Supporting transboundary cooperation through data management for IWRM: a case from Central Asia

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Growing competition between sectors and states, increasing signs of climate change makes water resources management in Central Asia a challange. In fact this situation is more profound in transboundary river basins, where inter-sectoral competition is coupled with interstate aspects. Therefore, application of water resources planning, IWRM (Integrated Water Resources Management) principles in the context of transboundary river basins is the most crucial element for sustainable water management.

The case study presented in this paper implemented within the scope of Transboundary Water Management in Central Asia Programme (TWMP CA). TWMCA programme is funded by German Foreign Ministry and it is the part of the 'Berlin Process', an initiative by the German Federal Government to support the countries of Central Asia in water management and to make water a subject of intensified transboundary cooperation.

Modern water management decisions use manyfold data and information. Application of modern information tools: geogragraphical information systems, mobile communication technologies, remote sensing tools, modeling and data bases could support better decision making in water sector [1].

The intervention on DM for IWRM has been launched at the middle – operational level where the daily data and information on discharge, flows, quantity and quality of water delivery is produced. At these level complex interactions between different actors (WMO, farmers, industry, local government authorities) for water management is observed through defining water limits, distribution amounts and irrigated agriculture [2].

The preliminary results of the DM for IWRM activities have shown that in the study locations sucess of the activities will help to improve performance of the WMOs on planning, distribution of the water resources. The data previously scattered around different water management levels are gathered and systematized, made accessible for water professionals and decision makers. The water professionals of WMOs are able to produce their regular weekly, monthly and annual reports from the Data Base established at their premises.

In 4 states out of 5 National Water Management Agencies (NWMA) decided to apply nationwide the results of the DM for IWRM activities. In future, wide spread of Data Management tools and approaches will help to enhance more transparent water management decision making, easing of the pubic access to the water related data and information. More transperant and publicly avalible data also makes cooperation of different sectors and countries dependent from the same water source much easy then it is at present state.

References

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