Holistic approach for water Resource Management

A more integrated and broader approach to water sector polices and issues are important because of water's special nature as a unitary resource. Rainwater, rivers, lakes, groundwater and polluted water are all part of the same resource, which means global, national, regional and local actions are highly interdependent (Rogers, 1992). Water use in one part of the system alters the resource base and affects water users in other parts. Dams built in one country frequently reduce river flows to downstream countries for years afterwards, thereby affecting hydro-electric and irrigation capacity. When a city overpumps a groundwater supply, stream flows may be reduced in surrounding areas. Some human actions at local levels may contribute to climate change, with long-term implications for the hydrological system worldwide.

The approach involves the management of fresh water as a finite and vulnerable resource and the integration of sectorial water plans and programmes within the framework of national economic and social policy (UN, 1992).