



International Workshop

Innovations in Marginal Water Resources Use for Resilient Agriculture and Food Security

PROGRAM

11 - 13 December 2017
 Radisson Blue Hotel, Tashkent, Uzbekistan

December 10, 2017

10:00-17:00 Arrival and accommodation of participants in Tashkent

December 11, 2017

9:00-10:00 **Opening ceremony**

Acad. Behzod YULDASHEV, *Chair of the Workshop, President of the Academy of Sciences of Uzbekistan*

Dr. Shavkat XAMRAEV, *Deputy Ministry, Ministry of Agriculture and Water Resources of Uzbekistan*

Dr. Ismahane ELOUAFI, *Co-chair of the Workshop, Director General, ICBA*

Mrs Pamela SPRATLEN, *H.E. Ambassador of USA in Tashkent, Uzbekistan*

Dr. Caroline MILOW, *Program Director, GIZ Uzbekistan*

Representatives of the International organizations and agencies

10:0-11:00 **Plenary session:**

Integrated water resources management to produce more nutritious food with less water.

Chair: Prof. William (Bill) PAYNE, *Nevada, Reno, University, USA*

Co-chair: Mr. Umid ABDULLAEV, *Uzbekistan*

Main objectives, priorities and expected outputs of the Workshop: Promoting Best Technologies for Marginal Water Resources Use for Resilient Agriculture and (with reference to Central Asia)

Prof. Kristina TODERICH, *International Center for Bioslaine Agriculture for Central Asia and Caucasus (ICBA-CAC), Tashkent, Uzbekistan*

Harnessing blue energy for sustainable agriculture in Arid Environment: a study from UAE.

Prof. Hassan A. ARAFAT, *Department of Chemical and Environmental Engineering, Masdar Institute Khalifa University of Science and Technology, UAE*

Resources for improving water use efficiency

Dr. Uktam UMURZAKOV, Dr. Abdukhakim SALAKHITDINOV, *Tashkent Institute of Agricultural Irrigation and Mechanization Engineers*

11:00-11:10 **Group photo**

11:10-11:30 **Coffee break**

11:30-13:00 **Session I**

Innovative technologies on desalination and decontamination of water and soil; alternatives for water, lands and bio-resources use

Chair: Prof. Haruyuki FUJIMAKI, *Arid Lands Research Center, Tottori University*

Co-chair: Dr. Gulchekhira KHASANKHANOVA, *UzGIP, Uzbekistan*

Reporter: Dr. Nataliya AKINSHINA, *National University of Uzbekistan*

Biogas production from halophytes towards phytoremediation of salinized area.

Prof. Hidenari YASUI, *Kitakyushu University, Japan*

Solar soil and water desalination technology and principles

Prof. Sanjay KUMAR, *BR Ambedkar Bihar University, India*

Agricultural production conditions analyzed through the soil water budgeting – a case study of Bosnia and Herzegovina

Prof. Hamid CUSTOVIC

Potential of conjunctive water use as a best management practice for irrigated areas of Uzbekistan

Dr Akmal AKRAMKHANOV, *ICARDA*

Marginal Lands and the Private Sector: Increasing Investment in Productivity

Dr. Michael BRODY, *American University, Washington DC, USA & Fulbright Scholar, National University of Uzbekistan, Tashkent;*

Bahtiyor ESHCHANOV, *Westminster International University in Tashkent, Uzbekistan;*

Alexander GOLUB, *American University, Washington DC, USA*

Moderator: Botir DOSOV, *FAO*

13:00-13:30 **Panel session of academic, donors and agencies to discuss the factors that are necessary for Alternatives of Water/Lands /Bioresources Valorization and Building Synergies**

13:30-14:30 **Lunch**

14:30-15:30 **Session II**

Experts from research international communities who focus their efforts on the water and food security, use of marginal water resources and their associated with climate change impact

Chair: Prof. Bob NOWAK, *Nevada Reno University, USA*

Co-chair: Dr. Zheenbek KULENBEKOV, *Applied Geoecology Department, American University of Central Asia, Kyrgyzstan*

Reporter: Dr. Hasan BOBOEV, *ICBA-CAC*

Water resources analysis for the crop requirement under climate change (case study of the Zerafshan River Basin)

Dr. Temur KHUJANAZAROV & Dr. Kenji TANAKA, *DPRI, Kyoto University, Japan*

Marginal sources of water in Pakistan: issues and options

Dr. Mohammad ASHRAF, *Pakistan*

Use of Halophytes to Remediate and Monitor Saline Habitats

Prof. Münir ÖZTURK, *Turkey*

EU COST Initiative “Drylands facing change”

Prof. Malgorzata SUSKA-MALAWSKA and Dr. Monika METRAK, *Warsaw University, Poland*

15:30-16:00 **Coffee break**

16:00-17:15 **Groups Discussion: Alternative sources of Agricultural Water:** water resource management, source water protection, agriculture and drought Treatment options, Desalinization, potential opportunities for marginal resources use; new concept on food security and nutrition value

Moderators: Dr. Umid ABDULLAEV, *UzGIP* and Prof. Kristina TODERICH, *ICBA-CAC*

Reporter: Dr. Pulat REIMOV, *Project manager, Karakalpakstan*

Protecting & Managing Water Resources During Drought in the Western United States

Dr. Jonah SCHEIN, *U.S. Environmental Protection Agency*

Benefits: Understand the benefits of marginal resources use.

Apply the lessons learned in scoping, budgeting, and scheduling for alternative water, lands and bio-recourses utilization (with special focus to Central Asia).

17:15-18:00 **Working Groups Results Presentation**

19:30 **Reception Dinner**

December 12, 2017

09:00-13:00 **Session III**

Regional Expertise on development of water and food recycling strategies, efficient irrigation practices, water and soil quality, bioremediation, bio-energy; Environmental Management and Sustainability; Ecosystem Health

Chair: Prof. Malgorzata SUSKA-MALAWSKA, *Director, Institute of Botany, Biological and Chemical Research Center, University of Warsaw*

Co-chair: Prof. Tetsuya KUSUDA, *Kyushu University, Japan*

Reporter:

Irrigation and Drainage Technology for Enhancement of Resilience to Soil Salinity

Mr. Yukio OKUDA and Mr. Junya ONISHI, *JIRCAS, Japan*

Using Smart Water Technologies for Improving Water Quality Monitoring in IWRM.

Dr. Zheenbek KULENBEKOV, *Applied Geoecology Department, American University of Central Asia, Kyrgyzstan*

Formation and management measures of collector-drainage water on irrigated lands in the lower reaches of the Syr Darya River

Dr. Karl ANZELM, *South Kazakhstan Hydrogeological Amelioration Expedition, Kazakhstan*

Improving Water and Energy Use Efficiency in Lift Irrigated Areas: A Case study Karshi Steppe, Uzbekistan

Dr. Kakhramon DJUMABOEV, *IWMI-Central Asia*

11:00-11:30 **Coffee break**

11:30-13:00 **Implications of climate change, land use and adaptation interventions on water resources and agricultural production in Transboundary Amu Darya river basin**

Mr. Zafar GAFUROV, *IWMI-Central Asia*

CAREC experience on basin planning as the instrument for sustainable development of pilot territories

Mrs. Ekaterina STREKILEVA, *Smart Waters project manager, CAREC*

Group discussion: Innovative technologies are required to ensure sustainable food production. They are needed to foster improve of water legislation; enhancement of the system of information and data exchange; water saving technologies; implement efficient irrigation strategies; reuse of drainage water and marginal water resources usage; produce smarter ways to use fertilizer and water.

Moderators: Dr. Nataliya AKINSHINA & Nataliya SHULGINA

Reporter: Dr. Elena SHUYSKAYA, *Academy of Sciences of Russian Federation*

13:00-14:00 **Lunch**

14:00-17:30 **Session IV**

Policy framework for water governance and integrated water resources management to produce more nutritious food with less water.

Chair: Dr. Caroline MILOW, *GIZ*

Co-chair: Prof. Bill PAYNE, *Nevada Reno University*

Reporter: Dr. Usupbek Kazbekov, *CAREC*

Welcome to the session and short introduction of the Berlin Process and its activities in Central Asia.

Dr. Caroline MILOW, *Programme Director/Team Leader Uzbekistan, GIZ*

Approach of the EU Programme in Uzbekistan: water saving technologies in pilot regions and improving water governance in selected river basins.

Oyture ANARBKOV, Umida SOLIEVA and Isomiddin AKRAMOV, *IWMI Project Team*

Irrigation planning: best practices examples from Spain

Dr. Manuel BARNEO, *SCA San Isidro & SCA San Francisco & Grupo JAENCOOP*

Reduction of water use through shelterbelts

Dr. Niels THEVS, *ICRAF*

A new Tool for Monitoring the Irrigated Cropland Use and Water Use Efficiency in the Amu Darya River Basin

Mr. Almas KITAPBAYEV, *CAWA Programme and German-Kazakh University*

Land use and water use efficiency analysis through remote sensing data in “Quva Orta Buz Anori”.

Mr. Bekzat ANARBKOV, *Master graduate from German-Kazakh University*

16:00-16:20 **Coffee break**

16:20-17:30 **Groups discussion: development of the recommendations**

Moderators: Mr. Alexandr Nikolayenko, *GIZ* and Dr. Botir Dosov, *FAO*

Reporter: Dr. Yusupbek KAZBEKOV, *CAREC*

December 13, 2017

09:00-13:00 **Session V**

Indigenous Knowledge and Practices on Dry Lands Water Resources Management: Research & Education Challenges

Chair: Acad. Mykhailo ROMASHCHENKO, *Ukraine*

Co-Chair: Prof. Mohammad ASHRAF, *Pakistan*

Reporter: Mr. Inom NURMATOV, *Tajikistan*

Choice methodology of optimum solution for efficient water use

Prof. Tetsuya KUSUDA, *Kyushu University, Japan*

Traditional land and water use for sustainable water resources management in agriculture

Dr. Azamat AZIZOV, *National University of Uzbekistan*

Conditions and features of marginal water use for irrigation needs in Ukraine

Acad. Mykhailo ROMASHCHENKO, *Institute of Water Problems and Melioration, National Academy of Sciences, Ukraine*

‘SMART WATER’ project Achievements and Future prospects, USAID /CAREC

Dr. Yusupbek KAZBEKOV, *Regional Environmental Centre for Central Asia (CAREC)*

11:30-11:30 **Coffee break**

11:30 -13:00 **Recommendation & Next Steps**

13:00 -14:00 **Lunch**

14:00-16:00 **Parallel sessions**

Round Table: New Approaches and Achievements in Water Conservation, Sustainable Management and Use (with reference to Central Asia and Afghanistan – Lessons Learned)

Moderators: Dr. Dalal NAJIB, *Senior Program Officer at National Academy of Sciences (NAS) WC, USA*

Dr. Shavkat RAKHMATULLAEV, *Uzbekistan Country Office, USAID/Central Asia*

Reporter: Mr. Shah AZEEM, *IWMI-Pakistan*

Round Table: Empowering Young Women Leadership in Water Management

Moderators: Elina DUSCHANOVA, *WWACAA* and Feruza ALIMOVA, *Uzbekistan*