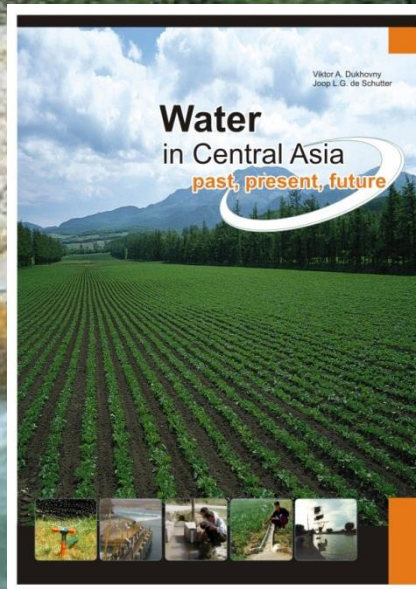


WATER OF CENTRAL ASIA: PRESENT AND FUTURE



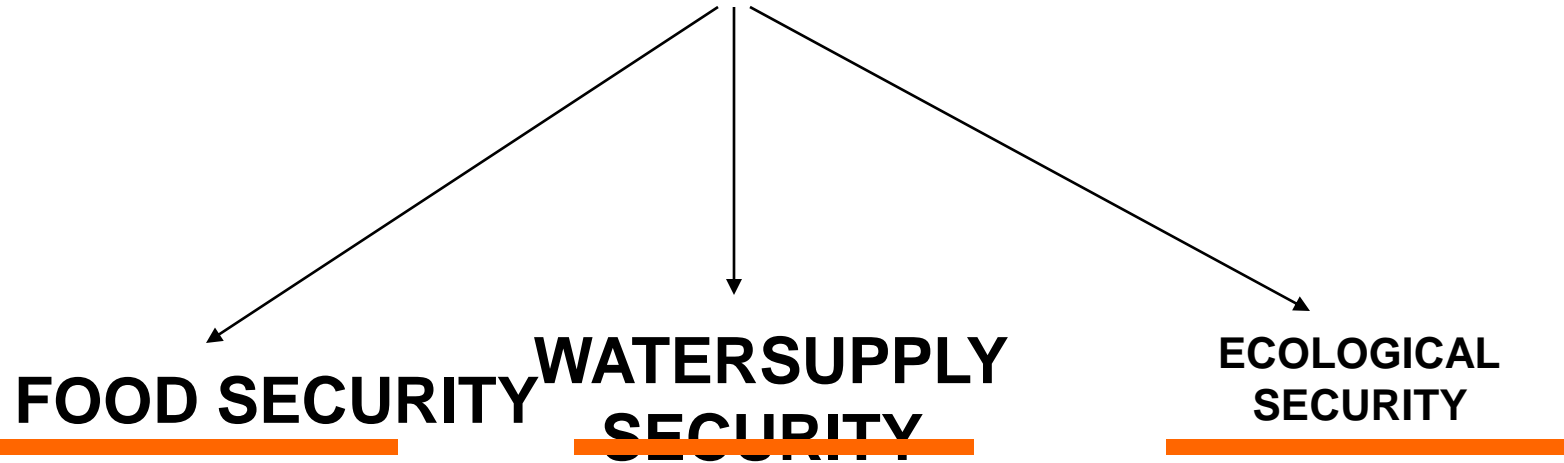
Merida, Mexico, INBO

By Prof. Viktor Dukhovniy June 2016

The Aral Sea Basin



WATER SECURITY



GUARANTEE OF WATER = GUARANTEE WATER RIGHTS

DESTABILIZING FACTORS



OUTSIDE:

CLIMATE CHANGES increase deviation of flow, growth temperature, change precipitation)

DEMOGRAPHIC PRESURE

GLOBAL MARKET

GLOBAL FINANCIAL CRISES

COMPETITION OF MEGAFORCES.

INSIDE

-LACK OF STATE ATTENTION

-HYDROEGOIZM



- FRAGMENT MANAGEMENT

- DESINFORMATION

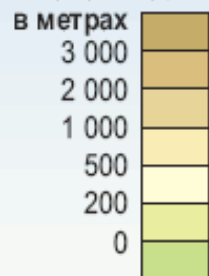
-LACK OF PUBLIC INVOLVEMENT.

Сток и потребление воды в бассейне Аральского моря

КМ³ в год

-  Формирование стока: за счет атмосферных осадков и таяния ледников
-  Забор воды из поверхностных источников (реки, каналы)

Шкала высот



Источник: Диагностический доклад по водным ресурсам Центральной Азии, ICWC 2000

КАРТА НЕ ЯВЛЯЕТСЯ ВЫРАЖЕНИЕМ КАКОГО-ЛИБО МНЕНИЯ СО СТОРОНЫ ОРГАНИЗАЦИЙ, РАБОТАВШИХ НАД ПРОЕКТОМ, В ОТНОШЕНИИ ПРАВОВОГО СТАТУСА КАКОЙ-ЛИБО СТРАНЫ, ИЛИ КАКИХ ЛИБО ТЕРРИТОРИЙ, ГОРОДОВ И РАЙОНОВ, НАХОДЯЩИХСЯ В ЕЕ ПОДЧИНЕНИИ, ЛИБО В ОТНОШЕНИИ ДЕЛИМИТАЦИИ ЕЕ ГРАНИЦ.

СОСТАВИТЕЛИ: ВИКТОР НОВИКОВ И ФИЛИПП РЕКАСЕВИЧ - ЮНЕП/ГРИД-А-РЕНДАЛ - Апрель 2005

STRUCTURE of Interstate Coordination Water Commission of Central Asian states

FOUNDERS OF ICWC



ICWC

Secretariat

Scientific Information Center (SIC ICWC)

BWO "Syrdarya"

BWO "Amudarya"

Coordination Metrological Center (CMC ICWC)

ICWC Training Centre

Kazakh Branch

Kyrgyz Branch

Tajik Branch

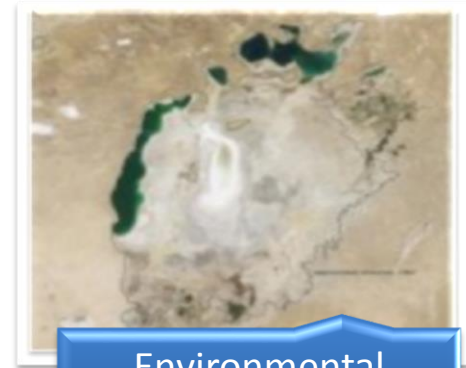
Transboundary water challenges



Irrigation/Food



Energy/Hydropower



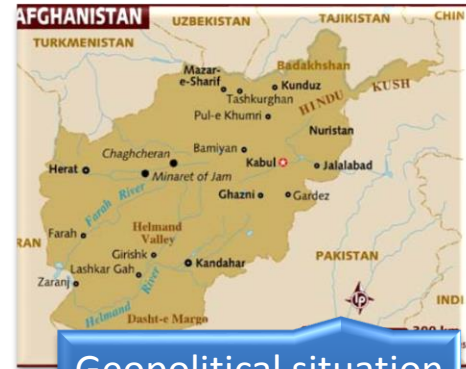
Environmental degradation



Climate Change



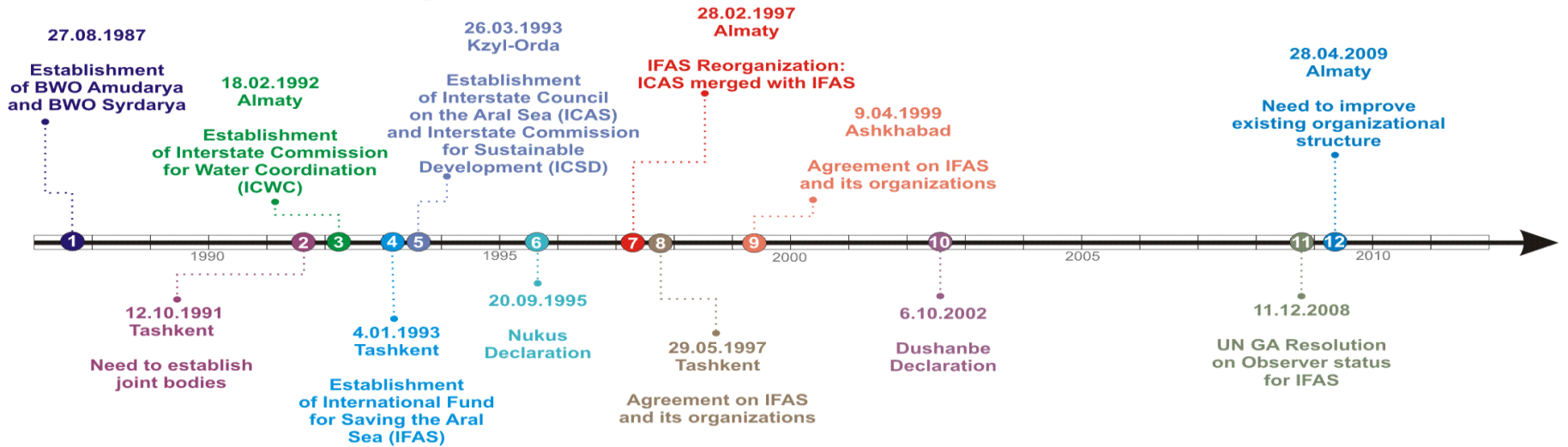
Drinking water and health



Geopolitical situation and Afghanistan



Aral Sea Basin: Timeline of Regional Bodies Establishment and Reorganization



1. Order of the USSR Ministry of Reclamation and Water Management on the establishment of basin administrations on inter-republican water allocation in Amudarya and Syrdarya (Water Management Administration «Amudarya» and «Syrdarya») (Moscow, August 1987)

2. Statement of the heads of water authorities of the Central Asian Republics and Kazakhstan (Tashkent, October 1991)

3. Agreement between the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan, and the Republic of Uzbekistan on Cooperation in the Field of Joint Management of the Use and Conservation of Water Resources of Interstate Sources (Almaty, 18 February 1992)

4. Decision by the Heads of Central Asian Republics on the establishment of International Fund for Saving the Aral Sea (Tashkent, January 1993)

5. Agreement between the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan, and the Republic of Uzbekistan on Joint Actions for Addressing the Problems of the Aral Sea and Its Coastal Area, Improving the Environment, and Ensuring the Social and Economic Development of the Aral Sea Region (Kzyl-Orda, March 1993)

6. Nukus Declaration of the Central Asian States and International Organisations on the Problems of Sustainable Development in the Aral Sea Basin (Nukus, September 1995)

7. Decision by the Heads of Central Asian Republics on the reorganization of International Fund for Saving the Aral Sea (Almaty, February 1997)

8. Agreement between the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan, and the Republic of Uzbekistan on the Status of International Fund for Saving the Aral Sea and Its Organizations (Tashkent, May 1997)

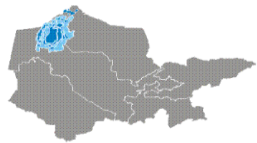
9. Agreement between the Republic of Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan, and the Republic of Uzbekistan on the Status of International Fund for Saving the Aral Sea and Its Organizations (Ashgabad, April 1999)

10. Dushanbe Declaration (Dushanbe, October 2002)

11. UN General Assembly Resolution on Observer status for the International Fund for Saving the Aral Sea in the General Assembly (December 2008)

12. Joint Statement Made by the Heads of States Founders of the International Fund for Saving the Aral Sea (Almaty, April 2009)

SIC ICWC, 2013



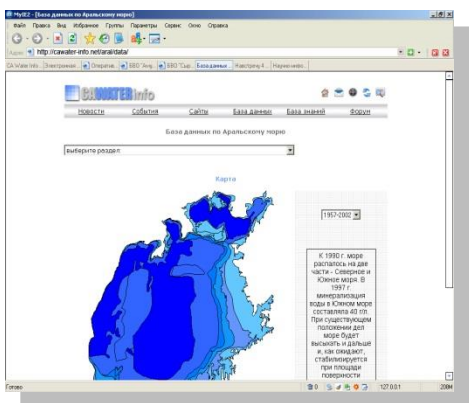
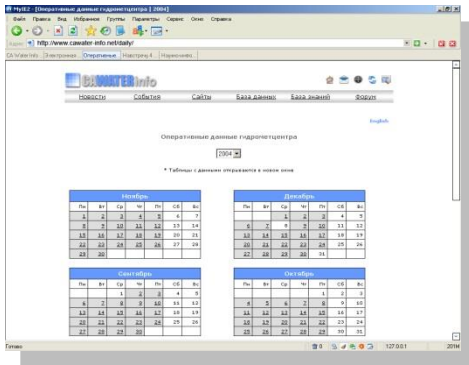
INTERNATIONAL PROBLEMS

- interests of mega forces;
- transformation water in “apple of discord”;
- use water as new tool of interstate pressure;
- Hydro egoism of upper watershed;
- ignoring need water for nature itself.

We should focused on the key issues that disturbing future:

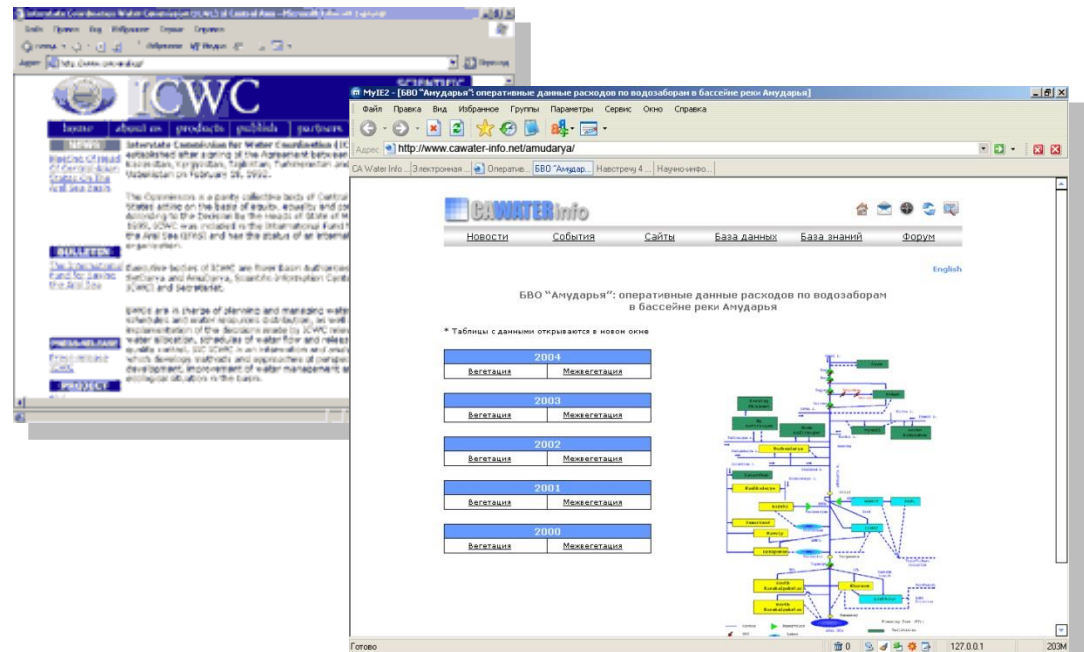
- Strengthening of international water law for guarantee food security;
- risk management (floods and drought);
- open exchange of information;
- preparation future generation to future challenge.





CAWater-Info

www.cawater-info.net



Growth physical food production

Capacity building and human resources development for broader implementation of scientific production in Central Asia

WAY from laboratory to field

Use margin waters



Four pillars of transfer

- Base of knowledge;
- Data base;
- Training of users;
- Adopted best practices.



SCADA



How to avoid TB conflicts?

- Rehabilitate open sources of information on the base of common information field.
- Renovate institutional structure of regional water and environment bodies.
- Establishment strong proceedings of TBWs management for each rivers.
- Create Public body (Water Council) for each TBW basin.

How to avoid TB conflicts?

- Arise new input of political will.
- Attempt to find new forms of collaboration with including economic tools.
- Expert cooperation and joint professional development courses
- Road map for increase collaboration between States in frame of ICWC and IFAS (water saving, public awareness and participation, IWRM implementation).
- Bi-lateral works with donors should take into account interests of all riparian countries.

Thank for your attention!!!

We are glad to collaborate with all you!!!

www.cawater-info.net

[www.sicicwc](http://www.sicicwc-aral.uz) –aral.uz

www.eecca-water.net.