Dissemination of European experience on water management in the countries of Eastern Europe, the Caucasus &Central Asia (EECCA)

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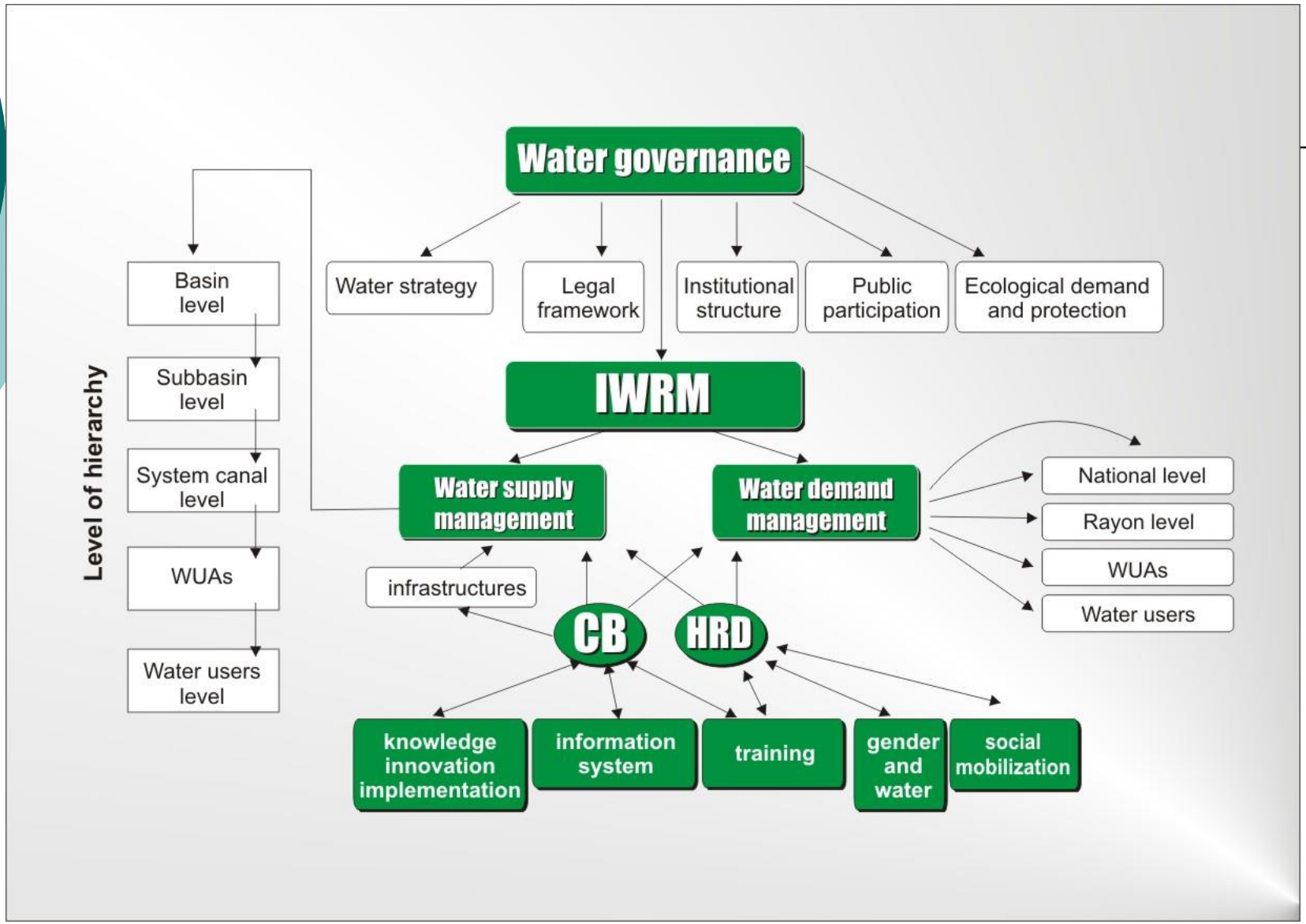
Thessaloniki, October 2015

Key issue areas

- EU Water Framework Directive (WFD) 2000
- UN ECE Water Convention 1992

Integrated Water Resources Management as comprised of:

- Basin water organizations
- National water management plans
- Public participation
- Water quality or good status of water
- Sustainable financing mechanism
- Transboundary water management


Water governance
Water strategy
Legal framework
Institutional structure
Public participation
Ecological demand and protection
IWRM
Level of hierarchy
Basin level
Subbasin level
System canal level
WUAs
Water users level
Water supply management
Water demand management
National level
Rayon level
WUAs
Water users
infrastructures
CB
HRD
knowledge innovation implementation
information system
training
gender and water
social mobilization

1. Basin water organizations

- Kazakhstan organized 18 Basin Water Organizations.
- Kyrgyzstan established 8 Basin Water organizations.
- Uzbekistan restructured 13 Basin Water Organizations in additions to 2 existed (2003).
- Russia reorganized water structures in 20 basin districts, 66 Hydrographic units, 85 sub basins (2006).

2. National plans and strategies

National Policy Dialogues focus on

- basin planning *(Armenia, Kyrgyzstan, Turkmenistan)*
- development water sector adaptation to climate change *(Moldova, Ukraine)*

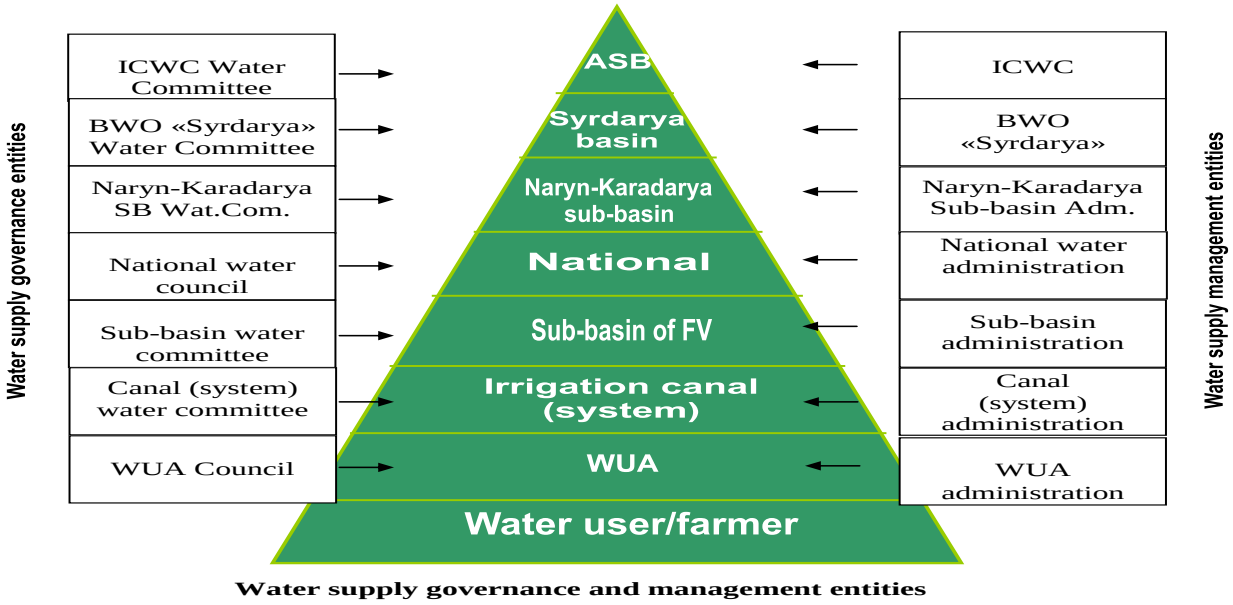
GIZ Transboundary Water Management in Central Asia programme

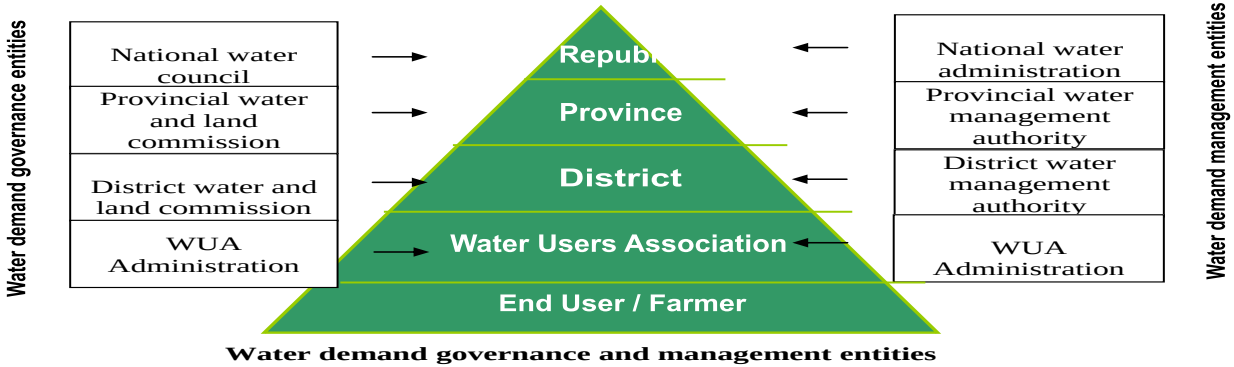
- Basin planning for the Isfara River in Kyrgyzstan and Tajikistan

3. Public participation

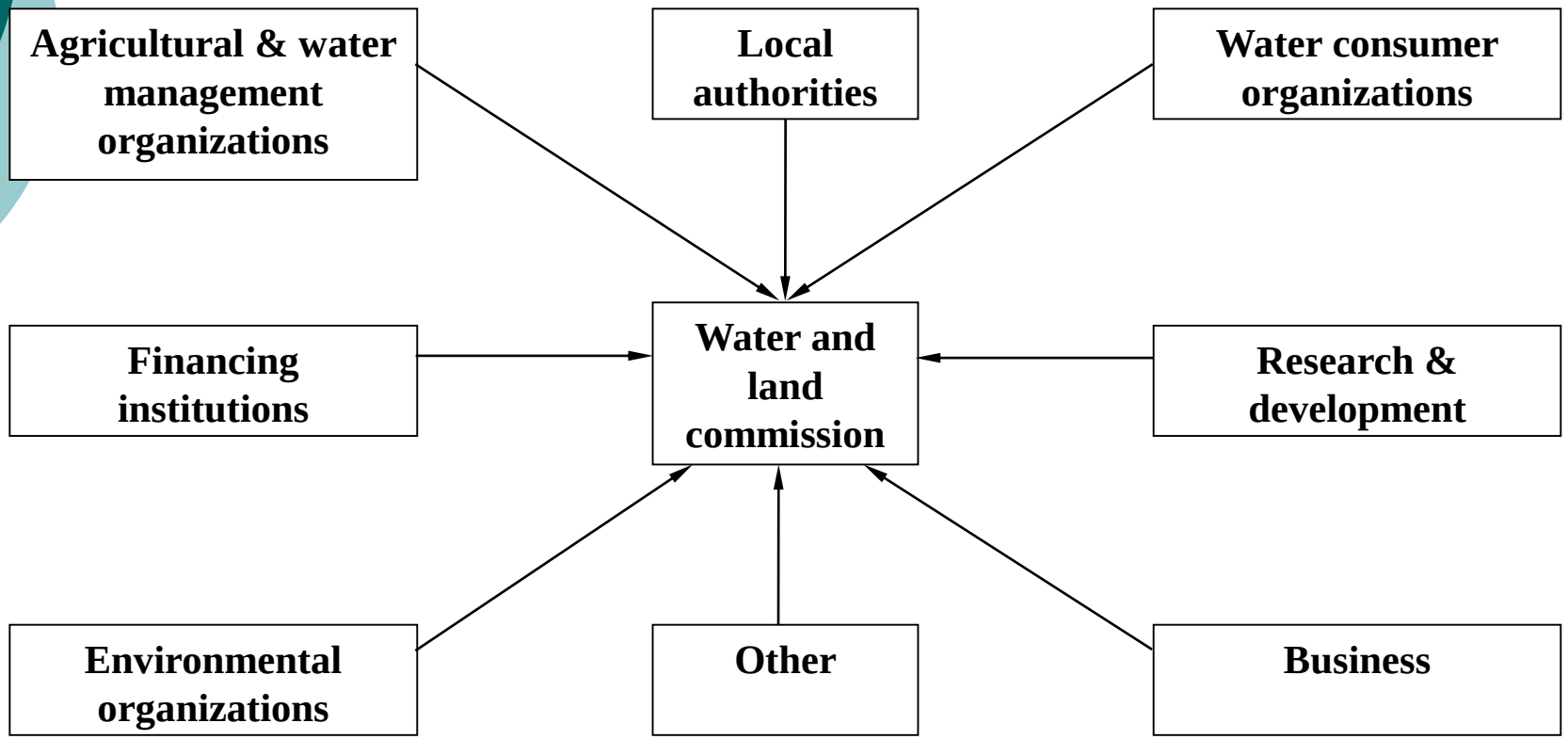
- Establishment of Water Users Associations: Kyrgyzstan, Tajikistan and Uzbekistan – 2002
- Establishment of Basin Water Councils in Kazakhstan - 2003
- Organizing Water Council of Canals in Kyrgyzstan, Tajikistan and Uzbekistan - 2005
- Pilot Water Land Commission Fergana - 2009

SDC-supported project “IWRM in Fergana Valley” established water governance bodies at different levels of the water hierarchy in addition to traditional water management institutions





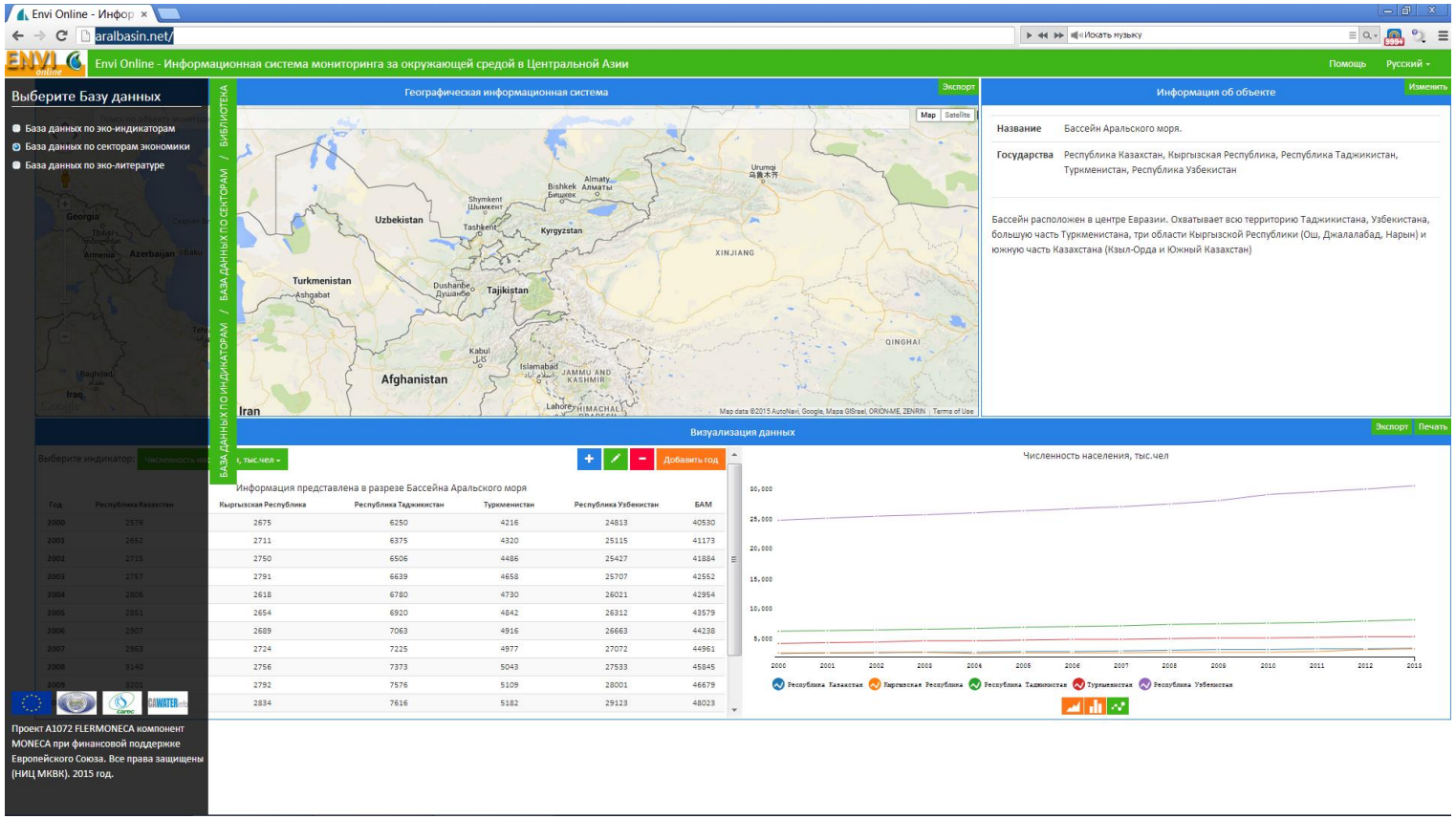
Stakeholders in Water and Land Commission



4. Water quality or good status of water

Component MONECA A1072, FLERMONECA project funded EUROPE Union

A system for monitoring the environment in Central Asia ENVI-online *(aralbasin.net)*

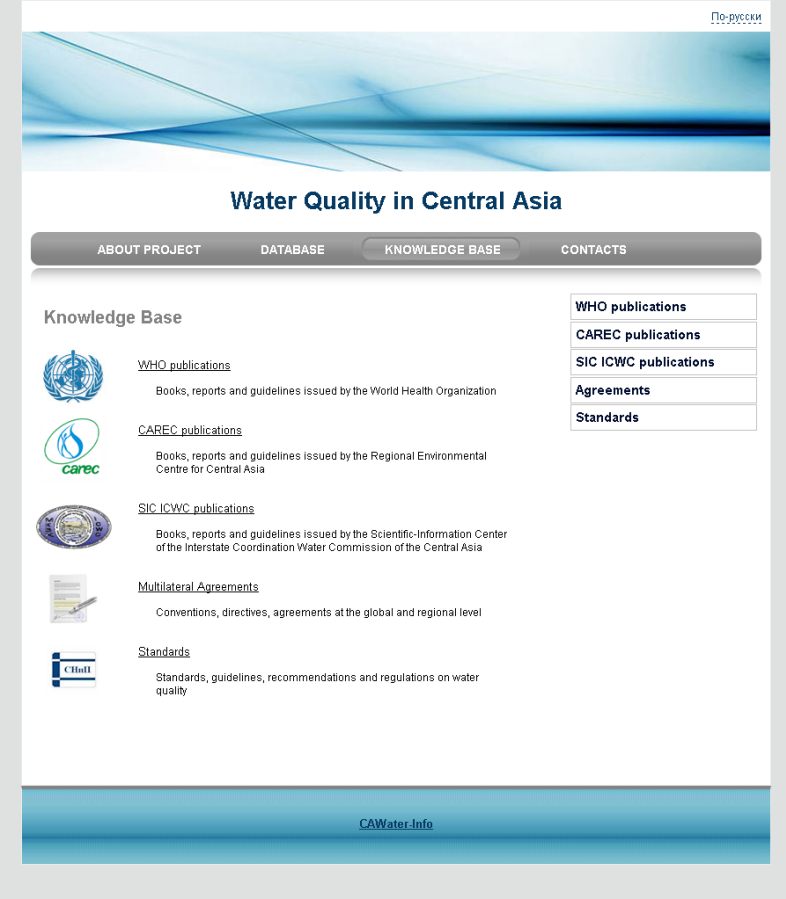


Database for eco-indicators: water quality, air and soil.

Database for eco-literature (includes Air, Biodiversity, Water, Earth)

Database of sectors is information on 8 indicators in the Aral Sea basin countries

Knowledge Base on Water Quality



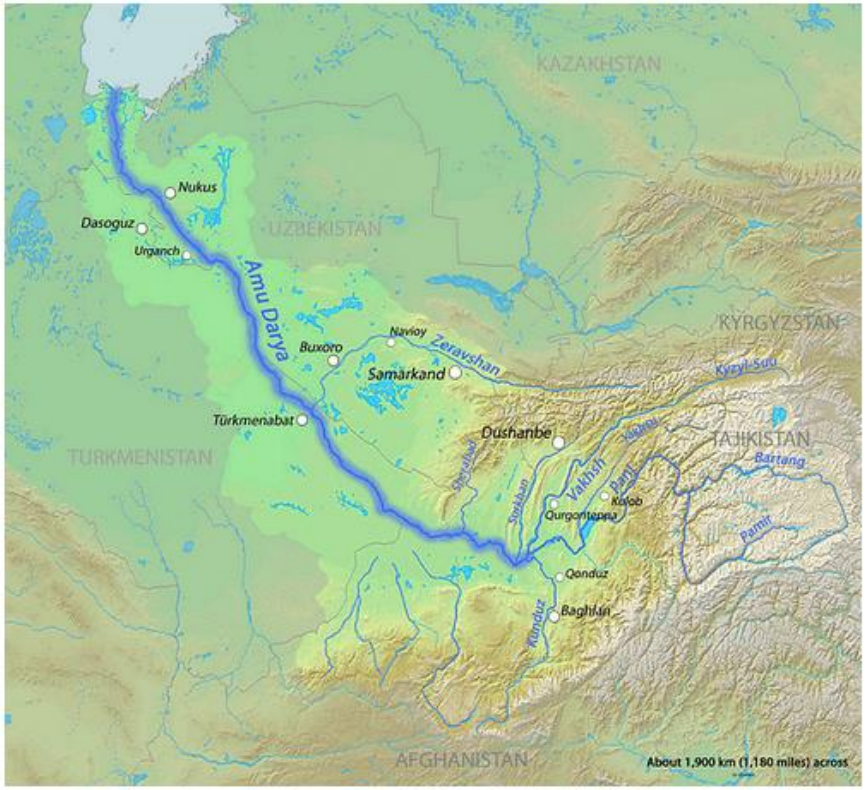
The knowledge base contains collection of books, reports, monographs, papers, standards, sanitary regulations concerning of water quality.

KB was created with support of UNECE.

www.cawater-info.net/water_quality_in_ca/knowledgebase_e.htm

Water Quality Knowledge Bases for Amudarya & Syrdarya

Water Quality in the Amudarya River basin



Data

The site: G/S Kelif – Tyuyamuyun reservoir

The collector-drainage flow coming into the Amudarya river (pdf, 26 kB)

Salinity of the collector-drainage flow coming into the Amudarya river (pdf, 24 kB)

The site: Tyuyamuyun reservoir - G/S Samanbay

cawater-info.net/water_quality_in_ca/amu_e.htm

Water Quality in the Syrdarya River basin

Data

Annual average mineralization in the Syrdarya (pdf, 45 kB)

Syrdarya river water pollution by organic and nutrient substances (pdf, 8 kB)

cawater-info.net/water_quality_in_ca/syr_e.htm

5. Financial & economic tools of IWRM

(case of Kyrgyzstan, Tajikistan, Uzbekistan)

To enable effective financial and economic activity and high-quality book-keeping and accounting, a financial and economic plan of WUA was developed and adopted. It was based on operational plans that ensure efficient economic activity without excessive accounts receivable and payable. A computer program “Financial and economic plan of WUA” was developed.

The main principles underlying the development of a financial and economic plan incude:

- ✓ annual contribution to WUA Statutory Fund is determined by crop profitability. Profitability, in turn, is a financial source for calculation of services related to production of specific crop, including water delivery. The project orients water users to the necessity of contribution to WUA budget - up to 5% of farm’s net profit.
- ✓ labor inputs for water delivery to farms and homestead plots are different. Profitability of crops is determined higher tariffs of water delivery to homestead plots.
- ✓ by using “Financial and economic plan of WUA” computer program one can plan incomes and expenses for current year or mid-term future (5 years).

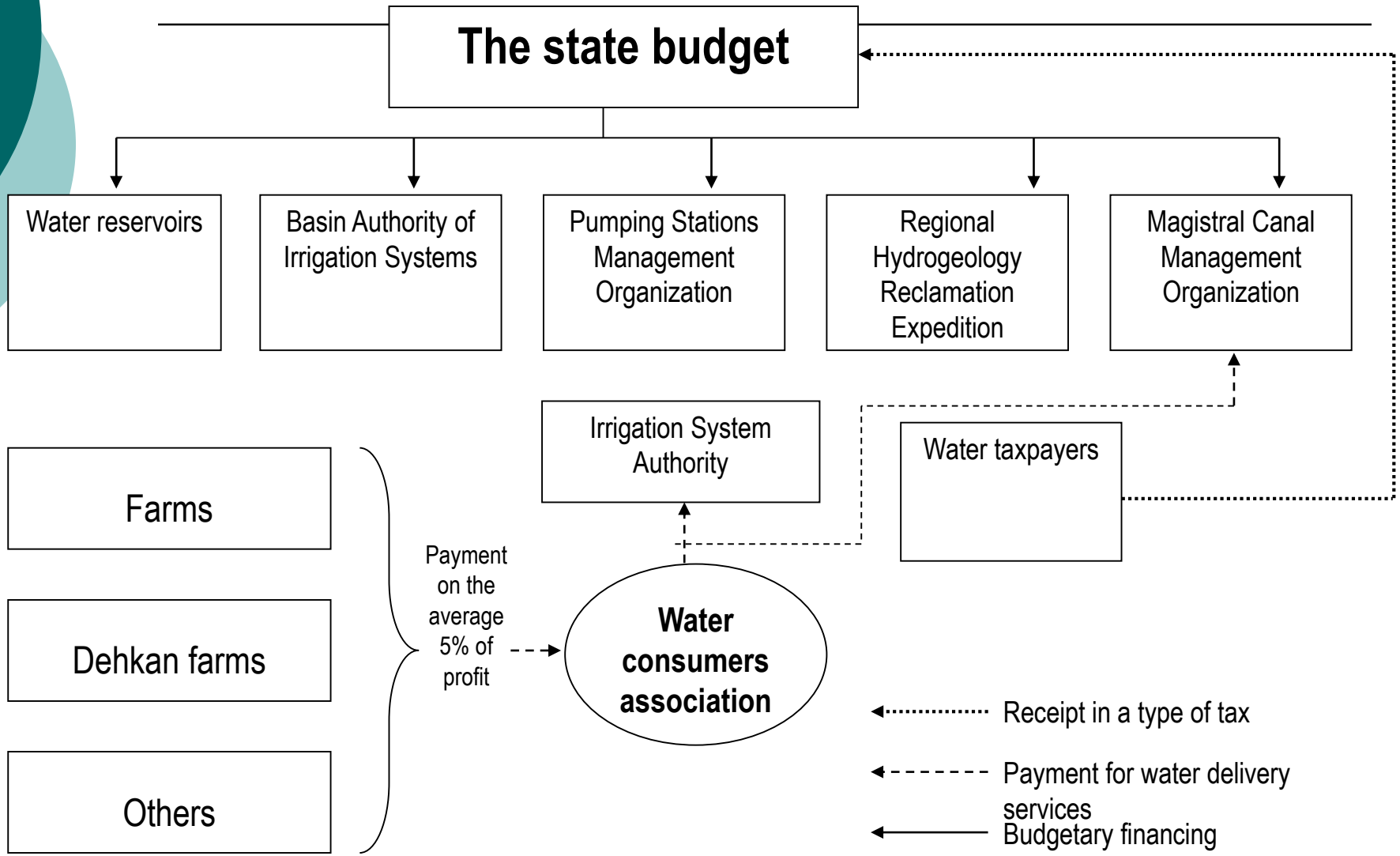
Financial and economic tools of IWRM

(case of Kyrgyzstan, Tajikistan, Uzbekistan)

We introduced modern approaches to accounting and reporting in WUAs to ensure the financial sustainability and viability of WUAs including:

- ✓ development of economically sound financial and economic plans of WUA;
- ✓ procedures for transfer on WUA balance sheet on-farm networks, irrigation structures and other facilities;
- ✓ writing off doubtful debts according to existing legislation;
- ✓ depreciation methods and formation of WUA emergency funds;
- ✓ rules for setting up WUA water supply service tariffs;
- ✓ methods of monitoring of WUA's financial and economic performance measures.

Model of water management financing improving **(case of Uzbekistan)**



6 Transboundary water management through improved data, information & knowledge management

Regional info system in Central Asia

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development and Cooperation SDC

UNECE

Analytical models

UNESCO-IHE Institute for Water Education

- ✓Aral Sea Basin Management Model (ASBmm)
- ✓Scenarios for water management situation in Amudarya & Syrdarya

Small rivers

giz

- ✓Data management for IWRM
- ✓ Joint Management of Isfara and Khodja-Bakirgan river basins

Training

Key training modu

Improvement of Irrigated Agriculture, (3) International Water Law (4) Regional Cooperation on Transboundary Waters

(5) Climate and Water - New

Thank you

Find out more

- SIC ICWC website http://sic.icwc-aral.uz
- CAWater-Info portal http://cawater-info.net/
- INBO EECCA http://www.eecca-water.net