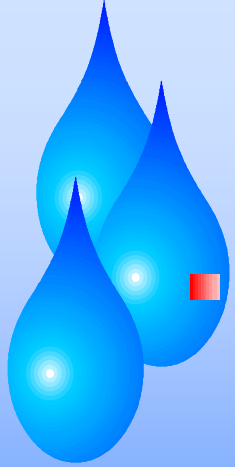


Development of Training Related to Integrated Water Resources Management and Capacity Building in Central Asia region

*Pulat Dj. Umarov
Director of ICWC Training Centre*

One of the main directions of water sector capacity building is professional development. Proceeding from this, SIC ICWC initiated establishment of Training Center for water management specialists and decision-makers of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan

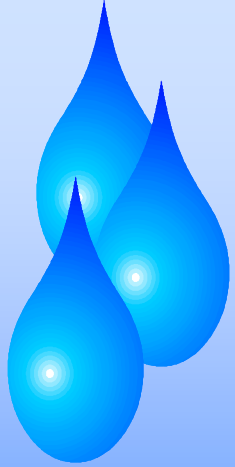




TC Objectives

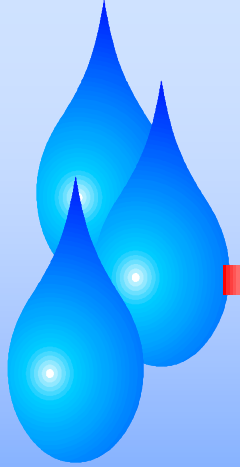
- Render advanced training to high and middle level specialists, inform them about technological know-how in the field of water and land resources management.
- Alongside with improving professional skills, TC promotes cooperation between the countries of the region in transboundary water resources use and management, development.
- Encourage policy and institutional reforms, which facilitate improvements in water management and nature protection;





Additional fields of training

Capacity building implies creating the solid reserve of professionals who are skillful in applying sophisticated state-of-the-art methods of management in such domains as informatics, economics and international and national water law. Therefore, there is a need of further improvement of training activity, which has become the basis for building regional consensus between countries, sectors, and governmental and non-governmental organizations.



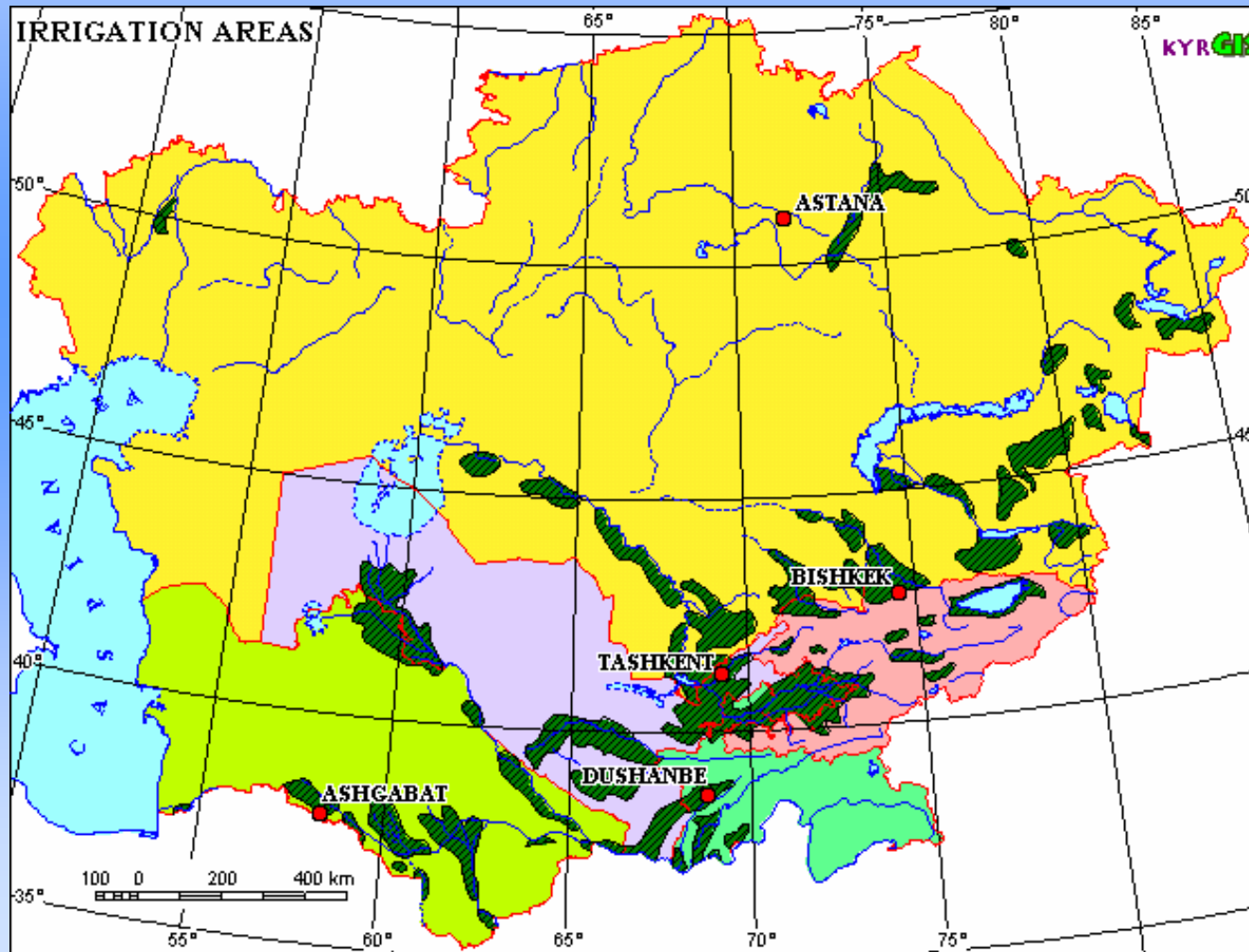
History

- **Opening Ceremony of the ICWC Training Centre was held in September 18, 2000;**
- **“Future Trainers Orientation and Strategic Planning Workshop” was held from September 18 through 25, 2000;**
- **To date over about 2000 specialists of water management, energy sector and ecologists, including representatives of Ministries of Foreign Affairs; Justice and NGO received high quality training.**



Sub-regional Branches

With the purpose of enhancing effectiveness of training by way of its decentralization and involving a larger number of specialists, new sub-regional branches of TC have been established



PROJECTS and SCIENCE

IWRM Ferghana, IWRM LOWLANDS , Strategic planning, IWRM Aral sea coast, Drainage in Central Asia , Water and education, Riwertwin.

PARTNERSHIP

McGill UN, UNESCO-IHE, BONN UNU, STUTTGART UN, MONPELLYE Un, MC ROYAL COLLEGE, IWMI.

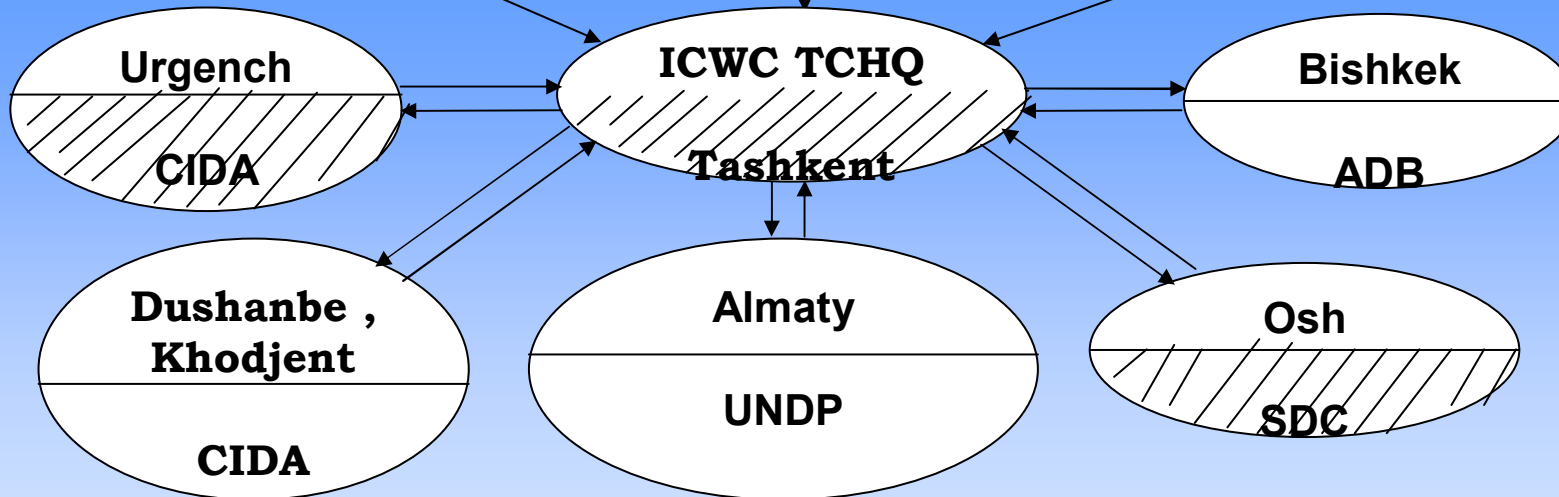
INFORMATION

INBO, ICID, ICID, WWC, IWRA, GWP SDC, WB, ADB.

Project proposals and scientific initiatives

Partnership contacts with the internat. community

CAREWIB project



EXTENSION SERVICE AND TRAINING FARMERS AND WUA.



Activities

We have developing a range of various training courses. For this we engage specialists from such adjoining sectors as energy, environment protection, water supply, hydrometeorological service. We've conducted the series of pertinent workshops in order to prepare the appropriate basis for promoting broader public participation in water resources management, and establishing non-governmental organizations network in every country, interacting with water management agencies. There is a need of organizing training on project management in the field of irrigation and environment protection, economic reforms and agricultural production.



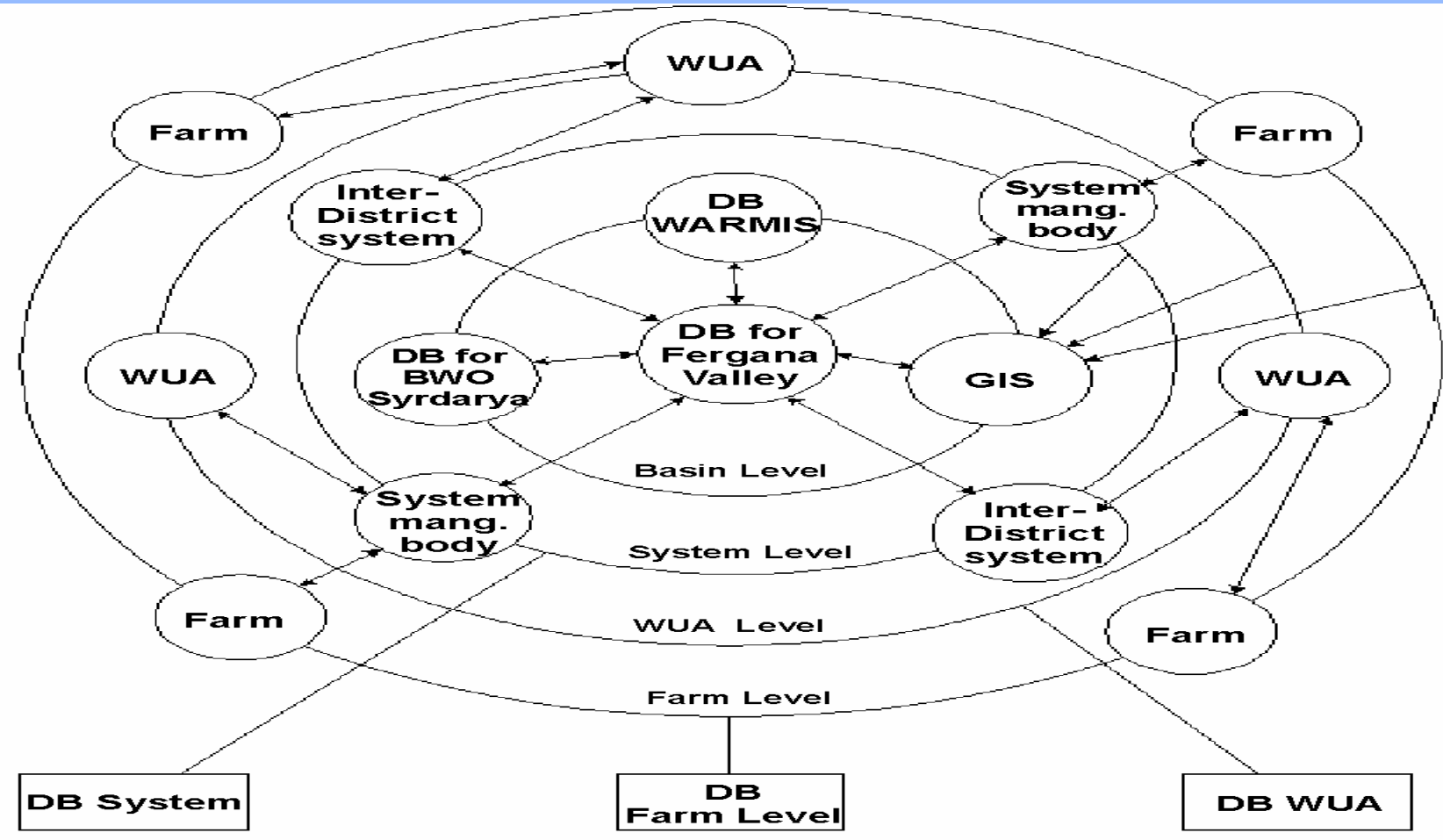
Training Development

Training activity is complemented by contribution from scientific-research and practical innovative results inputted by SIC ICWC. This gives the possibility to arrange a number of workshops for water specialists and farmers involved in several pilot projects. For this purpose TC makes use of such components of multi-level IS on the regional scale as:

- the information system developed within the previous WARMAP project. It includes database with geographic information system (GIS) and data of Remote Sensing Control over hydraulic structures on the regional level – Upper Level;
- the data base with geographic information system (GIS) on national and regional levels developed within the present IWRM Ferghana Valley project (Kyrgyzstan, Tajikistan and Uzbekistan), including such sub-projects as: - “The best practice of water saving”; - “Climate Change”; - “Copernicus”; - Middle Level;

Training Development (Continuation)

- Integrated Information Support System, which is now being developed, designed for management at the levels of Oblast, irrigation systems and WUAs – Lower Level.





Training Development

Combination of Training and Scientific research allows to get practical results and the example of “a success story” immediately becomes the asset of a broad range of specialists involves in the training network throughout the Aral Sea basin.

For example, the results of our work within the “Copernicus” Project concerning norms of water use, methods of their adjustment, introduction of GIS materials in water use planning have been continuously transformed into a training course of lectures used for professional improvement not only in Tashkent but in the Training Center branches as well.



Training Development

The resulting knowledge base will serve as the intellectual foundation for developing and implementing future permanent demonstration sites, providing farmers, WUA and water management organizations with consulting assistance in the capacity of extension service.





Training Development

For training we also use our set of models:

River basin models;

- **Models of a planning zone typically adopted in each planning zone of the Aral Sea Basin;**

- **Models for national water policy which satisfy water demands of each State, depending on their socio-economic development.**

This set of models can be adopted to assist in the creation of a methodology and data on an interconnected base, which will support the next phase of modeling:

- **for future development at the regional level as a tool in the preparation of Regional water Strategy;**

- **for future development at the national level as a tool in the preparation of National Water Strategy;**


- **for multiyear flow regulation by ICWC and for BWO multiyear planning;**

- **for annual planning of water allocation and correction of this planning in interests of BWO ,for operational tasks of water management by each BWO.**

Key Results

Influence on the decision – makers and Water Management Organizations

 **Integrated Water Resources Management now accepted as essential for Water Resources Management in Central Asia.**

- Water Law in Kyrgyzstan (2004)
- IWRM accepted as principal framework in Water Law of Kazakhstan (2003)
- Principal strategy of Water development of Tajikistan (2003)
- Degree of President Uzbekistan “About restructuring Water management system to hydrografing principle“ (2004)
- The creation of neutral apolitical forum where “round table” discussions can take place to build consensus on key issues such as:
 - Application of existing interstate and intersectoral agreements
 - Negotiation of new agreements at national and regional levels
 - Balance between needs of different economic sectors
- Water allocation in 2000-2001 (water scarce)
 - Unscheduled water releases (2002-2004)
 - Set up of Water User Associations – structure and function
 - Introduction of principle of payment for water
-  **Provided a better understanding of interrelations between Gender – Water - Poverty in Central Asia.**



Expected results:

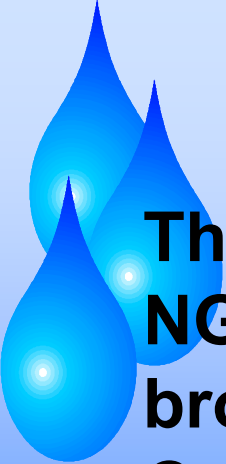
- To increase quantity of trainees up to 2000 persons annually (requirement of region – 7000 persons);
- Refreshment brains and understanding of new VIP staff, which are going through permanent replacement and changes in supporting of spirit water collaboration and improvement water and land management in five (but in future plus Afghanistan) states;
- Practical implementation of results best example approach and findings of different projects achievements thru auditorium of five states;
- To support by the methodological materials developing broad sphere of Extension service in five states, directed on the sharp increase productivity water and lands in new created WUAs and farms.

Future plans

Using our current capacity we intent to create:

- Training on the river basin management in terms of environmental protection and social development integrated management;
- Training on hydro-informatics and linkage between hydro-meteorology, water resources management and hydro-information systems;
- Training on issues of water quality management and improvement of environmental situation;
- Training in the field of financial mechanisms applied in water management;
- Training on methods of modeling prospective development and application of the models for direct water management;

Future plans



The specific direction of training is involvement of NGOs in establishing Water Partnership at the broadest layers of society by all target groups. Certain experience acquired by us (2-3 workshops with their participation, which we held within the IWRM Program) shows their large interest and potential in developing ideas rendered to them on a sufficiently wide scale.

At the same time it would be necessary and useful to develop the network of “young water protectors”, based on training for secondary school teachers and then for those schoolchildren who would be actively engaged in this network.