

## **Water Management in the South Caucasus**

Water represents one of the most vital resources in the South Caucasus. However, despite its significance it still remains as one of the most poorly managed resources in this region. There is no system of river basin approach to water resources management developed nor there is a tradition of integrated resource management, which ensures that all water respective aspects such as social, economic, environmental are taken into consideration.

The Kura-Araks River that originates in Turkey and flows through Georgia, Armenia and Azerbaijan to the Caspian Sea is the major watercourse in the South Caucasus. The waters of the Kura-Araks river basin are of high significance for economic growth on both national and regional level and could be the basis of future cooperation. All three countries are dependent on this water basin as a source of water for agriculture, urban, industrial sectors and hydropower. Due to the absence of transboundary water management and monitoring both Kura and Araks rivers are heavily polluted from municipal and industrial wastes, as well as agricultural runoff and landfill discharges that cause not only environmental but also health problems to the region.

In order to assist South Caucasus countries in resolving the above mentioned environmental problems, initiate regional cooperation on water issues and instigate integrated water management practices in Armenia, Azerbaijan and Georgia, United States Agency for International Development (USAID) - Caucasus contracted with Development Alternatives, Inc. (DAI) in October 2000. The primary goal of the Project "*Water Management in the South Caucasus*" is to increase dialogue in order to develop sustainable water management practices in the region through increased cooperation in the management of water resources, integrated river basin planning, and bilateral agreements.

This three year Project envisages two Phases - Design and Implementation. The first phase identified that there is a need to perform certain technical activities, such as strengthen the legal and regulatory frameworks for transboundary water management, improve the institutional and physical capacity for monitoring river flows and water quality, etc. Therefore, during the Implementation Phase series technical activities related to the management of transboundary water resources for improved water Management in South Caucasus are being realized.

The first activity is concerned with *Monitoring water quality and quantity in the Kura- Araks River Basin* and is being carried out in close collaboration with Hydrometeorological Services (HMS) in all three countries. The main objective is to provide regional framework for use of the hydrological information to promote better management practices in the Kura-Araks basin. One of the major components of this activity is rehabilitation of seven demonstration hydrological

stations in the pilot areas of three countries and thus improve the process of data collection on water discharge and level.

The second activity of the project is *Introduction of geographic information system (GIS) in the process of water monitoring* through development of spatial databases and hydrological database management system and provision of necessary equipment and training in six institutions – National HMSs and Environmental Monitoring Centers in Armenia, Azerbaijan and Georgia.

As an integral component of effective regional cooperation is information sharing the third activity of the Project is related to *Facilitation of data and information exchange between three countries*. It should be noted that despite the outdated technologies economic difficulties hydromet services face today some of them are still sharing data both with each other and with neighboring countries. Within a framework of Data exchange activity training in database management is being provided for the technical personnel of HMS in each country as well as senior-level officials.

The objective of *Integrated River Basin Planning* activity is to demonstrate the principles of integrated river basin planning and water resource management at the local level. It focuses mainly on *capacity building* in two pilot areas Khrami/Debed and Alazani and is being carried out by local consortia represented by five selected NGOs operating in the region. Finally, there will be an integrated river basin plan developed with the participation of all affected stakeholders in the region.

The final, fifth activity of the Project related to the *Legal framework affecting transboundary waters* anticipates to result in improved understanding and awareness of national laws and international agreements in the region. Therefore, all major national laws and international conventions and agreements were carefully studied, information dissemination campaign on the existing laws and policies is being undertaken and bilateral agreements on data exchange in the region are being developed.

As a result of the implementation of aforementioned interrelated activities it is expected that there will be improvement in information quality and its sharing that will encourage dialogue and thus improve water management in the region.

The Project “*Water Management in the South Caucasus*” is being executed in close cooperation with other donors such as the United Nations Development Program (UNDP), Swiss Agency for Development and Cooperation (SDC), European Union (EU), World Bank providing assistance in the water sector in this region. It is believed that USAID Water Management Project will not only contribute to the promotion of sustainable water management practices in the South Caucasus countries, but also serve as a one more step forward in advancing regional cooperation that will be both economically beneficial and will assist in political stabilization.