

Between Cup and Lip: Averting Water Scarcity in the Land Between Two Rivers

Ray Salvatore Jennings*

While much attention has been paid to questions over who will control Iraq's oil and gas wealth, access and control over water will be an equally explosive source of political instability for the new government. The Tigris and Euphrates have sustained the population and served the agrarian economy of the region for several millennia. But each is being systematically dammed by Turkey's Southeastern Anatolia Project, promising to reduce typical downstream flows of the Euphrates from 20 billion cubic meters to just 9. And what amounts to an international water crisis is playing out within Iraq, with Kurdish authorities unilaterally appealing to international donors for assistance to dam tributaries to the Tigris. Despite constitutional provisions that make water resource management the authority of the central government, as the Kurds go so might other "constitutional regions" that may form within the year. Along with oil and regionalization, reaching an agreement over water will be yet one more bitter challenge to a government that must navigate such dilemmas to establish its credentials.

Falling water levels are currently impacting hydropower generation, health, and incomes. The World Bank and The United Nations Development Program report that the hydropower gap contributes to the overall shortfall in electricity. Inconsistent irrigation service contributes to the poverty of farm households whose average income is now less than a \$1 a day. Rural employment has plummeted and 30% of farmers are said to have left farming. Only 20% of Iraqi households now have reliable access to safe drinking water. Contaminated water supplies and poor disposal of sewage create health problems that overwhelm the already stressed health system. And as water levels decrease the concentration of pollutants increases as more of the flow is composed of drainage effluent from farms, manufacturing and untreated waste. Child mortality under the age of one continues to increase, today estimated at 112 per 1000 children (up from 109 in 2004 and 16 in 1990). Water related diseases are responsible for about 25% of all deaths of children in Iraq.

Inefficient water use also contributes to the problem. Typical irrigation techniques involve flooding, crop densities are typically low and there is ambivalence over better, more drought resistant varieties of crops. Poor irrigation practice, lowering water levels and decreasing water quality are an especially injurious combination for agriculture that often results in increased salinity and lower soil productivity. Generally, there is little penalty for waste. Incoherence between relevant ministries and regional authorities, lack of enforcement capacity and a traditional deference to Baghdad weakens accountability and makes local monitoring and conservation difficult. Any adjustment to Iraq's water balance must address water use and conservation, improve farm water practices, provide financial incentives, strengthen enforcement of quotas and enhance participation in the local management of allocated water resources.

On the supply side, Iraq must contend with the consequences of years of neglect in conducting international water diplomacy. Tri-lateral negotiations on water between Syria, Turkey and Iraq were last held in 1996 with mixed results. These should be restarted, observed by the EU perhaps. International pressure to curtail Kurdish efforts to independently frame its water policy will be critical, lest other future “regions” in Iraq follow the lead. Increased ability to impound and increase water storage, repair levees and canal systems, and upgrade leaky delivery systems in urban areas, now only 32% efficient, will be essential as well. But most important will be to embed any initiative to restore water balance within the social and political context of demand and supply. If only this were simply a “bricks and mortar” problem.

Like most impulses in addressing water security issues in the aftermath of conflict, the initiatives of most donors are vital. But they are also insufficient to promote sustainability, stability and wealth. The United States Army Corps of Engineers has been the principal player in evaluating the status of water assets in the country and helping the Ministry of Water Resources develop its own capacity to assume macro-level responsibility for the sector. The U.S. is also currently programming approximately \$1 billion for several urgent rehabilitation and reconstruction activities, down from the \$4.3 billion planned in 2003. Japan has focused its assistance on the rehabilitation of sewage treatment plants and the supply of water treatment units in two governorates. The World Bank is focusing on the restoration of basic water supply and sanitation services in the poorest areas of Baghdad and nine governorates throughout Iraq. Bricks and mortar, and centralized capacity-building all.

Left unresolved, inequality in water access, degradation of water quality, poor sanitation conditions, and politicization of water resources may present an insurmountable challenge to achieving not only short term redress of an exhausted public’s grievances but also the long term stability of the republic.

***Author bio and affiliation**

Dr. Jennings is a senior conflict expert with extensive experience starting, designing and managing reconstruction and post-war transition programs. He is currently a Senior Advisor to the World Bank and Creative Associates International on social safeguards and transitional development. He also teaches at Georgetown and Syracuse Universities.