REPORT

On the national workshops conducted in Kazakhstan within the joint project of UNESCO-IHE and SIC ICWC of Central Asia "Capacity Building for Integrated Water Resources Planning and Management for Central Asia"

1. SIC ICWC of Central Asia together with UNESCO-IHE (Institute for Water Education, UNESCO IHE, Delft, Netherlands) implements the project named "Capacity Building for Integrated Water Resources Planning and Management for Central Asia".

One of the project objectives is development of the training system in the water sector of the five Central Asian countries. In 2010-2011, a series of regional workshops on the preparation of national trainers (training of trainers) was delivered with the assistance of key experts of the foreign project partner (Institute for Water Education) and by using the resources of SIC ICWC in four fields:

- Block № 1. Integrated Water Resources Management (IWRM);

- Block № 2. Improvement of Irrigated Agriculture (IIA);
- Block № 3. International Water Law and Policy (IWLP);
- Block № 4. Regional Cooperation in Transboundary Rivers (RCTR).

Leaders of each Block (regional trainers), leading experts of SIC ICWC, have developed training programs, training modules, and prepared a package of required training materials.

The next stage of the training related activity of the project will include delivery of national workshops in each of the five countries of the Central Asian region. The first series of the national workshops was conducted in Uzbekistan on September 12-21, 2011.

2. National workshops in Kazakhstan were delivered in two provinces:

- Kyzylorda province (Kyzylorda city): 8-10 November 2011,

- South Kazakhstan province (Shymkent city): 11-12 November 2011.

The themes of the national workshops covered all the above-mentioned 4 training areas (Blocks), i.e. IWRM, IIA, IWLP, RCTR.

Trainees' Population (target audience) was composed of:

- in the Shymkent city: specialists from the organization departments of the South Kazakhstan Branch of the Republican State Enterprise "Kazvodkhoz" (SKB RSE), Aral-Syrdarya Basin Inspectorate (ASBI), representatives of rural production cooperatives of water users (RPCWU), South Kazakhstan Hydrometeorology Center (SK HMC), South Kazakhstan Branch of the Shu-Talass Ecology Department, South Kazakhstan Hydrogeological Reclamation Expedition, and other water organizations.

- in the Kyzylorda city: specialists from the organization departments of the Kyzylorda Branch of SKB RSE, ASBI, Nature Resources and Environmental Management Administration of the Kyzylorda province, representatives of major water users of the province, SK HMC, Kyzylorda Regional Geology and Subsoil Use Inspectorate, Kyzylorda Hydrogeological Reclamation Expedition, and other water organizations.

Necessary help and assistance in the organization and conduction of the national workshops was provided by the Water Resources Committee (WRC) of the Ministry of Agriculture and Water Resources; the Kazakhstan Branch (KB) of SIC ICWC was a local organizer of the national workshops.

SIC ICWC provided methodological and other assistance in the conduction of the trainings.

3. Moderators/lecturers:

1. Kipshakbaev, N.K., Academic Professor of the Kazakhstan State Academy of Architecture and Construction (KazSAAC), Professor of the Kazakhstan National Agrarian University (KazNAU) (Shymkent city, Kyzylorda city) – National Trainer;

2. Seysenov, S.B., Director of "Kazvodkhoz" SKB RSE (workshop in the Shymkent city) – National Trainer;

3. Kystaubaev, O.A., Deputy Chief of the Aral-Syrdarya Basin Inspectorate (ASBI) on Water Resources Use and Conservation (Shymkent city);

4. Nurseyitov, Zh.B., Deputy Chief of the Aral-Syrdarya Basin Inspectorate (ASBI) on Water Resources Use and Conservation (Kyzylorda city) – invited lecturer.

4. Lectures, presentations, main issues considered:

4.1. IWRM Block (Prof. Kipshakbaev, N.K., trainings in the Shymkent and Kyzylorda cities):

- IWRM: Introduction.
- IWRM in the Republic of Kazakhstan.
- Water resources management (WRM) in river basins.
- Key issues of WRM.
- Problems of water management organizations.
- Water supply to population and branches of the national economy.
- Conservation and restoration of ecosystems.
- Public participation, dialogue worth water users.

The issues were considered by the example of topical current WRM problems in linkage with planning of water management, historical experience of WRM in Kazakhstan.

In the course of the training, role plays were organized on the themes "Late water supply to a farm", "Current WRM on the canals «Dostyk» and «Zakh»" (note: these canals are transboundary between Kazakhstan and Uzbekistan).

4.2. IWRM Block (Kystaubaev, O.A., training in the Shymkent):

- Implementation of the IWRM principles at the regional level;
- IWRM is a tool of multipurpose use of water;
- IWRM and improvement of water use effectiveness in the Republic of Kazakhstan.
- Public participation in WRM.
- Role of women in IWRM.
- Prospects of IWRM implementation in the Republic of Kazakhstan.
- WRM planning process.
- Community's awareness of WRM.
- Elaboration of IWRM related work plan.

In particular, the trainees were informed of the short-term and long-term Basin Plans of IWRM for the Aral-Syrdarya Basin, process of their elaboration, consideration, and adoption, and the trainees acquired relevant skills.

4.3. IIA Block (Seysenov, S.B., training in the Shymkent city):

- Current state of irrigated lands in Kazakhstan.

- Ways to solve the problems associated with the maintenance and improvement of reclamation state of irrigated lands in Kazakhstan.

- Water saving and water saving technologies.

- Principal ways and forms of the implementation of the water saving policy.

The lecture material was based on actual data on the South Kazakhstan province. In the course of the training, interactive dialogue between trainees on the issues considered was arranged.

4.4. RCTR Block and IWLP Block (Prof. Kipshakbaev, N.K., training in the Shymkent; Nurseyitov, Zh.B., training in the Kyzylorda city):

- Doctrines, conventions of international water law.

- Principles of international law.

- Transboundary water and watercourses.

- Management of transboundary river water resources.

- Cooperation on transboundary rivers.

- Regional cooperation in the Syrdarya river basin.

- Structure of inter-state organizations related to WRM in the Aral Sea basin.

- Existing mechanism of inter-state management of transboundary water resources (TWR) in Central Asia and ways to improve it.

- Management of transboundary river water quality: case study of the Syrdarya river.

At both trainings, discussion was arranged; the trainees took active part in those, showed a great interest in the analysis of the world experience in TWR management and willingness to participate in the development of the water policy of Kazakhstan. At the national workshops, the participants were provided with required handouts on each Block.

5. Participants of the national trainings (quantity):

Altogether, the two national workshops were participated by 52 specialists, in particular:

- in Shymkent – 26, in Kyzylorda – 26.

The workshop participants (trainees) were given certificates.

6. The workshops held in Kazakhstan had the following characteristic features:

- Identification of the most active trainees who demonstrated leadership qualities as potential trainers for each training Block;

- Assessment of the quality of the training courses by the trainees.

(Note: the necessity of the assessment of the training courses' quality by the trainees and identification of potential future trainers from among the trainees was initiated by Dr. K. Prasad, discussed at his meeting with the Training Center employees during his visit to Tashkent (first ten-day period of November 2011) and immediately recommended to be implemented at the national workshops in Kazakhstan).

6.1. Following the trainings, the following persons were recommended as potential trainers:

A) Workshop in Shymkent:

- Block № 1 (IWRM): Nurgali ALJANOV (Mr.), Hydraulic Engineer of the Makta-Aral Hydraulic Site of the South Kazakhstan Branch of the Republican State Enterprise "Kazvodkhoz";

- Block № 2 (IIA): Shukur KUCHKARBAEV (Mr.), Director of the Saryagysh District Water Administration;

- Block № 3 (IWLP): Esenkul RAYIMBEKOVA (Ms.), Head of the Water Use Department of the Zakh-Keless Hydraulic Site of the South Kazakhstan Branch of the Republican State Enterprise "Kazvodkhoz";

- Block № 4 (RCTR): Dosjan AMANBAEV (Mr.), Engineer-Hydrologist of the South Kazakhstan Hydrometeorology Center.

B) Workshop in Kyzylorda:

- Block № 1 (IWRM): Marat ABDULLAEV (Mr.), Senior Specialist of the Water Use Department of the Kyzylorda Branch of the Republican State Enterprise "Kazvodkhoz";

- Block № 2 (IIA): Karzhov KULAMBAEV (Mr.), Deputy Chief of the Kyzylorda Hydrogeological Reclamation Expedition;

- Block № 3 (IWLP): Raushan BEYSETAEVA (Ms.), Engineer-Hydrologist of the Kyzylorda Hydrometeorology Center;

- Block № 4 (RCTR): Babakhan TAYMANOV (Mr.), Head of the Water Use Department of the Kyzylorda Branch of the Republican State Enterprise "Kazvodkhoz".

It is worthy of note that female specialists proved to be the most efficient and active in Block 3 (International Water law and Policy).

6.2. Assessment of the training course and teaching quality: the assessment was carried out based on a five-point scale (5 points – excellent; 4 points – good; 3 – satisfactory; 2 – unsatisfactory; 1 – bad); overall score broken down by positions and in total, in terms of arithmetical mean value.

(Note: in the original questionnaire these scores are given in the following form: «I absolutely agree» (5); «I agree» (4); «Neutral» (3); «I do not agree» (2); «I absolutely disagree» (1).

A) Workshop in Shymkent:

- The training delivered was evaluated by 23 out of 26 participants (88.5 %);

- Teaching quality 4.9;
- Quality of training materials (understandability) 4.7;
- Relevance of the prepared training materials (topics) -4.6;
- Sufficiency of time for questions and discussions 4.5;
- Correlation of theory and practice-4.5;
- Sufficiency of time for preliminary familiarization with lecture materials 4.2;

- Method of the evaluation of the knowledge obtained by the trainees upon the completion of the training courses -4.0.

Key comments of the trainees, in particular:

- It is necessary to involve major natural resource users in the training and implementation of water recycling in industry;

- It is necessary to consider the issue related to the reduction of the rate of water application per unit of output and introduction of the mechanism of its assessment by a single method (individual book/balance sheet rate) within the training course;

- The issues associated with groundwater use are not reflected to sufficient extent;

- It is necessary to increase time for practical training.

Integral (overall) score given to the training course -4.7

B) Workshop in Kyzylorda:

- Evaluation was given by 22 out of 26 participants (84.6 %).

- Teaching quality – 4.9;

- Quality of training materials (understandability) – 4.9;

- Relevance of the prepared training materials (topics) -4.9.

- Sufficiency of time for questions and discussions – 4.7;

- Sufficiency of time for preliminary familiarization with lecture materials – 4.7;

- Method of the evaluation of the knowledge obtained by the trainees upon the completion of the training courses -4.7;

- Correlation of theory and practice – 4.5;

Key comments of the trainees, in particular:

- The issues associated with groundwater use and management are not reflected to sufficient extent;

- It is necessary to cover the issues related to reuse of collector and drainage waters (CDW) and discharged waters for crop irrigation by the training program;

- Focus on the strategy of the improvement of the environmental conditions of rice crop rotation in the Kyzylorda province;

- Include the information and GIS technologies related issues in the training program;

- Provide knowledge on the methods to apply for grants for the organization of training courses in different areas of WRM.

Integral (overall) score given to the training course -4.8.

C) Assessment of the teaching quality at the national levels in the Shymkent and Kyzylorda cities is similar and is high enough (4.9). This is owing to high skill of the national trainers (Prof. N.K. Kipshakbaev and S.B. Seysenova, Director of the SKB RSE "Kazvodkhoz") who were trained at regional workshops as well as invited lecturers who possess great practical experience (Deputy Chiefs of ASBI on Water Resources Use and Conservation O.A. Kystaubaev and Zh.B. Nurseyitov). At the workshop in Kyzylorda, a national trainer and invited lecturer introduced amendments allowing for the experience and results of the assessment by the trainees in Shymkent. Apparently, this is the reason for higher evaluation scores given by the Kyzylorda workshop participants as compared to the workshop in Shymkent in the following positions:

- «Quality of training materials (understandability)» (higher by 0.2 points),

- «Sufficiency of time for questions and discussions» (higher by 0.2 points),

- «Relevance of the prepared training materials (topics)» (higher by 0.3 points),

- «Sufficiency of time for preliminary familiarization with lecture materials» (by 0.5 points)

The highest excess of the evaluation scores for the Kyzylorda workshops over the workshop Shymkent workshops is for the position «Method of the evaluation of the knowledge obtained by the trainees upon the completion of the training courses» – 0.7 (4.7 against 4.0 in Shymkent).

At the same time, a relatively low evaluation score remains for the position «Correlation of theory and practice» at the Kyzylorda as well as Shymkent workshop -4.5, which can be explained by limited timeframe of the workshops (2-3 days).

Limited time and the coverage of the subject areas of all 4 training Blocks (IWRM, IIA, IWLP, RCTR) in general did not allow, in particular, conducting practical (field) training (for example, for the IIA and IWRM Blocks) and testing the skills acquired (which was performed during the national workshops held in Uzbekistan) and defining more specific (module) subject, and not in general, i.e. hydraulic measurement issues.

7. Information about the joint project of the Institute for Water Education (UNESCO IHE) and SIC ICWC "Capacity Building for Integrated Water Resources Planning and Management for Central Asia", its main goals and objectives within the training activity was provided by Prof. N.K. Kipshakbaev at the both workshops.

The workshop participants thanked the initiators of the joint project of the Institute for Water Education (UNESCO IHE) and SIC ICWC and underscored the importance of the trainings for enhancing the trainees' educational capacity.

Training Center workers carried out organizational arrangements for the preparation of the national workshops in the period of September-October in cooperation with the persons in charge of the conduction of the national workshops in Kazakhstan. At that, the interest and proper assistance of the leaders of the MAWR WRC of the Republic of Kazakhstan in the organization of the workshops played a big role.

The workshops held in Kazakhstan and Uzbekistan have shown that the national trainers trained at regional workshops have acquired required skills, become armed with training materials, and are able to deliver trainings in the regional countries on their own and at a highly professional level allowing for local specifics.

The national workshops conducted in Kazakhstan and training approaches somewhat differ from those in Uzbekistan. For example, in Kazakhstan the trainees were provided knowledge within the framework of all 4 training Blocks of the project, whereas in Uzbekistan the knowledge was given within the framework of a separate module named "Organization of hydrometry, water use planning, and improvement of the WUA performance", which is close to the themes of particular modules of Blocks N_{2} 1 (IWRM) and N_{2} 2 (IIA).

In both cases (national workshops in Kazakhstan and Uzbekistan), they applied the approaches, methods, training materials worked out and tested by SIC ICWC together with its foreign partners (experts from the Institute for Water Education, UNESCO IHE, Netherlands).

Currently, the works on the organization of similar national workshops in Kyrgyzstan, Tajikistan, and Turkmenistan are going on. In particular, the ICWC CA member from Kyrgyzstan approved the conduction of a national workshop in Kyrgyzstan. The workshop period is 8-9 December 2011.

Training Centre 03 December 2011