

CAPACITY DEVELOPMENT

A prerequisite for sustainable water management

Sustainable water management respects the needs of future generations and the environment, while taking into account social equity and economic efficiency. It is a cross-cutting issue that involves different levels (local, national, and regional) and sectors (agriculture, communal water supply, energy, ecology, etc.). Water experts need to have a comprehensive understanding of all these dimensions and their interrelatedness.

This poses several challenges to the capacities of water professionals in Central Asia:

- ≡ During the Soviet Era, water management was organised hierarchically and the water ministries at the level of the individual Republics were only in charge of implementing decisions taken at higher levels. Policy formulation, development of framework laws, and horizontal coordination with other ministries are new tasks that only arose with independence and still remain weakly developed.
- ≡ While there was relatively high-level training during the Soviet Era, it was very specialised and restricted to technical and engineering dimensions. Aspects like environmental sustainability, interaction with water users or cross-sectoral coordination were not covered. Today, Integrated Water Resources Management (IWRM) as a process stresses the necessity of participatory, comprehensive, coordinated management. The hitherto existing education and experience of water experts has not prepared them sufficiently for these new tasks.
- ≡ Many universities and research institutes are underfunded and unable to provide up-to-date technical and theoretical training, conduct field trips and offer access to current research.

Together, these aspects combine to result in a lack of adequately qualified water experts. In addition, qualified experts or young professionals who studied abroad often leave the poorly paid jobs at state agencies, which in turn suffer from 'brain drain' and lose even more expertise. Therefore, the Berlin Process unites several approaches to capacity development in Central Asia promoting cross-sectoral and transboundary water management.



The DKU in Almaty was established in 1999 with the objective to train Central Asian students according to German standards.



Training for participants of partner organisations of GIZ on innovative water planning methods.



Training on modelling crop water requirements conducted by the CAWa-programme at the SIC ICWC in Tashkent, Uzbekistan.

- ≡ A key element of the Berlin Process on capacity development is the establishment of a regional master course in integrated water management at the German-Kazakh University (DKU) in Almaty. It is implemented by the Free University Berlin. Courses taught by the Free University staff are supplemented by regional experts' classes. The master course's objective is to train specialists from all countries of the region according to European standards and equip them with extensive interdisciplinary skills. The focus lies on interdisciplinary approaches to planning and steering processes, and knowledge on technical as well as cultural, economic, political and environmental topics that have an impact on water management.
- ≡ GIZ trains its partners, for example basin organisations, in data management tools, river basin planning and IWRM. GIZ staff members support the direct implementation of the newly-acquired competencies to the benefit of the water users. Capacity development for long-term planning and management is crucial to making the projects sustainable; this process takes place in, with and through the partner institutions.
- ≡ In the framework of the CAWa project, the knowledge gained both in terms of the applied methods as well as the project results is transferred to Central Asian and Afghan professionals in short-term training courses, which follow the 'train-the-trainers' concept. All course materials are made available as e-learning modules to ensure long-term impact.

The capacity development programmes improve cross-sectoral and transboundary cooperation in water management in Central Asia by enhancing expertise and facilitating joint efforts. Region-wide seminars bring together water experts from all the countries and also help to develop and maintain professional networks across boundaries.