

THE «BERLIN PROCESS»



Optimized water management is the basis for sustainable economic development but requires the joint effort of all Central Asian countries.

The project "Central Asian Water" (CAWA) is part of the Central Asia Water Initiative (also known as the Berlin Process) which was launched by the Federal Foreign Office on 1 April 2008 at the "Water Unites" conference in Berlin.

The initiative is an offer from the German Government to the Central Asian countries to provide support in water management and help make water the subject of greater cross-border cooperation. The overarching goal is to set in motion a political process of forging closer ties in Central Asia that can lead to stronger cooperation on the use of this scarce resource.

The Berlin Process is open to all actors and sees itself as part of the EU strategy for a new partnership with Central Asia, which was adopted in June 2007 during the German EU Presidency.

CONTACT INFORMATION



Federal Foreign Office
Division for Environmental and Biopolitical Issues in Foreign Policy
Werderscher Markt 1
10117 Berlin
Email: 404-3@diplo.de
www.diplo.de



German Research Centre for Geosciences (GFZ)
www.gfz-potsdam.de



German Aerospace Center (DLR)
www.dlr.de



Central Asian Institute for Applied Geosciences (CAIAG)
www.caiag.kg

For more information please visit
info@cawa-project.net
www.cawa-project.net

REGIONAL RESEARCH NETWORK

«CENTRAL ASIAN WATER»

From climate change to irrigation performance: In the frame of the project "Central Asian Water" (CAWA) scientists from Germany and Central Asia develop the scientific basis for sustainable water management.



WATER – FUEL FOR CONFLICT AND SOURCE OF PEACE

As in the rest of the world, water is an indispensable necessity of life for people in Central Asia and an essential prerequisite for economic development.

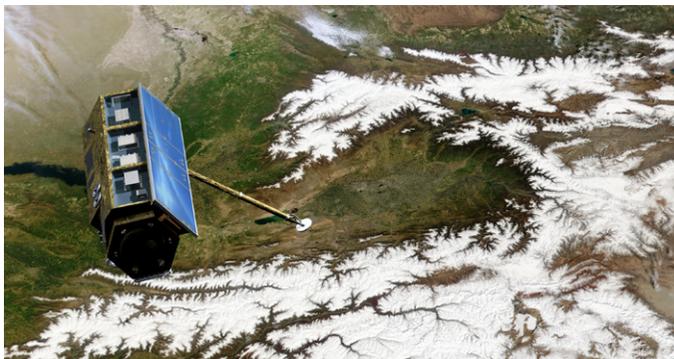
Yet in this region, home to snow-covered peaks as well as deserts, this precious resource is scarce and unevenly distributed. In addition, agriculture and industry in several countries compete for water resources, a situation that will only become more aggravated in the future due to climate change and population growth.

It is clear now that the existing conflicts of interest can only be resolved through the joint effort of all Central Asian countries. Science can make an important contribution to this process by providing information and methods for optimizing water management.



The Toktogul reservoir in Kyrgyzstan in summer 2008. Which impact will climate change have on water resources in Central Asia?

CAWA-PROJECT AIM: DATA AND MODELS FOR SUSTAINABLE WATER MANAGEMENT



Satellites, such as the German Radarsatellite TerraSAR-X, are used for the region-wide and dynamic earth observation.

Sustainable water management requires sound, reliable data. Data on water reserves and the use of water in Central Asia must therefore be collected consistently across the region. This information can be used to produce future scenarios and strategies for sustainable water management.

CAWA Network partners collect this data and develop methods for analysing it. The project's broad-based, interdisciplinary approach includes using hydrological models, satellite remote sensing and information and communications technology. Regional organizations like the International Fund for Saving the Aral Sea (IFAS) and the Scientific Information Center of the

Interstate Commission on Water Coordination (SIC ICWC) as well as national institutions such as the hydrometeorological services, universities and research institutes are part of the network.

Additionally, project partners work closely with the United Nations, the European Union and GTZ, the Deutsche Gesellschaft für Technische Zusammenarbeit (German Technical Cooperation).

TASKS OF THE CAWA-NETWORK

Installation

Hydrometeorological stations are being built within the framework of the project. These stations transmit their readings continuously using satellite communication. The result is a regional monitoring network whose data can be directly accessed on the internet.

Monitoring

Local data is complemented by monitoring of the broader region. For example, satellite data are used to monitor the changes in irrigation and natural vegetation areas, and the development of droughts in the region.

Stocktaking

Measurement data can be used to analyse the water cycle, specifically by examining the role of ground water in irrigation areas. This provides a foundation for improved water management.

Modelling

Climate change impacts the supply of water as well as demand for it. Climate models will help assess the future effects of climate change on Central Asia.

Forecasting

The hydrological models include measured data and the results of climate simulations which make it possible to estimate future water availability.

Information

An information system is being developed in close cooperation with regional users. This system will make the collected data, satellite products and links to existing databases available in an appropriate and user-friendly format in the internet.

Training

CAWA aims to improve water management in the region sustainably. Selected experts and managers in the Central Asian water sector are therefore receiving further training within the framework of the project.

Automated monitoring stations deliver reliable weather and flow data from the high mountains in real time.

