



GWSP
GLOBAL WATER
SECURITY & SANITATION
PARTNERSHIP

CAWEP
CENTRAL ASIA WATER & ENERGY PROGRAM

THE 2019 CENTRAL ASIA IRRIGATION MODERNIZATION



WORKSHOP AT A GLANCE



WORLD BANK GROUP

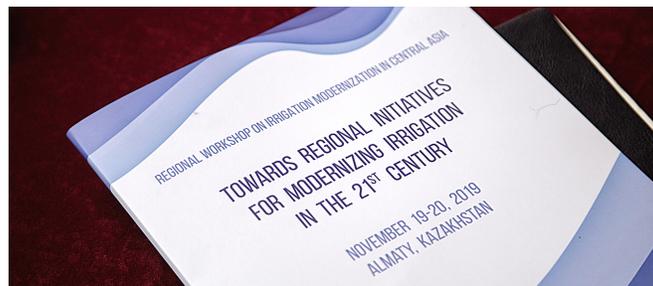
THE WORLD BANK
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GETTING DOWN TO BASICS

WHY IRRIGATION?

Irrigation plays a critical role in strengthening food security, creating jobs, improving farmer incomes and building climate resilience in Central Asia. Irrigated agriculture is twice as productive per unit of land compared to rainfed farming and is highly suitable for farmers who are looking to increase the diversification of high-value crops. But even though irrigation has been utilized in Central Asia for decades, Central Asian countries are nonetheless struggling with low water productivity, aging facilities and high operating costs.



WHY THIS WORKSHOP?

The workshop, which was funded by two World Bank trust funds – the Central Asia Water & Energy Program (CAWEP) and the Global Water Security & Sanitation Partnership (GWSP) – initiated a regional dialogue on irrigation modernization. The workshop aimed to (i) provide an opportunity to learn from the findings of stocktaking exercises, international experiences of irrigation modernization, and initiatives of research institutions and universities in the region; (ii) start a discussion on potential private sector involvement; (iii) outline possible irrigation modernization solutions in each country as next steps; and (iv) build networks to help countries work towards irrigation modernization.

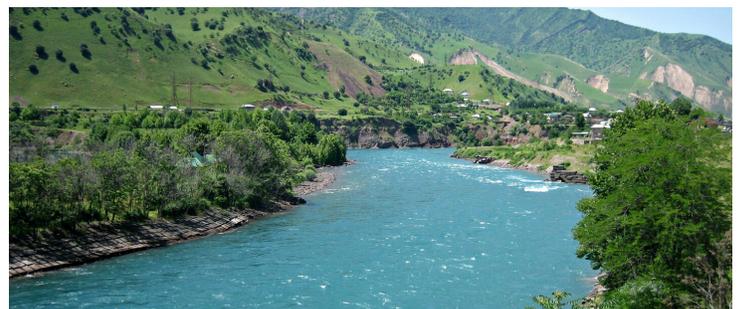
LOGISTICALLY SPEAKING



The event took place in Almaty, Kazakhstan on November 19-20, 2019 and gathered a wide range of participants, each with their own experiences and perspectives on irrigation practices in Central Asia and how to best improve them going forward. This included policy makers from government ministries along with agriculture and irrigation authorities; irrigation administration practitioners; scientists and researchers from research institutions and universities; water consumer and user association representatives; private sector representatives; and international technical partners and donors.

“I THINK EACH OF US CAN CONTRIBUTE TO WATER CONSERVATION BY CONSUMING LESS WATER AND USING IT SPARINGLY. THESE ARE THE BASIC PRINCIPLES THAT MUST ENTER THE CULTURE OF EVERY PERSON”

- Arman Turlybek, Chairman of the Committee for Water Resources, Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan.



THE NITTY GRITTY

Over the course of the workshop, participants attended sessions focusing on the following topics and subtopics:

1) Irrigation Modernization in Central Asia and Water Use Efficiency and Productivity

- Agricultural modernization that requires irrigation changes
- Modernizing water delivery systems to improve furrow irrigation at scale
- Buried pipe system distribution and pressurized irrigation
- Canal modernization - the Australian experience
- Country-specific cases from research institutions

2) Management Issues in Irrigation

- ET-based water management – China's Turpan model
- Operational water accounting
- Institution changes for improved service delivery
- Financing micro-irrigation

3) Private Sector involvement and Public-Private Partnerships (PPP)

- The International Finance Corporation's (IFC) experience in Morocco's Guerdane and Brazil's Pontal PPP irrigation projects
- The views on irrigation PPPs in Central Asia shared by a range of private sector company representatives, including an irrigation technology provider, a PPP operator, a large-scale farmer and an agribusiness off-taker

4) Country Experiences, Perspectives, Challenges and Opportunities

- The need for stronger collaboration at the basin level
- Changes in infrastructure, irrigation types and management to respond to agricultural transformations
- Prioritizing efficiency and improved systems to better adapt to climate change and competition in water use
- Utilizing new technologies, particularly remote sensing
- Private sector involvement

5) Our Future

- Attract younger generations to careers in irrigation
- Group Discussions
 1. Consolidate ideas and innovations and validate findings and recommendations
 2. Identify priority actions on irrigation modernization
 3. Determine the next steps in continuing the dialogue



PARTICIPANTS' FEEDBACK

- Representatives from both Kazakhstan and the Kyrgyz Republic valued the enriching exchange of views presented and the overall experience of finding solutions to common regional problems.

"WE NEED TO START CHANGING THE CULTURE OF WATER USE THROUGH EDUCATION."

- Dilshod Umarov, Director, Research Institute on Water Engineering and Amelioration (Tajik Niigim), Tajikistan.

- Tajikistan's attendees appreciated the angle and character of the seminar, given that mutual information sharing is crucial in preparing to proceed with irrigation reforms.
- Participants from Turkmenistan stressed the importance of new information on technologies and economic instruments introduced at the event.

"WE ARE FACING A PERIOD WHEN THIS RESOURCE IS COMING RAPIDLY TO AN END IN CERTAIN REGIONS."

- Valeriy Gutnik, Head of Irrigation Systems and Water Use Department, State Water Resources Agency under the Government of the Kyrgyz Republic





WHAT'S NEXT?

All countries confirmed an interest in continuing the discussion on irrigation modernization across the region and in each country individually. Specifically:

- Kazakh counterparts indicated the importance of developing a policy and a strategy, as well as conducting research at the national level and building the capacity of water specialists through regional seminars. They also proposed launching the “Water for Business” initiative, which would allow the country to attract private sector players into the water sector and irrigation.
- Kyrgyzstan's representatives emphasized the importance of extending its automated water accounting system from an on-farm level to a basin level.

“THIS PUSHES US TO SEEK NEW SOLUTIONS FOR THE CAREFUL AND EFFICIENT MANAGEMENT AND USE OF WATER RESOURCES.”

- Vohidjon Ahmadjonov, Director of the Informational Analytical Center, Ministry of Water Resources of Uzbekistan.





- Tajikistan's participants expressed a desire to continue cooperating with the World Bank under the irrigation agenda at the national level and noted the value of creating a regional hub for Central Asia and the Caucasus along the International Commission on Irrigation and Drainage (ICID).
- Representatives of Turkmenistan mentioned its intention of adopting new technology at the national level and continuing the dialogue at the regional level.
- Uzbekistan's representatives showed their intention to involve the World Bank in the launch of a PPP initiative and the development of a Water Strategy through 2030.

All participants expressed their support of the suggestion to create a platform for the exchange of knowledge among neighboring countries on issues and solutions at the Aral Basin level. Country representatives will continue to cooperate and rely on professional support from international organizations like the World Bank Group, in addition to investment institutions and donors, to further advance the cause of irrigation modernization in the region.



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