



Mashhad Wise Water Forum: a path to sustainable water resources management in a semi-arid region of Iran

Seyyed Alireza Tabatabaee (1), Shahnaz Neyshaboori (1), Ali Basirat (1), Samaneh Tavakoli Aminiyan (1), Ahmad Mirbehroozian (1), Hossein Sakhdari (1), Mojtaba Shafiei (2,3), and Kamran Davary (4)

(1) Mashhad Water and Wastewater Company, Mashhad, Iran., (2) Hydroinformatics Department, East Water and Environmental Research Institute (EWERI), Mashhad, Iran., (3) HydroTech Toos Consulting Engineers, Mashhad, Iran., (4) Water Engineering Department, Faculty of Agriculture, Ferdowsi University of Mashhad, Mashhad, Iran. (k.davary@um.ac.ir)

Water is key to sustainable development especially in semi-arid regions in which the main source of water provision is groundwater. Water has value from a social, economic and environmental perspective and is required to be managed within a sound, integrated socio-economic and environmental framework. Mashhad, the second big city in Iran, has been faced with rapid growth rates of population and economic activities. The groundwater in Mashhad basin has been overexploited to meet the increasing trend of water demand during the past 20 years. Consequently, the region has faced with water scarcity and water quality problems which originates from inefficient use and poor management. To tackle the water issue on a durable basis, within the economic, ecological, and political constraints (i.e. the integrated water resources management, IWRM concept), a Non-Governmental Organization (NGO), named as Mashhad Wise Water Forum (MWWF), has been established in 2013 that encompasses contribution of experts from academia, industry, and governmental policy-makers. The MWWF considers the UN-Water IWRM spiral conceptual model (which contains four stages: Recognizing and identifying; Conceptualizing; Coordinating and planning; Implementing, Monitoring and Evaluating) by implicating participatory water management (water users' involvement) methods in Mashhad basin. Furthermore, the MWWF has planned to look at all dimensions of water crisis (i.e. physical, economic, policy and institutional) particularly institutional dimension by gathering all stockholders, beneficiaries and experts in different parts of water policy making in Mashhad basin. The MWWF vision for Mashhad basin is achieving to sustainable equilibrium of water resources and consumptions in the basin by the prospect to 2040 year. So far, the MWWF has tried to understand and deal with regional diversity in legal systems as well as conflicts between private interests and public welfare in water allocation and management. At the moment, the key achievement of MWWF is "the codification of a strategic guideline for sustainable equilibrium of water resources and consumptions" in the basin, which has been prepared by cooperating of more than 4800 people per hour work. In this paper the procedure that the MWWF has passed is outlined.