IWRM2: Groundwater in IWRM options and lessons

Organized by Institute for Global Environmental Strategies (IGES)

Meeting room # D4 Arn-chan, 16 May 2013 at 13:30-16:30 hrs

The workshop has identified and emphasized that better coordination between groundwater and surface water management can lead to successful implementation of IWRM in Asia. IWRM role is central for managing groundwater buffer, a key for improving resilience and water security. Groundwater is linked to water security issues in various ways – different sectors, different areas, and different socio-economic conditions. Groundwater is vital for agriculture, domestic and industrial water supply, and ecosystem services. However, groundwater is under pressure from over exploitation, contamination, and climate change. In order to translate the concept into practice, the workshop recommends following set of measures for better visualization of groundwater during IWRM implementation and acceleration of co-management of surface- and groundwater resources:

Recommendations to the Leaders, Policy Makers and Implementing Agencies

- Considering increasing water related disasters, importance of groundwater in emergency situation should be highlighted as one of the integration options;
- Adaptive approach should be applied by balancing top-down and bottom-up approaches for implementation of IWRM from conjunctive use side of surface and groundwater;
- Change of agricultural policies such as expansion of irrigated areas in the future should be well considered to ensure sound allocation of groundwater. For this, it is necessary to improve information of available surface- and ground-water resources.
- Sustainable groundwater use should be built on the proper understanding of users' behaviors and needs
- Strong leadership is necessary to promote integrated surface and ground-water-management, since water resources has become a very limited and scarce in the region;
- Transboundary aquifer (TBA) management is still at its infancy in Asia-Pacific region. Strengthening cooperation for joint legal and institutional mechanism is in need to manage intra- and inter-nationally shared TBA. It will bring overall benefits of all to avoid potential conflicts in future.
- Careful and strategic development of groundwater resources is necessary, since groundwater is a highly vulnerable resource and could take a longer time to reverse back to original situation once problem has occurred.
- Necessity factors should be integrated under IWRM process to meet specific needs of the Pacific small island countries to cope with climate change impacts, where people

exclusively rely on thin groundwater lens for water supply-sanitation, irrigation, and businesses.

- Sharing experiences and knowledge among different countries of the region should be further promoted.