



Innovations for Improving Drylands in Central Asia  
Collaborative Research and Capacity Development Program  
December 14 - 15, 2016. Tashkent, Uzbekistan, City Palace Hotel.

**Workshop on “Innovations for Improving Drylands in Central Asia”**

A workshop on “Innovations for Improving Drylands in Central Asia” organized by ICARDA held on December 14-15, 2016 in Tashkent, Uzbekistan. The workshop was organized under the Collaborative Research and Capacity Building Program for the Development of Sustainable and Resilient Agricultural Production Systems and the Conditions of Changing Climate in Central Asia (CRP-DS) headed by the CGIAR Regional Program for Sustainable Agricultural Development in Central Asia and Caucasus led by ICARDA. The event brought together representatives of Ministry of Agriculture and Water Resources in Uzbekistan (MAWR) and National Agricultural Research Systems (NARS) from five countries of Central Asia, donor organizations, members of the international agricultural research centers and others involved in current projects related to agricultural development in the region. This workshop has been supported by the Eurasian Center for Food Security under funding by the Russian Federation. The main agenda of the event was to present technologies and approaches developed for improving drylands over the past four years in Central Asia, share the knowledge on dryland systems developed collaboratively by International and National Agriculture Research Centers in partnership with NARS, funded by other donors, find out ways to move innovations to the field for end-users, determine further needs to address the present and emerging environmental challenges to food security and identify funding opportunities for further work.

December 2016



**First Learning Alliance Meeting**

First Learning Alliance Meeting on “Beans with Benefits” Project was conducted on December 17, 2016 in Tashkent, Uzbekistan. This Meeting was conducted jointly with the World Vegetable Center in CAC and ICARDA Regional office. Forty participants (31 men and 9 women) from different international and government organizations, research institutes, universities, NGOs, farmers associations from Uzbekistan and Kazakhstan, and the private sector took part in the meeting. The purpose of the meeting was to consolidate the efforts of governmental organizations, National Agricultural Research Systems (NARS), NGO and farmers on mungbean production for diversification, soil fertility improvement, increasing farmers’ income and export potential.

December 2016



**Project Conclusion Meeting on Improving Water-use Efficiency through Innovative Technologies in Irrigation and Farming**

The Project Conclusion Meeting on CRP DS Activity: “Improving Water-use Efficiency through Innovative Technologies in Irrigation and Farming” was organized on December 16, 2016 in Tashkent, Uzbekistan and was attended by 36 participants - experts from ICARDA, the Ministry of Agriculture and Water Management of Uzbekistan, Uzbek Agricultural Research Institutes and Non-Government Organization as well as representatives of regional Water User Associations from Fergana Valley as well representative of Donor Organization (UNDP, CAREC) and Central Asia and the Caucasus Association of Agricultural Research Institutions (CACAARI). The purpose of the workshop was to highlight the findings of the stakeholders, find potential partners and donors, and to link the CRP-DS WUE activity to the needs of the stakeholders, inform them about ICARDA methodologies, research outputs and outcomes in order to find opportunities for technology adaptation in large-scale.

December 2016



**CAC Program Highlights**

Sustainable Agriculture in Central Asia and the Caucasus (CAC)

Led by INTERNATIONAL CENTER FOR AGRICULTURAL RESEARCH IN THE DRY AREAS (ICARDA)



**Regional training on Crop Diversification and Adaptation under Climate Change**

A regional training on crop diversification and adaptation under climate change, titled “New salt tolerant crops and modeling option for management optimization”, was organized by the International Center for Biosaline Agriculture (ICBA) in collaboration with National Agricultural Research Systems (NARS) from Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan from 07 to 11 November 2016 in Almaty, Kazakhstan. The trainees had opportunity to enhance their knowledge and understanding on climate change impact (drought) on the regional farming system and food production in marginal environments of Aral Sea Basin countries, its consequences, and a range of potential activities as a solution. The program covered intensive technical training application of advanced software, such as ENVI for analyzing satellite images, as well as practical exercises using DsSAT and CropSyst for crop modeling. Young agricultural scientists was trained how to produce crop maps using satellite images, download data from network dataset for mapping and modeling, and collect field data to verify these maps, and use crop modeling for estimating yields of different agro-landscapes affected by salinity and water scarcity. Hands-on training was held using GPS and camera-GPS for field data collection including water, rangelands, livestock and agricultural market.

November 2016



**Training course on Seed Multiplication**

A training course on multiplication of high quality seeds of traditional (wheat and legumes) and nontraditional (safflower, sorghum, pearl millet, soyabean, sesame, artichoke and others) crops was organized by ICBA on November 7-11, 2016 in Turgen (a model seed production farm), Kazakhstan. During the training, regional leaders stressed the needs of promotion of innovative water-saving technologies and new salt and drought tolerant crops suitable for rainfed conditions, rangelands grazing capacity and livestock productivity improvement. Also, participants highlighted that a special attention should be given to the value chain analysis and marketing of new crops, training program for farmers and agropastoralists (through farmer school model), traditional knowledge collection, etc. In addition, it was concluded that efforts should be given to local seed production; “farmer to farmer” seeds distribution and marketing accordingly to regional and global standards and needs.

November 2016



**Workshop on “Establishment of Model Forest Farm in Kara-agma Forest (Kyrgyzstan)”**

On 10-11 November 2016, Bioversity International organized a workshop on “Establishment of Model Forest Farm in Kara-agma Forest (Kyrgyzstan)” in Bishkek, Kyrgyzstan. The workshop was organized within the Bioversity project on conservation for diversified and sustainable use of fruit tree genetic resources in Central Asia with participation of all interested partners including, representatives of Bioversity, State Agency on Environment Protection and Forestry, Kyrgyz National Agrarian University, Research Institute of Nut and Fruit Crops, Forest Institute named after P.A. Gan, Administration of Kara-agma Forestry Enterprise, Kara-agma village

council, Public Fund “Biomuras”, Association of Fruit Producers of South Kyrgyzstan, Kyrgyz Association of Land and Forest Users, JICA, FAO and private enterprises. The workshop participants reviewed reports of several training workshops on “Walnut grafting methods”, “Sustainable use of pasture lands of the Forestry Enterprise”, “Pest and disease control of nut-fruit trees” and “Certification of forest management and forest products» organized for forestry employees and local residents within Kara-agma Model Forest Farm (KAMFF) initiative. They also were familiarized with the study results on implementation of National forest policy, legislation and reforming plans in Karaagma Forestry Enterprise and discussed next steps on implementation of study recommendations in Kyrgyzstan. At the workshop, a representative of Turkish Model Forest Farm presented a report on the progress made in establishment of Model Forest Farm in Turkey and provided recommendations on resources mobilization for continuation of this initiative after completion of the project. The participants developed and approved plan of actions for finalizing current activities and beyond the end the project.

November 2016



**IWMI conducted the Annual Research Meeting**

The International Water Management Institute (IWMI) conducted the Annual Research Meeting – 2016, titled “Looking forward”, at the Headquarter of IWMI in Colombo on November 14 – 18, 2016. The meeting gave an opportunity for IWMI research staff to come together to discuss future strategies, present their work and achievement, share ideas and challenges, and focus on joint collective efforts on action plans development. The main results of IWMI projects in Central Asia were presented to participants and highlighted during the strategic planning discussions.

November 2016

**ABOUT US**

CGIAR Regional Program for Central Asia and the Caucasus was initiated in 1998, and operates as a consortium of the Centers of the Consultative Group for International Agricultural Research (CGIAR), National Agricultural Research Organizations and advanced research institutions. The Program aims at reducing poverty and hunger, improving human health and nutrition, and enhancing ecosystem resilience through high-quality international research, partnership and leadership. It fosters cooperation among the countries in the Region and promotes their collaboration with the wider international community. Based in Tashkent, Uzbekistan, the Program provides policy, technical and administrative support for the implementation of the various activities and projects. It operates under the legal agreement between the Government of Uzbekistan and the International Centre for Agricultural Research in the Dry Areas (ICARDA) on behalf of the consortium.

**CONTACT US**

P.O.Box: 4375 Tashkent 100000, Uzbekistan.  
Tel: +998-71 2372130, +998-71 2372169.  
Fax: +998-71 1207125.  
E-mail: pfu-tashkent@cgiar.org.  
Web: www.cac-program.org





**«Global strategic planning Horticulture» Meeting in Taiwan**

Dr. Ravza Mavlyanova, Regional Coordinator of the World Vegetable Center (WorldVeg) in CAC attended the meeting on «Global strategic planning Horticulture» organized by WorldVeg-HQ on November 14-18, 2016 in Taiwan. The World Vegetable Center, as the world's leading research center in this area, invited the leading scientists for the development of new strategies for sustainable vegetable production throughout the developing world. As a result of the collective work important activities at the global level, including the gene pool of vegetable crops, breeding of new varieties, new technologies of cultivation and processing of products, healthy food, socio-economic aspects and marketing were developed.

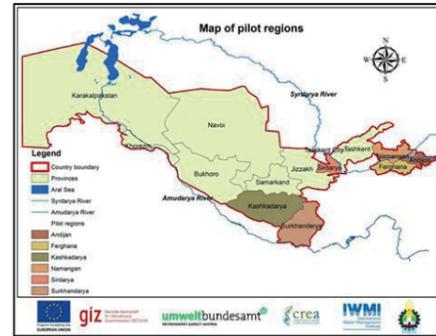
November 2016



**IWMI-Central Asia project team visited research sites in Kashkadarya province**

The field visit of IWMI-Central Asia team was organized on November 15-17, 2016 within the framework of the project on «Mitigating the competition for water in Amudarya river basin, by improving water use efficiency», funded by USAID PEER cycle 4 Program. The main purpose of the event was to perform documentation of bright farmers, who practice innovative water and energy saving technologies. The study has been conducted in the command areas of Mirishkor and Karshi main canal systems. Besides, survey and semi-structural interviews with partners and farmers were arranged to explore their experience in water and energy saving technologies.

November 2016



**Field visit to prepare GIS map of irrigation systems of Amu-Kashkadarya Basin**

The field visit to Kashkadarya province of Uzbekistan was conducted on November 16-17, 2016 by IWMI-Central Asia team within the EU/GIZ «Sustainable management of water resources in rural areas in Uzbekistan» Component 1 - National policy framework for water governance and integrated water resources management. The focus of the trip was to prepare GIS map of Amu-Kashkadarya Basin Irrigation System Authority (BISA). During the trip, IWMI-Central Asia specialists conducted ground truth of GIS database on irrigation systems jointly with experts of BISA and verified developed inventory list of rivers in the Kashkadarya province for the diagnostic analysis report.

November 2016



**USAID Director for South and Central Asian Affairs visits IWMI-Central Asia office**

IWMI-Central Asia office held a joint meeting with Director of United States Agency for International Development (USAID)'s office of South and Central Asian Affairs, on December 1, 2016. National research staff presented the overall activities and best practices of IWMI in the region and interim achievements of the ongoing USAID PEER cycle 4 funded program administrated by the US National Academy of Sciences (NAS) on Mitigating the Competition for Water in Amudarya River Basin, by improving water use efficiency. IWMI-Central Asia's potential contribution to the dialogue with policy makers and priorities for the next year were also discussed during the meeting. In addition, special attention was given to newly awarded project on «Implications of climate change, land use and adaptation interventions on water resources and agricultural production in Transboundary Amu Darya River Basin», funded by USAID PEER cycle 5 Program.

December 2016



**«Open day» at GIZ Uzbekistan**

Team of IWMI-Central Asia attended «Open Day» event organized by the representative office of the German Agency for International Cooperation (GIZ) in Uzbekistan and the German Development Bank (KfW) on December 6, 2016 in Tashkent, Uzbekistan. International and local partners were familiarized with the results of GIZ projects activities in Uzbekistan. The head of GIZ in Uzbekistan, Mr. Torsten Brezina pointed out that within more than 20 years of close cooperation with partners in the region, GIZ promoted several programs in the field of transboundary water management, health care systems, legal reform and sustainable development of the economy. IWMI-Central Asia team were able to gain insight about GIZ activities in the development sector and meet with experts involved in the implementation of the initiatives in the region. The team also had the chance to exhibit IWMI's work and joint activities with the EU/GIZ projects in the region through posters and publications displayed at the event.

December 2016



**Joint meeting with the Swiss Agency for Development and Cooperation**

IWMI-Central Asia office held a joint meeting with the representatives of the Swiss Agency for Development and Cooperation (SDC) funded project on November 18, 2016. During the meeting, it was stressed, that both, Switzerland and Uzbekistan are strengthening their cooperation towards the development of the integrated water resources management. SDC informed that it is going to initiate a project jointly with the Ministry of Agriculture and Water Resources of the Republic of Uzbekistan to promote integrated and needs-based water resources management, taking into account water-related disaster risks prevention and preparedness. The project is expecting to have four components focusing on water strategy elaboration and implementation of water legislation, strengthening the institutional capacities of the water management agencies, establishing a National Water Information System, and enhancing the Disaster Risk Management in the South Fergana. IWMI-Central Asia team and SDC project members exchanged information on their activities, practices in this area and discussed future collaboration.

November 2016



**IWMI-Central Asia conducted First QGIS training in Turkmenistan**

The First Quantum Geographic Information System (QGIS) seminar was organized on November 21-25, 2016 by IWMI- Central Asia Office under the «Murgab Basin Planning» project. The project is implemented by the German Agency for International Cooperation (GIZ) in collaboration with IWMI and the Ministry of Agriculture and Water Resources of Turkmenistan. Trainees from the water sector were able to broaden their knowledge on innovative methods, tools for analyzing and monitoring water and land resources with the use of GIS and remote sensing data of the Murgab River Basin. Moreover, practical exercises covered visualization and creation of thematic maps, generation of DEM based on Google Earth data and development of 3D maps.

November 2016



**International Conference on Economics of Land Degradation in Central Asia**

The International Conference on Economics of Land Degradation in Central Asia was conducted on November 28-29, 2016 in Bishkek, Kyrgyzstan, to discuss the findings and recommendations developed within the regional project on the Economics of Land Degradation (ELD) in Central Asia, initiated in 2014 jointly by the UNCCD, the International Center for Agricultural Research in the Dry Areas (ICARDA) and the GIZ Regional Programme for Sustainable and Climate Sensitive Land Use for Economic Development in Central Asia. The overarching objective of the conference was to consider the ELD results in relation to on-going plans and frameworks to achieve greater synergies between the commitments of the Central Asian countries to the UN environmental conventions (combating desertification, climate change, and biodiversity). The main message of the project is that sustainable land management (SLM) practices, assessed in the different ELD studies, can contribute to livelihood enhancement and more sustainable production systems given a better enabling environment that includes policies and new institutional arrangements.

November 2016



**International Quinoa Conference**

The International Conference on quinoa, titled «Quinoa for Future Food and Nutrition Security in Marginal Environments», was organized by ICBA in collaboration with the Ministry of Climate Change and Environment of the United Arab Emirates, Zayed University, the Islamic Development Bank (IDB), and the Arab Bank for Economic Development in Africa (BADEA), with the technical contribution of the Food and Agriculture Organization of the United Nations (FAO) in Dubai, the United Arab Emirates, on December 6-8, 2016. This conference provided a unique platform for discussions on ecological, economic and social aspects related to introducing quinoa for sustainable agricultural production in marginal environments. More than 150 leaders, policymakers, scientists, experts, young and experienced professionals from over 46 countries came together to discuss and share the latest developments in quinoa research, production and trade around the world, and develop a set of recommendations for quinoa cultivation in marginal environments which are affected by water scarcity and salinity. During the conference potential opportunities for collaboration between the public and private sectors, and the latest developments in quinoa research, production and trade around the world as well as market opportunities were discussed comprehensively.

December 2016



**Regional consultations on ICT for agricultural research and extension in CAC region**

On December 7-9, 2016, in Bishkek, Kyrgyz Republic a number of Regional consultations on ICT for agricultural research and Extension were conducted by the Association of Agricultural Research Organizations in Central Asia and the Caucasus (ACAARI) in collaboration with the Regional Bureau FAO for Europe and Central Asia (FAO-REU) and with support of the Ministry of Agriculture, Food and Land Reclamation of the Kyrgyz Republic, the Central Asia and the Caucasus Forum for Rural Advisory Services, the Global Forum for Rural Advisory Services, the International Center for Agricultural Research in the Dry Areas (ICARDA) and Kyrgyz Public Foundation «Center training, advice and information». Totally 28 participants from Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan, representing various stakeholders of e-agriculture, namely, agricultural research, extension services, agricultural universities, farmers' associations, Ministries of Agriculture, and ICT management at the ministries of agriculture, non-governmental organizations, development agencies, social networks and youth organization took part in these events. The goal of these consultations was to enhance the capacity and awareness of the participants on the key aspects of the components and high-level process of e-agriculture development, exchange of experience and knowledge, discussion of impacts and approaches of e-agriculture, etc.

December 2016