

Environmental Problems of Central Asia and Their Economic, Social and Security Impacts

01 - 05 October, 2007

Tashkent, Uzbekistan

NATO Advanced Research Workshop



WORKSHOP PROGRAMME

Day 1, October 1, 2007

9:00 – 10:00 **Registration and coffee**

Morning Session: Opening Ceremony and Environmental Issues (Chairs: J. Qi and R.Eshchanov)

- 10:00 – 10:30 *Welcome and Introduction* (J. Qi , R.Eshchanov and A. Kulmatov)
- 10:30 – 11:00 *Designing institutions for environmental policy* (T. Goeschl, Germany)
- 11:00 – 11:30 *Cooperation for Irrigation of the Banks of Amu-Darya* (T. Tsukatani, Japan)
- 11:00 – 11:30 Coffee Break**
- 12:00 – 12:30 *Poppy Ecologies and Security in Eurasia: Lessons from Turkey's Past and Present* (K. Evered, USA)
- 12:30 – 13:00 *Using Satellite Remote Sensing to Study & Monitor the Aral Sea and Environs* (P. Micklin, USA)

Lunch (13:00 – 14:00)

Afternoon Session: Chair: P. Micklin (14:30 – 18:00)

- 14:30 – 15:00 *Agricultural pollution impacts on health and environment in the Aral Sea Basin* (J. Jarsjo, Sweden)
- 15:00 – 15:30 *Drylands performance monitoring with Earth observation techniques: examples in intense and extensive agriculture* (R. Escadafal, France)
- 15:30 – 16:00 *Impacts of Water Scarcity in Northern Cyprus* (A. Turkman, Turkey)
- 16:00 – 16:30 Coffee Break**
- 16:30 – 17:00 *Governing of Environmental Problems and Impacts in Bulgarian Agriculture -Lessons for Central Asian Countries* (H. I. Bachev, Bulgaria)
- 17:00 – 18:00 Panel Discussion**

Dinner Reception (19:00 – 21:00)

Day 2, October 2, 2007

Morning Session: Chair: L. Lebed (9:00 – 13:00)

- 9:00 – 9:30 *Role of large dams in the Amu Darya basin and their impact on future water security in Central Asia, coming under the water management issue with links to the modeling* (J. Froebrich, Germany)
- 9:30 – 10:00 *Dryland ecosystems and their interactions with regional climate* (J. Qi, USA)
- 10:00 – 10:30 *Biodiversity of the Aral Sea and possible ways of rehabilitating and conserving its remnant water bodies* (N. Aladin, Russia)
- 10:30 – 11:00 *Influence efficiency of use of energy on an environment* (Zh.K.Bakhov, Kazakhstan)
- 11:00 – 11:30 Coffee Break**
- 11:30 – 12:00 *Problems of salinity and leaching efficiency in the Khorezm region, Uzbekistan* (R. Eshchanov, Uzbekistan)
- 12:00 – 12:30 *Ecological situation in current socio-economical condition of the Republic of Kazakhstan* (M. Baekenova, Kazakhstan)
- 12.30 – 13.00 *Disaster threat in Tianshan-Pamir Region* (I. Hodjamberdiev, Kyrgyzstan)

Lunch (13:00 – 14:00)

Afternoon Session: Chair: R. Escadafal (14:30 – 18:30)

- 14:30 – 15:00 *Possible changes in agriculture (crop and pastures) under the influence of climate change in Kazakhstan.* (L. Lebed, Kazakhstan)
- 15:00 – 15:30 *Saline water irrigation and mulching effect on soil productivity on salt-affected soil of Sirdarya province of Uzbekistan* (R. Qalandarov, Uzbekistan)
- 15:30 – 16:00 *Globalization and socio-ecology-economical problems of sustainability development* S.M. Sukhorukova, Russia)
- 16:00 – 16:30 **Coffee Break**
- 16:30 – 17:00 *Mathematical modeling of distribution of harmful substances at ecological accidents* (B. Ismailov, Kazakhstan)
- 17.00 – 18.00 **Panel Discussions**

Dinner (19:00 – 21:00)

Day 3, October 3, 2007

Morning Session: Chair: T. Tsukatani (9:00 – 13:00)

- 9:00 – 9:30 *Dynamic of total ozone over the territory of Kazakhstan* (A. Cherednichenko, Kazakhstan)
- 9:30 – 10:00 *Biosensor express measurement of chemicals regularly used in agriculture and as terrorist means in the environment to prevent dangerous consequences* (N. Starodub, Ukraine)
- 10:00 – 10:30 *Economic evaluation of farmers' alternatives during irrigation water deficit* (A. Zaikin, Uzbekistan-USA)
- 10:30– 11:00 *Ecosystem modeling as a tool for rangelands ecological monitoring* (M. Nasyrov, Uzbekistan)
- 11:00 – 11:30 **Coffee Break**
- 11:30 – 12:00 *On Farm Water Resources Management Efficiency* (A. Salokhiddinov, Uzbekistan)
- 12.00 – 13.00 **Panel Discussion**

Lunch (13:00 – 14:00)

Afternoon Session: Tour in Tashkent (14:00 – 18:00)

Dinner (19:00 – 21:00)

Day 4, October 4, 2007

Morning Session: Chair: J. Froebrich (9:00 – 13:00)

- 9:00 – 9:30 *Environmental assessment, strategic environmental assessment as an environmental protection: Waste management and waste minimization* (V. Misiuchenka, Belarus)
- 9:30 – 10:00 *Mulching and crop production technologies effect on soil salinity* (A. Karimov, Uzbekistan)
- 10:00 – 10:30 *Modern problems of monitoring, management and protection of Water-land resources of Aral Sea Basin* (R. A. Kulmatov, Uzbekistan)
- 10.30-11.00 *Water provision of a pasture lands as a restrictive factor for livestock grazing in Kazakhstan* (M. Baekenova, Kazakhstan)
- 11:00 – 11:30 **Coffee Break**
- 11:30 – 12:00 *Urban greenery monitoring for sustainable urban management* (N. G. Akinshina, Uzbekistan)
- 12:00 – 12:30 *Climate scenarios for South-Eastern Kazakhstan and possibility for impact assessment* (I. Esserkepova, Kazakhstan)
- 12:30 – 13:00 *A decision support tool for ecological improvement and income generation for smallholder farms in irrigated drylands, Uzbekistan* (I. Bobojonov, Uzbekistan)

Lunch (12:00 – 13:00)

Afternoon Session: Chair: R. Kulmatov (14:30 – 17:00)

- 14:00 – 14:30 *The use of electrical conductivity devices and environmental factors for assessment and monitoring of spatial distribution of soil salinity* (A. Akramhanov, Uzbekistan)
- 14:30 – 15:00 *The use of the Value Chain Approach to Economic and Environmental Impact Assessment of Cotton Production in Uzbekistan* (I. Rudenko, Uzbekistan)
- 15:00-15:30 *Participation Ecoforum of Uzbekistan in realization of principles of sustainable development* (S. Sanginov, Uzbekistan)
- 15:30 – 16:00 **Coffee Break**
- 16:00–16:30 *Advantages of conservation tillage systems for irrigated cotton and winter wheat production in Khorezm, Aral Sea Basin* (Tursunov M., Germany)
- 16:30 – 17:30 **Panel discussion**
- 17:30 – 18:00 **Summary**

Banquet

Day 5, October 5, 2007

Morning Session: Chair: A. Turkman (9:00 – 11:00)

- 9:00 – 9:30 *Economic analysis of introduction of water prices for agricultural producers in Khorezm, Uzbekistan* (N. Djanibekov, Uzbekistan)
- 9.30 – 10.00 *Study peculiarities of formation and evaluation quality of collector-drainage water with the view of reusing it for irrigation* (M. Khalmirzayeva, Uzbekistan)
- 10.00 – 10.30 **Coffee Break**
- 10:30 – 11:00 **Panel Discussion**

Optional Field trip (11.30 – 21:00)

Evening: Science Advisory Meeting