WATER AND WE

ICWC TRAINING CENTER

says to you:

"WELCOME!"

CIDA

McGill

DEAR COLLEAGUES,

Training Center, established in 2000 by the International Fund for the Aral Sea Saving, its Interstate Commission for Water Coordination, McGill University ("Brace" Center, Montreal), and Mount Royal College, Calgary and supported by the Canadian International Development Agency (CIDA), welcomes you and invites over for an effective cooperation.

The Training Center is intended for professional development of water specialists from five Central Asian states - Republic of Kazakhstan, Kyrgyz Republic, Republic of Tajikistan, Turkmenistan, and Republic of Uzbekistan. Since the establishment of newly independent states in Central Asia before existed advanced training system had been destroyed, and for a long time our colleagues-water specialists have been isolated from advanced experience of developed countries in water sector and irrigated agriculture, from new concepts and tendencies being positive during last decade. The establishment of the Training Center filled up this gap.

We are not going to teach you. We want to have key water specialists acquired with the best water management practices in the world (Australia, Canada, Spain, Israel, USA and other advanced countries) intended for the benefit of human and the nature. We would allow you to discuss issues of regional water-related development with your colleagues from the Aral Sea Basin's countries, and we would help you to summarize your positive experience, to analyze mistakes made, and to learn lessons. If you are quite comfortable with a computer we can offer you up-to-date computer base in the Training Center with a broad database, which is ready to input your experience and research works and consider your requests. If you need to improve your computer skills we will render required assistance.

CERTIFICATE

OF COMPLETION

Presented by
McGill University "Brace" Center (Montreal, Canada), Mount Royal College (Calgary, Canada)
and Scientific-Information Center of the Interstate Coordination Water Commission (Tashkent, Uzbekistan)
recognizing

Mr. Ally Baliyevich Orazov

as having successfully completed the
"Transboundary Waters: Strategies to Improve Regional Cooperation" Course
held at the ICWC Training Center in Tashkent, Uzbekistan

May 24-29, 2001

arranged under the international program of education

Presented this
May 29, 2001

ICWC Training Center Certificate

WATER AS A FEEDER

Our region is rich in ancient traditions, experience, and achievements in water sector. Our nations treat both land and water as a source of life. This is well demonstrated by people's water khashars, in which population of the whole oases took part. We want to show you the beginnings, our evolution, as well as documentary films dedicated to the construction of Big Fergana Canal, Kattakurgan reservoir, and Karakum Canal, to development of Golodnaya Steppe and other water structures, which have been serving to the nations up to date. We must not forget hundreds of thousands of dehkans, who in one month laid manually with ketmen (Asian shovel) the kilometer tracks of canals, such as Big Fergana Canal, Vaksh Canal, Shavat fissure, etc. Dozens of large and huge water structures in Central Asia were constructed through people's construction - khashar.

Old film shots show our people's attitude to water - kind and reverential. Huge water management system has been created in Central Asia during Soviet period. It comprised perfect irrigation and drainage systems, extensive reservoir network, which almost completely regulated flows of SyrDarya, Zarafshan, Vaksh and other rivers. Just this system became a basis for agriculture in our countries. The labor of many generations and great funds were invested in our water use systems.

However, the use of nearly the whole surface and considerable share of ground waters for people needs has its back - that is the shrinkage of the Aral Sea and degradation of rivers as living organisms. Transition to market relations and private ownership of investment goods, and inducing by the government of private initiative issue the challenge to our governments: to keep, under such difficult period, existing water-related potential, using, first of all, new forms of highly skilled management and increasing its effectiveness.

Showing you, dear colleagues, new forms of water management and making them an important for your day-to-day practice - is one of the main tasks of the Training Center.

Canal in the concrete channel

RATIONAL WATER USE AND ENVIRONMENTAL DEMANDS

Ability to save water has been always appreciated in Central Asia. And you, dear colleagues, through lectures disseminated in advance among you, database and opinion exchange will get answers for the following questions at our workshops:

- what is integrated water management and how does it solve is own problems;

- what practice and recommendations of international water law on effective transboundary water resources use are available;

- how is irrigated agriculture being improved under market conditions in Central Asian countries and in developed countries with arid climate;

- how is water resources management being implemented according to hydrographic principle;

- how to implement water saving at level of field, farm, irrigation system, rayon, oblast, country, river basin, and group of countries sharing water resources;

- what does water charge provide for water users and water organizations and what can it give in future;

- how to account for environmental demands under water resources management;

- how to involve water users in effective water resources management;

Water supplied in proper amount and in time to the right place is a great production force, an output of human labor with own cost and price. However, in majority of our countries the government compensates water cost because today water users are not able to cover this cost. You will get acquired with the first steps made in this direction by Kazakhstan and Kyrgyzstan. The workshop will help you to compute and model options of transferring the compensation of water costs from the government to water user.

Drip irrigation of cotton

Vertical drainage well

TRAINING TO COOPERATE

Available water resources are limited and their amount is relatively small. Under current technical level of irrigation systems and existing irrigation and drainage technology, further extension of irrigated area is impossible. Training Center will remind you, dear colleagues, that best results of water management could be reached only on a base of cooperation. Cooperation with colleagues, water users, local authorities, and public, which is eyes, ears, and mouth of people and, therefore, is charged with functions of control. You can yourself give dozens of examples that show how is important to take into account interests of partners of any rank, be accurate in fulfilling yours commitments to people, water users, and nature.

You should consider cooperation issues in transboundary water use very carefully. Here weighted and coordinated policy of the countries, which created the Interstate Coordination Water Commission and charged it with specific authorities, is able to maximally help water user in dry years and mitigate damage as much as possible.

In order to reach this purpose many tools were created in cooperation with water experts from five states, such as regional information system and database, models, agreements. Our trainees learn how to apply these tools during workshops.

Ditch irrigation network

Charvak storage reservoir

LESSONS OF WATER SHORTAGE

Training Center will provide you, dear colleagues, with data (and you will supplement them with your own examples) revealing the heart and nature of our errors made during maneuver with extremely limited resources in the hardest water year 2000. People's wisdom says: mistakes are good only for that they allow learning useful lessons. We also should learn lessons from the following: why we obtained water less than upstream users; why in such a year more than 1.5 km^3 were released in Arnasay; why commitments of the parties related to the operation of Toktogul, Nurek, and other major hydrounits were not fulfilled; why Tuyamuyun reservoir had no water available before growing period that critically affected the whole downstream oasis of the AmuDarya River.

More than one third of our irrigated area is subject to salinization. Resistance to this process requires that constant well-directed efforts be made. Weakening of such efforts leads to loss of productivity that is demonstrated in many our oases. Our task is to protect labor of previous generations, who developed Golodnaya Steppe, Karshi, and Kzylorda virgin lands, from salt expansion, which is being withstanding by us weakly and inefficiently. Preventing the irrigated fields from degradation is a topic for serious and unpleasant talking.

Our reserves in water saving are very big. Let us compare the following data. In Israel unit water discharge per 1 ha is equal to 5.6 thousands m^3, while it is 57 m^3 per capita in public water supply. In the Aral Sea basin's countries, these are 11.9 thousands m^3 and 144 m^3, respectively.

Saline part of the field

Mechanized construction of horizontal drainage

Levelling of the irrigated field

THE WORLD PRACTICE AND OUR TASKS

World water use experience is valuable for us by its unique nature and variety. USA, Australia, Israel, the Netherlands, France, Spain, Canada, and Japan give examples of clear, high-effective water management. All of them are rich countries, which are able to accumulate rapidly latest recommendations of science and practice in their water site. We are certainly interested: how government and private water users' funds are involved in water sector in these countries; what amounts and shares are; what relations are developed; how they achieve rational water management and water saving; and, how environmental needs are taken into account.

If our level of understanding of all processes related to effective water use is not lower than that of experts from the most developed countries, our ability to impact these processes is directly connected with funds available. They are very limited. Therefore, it is very important to select appropriate priorities, support all initiations, which are based on enthusiasm and love for own land, and all those initiations, which give larger profit from relatively small capital investments.

Dear colleagues! You will be satisfied and, undoubtedly, will enrich your experience by tracing the numerous examples from the world practice, such as: how vision of one or another problem transforms to specific project; how this project is implemented; how project investments are covered; and, to what extent international joint commissions on transboundary water use and their decisions are effective.

Irrigation systems of the Netherlands and Austria

WORKSHOPS

Water specialists training during the first year was organized through monthly training courses for 20-30 persons from 5 countries. First preparatory workshop was held on September18-25, 2000. High level specialists were participants of this workshop. Training program includes two study tours to USA and Canada. First (two weeks duration) for Ministries of Agriculture and Water Resources leaders to exchange opinions with American and Canadian colleagues in water and agriculture management, transboundary waters management improvement was fulfilled in November 2000. Second one for ministry departments and regional organization leaders in February 2001.

During period since October 30 till November 9 course “Integrated Water Resources Management” for province water organization specialists was conducted; since 11 till 21 December 2000 - second session; since 22 till 31January 2001 - third session; since February 19 till March 1 - fourth session and since 23 till 31 March - fifth session since were carried out.

In April-May course “Transboundary Water Resources Management” was carried on with participation of representatives of the specialists from different branches (power engineering, water supply, ecology) and NGOs.

In September and November 2001 two sessions “International and National Water Right and Policy” were carried out with participation of the specialists from Dundee University (Great Britain) and Israel under DFID financial support. Representatives of the Ministry of Justice and Ministry of Foreign Affairs were invited to these sessions.

In December 2001 kick-off seminar was carried on the program “Improvement of Irrigated Faming Practice in Central Asia”. Another three sessions on this theme are to be conducted.

Program foresees Training Center's branch establishing in Dushanbe (under USAID sponsorship) which will serve specialists of South Tajikistan and Uzbekistan (Surkhandarya and Kashkadarya provinces).

Joint activity with Kyrgyz Minselvodkhoz is underway for Osh branch establishing under SDC sponsorship. This branch will serve the specialists of the Fergana valley from three countries.

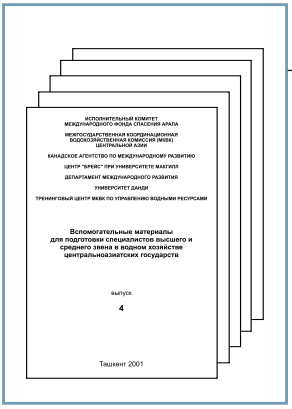
One more branch is to be opened in Dashhovuz, Turkmenistan for AmuDarya lower reaches and in Kyzylorda for rice growing zone.

PUBLICATIONS

Training Center's personnel together with SIC ICWC publications containing review of advanced world experience and perspective of water sector development in Central Asia have been issued:

- “Integrated water resources management” (2 volumes);
- “International and national water right and policy”;
- “Improvement of irrigated farming in Central Asia”;
- “Supporting materials for high and middle level specialists training in water sector of Central Asia” (5 issues).

Training Center's activity is regularly lighted in IFAS Bulletin twice a month, which is disseminated to more than 40 countries and is available through Internet.



Besides workshops Training Center intends to initiate regular consultations of water users and water organizations on water saving, water and land productivity increase as well as provide assistance on enhancing computer skills, software.

Training Center also plans to create subdivisions in each state of Central Asia that will provide rapid extension of water experts trained on its methods and dissemination of the most valuable thing - world experience in water use and saving, and will include new training courses on environmental issues and water quality, water supply and fish production in irrigation systems, thus covering other water use sectors.

Trainers and trainees of the ICWC Training Center

Awarding certificates to the graduates of the ICWC Training Center cources

ICWC Training Center:

- this is a way of communication and rapprochement of water experts
- this is an opportunity to discuss actual water management issues
- this is a forum for future partnership.

ICWC Training Center located in BWO "SyrDarya" building on the 4-th floor

Computer hall of the ICWC Training Center

11, Karasu-4, Tashkent,
700187, Republic of Uzbekistan

(998 712) 65 16 51

dukh@icwc-aral.uz
dukh@online.ru

www.tc.icwc-aral.uz

WATER AND WE

Pre-press and printing
in SIC ICWC