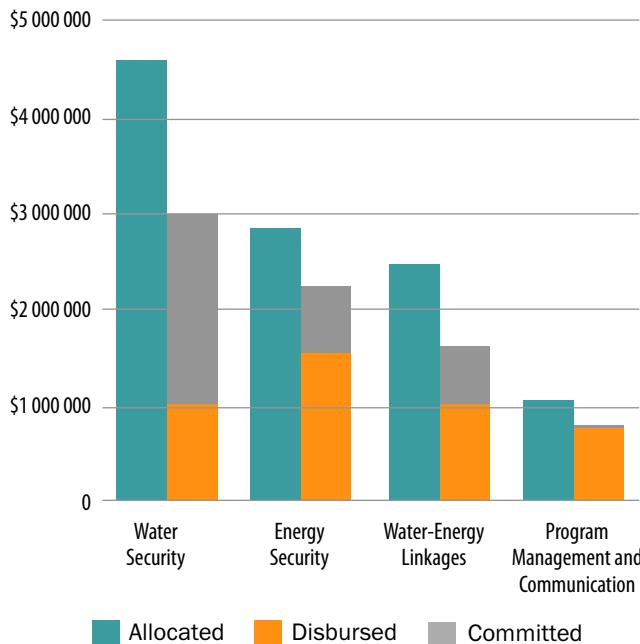


FIGURE 10. DISBURSEMENT AND COMMITMENT BY PILLAR

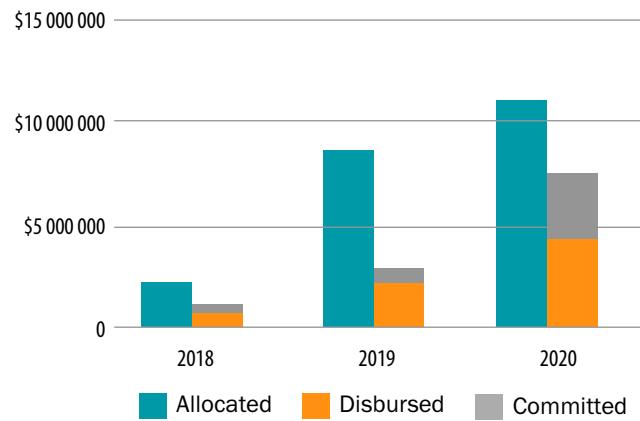


FIGURE 11. ANNUAL FINANCIAL PROGRESS

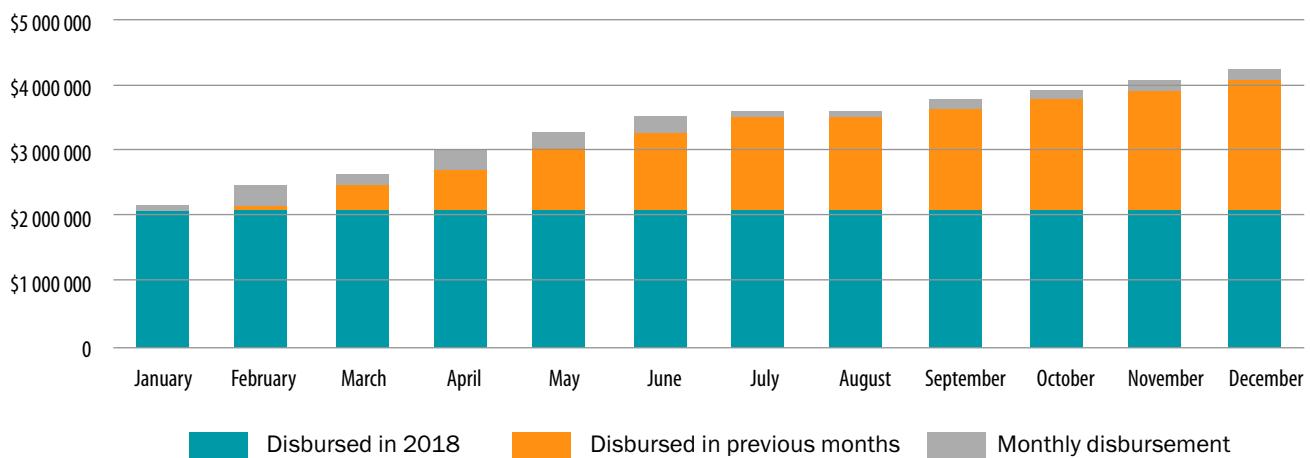


FIGURE 12. DISBURSEMENT DURING 2020

Communication and Outreach

CAWEP communications are guided by the overarching goals of strengthening knowledge-sharing and increasing stakeholder understanding of CAWEP work, as outlined in the program Communications and Visibility Plan, adopted in 2019. The *Outreach and Dissemination* activity strengthens knowledge sharing and increases stakeholder understanding of CAWEP efforts through a strategic communications framework. The Communication and Visibility Plan reflects the requirements of EU-funded programs.

Online Engagement

The CAWEP webpage ([English](#) and [Russian](#)) is updated regularly with new outputs and announcements. It received around 12,000 page-views during 2020. CAWEP updates are also shared on social media with 46 Facebook posts (11 English and 35 in Russian) reaching over 176,000 people, and 75 Twitter posts receiving over 800 likes or retweets with potential reach of 140,000 people.



2020 Communications Products

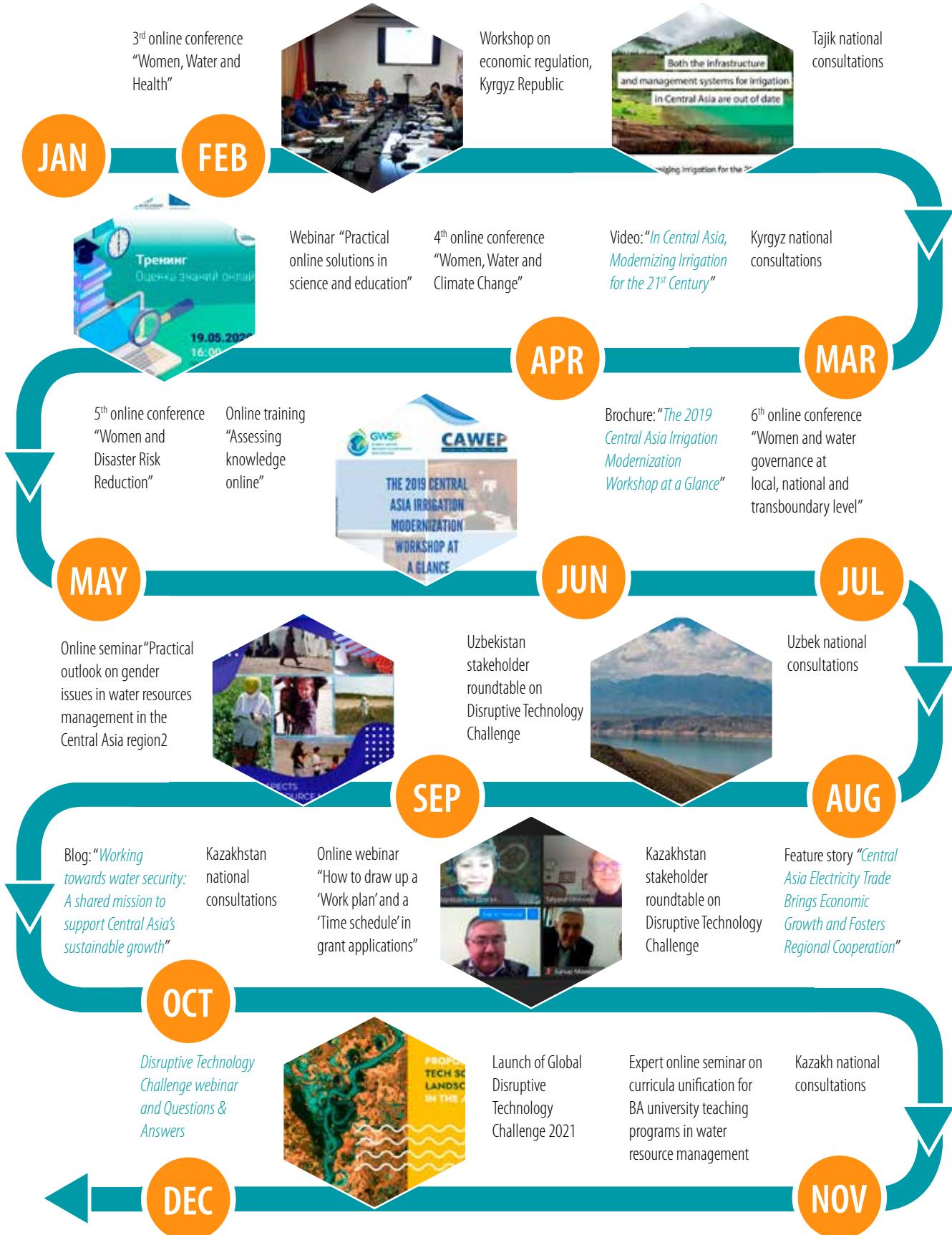
- Four quarterly newsletters
- 24 media digests focusing on water, energy, and related topics
- Blog: "[Working Towards Water Security: A Shared Mission to Support Central Asia's Sustainable Growth](#)"
- Feature story: "[Central Asia Electricity Trade Brings Economic Growth and Fosters Regional Cooperation](#)"
- Video: "[In Central Asia, Modernizing Irrigation for the 21st Century](#)"
- Brochure: "[The 2019 Central Asia Irrigation Modernization Workshop at a Glance](#)"
- Press release: "[Global Disruptive Tech Challenge 2021: International Innovators Invited to Help Restore Landscape in the Aral Sea Region - launch of a 2021 flagship event](#)"

Looking Ahead

A mid-term review of the program will be conducted early in 2021, to identify and address any significant implementation issues, and to adjust strategic direction to the changing external environment, especially in the context of COVID-19 impacts and the increasing urgency of the global climate crisis. Rotations for several World Bank managers and directors with oversight responsibility for CAWEP will occur in early-mid 2021, as will transitions for key donor partner representatives. CAWEP will work to ensure these transitions do not disrupt implementation through internal briefings and regular external engagement.

The World Bank and its development partners are strengthening joint focus on green and resilient development, responses to COVID-19, and enhanced efforts to combat and respond to climate change. CAWEP is incrementally adjusting its focus through the design of new activities to be fully aligned with these agendas for the remainder of the program implementation period.

2020 Program Events and Outreach





ANNEXES

ANNEX 1. FOCUS AREA, THEMES, AND ACTIVITIES BY PILLAR

WATER SECURITY PILLAR

Focus Area	Theme	Activity	Countries	TF No.
Regional Water Management	Institutions, Capacity, Dialogue	Strengthening Service Delivery of CA National Hydrometeorological Agencies	CA, AF	OB0550
		Strengthening Capacity in AF for Greater Collaboration with TJ on Hydromet, Flood Risk Management and Early Warning Services	AF, TJ	OA9176
National Water Management	Institutions, Capacity, Dialogue	Regional Water Resources Management in CA	CA	OB4565
		Human Water Security: Strengthening WSS at Regional Level	CA	OB1277
Sub-Basin Water Management	Data, Diagnostics	Vakhsh Integrated River Basin Management	TJ	OA7025
	Supporting Investments	North Aral Sea Engagement	KZ	OB2375
		Support for Preparation of the North Aral Sea Development and Revitalization Project	KZ	OB2724
Irrigation Modernization	Institutions, Capacity, Dialogue	Sharing Information and Exposure to Pave the Way to Irrigation Modernization	CA	OA9391
		Strengthening Irrigation Management Across CA	CA	OB4552
Capacity Building	Institutions, Capacity, Dialogue	CA “Solutions for Water” (S4W) Living Lab	CA, AF	OB2730

ENERGY SECURITY

Focus Area	Theme	Activity	Countries	TF No.
Regional Power Trade	Institutions, Capacity, Dialogue	CAREC Energy Sector Coordination and Cooperation	CA, AF	0A7267
		Capacity Development for Regional Cooperation in Power System Planning and Operations	CA, AF	0A7333
		Analysis of Synchronized Operation of AF and CA Power Systems	AF	0A9869
	Data, Diagnostics	CA Regional Electricity Trade and Market Development	CA, AF	0A8743
National Energy Sector Capacity	Institutions, Capacity, Dialogue	Energy Sector Strengthening	TJ	0A9034
		Support for Preparation of the Rural Electrification, Sebzor HPP and Khorog-Qozideh Power Transmission Line Projects (RETF and BETF)	TJ	0B1004 0B1244
	Supporting investments	Project Preparation for Uzbekistan Electricity Transmission System Modernization and Market Development (RETF and BETF)	UZ	0B3778 0B4451
		Options for Leveraging Commercial Financing for Power Generation in TJ	TJ	0B4727
Renewable Energy	Data, Diagnostics	Uzbekistan Small and Medium Hydropower Development Program	UZ	0A7213
	Institutions, Capacity, Dialogue	Integrated Hydropower Development in the Naryn River Basin	KG	0A8728

WATER-ENERGY LINKAGES

Focus Area	Theme	Name	Countries	TF No.
Regional Coordination and Capacity Building	Institutions, Capacity, Dialogue	Facilitation of Regional Dialogue and Development Partnerships on Water & Energy Security in CA	CA, AF	0A7071
		CA Knowledge Network	CA, AF	0A7242
	Data, Diagnostics	CA Water and Energy Data Platform	CA, AF	0A8939
Environment Management	Data, Diagnostics	TJ Integrated Landscape-Catchment Management	TJ	0B0866
		KG Integrated Landscape-Catchment Management	KG	0B2684
		Strategic Environmental Assessment of the Power Sector Expansion in TJ	TJ	0B4132
	Institutions, Capacity, Dialogue	Disruptive Technologies for Landscape Restoration Along the Aral Sea Watershed in KZ and UZ	KZ, UZ	0B2683

ANNEX 2. SUMMARY OF ACTIVITIES

Water Security

Regional Water Management

Strengthening Service Delivery of Central Asia National Hydrometeorological Agencies

TF0B0550; US\$500K; Jun '19 – May '22

This activity commenced in June 2019 to assist national hydromet agencies deliver improved, demand-driven information services, including weather and hydrologic forecasts to support transboundary cooperation. The activity complements current World Bank and partner projects that are strengthening hydromet services. In 2020, in response to COVID-19 restrictions and impacts, the scope of work was adjusted, the duration was extended, and additional funding for three new sub-activities was provided. The sub-activities are: (i) technical assistance to national hydro-meteorological agencies, (ii) analysis of gaps and development of a strategic capacity building and service delivery plan for Turkmenhydromet, (iii) opportunity assessment for an Amu Darya flood forecasting system, (iv) gap assessment and diagnostic for Kyrgyzhydromet, (v) strategic support for Uzhydromet modernization, and (vi) awareness raising for CAFEWS – a regional multi-system platform for improved flood and drought forecasting to be operationalized under the Bank-financed [Central Asia Hydrometeorology Modernization Project](#). National hydromet agencies have confirmed their engagement in CAFEWS, agreed on system design, and appointed Steering Committee and working group members.

Strengthening Capacity in Afghanistan for Greater Collaboration with Tajikistan on Hydromet, Flood Risk Management and Early Warning Services

TF0A9176; US\$350K; Dec '18 – Nov '21

This activity is strengthening Afghanistan–Tajikistan collaborations on hydromet, flood risk management, early warning services, and hydrological modeling, as well as improving regional hydromet coordination. An Afghanistan Hydromet Atlas for decisionmakers and hydromet service users is being finalized that complements the [Central Asia Hydromet Atlas](#) with easy-to-understand overviews of weather, water, and climate in Afghanistan, together with details of Afghan hydrological and meteorological services. The activity is supporting CAFEWS through discussions between Afghan and Central Asian hydromet agencies on integration of the Amu Darya Flash Flood Guidance System. Following consultive meetings in 2019 between Afghanistan and Tajikistan, three new monitoring stations were installed on the Panj River in 2020, and an environmental Memorandum of Understanding was signed.

National Water Management

Regional Water Resources Management in Central Asia

TF0B4565; US\$400K; Jan '21 – Aug '22

This activity is building confidence and capacity for safer management of water infrastructure, and improved conjunctive management of surface water and groundwater. Technical support is being provided to assess the needs of agencies responsible for dam safety. Support is expected to help improve standards and to develop codes of practice, guidance, and engineering tools for monitoring of dam performance and operations. National institutional, legal and organizational aspects of groundwater management will be reviewed, and the state of transboundary aquifers will be assessed. Following these reviews, events will be convened to build the institutional capacity of relevant agencies.

Human Water Security: Strengthening WSS at the Regional Level

TFOB1277; US\$465K; Oct '19 – Dec '21

This activity is strengthening WSS services and building national and regional WSS resilience to improve social stability and human capital. The 1st phase scoped areas of engagement through the *Towards Sustainable and Climate-Resilient Water Supply and Sanitation Services in Central Asia Conference* (Tashkent, 2019), launched technical assistance in the Kyrgyz Republic and Tajikistan, and convened a workshop in the Kyrgyz Republic (February 2020) on economic regulation. The 2nd phase, from July 2020, is focused on strengthening national institutions in the Kyrgyz Republic, Tajikistan, and Uzbekistan. In the Kyrgyz Republic, international experts complemented work under the *Sustainable Rural Water Supply and Sanitation Development Project* to: (i) develop an institutional development plan, (ii) develop a new WSS law, (iii) review and update design norms, and (iv) advance digitalization in WSS. In Tajikistan, the activity is supporting: (i) a sector governance review and development of a reform vision; (ii) a WSS public expenditure review, and (iii) introduction and piloting of monitoring tools. In Uzbekistan, the activity is revising the tariff calculation tool and the tariff setting process.



Workshop on economic regulation. Kyrgyz Republic, February, 2020.

Sub-Basin Water Management

Vakhsh Integrated River Basin Management

TFOA7025; US\$226K; Apr '18 – Jun '20

This activity completed a needs assessment, prepared an inventory of infrastructure assets, and prepared a basin action plan, for the Lower Vakhsh Basin in Tajikistan. The work is informing investment and technical assistance requirements for integrated management of the basin, including design of a US\$50 million IDA-EU-financed Tajikistan *Resilient Irrigation Project*.

North Aral Sea Engagement

TFOB2375; US\$300K; Mar '20 – Jun '22

This activity is supporting preparation of the US\$161.5 million *North Aral Sea Development and Revitalization Project* that aims to improve water resources management in North Aral Sea-Syr Darya Basin, and the planning and development of natural resources based economic activities in Kyzylorda region of Kazakhstan. The lending project will help restore wetlands and reduce the impacts of salt and dust blown from the dry seabed. The supporting activity is preparing a water balance for the Syr Darya Basin. An interim report with preliminary results was discussed with project stakeholders. The water balance will be complemented with Earth observations using a “Scalable Water Balance from Earth Observations” tool.

Support for Preparation of the North Aral Sea Development and Revitalization Project

TFOB2724 RETF US\$1,500K; Dec '20 – Jun '22

This activity supports the Government of Kazakhstan's preparation of the *North Aral Sea Development and Revitalization Project*. It is financing the project feasibility study, detailed designs, and environment and social impact assessments.

Irrigation Modernization

Sharing Information and Exposure Visit to Pave the Way to Irrigation Modernization

TF0A9391; US\$222K; Jan '19 – Jun '20

This activity, completed in June 2020, supported exposure, learning and adoption of irrigation sub-systems and on-farm modernization concepts, focused on technical and managerial improvements to resource use and service delivery. The *Towards Regional Initiatives for Modernizing Irrigation in the 21st Century* (Almaty, 2019) with nearly 100 participants discussed irrigation modernization and reforms, with peer-to-peer learning and knowledge exchange. The brochure Central Asia Modernization Workshop at a Glance and [video](#) summarize the key workshop messages. Priority areas identified at the workshop are now supported under new activities on regional water resource management and irrigation modernization.

Strengthening Irrigation Management Across Central Asia

TF0B4552; US\$400K; Nov '20 – Jun '22

This activity is focused on improving water productivity and irrigation management, complementing current World Bank irrigation investments. Technical assistance and analyses include: (i) assessment of progress and challenges in sustainable irrigation and drainage for state and non-state actors, to inform water policy in Kazakhstan and Uzbekistan, (ii) public expenditure reviews in Tajikistan and Uzbekistan, and (iii) just-in-time support to governments and task teams on irrigation innovation including energy efficiency, water efficient technologies, and options for public-private partnerships.

Capacity Building

Central Asia “Solutions for Water” (S4W) Living Lab Project

TF0B2730; US\$250K; Apr '20 – Jan '22

This activity is improving cross-country cooperation and is linking water users, academia, students, local authorities, and small business through a series of “Living Labs”. In the Living Labs, project teams assemble stakeholders to find innovative solutions to local water management problems. Solutions are piloted and then scaled-up or/and disseminated for implementation elsewhere. The 1st project – on takyr rehabilitation – proposed methods for takyr conservation, protection and restoration. Pilot testing of these methods commenced in July 2020 and interim results were presented at a conference in December 2020 in Tajikistan. Project proposals under consideration include a cross-border project to address sedimentation in the Tuyamuyun Hydroelectric Complex, and options for accelerated restoration of degraded lands.

Energy Security Pillar

Regional Power Trade

CAREC Energy Sector Coordination and Cooperation

TF0A7267; US\$200K; Mar '18 – Apr '21

CAWEP engages with CAREC to enhance regional energy sector dialogue and to coordinate donor support. This includes engagement with the CAREC ESCC – a knowledge sharing forum for CAREC countries and development partners. In 2019, The World Bank contributed to the CAREC Mid-Term Review and the CAREC Energy Sector Strategy 2030. In October 2020, Energy Sector Consultations for Senior Officials presented priorities for regional energy sector cooperation and the ESCC Work Program 2020–2022. During the consultations, six working groups were established, one for each of the strategic priority areas (Energy Security & Regional Interconnections, Energy Market Reform, Sustainable Energy) and one for each of the cross-cutting themes (Knowledge & Partnerships, Private Sector Enhancement, Women in Energy). A new CAREC energy web platform will be established to facilitate remote working. A high-level assessment was launched of the technical feasibility and economic viability of hydrogen production, use and exports in Central Asia. This work will: (i) identify sectors that could benefit from local green hydrogen production and export; (ii) estimate green hydrogen and hydrogen-derived fuel

production costs; (iii) describe possible green hydrogen applications for duller exploration; and (iv) identify factors that could drive local competitiveness of hydrogen production equipment.

Capacity Development for Regional Cooperation in Power System Planning and Operations

TFOA7333; US\$199K; May '18 – Mar '20

This completed activity improved the sustainability and organizational capacity of CDC Energia (regional power system operator) through trainings and preparation of a long-term capacity development plan that described: (i) analysis of CDC Energia's functions and responsibilities; (ii) assessment of CDC Energia's training needs; (iii) feedback of the 1st training workshop and study trip; (iv) lessons learned for organization of next training workshops; (v) suggested agendas for training workshops; and (v) assessment of training facility/equipment at CDC Energia. The activity helped national dispatch centers understand the benefits of regional coordination and developing common operational rules/procedures to improve planning and day-to-day operations of the regional power system. Training workshops were held for dispatch center experts in Tashkent, Uzbekistan, in 2018 and 2019. The head of CDC Energia visited a dispatch center and training center at Russian system operator in 2018, and a power system operations training facility was established in 2019 and equipped by USAID.

Analysis of Synchronized Operations of Afghanistan and Central Asia Power Systems

TFOA9869; US\$100K; Mar '19 – Jun '21

This activity supports The World Bank-financed Herat Electrification Project in Afghanistan by development of a roadmap for synchronizing the Afghan and Central Asian power systems. It is enhancing DABS capacity to manage grid synchronization and informing preparation of the Afghan grid code and relevant policies and investment plans. It facilitates dialogue between DABS, CDC Energia and Central Asian national dispatch centers. Finalization of the grid code and consultations with Central Asian countries were postponed to 2021 because of COVID-19 pandemic restrictions.

Central Asia Regional Electricity Trade and Market Development

TFOA8743; US\$300K; Oct '18 – May '21

This activity is financed by PACT and coordinated with the USAID work on regional power system modelling and electricity market design. It assessed opportunities for intra- and inter-regional energy market integration and trade, reviewed energy demands, explored trade options, assessed trade barriers, and developed a sector action plan. A regional Electricity Planning Model for Central Asia, Afghanistan and Pakistan assessed the economic benefits of regional electricity trade for 2019–2030 under business-as-usual, trade and existing infrastructure, trade and CASA-1000, and trade and CASA-1000 and TUTAP scenarios. A [feature story](#) highlights key findings and these will be disseminated at regional conferences. The economic benefits of increased regional trade between 2020–2030 are up to US\$6.4 billion (discounted). With CASA-1000 and TUTAP to connect Central Asia power grids with South Asia, an additional US\$2.6 billion in benefits accrue.

National Energy Sector Capacity

Energy Sector Strengthening

TFOA9034; US\$230K; Nov '18 – Oct '21

This activity in Tajikistan informed the design of measures to improve the financial and operational performance of Barki Tojik and to unblock regional power trade by strengthening the Barki Tojik financial standing and institutional capacity. The activity helped reconnect Tajikistan to the region power system by developing regulatory frameworks for energy pricing and power purchase agreements. It helped design the Program of Financial Recovery of Barki Tojik for 2019–2025 approved by the Government in April 2019, and informed design of the US\$134 million World Bank-financed [Power Utility Financial Recovery Program](#). Key work included: (i) financial analyses; (ii) recommendations for improved operational efficiency; (iii) financial model development; (iv) corporate governance review and recommendations; (v) drafting of regulatory documents; (vi) social impact analyses; and (vii) legal and regulatory analyses to remove bottlenecks to regional power trade expansion. The activity was extended to: (i) evaluate the impacts on hydroelectricity generation of reservoir sedimentation, and (ii) update financial and operational recommendations in the light of COVID-19 pandemic impacts.

Support for the Preparation of the Rural Electrification, Sebzor HPP and Khorog-Qozideh Power Transmission Line Projects

TF0B1004 RETF US\$500K; TF0B1244 BETF US\$150K; Oct '19 – Jun '21

The RETF activity supported feasibility studies, environmental and social impact assessments, biodiversity management plans, Environmental and Social Management Frameworks, and Resettlement Policy Frameworks, for the Sebzor Hydropower Project, the Khorog-Qozideh Transmission Line Project, and the *Rural Electrification Project*. Remaining tasks include disaster risk screening and mitigation assessments, preparation of procurement documents, knowledge sharing on electricity grid operations and maintenance, and capacity building (for planning and operations, transmission and distribution, energy security and efficiency). The work is informing preparation and implementation of US\$100 million in sector finance across multiple development partners.

Project Preparation for Uzbekistan Electricity Transmission System Modernization and Market Development

TF0B3778 RETF US\$500K; TF0B4451 BETF US\$100K; Nov '20 – Sep '21

These activities, financed by PACT, are helping to modernize the planning and operations of Uzbekistan's power transmission system through introduction of digital technologies and the strengthening of institutional capacity of the Uzbekistan National Electric Grid JSC and the regional system operator (CDC Energia). The RETF activity is preparing the feasibility study and technical specifications on introduction of digital technologies into the national power grid and is strengthening the capacity of the national grid company and the regional system operator for design, operations, and maintenance of digital technologies. The activity informs the design of a US\$115 million component of the Uzbekistan *Electricity Sector Transformation and Resilient Transmission Project*.

Options for Leveraging Commercial Financing for Power Generation in Tajikistan

TF0B4727; US\$160K; Dec '20 – Dec '21

This activity is informing the *Program of Financial Recovery of Barki Tojik* for 2019–2025 to identify options for commercial financing for rehabilitation of existing generation assets and construction of new generation projects. The activity will review policy, legal, and regulatory obstacles, and evaluate options including public-private partnerships, ring-fenced project financed transactions, private equity and commercial debt, and sovereign guarantees. The impact of these options on electricity tariff setting will be assessed based on indicative terms and financing, and a roadmap with policy, legal, and regulatory recommendations will be developed for the Government's Generation Expansion Plan.

Renewable Energy

Uzbekistan Small and Medium Hydropower Development Program

TF0A7213; US\$231K; May '18 – Jun '20

This activity built the capacity of Uzbekhydroenergo and the Hydro Project Institute for developing small and medium hydropower programs. Based on a regulatory and institutional assessment, an action plan was developed with recommendations improving managerial skills and technical capacity (for assessment of hydropower potential and technical equipment, use of advanced technologies, tools and digital maps, natural resources studies, and creating incentives for private investment). The activity contributed to Uzbekhydroenergo's public-private partnership and investment plans by identifying potential sites for construction of new small and medium HPP and by preparing concepts and pre-feasibility studies. A Microsoft Excel financial model and user guide, tailored for the Uzbekistan market, were developed to evaluate the financial viability of projects. A document was prepared to guide simple and consistent assessments of river basin hydropower potential, and water quality and other environmental issues. A study tour to Italy and a workshop were conducted in 2019.

Integrated Hydropower Development in the Naryn River Basin

TFOA8728; US\$200K; Oct '18 – Sep '20

This activity assessed the viability and enabling framework for hydropower development in the Naryn River Basin in the Kyrgyz Republic, considering national social and economic development goals, and using a river basin approach. The assessment showed that the current legal framework inhibits third party investment. To close the supply gap, the activity recommended: (i) improving the long-term sustainability of the energy sector including through tariff reforms, efficiency increases, and demand management; (ii) preparing a development action plan including an electricity master plan and studies of priority projects; and (iii) improving the framework for investment. The activity reviewed prospective projects using a multi-criteria analysis, and identified several that require preparation of feasibility studies, environmental and social impact assessments, market studies, and business plans. Results were shared with government and development partners.

Water-Energy Linkages Pillar

Regional Coordination and Capacity Building

Facilitation of Regional Dialogue and Development Partnerships

TFOA7071; US\$450K; Mar '18 – May '22

This activity continues to support CAWEP engagement with governments and development partners. The activity has two components: regional dialogue among countries to develop a regional engagement strategy, and coordination between development partners to develop a shared long-term vision. A brochure *Towards Water-Secure Sustainable Economics* was used in country consultations on water security to better understand national and regional water security priorities and to identify opportunities for bilateral or regional coordination and cooperation. Two of the action areas identified in the brochure – WSS and irrigation modernization – were agreed by government officials as areas primarily for national action. The 3rd action area – investing in adaptation measures to build resilience to climate change – is a shared regional agenda. Three additional action areas consistently raised during the consultations are: (i) reform of IFAS institutions and governance, (ii) water data, accounting and forecasting, and (iii) joint operation and management of shared water infrastructure. A regional engagement strategy will be prepared in 2021 to guide the ongoing engagement on regional water security.

Central Asia Knowledge Network

TFOA7242; US\$400K; Mar '18 – Sep '21

This activity fosters cooperation and knowledge exchange between local and regional institutions and practitioners, on water resource management, energy, and climate change, and works at three levels: (i) strengthening national sectoral and cross-sectoral capabilities, (ii) enabling deeper regional cooperation, and (iii) developing academic and research capacity, connecting youth with practitioners, and promoting gender-related efforts in IWRM. The Knowledge Network maintains four communities of practice: the Central Asia Youth Forum on Water, the Academic Network in Central Asia, the Regional Cross-Sectoral Working Group in Kazakhstan, and the National Cross-Sectoral Working Group in the Kyrgyz Republic. Numerous online trainings and knowledge-sharing events were conducted, covering aspects of online education and IWRM. Support was provided to young female researchers publishing scientific articles on gender issues in IWRM. Experts in the Regional Central Asian Academic Community of Practice developed Unified Discipline Syllabuses packages on hydro amelioration and water engineering and presented these during an online conference. A Russian glossary of water management terms was developed to improve consistency of water education and will be extended to become a multi-lingual glossary. A review of academic and research capacity in Turkmenistan was undertaken to extend the 2019 regional review.

Central Asia Water and Energy Data Platform

TFOA8939; US\$35K; Mar '18 – Sep '19

This activity developed the *Central Asia Water and Energy Data Platform* to facilitate access to information and support outreach and dissemination. It includes interactive maps on environment, social, economic, climate, water, and disaster topics, with spatial datasets available for download. The portal synthesizes data from the *Central Asia Hydrometeorology*

Modernization Project and the *Climate Adaptation and Mitigation Program for the Aral Sea Basin* and links to other databases. The Kazakh-German University, Almaty, Kazakhstan uses the *e-learning video modules* on “How to Use” the Central Asia Water and Energy Data Portal in the Integrated Water Resource Management Masters’ program and the “Young Leaders – Vector of Change” Summer School.

Environment Management

Tajikistan Integrated Landscape-Catchment Management

TF0B0866; US\$480K; Aug '19 – Jun '22

This activity is undertaking a cost-benefit analysis of integrated landscape restoration and catchment area management to reduce sediment inflow to Nurek and Baipaza reservoirs on the Vakhsh River in Tajikistan. The activity is: (i) collecting baseline data, (ii) undertaking economic evaluations, and (iii) building capacity. Field visits in 2020 in the Vakhsh area collected water and sediment samples, and data on ecosystem services.

Kyrgyz Republic Integrated Landscape-Catchment Management

TF0B2684; US\$400K; Apr '20 – Mar '22

This activity is undertaking a cost-benefit analysis of integrated landscape restoration and catchment management to reduce sediment inflow to Toktogul Reservoir in the Kyrgyz Republic, and will complement the *National Water Resources Management Project* financed by Switzerland to provide government with detailed information on erosion and sedimentation and the links between catchment and reservoir condition.

Disruptive Technologies for Landscape Restoration Along the Aral Sea Watershed

TF0B2683; US\$400K; Apr '20 – Feb '22

This activity is developing innovative approaches for restoration of degraded landscapes in Kazakhstan and Uzbekistan with potential scale-up across Central Asia. The activity is informing the Resilient Landscape Program in Central Asia (RESILAND CA+) and other operations under preparation. The activity consists of an *innovation challenge*, a four-month online mentorship program, and preparation of an e-book on innovative approaches. The technology challenge sought proposals for grants to support innovations across four themes: agriculture and land management, sustainable forestry, socio-economic development, and information and knowledge. The challenge was implemented by the Kazakh-German University, the Global Landscape Forum, and Plug&Play (private sector accelerator). Virtual roundtables were conducted with Uzbekistan and Kazakhstan stakeholders, and a webinar and a Questions & Answers session were conducted on landscape restoration. Following a call for proposals and international panel shortlisted 24 of 159 proposals from 38 countries, with winners to be selected at a grand finale event in 2021.

Tajikistan – Strategic Environmental and Social Assessment of the Power Sector Expansion

TF0B4132; US\$350K; Nov '20 – Dec '21

This activity is helping the Government of Tajikistan incorporate environmental and social criteria into power sector expansion plans, both for major hydropower projects with significant environmental and social risks, as well as thermal power projects that require significant cooling water. The activity will ensure that selection of projects to reduce winter energy shortages consider long-term environmental and social sustainability. Key activities include: (i) assessing environmental and social impacts of base-case electricity generation expansion plan; (ii) determining environmental and social criteria for electricity generation projects selection; (iii) guiding energy project development and appraisal by national and regional authorities considering the requirements of international financial institutions and private sector lenders; (iv) engaging stakeholders; (v) developing an environmental and social GIS database for Tajikistan; and (vi) providing potential investors with information on appropriate locations and types of energy facilities.

ANNEX 3. RESULTS FRAMEWORK

CAWEP tracks indicators annually against target values from the 2017 Concept Note.

PROGRAM PROGRESS AND OUTCOMES

Indicator	Cumulative Actual					TARGET	Outputs
	'18	'19	'20	'21	'22		
Component: Strengthen the enabling environment to promote water and energy security at regional level and in beneficiary countries. Baseline: Disparate national-level investments and fragmented regional cooperation. Weak regional institutions are not fulfilling mandates to promote regional cooperation. HEP investment plans negatively impact on already tense neighborly relationships.							
No. of policies, sector strategies, regional institutional frameworks being developed that are based on recommendations of CAWEP funded analytical work	0	2	3			7	Water security brochure; Program for Financial Recovery of Barki Tojik. Concept for flow forecasting and flood warning advisory system for the Amu Darya and Syr Darya Basins
No. of institutions demonstrating improved management performance (of which regional)	0	4/1	4/1			3	CDC Energia (regional), Uzbekhydroenergo, Hydroproject design institute, Barki Tojik
No. of joint decisions (or agreements) to move forward reached	0	0	1			4	AF-TJ MOU on environment protection signed September 2020 for 5-year duration
World Bank investments (US\$b) that reflect transboundary consideration that are based on/ include recommendations from CAWEP funded activities	0	0.13	0.56			0.8	TJ Power Utility Financial Recovery Prog (US\$134M IDA, US\$305.1M govt co-financing), TJ Rural Electrification Proj (US\$31.7M IDA), North Aral Sea Development & Revitalization Proj (US\$161.5M IBRD, US\$30M govt co-financing), TJ Resilient Irrigation Proj (US\$30M IDA, US\$20 EU), TJ Resilient Landscape Restoration Proj (US\$90M IDA), UZ Electricity Sector Transformation & Resilient Transmission Proj (US\$115M IDA, Comp 1)

PILLAR PROGRESS AND OUTCOMES: WATER SECURITY

Indicator	Cumulative Actual					TARGET	Outputs
	'18	'19	'20	'21	'22		
Component: Data and Diagnostic Analyses. Baseline: Opportunities and constraints to improve water productivity and use efficiency are not systematically analyzed, and not identified at the regional level and not owned by riparian governments. National action plans to improve agricultural water productivity do not exist.							
No. analytical outputs related to water use efficiency, water balance, or IWRM	0	3	3			5	Needs assessment, maps and schematic layout for Lower Vakhsh Basin; report on AF-TJ cooperation on data exchange, flood control and early warning
Component: Institutions, Capacity and Dialogue. Baseline: Institutional capacity varies between countries. Limited institutional linkages between riparian states on agricultural water management. Active donors in the region and in countries have disparate coordination.							
No. learning activities that strengthen capacity of water institutions	0	4	5			5	Regional workshops: WSS, irrigation modernization; AF-TJ meetings on hydromet information exchange; KG economic regulation workshop
No. learning activity participants (% female)	0	263/ 15	285/ 16			-	
% participants who consider trainings as relevant & have integrated them in their work	0	77	74				
Component: Supporting Investments. Baseline: Few current investment decisions consider transboundary implications of water use and/or quality impacts.							
No. national-level investments based on CAWEP diagnostics	0	0	1	1	1	1	TJ Resilient Irrigation Proj
No. investments under preparation	0	0	1			1	North Aral Sea Development and Revitalization Proj
No. potential beneficiaries of investments (% female)			810K (50%)			-	Potential beneficiaries under North Aral Development & Revitalization Proj

PILLAR PROGRESS AND OUTCOMES: ENERGY SECURITY

Indicator	Cumulative Actual					TARGET	Outputs
	'18	'19	'20	'21	'22		
Component: Data and Diagnostic Analyses. Baseline: Opportunities and constraints to improve energy sector efficiency are not systematically analyzed and/or are not owned by riparian governments. National energy sector plans do not exist in all countries.							
No. of quality and relevant analytical outputs related to sector efficiency, system planning, service reliability, harmonization of trade regulations	3	4	6			6	Program for financial recovery of Barki Tojik; Financial model and expenditure program for asset maintenance; Report on improvement of power purchase agreements in TJ; Regional power system model for CA, Report on potential electricity trade and interconnections, Analysis of potential of hydropower development in KG
Component: Institutions, Capacity and Dialogue. Baseline: Institutional capacity varies; in some countries institutions are weak with poor financial performance. Coordination among countries initiated. CAREC has regional mandate. Donors have disparate coordination.							
No. institutions supported by capacity strengthening (of which regional)	0	7/1	8/1			6/1	CDC Energia, Uzbekhydroenergo JSC, Hydroproject Design Institute, KEGOC (KZ), NESK (KG), Barki Tojik (TJ), DABS (AF), National Electric Grid (UZ)
No. regional frameworks supporting energy security formulated with CAWEP support						1	
No. learning or dialogue activities that strengthen capacity of institutions	2	6	7			8	Study tour for CDC Energia; study tour & workshop for Uzbekhydroenergo and Hydroproject design institute; trainings for national institutions, CAREC ESCC and Senior Officials meetings
No. learning/dialogue activity participants (% female)	149/11	267/23	428/29			120	Includes participants in above workshops/meetings
% of participants (% women) who consider learnings as relevant and have integrated them in their work						70	
Component: Supporting Investments. Baseline: CA power system is weak and disintegrating since 2009 causing financial losses. Few investment decisions consider transboundary aspects. TJ and KG have winter energy deficit.							
No. energy investments based on CAWEP diagnostics (of which regional)						2	
No. energy investments under preparation (of which regional)	0/0	1/0	3/0			4/1	TJ Power Sector Financial Recovery Proj, TJ Rural Electrification Proj, UZ Electricity Sector Transformation and Resilient Transmission Proj
No. potential beneficiaries of investments supported (% female)			40K /49			-	

PILLAR PROGRESS AND OUTCOMES: WATER-ENERGY LINKAGES

Indicator	Cumulative Actual					TARGET	Outputs
	'18	'19	'20	'21	'22		
Component: Data and Diagnostic Analyses. Baseline: No robust recent analysis of links between energy and water. Climate change implications for energy and water resources management are poorly understood at national and regional levels.							
No. analytical outputs related to water-energy linkages, climate change, regional IWRM	0	2	2			3	Reports: "Stocktaking review and mapping of IWRM knowledge and capacity building initiatives by international partners in CA"; "Review of water-related academic and research capacity in CA countries"
No. platforms for data access, analysis or sharing established at regional level	0	1	1			1	Central Asia Water and Energy Data Portal
No. platform users (% female)		400 /50	400 /50			-	
% users satisfied with platform access & contents		85	85			90	
Component: Institutions, Capacity and Dialogue. Baseline Regional institutions are weak; national institutions lack physical and human resource capacity to consider energy-water linkages and work cross-border. Systems for data sharing and accessing publicly available data sets are weak.							
No. regional institutions supported through capacity strengthening activities					2	2	
No. regional frameworks formulated with CAWEP support		1	1			1	Water security brochure
No. multi-country learning activities	1	6	10			5	Study tour of Tajik institute to Uzbek TIIAME; cross-country knowledge exchanges, webinars on online tools
No. participants in multi-country learning activities (% female)	5	188/ 42	293/ 45			-	Study tour of Tajik institute to Uzbek TIIAME; cross-country knowledge exchanges, webinars on online tools
% participants (% female) who consider trainings relevant and have integrated them in their work						75	
No. dialogue events promoting regional cooperation (of which regional)	8/7	16/15	22/17			10	13 partner meetings; 1 pre-conference event for high level conference in TJ; 2 Youth to Youth IWRM Initiatives; pre-conference academic event, bilateral consultations
No. dialogue event participants (% female)	164/ 70	269/ 50	441/ 48			-	Participants in above-mentioned events
% participants (% female) who consider outcomes of dialogue events as relevant and have integrated them in their work.						75/ 20	
Component: Supporting Investments. Baseline: Earlier regional nexus projects not successful in achieving regional outcomes or cooperation. Few investment decisions consider transboundary implications or the nexus.							
No. regional investments under preparation						1	
No. potential beneficiaries of investments supported (% female).						-	

