Rysbekov Yu.Kh.

About the RIVERTWIN Project under the European Community's FP6

Scientific-Information Center at the Interstate Commission for Water Coordination (SIC ICWC) of Central Asia together with partners from a number of European countries (such as Germany, Greece, the Netherlands, and Sweden) and from Africa is implementing research project RIVERTWIN (Regional model for integrated water resources management in twin-basins). SIC ICWC carries out research to identify key issues of water management in transboundary (Kazakhstan, Kyrgyzstan, and Uzbekistan) Chirchik-Akhangaran river basin (CAB). As a result of modeling and based on analysis off current management structure, it is planned to elaborate sustainable development scenarios that are to be submitted and presented to relevant authorities as a tool for strategic planning of socio-economic development in the river basin.

The river basin development scenarios should give answers to the following questions:

- socio, environmental, and economic goals of river basin development;
- expected anthropogenic impact on water quality under current and future water and land use and in view of climate change;
- recommended measures promoting sustainable water use;
- ecological resources and water services, based on predicted reserves and demand;
- ways to ensure equality of upstream and downstream interests;
- level of public participation in water management.

Project duration is 2004-2007, and the first year was completed.

The main first year project results are as follows:

- developed general (for CAB as a whole) and specific (for important directions) Concepts for project implementation, with particular focus on involvement of stakeholders in the development of CAB sustainable development strategy;
- analyzed water management structure, identified key problems of water use, and justified input parameters for the integrated model;
- prepared proposals on modeling and sub-models (economic, ecological, hydrological, etc.) interaction schemes, based on water users' opinion;
- identified problems and tendencies of sectoral development in CAB;
- workshops held with managers, experts, key personnel of government and administrations, water sector, environment, statistics and other stakeholders on water development strategy for CAB;
- provided information support for development of water management scenarios among the project partners from different countries;
- created database on water, soil, water quality, pollution sources and other ecological parameters, on agriculture, socio-economic indicators, and climate for modeling purposes.

In particular, an analysis of climatic scenarios showed that, by 2030, there would not be considerable changes in regional water amount, and flow could increase by 3-4% in the Syrdarya basin. At the same time, climate change would impact glaciation processes in the basins. By 2020, glaciers are estimated to lose about 17% of their volume in 2000 and their mass reduction would amount to 1/3 of volume in 1960 in CAB. This would increase flood frequency.

The RIVERTWIN Project would contribute to implementation of the European Water Directive in part of water management at basin level.