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

10:00-11:00  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. Gulchekhra KHASANKHANOVA, UzGIP, Uzbekistan
Reporter: Dr. Nataliya AKINSHINA, National University of Uzbekistan

Biogas production from halophytes towards phyto remediation 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;
Bahitiyor 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 Geocology 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 Geocology 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 ANARBEKOV, 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 ANARBEKOV, *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

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**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