

## **Report**

**on the regional seminar on:**

### **“Capacity building in the integrated water resources planning and management in Central Asia”**

**jointly held by SIC ICWC and UNESCO-IHE Institute for Water Education (Netherlands)**

**June 7-16, Uzbekistan, Tashkent**

A regional seminar on Capacity building in the integrated water resources management and planning in Central Asia was held jointly by SIC ICWC and UNESCO-IHE Institute for Water Education in the Business Center Poytakht on June 7- 15 2010. The aim of the seminar was training of trainers in following four areas:

1. Integrated Water Resources Management (IWRM);
2. Improvement of Irrigated Agriculture (IIA);
3. International Water Law and Policy (IWLP);
4. Regional Cooperation in Transboundary Rivers (RCTR)

Based on previous studies on the problems of the ASB and their solutions, as well as subsequent developments to identify priority areas of organization and development of shared transboundary water resources management, ICWC approved four thematic blocks, interrelated by a common purpose of strengthening regional cooperation in the basin.

At the opening ceremony of the seminar Dr. Umarov P.D. (Deputy Director of ICWC, Director of TC ICWC) delivered a speech. He welcomed participants and introduced the aim of the seminar.

In his speech, Dr. Umarov P.D. talked about the creation of the capacity-building program for water specialists through the Training Center of ICWC (TC ICWC) which was established in 2000 at the initiative of ICWC and with financial support from the Canadian International Development Agency (CIDA). The Training Center conducted comprehensive regional training program for upper and middle level specialists on priority areas identified by ICWC members: IWRM, IIA, IWLP and RCTR. After the completion of the project in 2005, TC ICWC did not receive any financial support and could not function on an ongoing basis for a long time.

During this period, TC had been periodically conducting regional seminars for one-time programs of the European Union, NATO, OSCE, FAO, etc. until the UNESCO-IHE Institute undertook to support this initiative and found some means so that TC could generalize all the previous experience and develop training modules on the abovementioned four areas which could be further used in the countries as a tool for conducting profession development on a continuing basis. To participate in this project ICWC members identified four experts as future trainers from each country, which, with their focused specialization in one of the above four areas, could both be ready to discuss and participate in the discussions on the remaining three blocks. In order to develop these blocks assessment was carried out and based upon its results the best specialists with many years of regional experience were selected to prepare appropriate training modules on each of these areas. This work was done quite thoroughly and the composition of modules was carefully studied. Moreover, their contents were written to be discussed at the orientation seminar with future trainers from each country.

In accordance with the seminar program (Annex 1) after the introduction of participants (Annex 2) Dr. Umarov P.D. called on Dr. Krishna Prasad, senior lecturer at UNESCO-IHE Institute for Water Education to speak.

In his speech, Krishna Prasad pursued two main objectives:

- to convey the basic idea of SIC ICWC and UNESCO-IHE project; and
- provide information on UNESCO-IHE

The aim of the project is to have a broader look at the project and develop cooperation in this sphere between the countries after the end of the project. The project focuses on training, education and research in the Aral Sea region. In his speech, Dr. Krishna Prasad outlined the main goals and objectives and expected results of the project. He also talked about the history, functions and objectives of UNESCO-IHE.

After the opening speeches by Drs. Umarov P.D. and Krishna Prasad, classes began in the general auditorium, i.e. with the participation of four area specialists. Coordinators of each of the blocks delivered an introductory lecture, which briefly described the structure and content of their courses.

Rysbekov Yu.Kh. – coordinator of Block 3 «International Water Law and Policy». The Block consists of 12 modules and focuses on enhancing regional cooperation in terms of: strengthening of trust and mutual understanding between nations by improving the tools of the negotiation process on the basis of adherence to international water law in the integrated management and efficient use of water resources at the interstate and national levels to meet social and economic demands of the population of the entire region. Rysbekov Yu.Kh. familiarised the participants with the block structure and thematic content.

Sorokin A.G. – coordinator of Block 4 «Regional Cooperation in Transboundary Rivers». The Block consists of 5 modules and focuses on strengthening regional cooperation in transboundary rivers in terms of: application and development of best international and regional practices in integrated management, operational and long-term planning, reducing unproductive runoff losses, increased use of measuring and modeling instruments at the interstate and national levels to meet social and economic demands of the population of the entire region. An emphasis should be given to the use of economic mechanisms in the relationship between countries.

The presentation by Sorokin D.A. supplemented Block 4. In his speech, Sorokin D.A. provided information about the CAREWIB portal - regional information system on water and land resources of the Aral Sea, which is designed primarily to support decision making in the water sector in Central Asia.

The main objective of IS is to create a integrated system for accounting land and water resources of the Aral Sea basin, with the possibility of assessing various aspects of their efficient use and forecasting, which will promote sustainable management and control over all kinds of water resources.

The system makes it possible to allows continuous evaluation of the effeciency of water for all types of use and identify unproductive losses.

The information system, shared by riparian states, promotes trust, solidarity and a sense of mutual responsibility. Data are available from 1980 to the present, (time interval: annual - seasonal [vegetation / non-vegetation] - monthly). In general, the information system includes more than 150 parameters.

In the course of discussion after the speech by Sorokin D.A, participants have expressed great interest in the work of this portal. Dr. Umarov P.D. emphasized the importance of CAREWIB as a tool to strengthen regional cooperation that needs to be learnt.

Mirzaev N.N. – coordinator of Block1 «Integrated Water Resources Management». The Block consists of 8 modules and is aimed at strengthening regional cooperation through the organizational and technical improvement and management of water resources through: improving the organization of water management and irrigated agriculture, with the involvement of water users and stakeholders; use of technical and financial tools to improve

water and land management at all levels of water hierarchy; improvement of the legal framework of the ongoing reforms in agriculture and water management at national level. The implementation of IWRM at the basin level plays an important role.

After the speech of Mirzaev N.N. during the discussion gender issue was raised. Participants concluded that the involvement of women in water management is necessary.

Khorst M.G. – coordinator of Block 2 «Improvement of Irrigated Agriculture». The Block 2 consists of 8 modules and is aimed at saving and economic use of water based on: the implementation of IWRM and improvement of water and land productivity focused on achieving their potential level; application of mathematical tools and computer technology in irrigated agriculture; the use of economic and legal instruments to promote water saving.

All these activities should provide the release of water and reduce the load at transboundary level, as measures to strengthen regional cooperation.

To ensure the efficiency of the course all participants were divided into 2 groups: given that Blocks 1 and 2, 3 and 4 share many common issues that complement each other, sessions on these areas have been combined. The classess were held in this way for 5 days. Group trainings were held in an interactive way and allowed the experts to reveal in more detail the main specific issues in both adjacent blocks.

In the course of seminar the participants were familiarized with international and regional practices, discussed in the interactive debate the challenges facing the oblast water management organizations in the region, as well were acquainted with one of the most efficient and popular methods of training - role-playing. In particular, in his presentation Dr. Krishna Prasad outlined the rules of role-playing.

At the end of each module, active discussions were held between participants and lecturers, where the details of various issues relating to each individual country and the region as a whole were considered.

In one of his speeches, Dr. Krishna Prasad emphasized the organization of training at national level by trainers already trained under given project. He also mentioned the need for developing common approach by the participants from five countries

Dr. Umarov P.D. made suggestions on the organization of further training:

- to combine the upper and middle level to ensure practicability and feasibility of holding the seminars, since it is very difficult to organize training at the upper level;
- to pay special attention to the training of the lower level as an important element in water resources management;
- funding depends on the specific conditions of the country, the target audience;
- the implementation of the idea of creating extension services and integrating them with training for lower level;
- provision of state support for training and maintaining the stability of training activity;
- searching new projects that will be interested in conducting training component;
- creation of regulatory mechanism that would allow each area specialist undergo relevant advanced training.

This project aims to train national trainers who will in turn conduct training in their countries, and prepare trainers for the lower levels (oblast, district). The project aims to equip future national trainers with constantly updated extensive knowledge and tools as a full arsenal of modules, from which it will be possible to organize courses adapted to their conditions.

In his speech Dr. Joop de Schutter stressed the importance of continuous building the people's capacity who are involved in water resources management, which requires in the first place strengthening of Training Center, in particular the transition from intermittent training to the training on an ongoing basis. It is necessary to organize trainings that facilitate decision-making in the water sector. The issue of developing business plan, which will define how to

organize and institutionalize ICWC training capacity in the future, and identify sources of funding is also closely related to this. It is also necessary to enhance cooperation with existing educational institutions in the region, such as universities and technical schools to exchange information and strengthen the effectiveness of our activities. Achieving the level of integrated decision-making is one of the important goals we are trying to achieve and IWRM is the basis for achieving this goal. In Central Asian water sector a multicriteria decision support, balance the interests of all countries needs to be developed. Central Asia is important geopolitical region, the people who live here, especially the decision-makers must be able to find a compromise and understand the importance of integrated decision-making. Trainers trained in this training course are a key element in achieving the balance between countries in the management of water resources, namely, they will be able to explain managers and all water users the integrated decision-making and how to implement it in practice. Given that there are different target groups, different learning formats should be elaborated. One of the key methods of learning in the training is role-playing. Using the results of the Aral Sea model as a basis for role-playing will contribute to mutual understanding between countries. Joop de Schutter expressed his hope to continue cooperation with these groups.

In his address, prof. Dukhovny V.A focused on the international practice of water resources management. Experience of such organizations as the International Joint Commission of the United States and Canada, Indus Commission between India and Pakistan, as well as the Rhine Commission shows professionalism in water resources management. Many provisions, especially of the Columbia River Treaty of 1909 and the subsequent treaties would be appropriate for Central Asian region. The main difference of our commissions from these commissions lies in the fact that none of these commissions are practically directly involved in water allocation and monitoring of water allocation. All these commissions are engaged in management and control over management, i.e. control the observance of those principles, which the commission established.

A main noteworthy result in our region is that from the very beginning, certain principles of water allocation were retained. Analysis conducted by ICWC of adherence to these principles (Dukhovny V.A., Sorokin A.G.) throughout the period of ICWC activities shows that the water share fixed by agreements were strictly maintained, with very little deviation and even in dry years all water users received, nationwide equal shares, which was specified by these agreements. Unfortunately, the countries themselves in these dry years, gave priority to their various zones.

The availability of the worked out system of principles and control over water allocation is a big advantage of ICWC, which does not have analogs in the world, as nobody in the world allocates water on a daily basis. Another positive point specified in the agreement is the equality of funding and the need to develop a strategy. Unfortunately, inobservance of both of these provisions, laid the foundation for all the current tensions that exist in our area.

The main problem is that all energy organizations, which operate reservoirs dictate their energy regime, which often causes damage and especially during dry years. Although provided that water allocation and operation mode is rational this could have been avoided. All participants perceived the presentations and reports with great interest and expressed their gratitude to the organizers of the seminar - SIC ICWC and TC ICWC, UNESCO-IHE, the sponsor of the seminar, as well as expressed their desire to organize similar events at national and other levels.

Both printed versions of reports and presentations, as well as electronic versions of all training materials for each block were distributed to all participants. It was decided that all future trainers who participated in this first regional seminar, based on more in-depth study of these materials will create in consultation with the heads of water management organizations, expert working groups at national-level to analyze the presented training modules and develop

joint proposals for their finalization, improvement and final adoption at the second regional seminar in September-October 2010. After approval of the final versions of training modules, subsequently their confirmation will be carried out at individual seminars under project at national level.

Upon completion of the seminar, the participants assessed the training course by filling out questionnaires specially designed by TC. The purpose of this evaluation was to determine the effectiveness of programs and receive proposals for improving their quality, as well as identify the strengths and weaknesses of the program and take into account the feedbacks when conducting similar programs in the future.

According to the results of the evaluation, the participants were satisfied with the results of the seminar, in particular with the knowledge and organization of the training. In their responses, participants stressed that the course was useful for the preparation of analytical documents, work with databases, cooperation within the framework of interstate commissions of the Central Asian countries, conducting international negotiations to solve water problems and solving regional problems related to the shared use of water resources.

According to a small number of participants the Blocks «International Water Law and Policy» and «Improvement of Irrigated Agriculture», as well as topics related to the establishment of WUAs, councils and committees should be reduced.

Participants also expressed their opinions on the expansion of such topics as, «The experience and prospects of IWRM in Central Asian countries. Best practices and approaches of leading countries», «MIS», «Issues of basin water resources management», as well as Blocks of «Regional Cooperation in Transboundary Rivers», «Integrated Water Resources Management».

The following topic was proposed for inclusion in the course program – «Reforms in water sector, positive and negative aspects».

The participants mentioned the competence and professional knowledge of lecturers, the efficiency of various interactive learning methods, including role-playing, logical sequence of learning materials, active debates and discussions and well-organized training course.

Suggestions made by participants on further improvement of the course:

- shortening the training course duration up to 3 days;
- holding a separate seminar for each block;
- paying special attention to practical exercises.

The participants agreed on the need to maintain the stability of training activity by joint efforts. This primarily requires permanent financial, institutional and political support from governments and donors. In particular, following proposals were made:

- strengthening of TC branches, attracting foreign specialists;
- translation of educational materials into national languages to organize the course at lower level;
- combination of the training courses with meetings of the Basin Councils, which are held twice a year. Basin councils have been functioning successfully in Almaty since 2006.

During the discussions, following obstacles and barriers to the sustainability of the training course in the region were mentioned, in particular:

- there is no professional development program in Turkmenistan;
- there is a problem with issuing of certificates in Turkmenistan, as it is not allowed without the government permission,
- the goal of national trainers to explain and convince the leadership of the usefulness of training courses;
- not all states will be able to fund training after the project completion.

Prof. Dukhovny V.A. summing up reminded that in Shariah (Islamic law) water is compared with the holy thing and it is our duty to inculcate this sense from early childhood. He stressed the importance of such events in order to unite the Central Asian region under a common idea - to survive together. Water should not be a wick or a political lever, but rather an incentive for mutual understanding, trust and consolidation.

During the seminar the following recommendations were developed:

- reducing the duration of the training course to 5 days;
- duration of the lecture should be no more than 1 academic hour (45 minutes);
- application of various learning methods, primarily interactive;
- searching the regulatory mechanism which would allow specialists to take appropriate professional development;
- teaching professionals how to use the regional information system on water and land resources in the Aral Sea basin (CAREWIB), which is an important tool to strengthen regional cooperation;
- engagement of the public and the state in water resources management and maintenance of water infrastructure;
- organization of training activity at the WUA level taking into account the vegetation and non-vegetation period.

At the end of the seminar, a solemn presentation of certificates to participants of the seminar took place.