

Goal

to build adaptive capacity of the countries sharing the Amudarya basin to manage effectively their transboundary waters under climate change and other uncertainties.

Objective

to study in a holistic manner transboundary water management issues in the Amudarya basin for the long run under conditions of climatic and other changes along with national plans on irrigated agriculture and hydropower development.

Expected outputs

A comprehensive set of basin management scenarios & options in the form of assessments & recommendations for various stakeholders; database; methodological materials; regional workshop for key stakeholders, training materials, articles, web-site.

Specific objectives

- ◆ Assess possible changes in the hydrologic regime & future crop water requirements due to climate change;
- ◆ Study scenarios of long-term flow regulation by a system of large reservoirs on hydrology of rivers, available water supply for irrigated lands and for sustaining aquatic ecosystems in the basin;
- ◆ Evaluate future crop water requirements for irrigated lands of the basin's countries under an array of future climate change and river flow regulation based on national plans for irrigated agriculture & hydropower development with account of technological innovations and water conservation technologies;
- ◆ Elaborate possible tradeoff between national priorities and requirements at the basin level inter alia on the basis of legal and institutional analysis of transboundary water management in the Amudarya basin, with the focus on two Global Conventions - 1997 UN Convention, 1992 UNECE Convention.

Scientific merit

- ◆ the modeling tool ASBmm that allows for assessment of climate change impacts in combination with various scenarios of water, socio-economic, agricultural, environmental, & energy development in the basin countries;
- ◆ approaches which aim at reducing water inputs in irrigated agriculture; to be enriched by the relevant US experience (WaterSmart software, etc);
- ◆ harvesting positive impacts of climate change in the basin by making use of shorter crop growing period, modeling of which will give lower figures of water requirements;
- ◆ numerical experiment allows for more flexible combination of irrigation, energy, and nature demands.

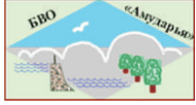
Implementation period

1 November 2015 – 31 October 2017

Project executors



Scientific-Information Center
of the Interstate Coordination Water
Commission of the Central Asia



Basin Water Organization
"Amudarya"

**YNANCH
VEPA**

Analytical Agency
"Ynanch-Vepa", Turkmenistan

The Project also involves individual experts from
Uzbekistan, Tajikistan, and USA

Financial support



U.S. Government-Supported Partners

JOHNS HOPKINS
UNIVERSITY

Johns Hopkins University

The Morton K. Blaustein
Department of Earth and Planetary Sciences



US Geological Survey

The United States Agency for International Development (USAID) is the U.S. Government's preeminent foreign assistance agency. The U.S. Global Development Lab at USAID is bringing together a diverse set of partners to discover, test, and scale breakthrough solutions to address critical challenges in international development. A key element of this strategy is the support of scientific and technological research through the Partnerships for Enhanced Engagement in Research (PEER) program.

PEER is a competitive awards program that invites scientists in developing countries to apply for funds to support research and capacity-building activities on topics of importance to USAID and conducted in partnership with U.S. Government-funded and selected private sector partners.

PEER is implemented by the U.S. National Academies of Sciences, Engineering, and Medicine (NAS).

For further information about the program, please, see:
<http://sites.nationalacademies.org/pga/peer/>

Contacts

Scientific-Information Center ICWC

11, Karasu-4, Tashkent, 100 187,
Republic of Uzbekistan

Phone: (998 71) 265 92 95, 266 41 96

Fax: (998 71) 265 27 97

vdukhovniy@gmail.com

sic.icwc-aral.uz www.cawater-info.net



Transboundary Water Management Adaptation in the Amudarya Basin to Climate Change Uncertainties

