Recommendations of Sub-regional Workshop
“Transboundary aquifers in Central Asia: An Integrated Approach for Multidisciplinary Study and Governance”.

On September 12-13 UNESCO International Hydrological Programme (IHP) with the support of the UNESCO Almaty Cluster Office for Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan and in collaboration with the Organization for Security and Cooperation in Europe (OSCE) in Astana, on September 12-13, 2011, hold in Almaty sub-regional workshop: “Transboundary Aquifers in the Central Asia: An Integrated Approach for Multidisciplinary Study and Governance.” The experts-hydrogeologists, representatives of competent government agencies, research institutions, NGOs and international organizations in Central Asia: Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan have been invited to participate in this event.

The aim of the workshop is to discuss progress on the study of Central Asian (CA) transboundary groundwaters, to get familiar with internationally supported groundwater projects, as well as to identify possible future projects on transboundary groundwater management in CA, which might be initiated by countries in collaboration with UNESCO and other international partners.

While discussing the current situation on transboundary aquifers researches, as well as governance issues and development of cooperation in this field, participants accentuated the need to promote the idea of sustainable groundwater management among decision-makers more actively to ensure that groundwater have been fully taken into account in plans and projects on integrated water resources management (IWRM) at the national and regional levels in all CA states.

In order to achieve this participants recommended: develop new requirements for monitoring transboundary aquifers, given the new socio-economic conditions; optimize the network for monitoring the transboundary aquifers, with particular attention should paid to monitoring of intensive irrigation areas and to those areas where the groundwater is sole source of drinking water; clarify the water balance of river basins, taking into account the groundwater; and create a permanent, working models of transboundary aquifers.

To develop this area the workshop’s participants recommended initiating a project to exchange experiences between the monitoring/hydro-geological services of Central Asian countries and conduct training on the use of automatic systems for monitoring groundwater on the basis of the GIDROINGEO Institute (Uzbekistan).

At the meeting it was pointed out that in the process of preparing national programs for adaptation to climate change in the countries of the region have faced with lack of data and models of underground waters deposits. In this regard, participants emphasized the importance of early initiation of national programs to study the role and response/reaction of groundwater on the processes of climate change. For CA region it is recommended to create a peer group of different countries’ representatives to conduct extensive research in this area as well as to attract professional hydrogeologists to develop adaptation mechanisms.

Competent state bodies were encouraged to prepare proposals on how to develop and coordinate between the countries the development of hydrogeological maps of transboundary aquifers. This work should begin with the initiation on bilateral basis of several pilot projects of mapping transboundary aquifers on the basis of agreed procedures and existing maps of scale 1:200,000 using GIS technology. CA states which currently do not have modern electronic databases on groundwater, are encouraged to study the experience of Kazakhstan and Uzbekistan in detail.
During the meeting participants discussed the ways of engaging to this cooperation of CIS Intergovernmental Council on the geology and other international organizations to assist countries in implementing projects on cross-border cooperation on aquifers. The experts mentioned the importance of increasing awareness among all concerned agencies and regional organizations dealing with groundwater issues. In order to do this, it is recommended to conduct at national level introductory workshops on groundwater use as well as on the role of groundwater in an interstate water distribution for the representatives of appropriate agencies, basin inspections, basin councils and the Ministries of Foreign Affairs.

Experts and interested agencies were advised to make better use of the portal of UNESCO’s International Groundwater Resources Assessment Centre (www.igrac.net) in order to collect and disseminate of information on Central Asia. Also, countries were invited to nominate representatives from Central Asian region to be included as the experts of the Internationally Shared Aquifer Resources Management Program (ISARM).

Workshop participants highlighted the need to improve the training system for professional hydrogeologists to bring them in line with modern standards. In this regard it was suggested that the interested agencies and donor organizations to implement projects on equipping specialized higher education institutions with modern technical and methodological literature, facilitate the exchange of experiences and knowledge as well as establish communication between teachers and students on aquifers sustainable management. UNESCO Cluster Office was requested to consider the possibilities of translation into Russian the modern versions of manuals and textbooks on transboundary groundwater study and disseminate them between the interested organizations in electronic format.

The workshop participants welcomed the initiative of UNESCO and UNDP on preparing a regional project to assist Central Asian countries in the sustainable use of groundwater and the potential of underground space, and laid emphasis on the importance of expanding project by including components aimed at strengthening the capacity of countries to assess, monitor, protect and use groundwater resources in a sustainable way, as well as at raising public awareness and promoting dialogue between the countries in transboundary aquifers management.

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