

## Second International Conference on Arid Land Studies (ICAL2)

*”Innovations for sustainability and food security in arid and semi arid areas”*

### PROGRAM

**10-14 September, 2014**  
**Samarkand, Uzbekistan**

#### **Tuesday, 9 September 2014**

- 10:00- 16:00      Arrival, accommodation and registration of participants in Samarqand
- 14:30- 16:00      Sightseeing of historical monuments in Samarkand

#### **Day 1, Wednesday, 10 September 2014**

9:00 – 9:45      **Opening ceremony**

Chair of the Conference  
Rector, Samarkand State University, **Prof. Ulugbek TASHKENBAEV**

Khokim of the Samarkand region, **Mr. Zoyir MIRZAEV**

Ministry of High and Secondary Specialized Education of the Republic of Uzbekistan,  
**Mr. Alisher VAKHOBOV**

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

Regional Director (Central Asia)  
University of Tsukuba, Japan, **Prof. Dr., Toshinobu USUYAMA**

Representatives of Government of the Republic of Uzbekistan  
(Ecological Movement of Uzbekistan, Ministry of Agriculture and Water Resources,)  
Representatives of the International organizations and Agencies

**09:45 – 10:45      Plenary session: Global issues of arid and semi arid ecosystems**

**Chair:** William PAYNE (University of Nevada, USA)  
**Co-chair:** Dilorom FAYSIEVA (Ecological Movement, Uzbekistan)

09:45 – 10:45      ShoaiB ISMAIL (*ICBA, Dubai, UAE*)

**Social and economic impacts of salinization – Mitigation and Adaptation**

Hiroko ISODA (*University of Tsukuba, Japan*)

**Collaboration research on bio-, water and energy resources in semi arid and arid areas**

Jozef TUROK (*ICARDA-CAC, Tashkent, Uzbekistan*)

**Integrated research approaches to increase resilience and improve well-being: launching the CGIAR Research Program on Dryland Systems in Central Asia**

Pavel KRASILNIKOV (*Eurasian Center for Food Security, Lomonosov Moscow State University, Russian Federation*)

**Eurasian Soil Partnership: Challenges for Action**

10:45-11:00      Group photo

11:00 – 11:30      Coffee break

<b>11:30-13:30</b>	<p><b>Session I: Arid land ecosystems: climate, biodiversity, desertification and land degradation, ecosystem services</b>  <b>Chair:</b> Małgorzata SUSKA-MALAWSKA, University of Warsaw, Poland  <b>Co-chair:</b> Sviatoslav BALIUK, Institute of Soil Science and Agrochemistry, Ukraine</p>
11:30-11:45	<p>Sviatoslav BALIUK  <b>Scientific approaches to the rational use and management of saline soils fertility in Ukraine</b></p>
11:45-12:00	<p>Małgorzata SUSKA-MALAWSKA  <b>Response of wetland ecosystem developing to climate changes in the cold alpine and desert biomes of East Pamir Region: A Pilot Study of multi proxy analysis</b></p>
12:00-12:15	<p>Alexey SOROKIN  <b>Spatial distribution of salts in solonetz complexes of arid zone of the Caspian, using field data and remote spectral data</b></p>
12:15-12:30	<p>Wyes Heinrich  <b>A methodology to assess the carbon sequestration potential of semiarid regions in Central Asia</b></p>
12:30-12:45	<p>Ken YOSHIKAWA  <b>Genetic diversity of gray mangrove (<i>Avicennia marina</i> (Forssk.) Vierh.) growing on the Red Sea Coast</b></p>
12:45-13:00	<p>Taichi MAKI  <b>Application of artificial rainfall by the aircraft seeding of liquid carbon dioxide for utilization of water resources and prevention of desertification</b></p>
13:00-13:15	<p>Barry PERRYMAN  <b>Chenopod cultivation increases the forage base for domestic grazing animals in Turkmenistan</b></p>
13:15-13:30	<p>Yukio OKUDA  <b>Current status and problems of drainage system in Uzbekistan</b></p>
13:30-14:30	Lunch
<b>14:30-17:00</b>	<p><b>Session II: Economic benefits of arid lands use; biological resources assessment and trade-off analysis; supporting of social initiatives</b>  <b>Chair:</b> Hiroko ISODA (<i>University of Tsukuba, Japan</i>)  <b>Co-chair:</b> Kristina TODERICH (ICBA-CAC, Uzbekistan)</p>
14:30-14:45	<p>Ewa J. BULSKA  <b>Measurement facilities at the Biological and Chemical Research Center at the University of Warsaw in Poland: Case study on the analytical possibilities of modern instrumental techniques for the investigation of metabolism of selected elements in plants</b></p>
14:45-15:00	<p>Münir ÖZTÜRK, Salih GUCEL  <b>Plant diversity of the drylands in upper Mesopotamia (Turkey) and their role in food security</b></p>
15:00-15:15	<p>Mitsutoshi NAKAJIMA  <b>Integrated membrane system for polyphenols recovery from olive mill water</b></p>
15:15-15:30	<p>Rafaat MISAK  <b>Managing human and natural threats to the productive soils in Kuwait, the case of Al Wadra Agricultural Area, southern part of Kuwait</b></p>
15:30-16:00	Coffee break
16:00-16:15	<p>Akifumi SHIOYA  <b>Water conflict resolution in rural Central Asia: A Historical Perspective</b></p>
16:15-16:30	<p>Alka PARIKH  <b>Inter-country comparison of food security schemes: lessons learnt</b></p>

- 16:30-16:45 Ernaz ALTUNDAĞ  
**Potential usage of some of the ground-cover vegetation for ecosystem restoration practices in central Anatolia region of Turkey**
- 16:45-17:00 Stefanie CHRISTMANN  
**Climate-change information days for tourists as a value chain for landscape restoration; the example of Mahalla Kadok (Nurata, Uzbekistan)**
- 17:00-17:15 Inna RUDENKO  
**Strategies of the Rural Population in Uzbekistan towards Improving Livelihoods and Coping with Degradation of Land and Water Resources**
- 17:15-17:30 Botir DOSOV  
**Investing in land reclamations to improve agricultural productivity and rural livelihoods in Central Asia**

**14:30-18:45 First Regional Plenary Meeting of the Eurasian Soil Partnership**  
**Chair:** Pavel KRASILNIKOV, Eurasian Center for Food Security  
**Co-chair:** Gulchekhra KHASANKHANOVA, UZGIP Institute, Ministry of Agriculture and Water Resources of Uzbekistan

- 14:30-14:45 Ines BEERNAERTS (*FAO, Ankara*)  
**Status of the Global Soil Partnership**
- 14:45-15:00 Hakki ERDOGAN (*Ministry of Agriculture, Ankara, Turkey*)  
**Horizons and perspectives of eurasian soil partnership**
- 15:00-15:15 Pavel KRASILNIKOV (*ECFS, Russia*)  
**Outcomes of the consultation for the development of the Implementation Plan of the Eurasian Soil Partnership**
- 15:15-15:30 Hukmatullo AHMADOV (*Agricultural Academy of Sciences, Tajikistan*)  
**Food security in the Central Asian region**
- 15:30-16:00 Coffee break
- 16:00-16:30 Pavel KRASILNIKOV (*ECFS, Russia*)  
**Introduction to the draft version of the Implementation Plan**
- 16:30-17:00 Gulchekhra KHASANKHANOVA (*UZGIP, Uzbekistan*)  
**Establishment of a working group for the development of the Implementation Plan**
- 17:00-18:00 **Discussion of the five pillars of action as part of the Implementation Plan**  
(Kristina TODERICH, Svyatoslav BALYUK, Alisher TASHMATOV, Eugenia PANKOVA)
- 18:00-18:30 Ines BEERNAERTS (*FAO, Ankara*)  
**Agreement on the way forward and timetable for finalization of the Implementation plan.**
- 18:30-18:45 **Concluding remarks**
- 17:30-18:30 **Poster session**
- 19:30 Welcome banquet (Samarkand City Administration)

## Day 2, Thursday, 11 September, 2014

**09:00-12:30 Session III: Arid agriculture; biosaline agriculture; Desert livestock-pastoral systems**  
**Chair:** Shoaib ISMAIL (*ICBA, UAE*)  
**Co-chair:** Ewa BULSKA (*Biological and Chemical Research Centre, Poland*)

09:00-09:15	Majed ABU-ZREIG <b>Control of soil erosion of agricultural land in Jordan with polyacrylamide</b>
09:15-09:30	Wenjiang LIU <b>Plant diversity and management practice of traditional uygur home-garden in arid area of Xinjiang, China</b>
09:30-09:45	A. P. FACIOLA <b>Nutritional evaluation of forage <i>Kochia (Kochia prostrata)</i> as alternative forage for cattle using a dual-flow continuous culture system</b>
09:45-10:00	Abdulah DAKHEEL (ICBA, UAE) <b>Enhancing food security for small holder farmers, in arid environments through scaling-up of adapted resilient crop-livestock models: ICBA achievements and lesson learnt</b>
10:00-10:15	Feyza CANDAN <b>Studies on the grasslands of Manisa-Turkey</b>
10:15-10:30	Toshpulat RADJABOV <b>Integration of grazing gradient concept and remote sensing to detect rangeland degradation in Uzbekistan</b>
10:30-10:45	Questions, discussion
10:45-11:15	Coffee break
11:15-11:30	Yuji SAKAI <b>Salt-affected soil amelioration with low-quality coal bio-briquette ash in northeastern China</b>
11:30-11:45	Ren KAMEOKA <b>Cultural experiment of licorice in Mongolian arid land focused on the water condition of greening soil materials</b>
11:45-12:00	Toshinori KOJIMA <b>Site Selection and Environmental Effect Evaluation of Large Scale Plantation Using Arid Area Run Off Model</b>
12:00-12:15	Atsushi NAKASHIMA <b>Effects of camel browsing on the growth of <i>Avicennia marina</i> (Forssk.) Vierh. in coastal dry climate mangroves</b>
12:15-12:30	Zentaro FURUKAWA <b>Settings and geo-environmental conditions of developed greening soil materials (GSM) for cultivating licorice (<i>Glycyrrhiza uralensis</i>) in Mongolian arid region</b>
12:30-13:00	Session summing-up
13:00-14:00	Lunch

<b>14:00-17:15</b>	<b><u>Session IV:</u> Innovations for food security; Agroforestry; Conservation agriculture; Climate Change; Alternative energy in desert areas</b> <b>Chair:</b> Adbullah DAKHEEL ( <i>ICBA</i> ) <b>Co-chair:</b> Robert NOWAK ( <i>University of Nevada, USA</i> )
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14:00-14:15	Elena SHUYSKAYA <b>Current state of marginal lands in Amu Darya delta, prediction and management</b>
14:15-14:30	Lotfie A. YOUSIF <b>Conservation Agriculture: A sustainable system to improve sorghum yield in rainfed areas Southern Gedarif State, Sudan</b>

14:30-14:45	Robert S. NOWAK <b>Litter production as a proxy for aboveground productivity under elevated atmospheric CO<sub>2</sub> at the Nevada Desert FACE Facility</b>
14:45-15:00	Chandrashekhar BIRADAR <b>Satellite-based observation and modeling of grasslands and croplands in dry areas</b>
15:00-15:15	Natalya AKINSHINA <b>Salt-tolerant plants for soil salinity control, sustainable fodder and bioenergy production in Central Kyzylkum</b>
15:15-15:45	Coffee break
15:45-16:00	Kiyotsugu YODA <b>Evaluation of the ecological role of seed gum in germination of <i>Prosopis</i> under drought stress conditions</b>
16:00-16:15	Mitsuha MIYAKE <b>Evaluation of an artificial capillary barrier as a means to control infiltration and capillary rise to improve root zone condition</b>
16:15-16:30	Mariya GLAZIRINA <b>Crop modeling as a tool for assessment of climate change impact on crop development and productivity</b>
16:30-16:45	Özlem YAVUZ <b>National action plan on afforestation mobilisation in Turkey</b>
16:45-17:00	Makhmud SHAUMAROV <b>Institutional transition for sustainable management of dryland pastoral systems in Uzbekistan</b>
17:00-17:15	Session summing-up.
17:15-18:00	<b>Poster session</b>

## Day 3, Friday, 12 September, 2014

[Parallel Session : ICBA-Partners Round Table]

**09:00-13:00**      **Session V: Water resources management in arid and semi arid areas**  
**Chair:** Kenji TANAKA (*University of Kyoto, Japan*)  
**Co-chair:** Chandrashekhar BIRADAR (*ICARDA*)

09:00 - 09:15	Islam AL TAMIMI <b>Sedimentation and storage reduction of flood water reservoirs in Jordan</b>
09:15-09:30	Anil ROY <b>Production of high quality potable water for sale from atmospheric moisture in coastal areas of semi-arid north-west India</b>
09:30-09:45	Bogusław WILKOMIRSKI <b>Aydarkul -Arnasay Lake System (AALS) – ecological disaster or a new paradise</b>
09:45-10:00	Mitsuteru IRIE <b>Numerical simulation of the inundation on the flood plain of Senegal River for the improvement of the agricultural productivity in Mauritania</b>
10:00-10:15	Temur KHUJANAZAROV <b>Multi-factor objective modeling for water resources management in Zeravshan river</b>

10:15-10:30	Yoshiko KAWABATA <b>Changes in water quality of Amu-Darya river and ground water in Karakalpakstan, Uzbekistan</b>
10:30-11:00	Coffee break
11:00-11:15	Ahmed Bouya AHMEDOU <b>Groundwater recharge and salinity problem in south-western Mauritania</b>
11:15-11:30	Yoshiya TOUGE <b>Developing water circulation model in the Aral Sea basin based on in situ measurement in irrigated areaa</b>
11:30-11:45	Ryota SAITO <b>Sustainable water management in Central Asia and the role of foreign donors. Case study of JICA's "Water management improvement project" in Uzbekistan</b>
11:45-12:00	Saidislom USMANOV <b>Evaluation of interpolation methods for spatial modeling of reference evapotranspiration using modified Hargreaves equation</b>
12:00-12:15	Odyl RAMAZANOV <b>Regulating water-salt regime of irrigated soils under water short conditions</b>
12:15-12:30	Zafar GAFUROV <b>Evapotranspiration and land use land cover (LULC) change analyses in Karshi steppe, Uzbekistan for water requirement analysis</b>
12:30-13:00	Questions and discussion
13:00-14:00	Lunch
<b>14:00-17:00</b>	<b><u>Session VI: Conservation of cultural and natural heritage of arid and semi arid areas</u></b>  <b>Chair:</b> Krista PIKKAT ( <i>UNESCO, Tashkent</i> ) <b>Co-chair:</b> Dmitriy CHEREMISIN ( <i>Institute of Archeology, Russia</i> )
14:00-14:15	Mukhiddin KHUJANAZAROV <b>Conservation of cultural and natural heritage of Sarmishsay</b>
14:15-14:30	Dmitriy CHEREMISIN <b>Arid zone of altay during bronze age</b>
14:30-14:45	Brad SCHULTZ <b>Nevada (USA) Range Management School – Adapting an American, grazing management curriculum, to other continents</b>
14:45-15:00	Hiroshi NAWATA <b>How do Japanese people image and understand deserts: Based on questionnaire survey results at National Museum of Nature and Science, Tokyo</b>
15:00-15:30	Coffee break
15:30-15:45	Mukhtor NASYROV <b>Income generating activities in dryland areas as a component to combat land degradation</b>
15:45-16:00	Frederique BRUNET & Muhiddin KHUJANAZAROV <b>The reconstruction of flora and fauna of Neolithic site Ayagakitma in the Central Kyzylkum Desert</b>
16:00-16:30	<b>Closing ceremony of the conference</b>

