



**Organization for Security and Co-operation in Europe
Secretariat**

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Conference Services

**Fifteenth OSCE Economic and Environmental Forum - Part 2:
“Key challenges to ensure environmental security and sustainable development in
the OSCE area: Land degradation, soil contamination and water management”
Prague, 21 - 23 May 2007**

**Session II
Water – transboundary co-operation**

Please find attached the presentation by Mr. Victor A. Dukhovny, Professor, Director,
Scientific Information Center of the Central Asian Interstate Co-ordination Water
Commission (SIC ICWC).

Water – Transboundary Cooperation in Central Asia – Past, Present, and Future

Prague, May 2007

Prof. V.A. Dukhovny
Director, SIC ICWC

15 years of ICWC anniversary

“There are more than 260 transboundary basins in the world. But very few examples where five states are working together, hand-in-hand. Five States that are not only dealing with planning and negotiation but also with day-to-day management and functioning of two weighty rivers: the Amudarya and the Syrdarya. Our greeting to you!”

Loic Fauchon, President WWC

Framework of collaboration

Political will of 5 Presidents
Decision by the Head of States of March 1993
Decision by the Head of States of January 1994 – PBAM 1
“Concept decision of the Aral Sea basin problems”
Agreement on IFAS status, 1999
PBAM 2, 2002

Water collaboration takes place as

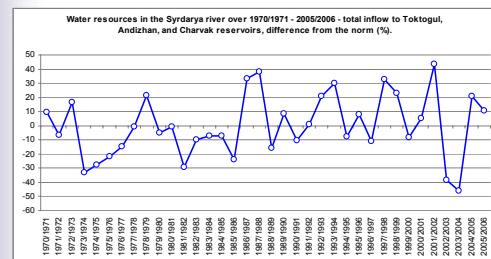
- mutual planning and control of annual water allocation;
- operation by two BWO's
- capacity building of ICWC
- information system – transparency and trust
- strengthening legal, institutional, and technical frameworks of executing bodies;
- implementation of IWRM

Present challenges

- population growth
- urban area growth
- increasing environmental demand
- irrigated area expansion
- climate change
- decline of agricultural production
- sudden reduction of government support and investments
- increase of operational needs
- weakened staff capacities

Climate impact

Increase in scale and frequency of extreme phenomena



Climate impact

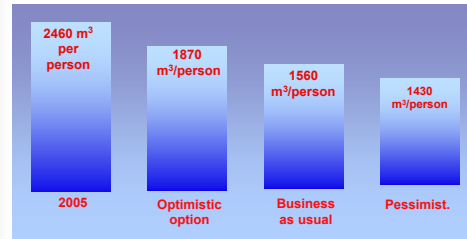
Comparison of two climate change scenarios for Chirchik-Akhangaran-Keles basin

Comparison of two scenario simulation results (Chirchik-Akhangaran-Keles basin)

Year	Total resources		Water demand	
	BAU/ECHAM	OPT/HADCM2	BAU/ECHAM	OPT/HADCM2
2006	7908	8019	4778	4968
2011	8841	9404	4714	5404
2016	7263	7540	4714	5188
2021	6662	6944	5299	5958
2024	5154	5871	5362	6270

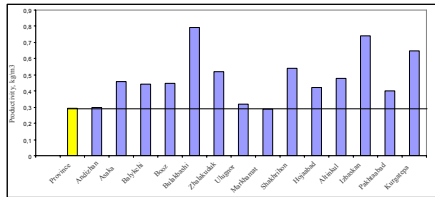


What can we expect in 2030?



IWRM Ferghana

Water productivity potential



Public involvement

- Establishment of Water Councils at BWO;
- Establishment of National Water Council;
- Establishment of Councils for national basins;
- Establishment of Canal Water Users Unions as a body of joint system management (example of Aravan-Akbura canal);
- Involvement of their initiatives and managerial functions in water distribution.

IWRM

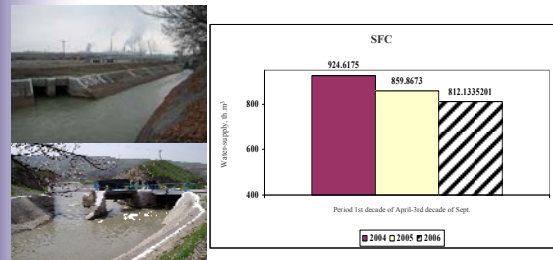
- First steps in the region;
- National Plan in Kazakhstan Road map in three other states
- Hydrographic principle does not have an effect unless:

addresses all kinds of water (surface, ground, and return);

representatives of water and nature users at all water hierarchical levels and in all sector take an active part in management, including water delivery planning, its correction, financing, repair and maintenance, and, finally, improvement.

IWRM Ferghana valley

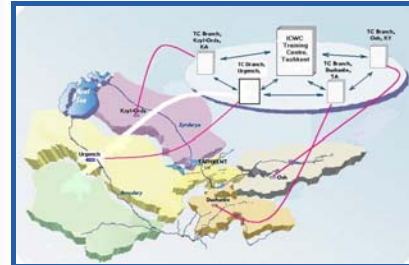
Decreased water supply in SFC over 2004/2006



How can OSCE help to cooperation among the five countries!

- **Coordination of donors in forming the regional programs of water end ecological cooperation; improving usage efficiency of donor funds. Average only 30% of funds indicated in ODA reports as a support to developing countries actually reaches the beneficiaries. The two contrasts are the projects of SDC, INTAS, and ADB, where 70% reach directly the beneficiaries and the support of USAID, and TACIS, where this value is 10...25%**
- **Work on strengthening the international law on transboundary rivers**

Widespread campaign on training of water users and water specialists; advanced training of 6.000 – 10.000 specialists at middle and lower levels should be provided every year



Water productivity in Central Asia implies, first of all, land productivity under minimum water consumption; the promotion of extension services for farmer training can also contribute to the reduction of soil cover degradation, at which the new direction of OSCE is aimed.



The future in hands of our children

**We should learn to look forward!
Training of future water leaders!**

Water end education

