

## **Recommendations of the Sub-Regional Workshop**

### **“Capacity Development for IWRM in Central Asia”**

The Workshop conducted on May 16-17, 2011 in Almaty under the auspices of UNESCO Cluster Office and the UNDP, within the framework of the project “Promoting IWRM and Fostering Transboundary Dialogue in Central Asia”, with the financial support from the European Union, government of Finland and the Cap-Net network, brought together representatives of governments, universities, research institutions, public and international organizations of Central Asian countries: Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan.

The aim of the Workshop was to review the experience of capacity building in water sector, to exchange information and knowledge on resources available in the area of Integrated Water Resources Management (IWRM) and to develop an action plan and recommendations for capacity building and cooperation among the various sectors involved and the partners in Central Asia region in three main areas of work: challenges in training and education of personnel in the water sector; the current situation and prospects for professional training of specialists on water resources management; and facilitation of networking between professionals in IWRM.

Having discussed the issues of capacity development in water sector, and in particular capacity in implementation of IWRM principles at all levels as a necessary and integral component of sustainable development in Central Asian region, the participants developed the following recommendations:

***To the competent ministries and authorities in Central Asia in charge of training and education - to coordinate and agree on the issues of improving the system of education and in-service training of personnel in the water sector, namely:***

1. To initiate activities on introducing changes to the standards of water education: to improve the formulation of qualification requirements; for technical specialties - to increase the number of general engineering subjects in the curriculum; for all specialties - to improve the list of industry-specific training subjects; to increase the number of educational credits allocated for the pre-graduation practical training and externship, as well as the number of credits for practical and laboratory classes.
2. To develop and submit proposals on amending the ‘Classifier of higher education specialties’ and for this to include new specialties to be taught to the water resources students: for the Republic of Kazakhstan – “Hydraulic engineering and construction”, “Water supply and sanitation”, “Hydrogeology and Engineering Geology”; “Water Resources Management”; for the Kyrgyz Republic and Tajikistan – “Water Resources Management”.
3. To develop and submit proposals on amending the regulations governing the formation of educational standards (‘Rules of development of standards of education’, etc.) with the aim to implement procedures engaging the competent authorities and employers in the preparation of educational standards.

4. To develop qualification requirements for water professionals (with due regard of general and specific components), involving the representatives of competent authorities and practitioners of water sector.
5. To include the subject “Water resources” into the curriculum of school teachers’ advanced training, and engage water practitioners into giving the lectures.
6. To identify the main universities in the Republic of Kazakhstan to provide training to specialists in the field of water resources, to take the lead in the preparation of standards and other teaching aids. Participants of the Workshop and experts recommended the following universities in the Republic of Kazakhstan to take the lead: for degrees in Hydrogeology – the Kazakh State Technical University named after Satpayev, for degrees in Hydrology – the Kazakh National University named after Al-Farabi, for degrees in Hydraulic Structures and Construction - Taraz State University, for degrees in Water Supply and Sanitation - KazGASA.
7. To revive the specialized colleges for the training of technicians in the field of water resources management and to equip them with relevant contemporary facilities and materials, and staff with qualified teachers.
8. To determine the mechanism of raising the economic interest of enterprises, public and private water organizations to participate in the practical training process lead by universities under the overall education process.
9. Increase the number of grants for master's and doctorate courses in specialties related to water resources management, use and protection.
10. To the Ministries of Education make efforts to develop standardized textbooks on the most important disciplines in the training of water professionals, engaging the expert practitioners. Appeal to donors for supporting this work.

***To the Universities in Central Asia:***

11. To define the list of subjects on which standardized textbooks and training materials on water resources have to be developed, and suggest a lists of key professors, who would be able to prepare such manuals.
12. To undertake due effort to train young teachers in IWRM. In order to achieve this, include a course on IWRM into the advanced training curriculum for teachers; and to hold a Central-Asia-wide summer school for teachers of high schools and colleges on IWRM, raising funds and engaging capacities of international projects and donors.
13. To work with interested organizations to allocate individual scholarships for water sector related students.
14. To create a Central Asian network of educational institutions, experts, practitioners and academics in IWRM, in collaboration with existing networks for capacity building.

15. To recommend to the Universities to have greater involvement of international experts to provide guest lectures during the visits of experts to a particular country aimed to attend conferences or work under projects.

***To the in-service training institutions and training centers***

16. To undertake additional efforts in all countries of the region to conduct courses for retraining and advanced training of water specialists in accordance with the intended purpose of their specialty (taking into account the specificity and hierarchy in the management of water resources - for senior managers, middle managers and technical staff, public) in priority areas of a subject matter.
17. To address the Governments with a request for state support to be provided to the Training Centers for water sector specialists (including legal, financial and economic issues).
18. To address the authorized state bodies with a request to coordinate the work of civil service academies and training centers to develop and implement a uniform policy for retraining and advanced training of state officials.
19. To address donors with a request to support the IWRM training courses, exchange of best practices within the countries at different levels, including mass-media and public.

***To all the above organizations and institutions in Central Asia***

To coordinate their ongoing activities under various programs and projects aimed at capacity building in IWRM, particularly run by the Global Water Partnership, Cap-Net network, IFAS bodies and other partners, and consider the need for a coordination meeting to discuss joint initiatives and joint database of experts in the field of capacity building for IWRM.