

Capacity building in water resources management

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At present, the Central Asian countries are transiting to introduction of sustainable development principles into policies and practices of public management. One of the instruments for transition to sustainable development is integrated water resources management (IWRM).

The importance of these issues is explained by grave situation with clean water supply and sanitation in Central Asia (CA). The most acute water problems in the region are as follows: increasing water deficit; pollution of surface and ground waters; huge excessive water losses; provision of the population with good drinking water; inter-state water allocation; risk of desiccation of water resources caused by population growth and economic development.

One of the key points for implementation of IWRM in CA is preparation of skilled personnel the lack of which is considered as the main obstacle in the achievement of set strategic goals and objectives. To improve water resources management, the following is necessary: capacity building of the process actors; knowledge and experience sharing; development of communication culture; proficiency in IWRM instruments.

To solve the problems of capacity building in water-related sphere, the Center for Sustainable Development of the Republic of Kazakhstan (CSD) carried out projects related to implementation of IWRM principles at 3 levels of education: development of teaching aids on environment and sustainable development for schools; development of university courses on IWRM; and development of training modules for basin councils.

The teaching aids developed cover preschool education, elementary school (1-4 years), high school (7-9 years), and senior high school (10-11 years). The major part of the teaching aids deals with water. The teaching material is given in the form of practical problems, laboratory experiments, and other interactive exercises. In the course of education, the students acquire good skills in water saving and water protection.

The IWRM course in the university stipulates studying of the key principles and problems of water resources management, addresses policy development and approaches to decision making on the basis of IWRM. Learning of this course will be helpful in the implementation of IWRM principles in the Central Asian countries.

The Integrated Water Resources Management materials are placed on the UNESCO website www.unesco.kz. They include the training program, presentations of lectures, guidelines for conduction of lectures and practical training, exercises for self-training, case studies, test questions, list of recommended sources. The course materials can be used for training of the practitioners in the water resources management sphere.

To improve the water related decision making procedure, it is necessary to improve the capacity of public employees in the IWRM field. In order to solve this task, CSD has developed the draft training module “Improvement of the decision making procedure on the basis of an integrated approach to water resources management” for basin councils and their stakeholders. The training module has summarized the practice of the conduction of training workshops for basin councils in Kazakhstan.