

Advancing Water and Sanitation in Afghanistan¹

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Summary

Afghanistan is a water short country and faces many challenges in supplying adequate water for agriculture, human consumption, sanitation, and economic development. Years of war and neglect has severely impacted the existing water infrastructure that provides irrigation water, as well as domestic water to the vast majority of the people. Currently, less than 30% of the agricultural farmland receives adequate water. Likewise, modern domestic water supply and waste treatment systems do not exist. Only 5% of rural residents and 16% of urban have access to sanitation systems, and only 11% of rural residents and 19% of urban have access to improved drinking water systems.

Conflicts over water could affect the internal and external stability of Afghanistan. These concerns include disputes between upstream/downstream water users, groundwater depletion (which affects the urban and industrial sectors the most), refugee and displaced persons, and transboundary water conflicts.

Under the Water for the Poor Act (Public Law 109-121), the US Embassy in Kabul has been directed to report on the needs, opportunities and our programs in three specific areas: infrastructure investment, protection of public health, and transboundary water. However, while water has been identified as a priority program area by the Afghan government, the US Embassy and USAID in Afghanistan is reducing its funding and involvement in Water.

On transboundary water issues, the Afghanistan Reconstruction Group (ARG), US Embassy-Kabul has cooperated with the US Embassy-Dushanbe on establishing the first water talks and water-related cooperative programs between the two nations. However, the Embassy and USAID has not committed to continued support for this initiative.

Report

Under the Water for the Poor Act (Public Law 109-121), the Secretary of State in consultation with USAID is to begin a long-term process to develop and implement a strategy to improve US efforts on water and sanitation. Under this act, the US Embassy in Kabul has been directed to consider activities, and to report on programs and opportunities in three specific areas: infrastructure investment, protection of public health and transboundary water. In addition, the Embassy is to report on how US efforts on water and sanitation can be strengthened in Afghanistan

In GOA (Government of Afghanistan) and NGO strategic planning documents, Water is universally recognized as a key, and usually as the key to Afghanistan's future.² Water

¹ by Guy Fipps, PhD, P.E., Senior Advisor for Water, Afghan Reconstruction Group, US Embassy, Kabul.

² Examples: Regional Economic Cooperation Framework, 2005; Interim Afghanistan National Development Strategy, 2006; The Water Sector Development Plan, 2005-2015, Ministry of Energy and

shortages, internal water conflicts, and international water disputes will increase and become more serious, with destabilizing consequences, unless effective programs are implemented.

Afghanistan is a water short country and faces many challenges in supplying adequate water for agriculture, human consumption and economic development. Years of war and neglect has severely impacted the existing water infrastructure that provides irrigation water, as well as domestic water to the vast majority of the people. Currently, less than 30% of the agricultural farmland receives adequate water.

MEW (Ministry of Energy and Water) documents state that 85% of the population is involved in irrigation dependent agriculture, 98% of all water diverted from the rivers is used by agriculture, with 60% or more of that water lost to seepage and due to poor on-farm water management. These same irrigation canal systems also provide drinking water to the vast majority of the population.

Improving irrigated agricultural production and livelihoods is critical for maintaining social order. Increasing the water supply to farmers to pre-war levels would improve yield and economic return and reestablish the two-crops per year system practiced by many Afghan farmers. This income would help counter the pressure to grow poppies, a crop with modest water requirements and high economic value.

New irrigated land needs to be opened in order to resettle the large numbers of refugees living in Pakistan and the many displaced persons in Afghanistan. Some believe that the continuing insurgency would be greatly reduced by the resettlement of these peoples into Afghan society and agricultural system.

Most of the population does not have access to improved drinking water and waste treatment systems. Only 5% of rural residents and 16% of urban have access to sanitation systems, and only 11% of rural residents and 19% of urban have access to improved drinking water systems. As a result, Afghanistan faces high incidences of water and sanitation-related diseases, such as cholera, dysentery, scabies and trachoma. UNICEF estimates that up to half of the deaths of all children under the age of five are related to diarrhoeal disease, caused by inadequate sanitation, lack of clean drinking water and poor hygiene practices.

The significant increase in urban populations brought about by high numbers of returnees in the few years has placed particular strain on the water and sanitation systems in Afghanistan's major cities, with households increasingly using contaminated ground-water from shallow wells for drinking and food preparation.

Afghanistan faces the combined challenges of address emergency repairs of its existing infrastructure, providing clean water to the population, as well as modernization in order to promote economic development and to be able to compete in the world market.

Conflicts over water could affect internal stability. These concerns include disputes between upstream/downstream water users, groundwater depletion (which affects the urban and industrial sectors the most), refugee and displaced persons, and transboundary water conflicts.

Except for winter wheat and similar plants that mature in early spring, all crops must be irrigated in Afghanistan. The lack of sufficient volumes of water for crop production may also be contributing to the expansion of poppy production which requires less water and has higher returns than traditional crops.

Three major and several smaller river systems originate in Afghanistan and flow into the bordering nations of Pakistan and Iran. The longest river in central Asia, the Amu Darya originates in Tajikistan and Afghanistan and flows to the downstream nations of Uzbekistan and Turkmenistan. Additional diversion/use of water from these rivers in Afghanistan may spark international disputes.

Iran is eyeing the Helmand River and wants to revise the existing agreement on the minimum amount of water that Afghanistan must allow to flow into Iran. Reports are that during the Taliban rule, Iran entered Afghanistan and dredged 30 km of the Helmand River in order to divert the flow to storage basins where the water is pumped to other regions in Iran. The net result is decrease flow to Afghan farmers in the region and an increase in the flow taken by Iran to levels exceeding the treaty amount.

Internal Afghan conflicts between up-stream and down-stream water users are increasing. These disputes are beyond the capability of the traditional tribal systems to deal with, and may lead to regional conflicts within Afghanistan. For example, reports are that Kabul is planning a dam on the Panjshir River to help meet the growing demand for municipal and industrial water in the city, while Kapisa Province is planning on using the Panjshir to supply water for refugee resettlement and expansion of irrigated land for economic development.

Water resource management in Afghanistan involves balancing water demands for irrigation, hydropower, environmental, water supply, sanitation, groundwater, while also considering international treaties and flood control issues. This will involve creating national water policies and regional watershed management plans. A major challenge is how to integrate the ancient Afghan Mirab system into the more complex interrelationships and water competition in a regional river basin system as proposed in the draft Afghan water laws.

Hydro-power generation water requirements differ from that of irrigation in the timing and amounts of water needed. Peak energy demand is in winter, while peak irrigation demand occurs during the summer. Thus, any hydro-power development must consider the seasonal demands of agriculture to avoid conflicts between the two uses.

The major players in the water sector are the World Bank, ADB (Asian Development Bank) and the EU (European Community). The World Bank and ADB have approached the US about cooperating on upcoming programs and projects. On the other hand, for 2006-2007, USAID has terminated all water programs except for some small irrigation works as part of the planned ASAP program and USGS funding at \$5 million for resource assessment. However in the past, as a percentage, USAID had spent only a small fraction of our total funding on water, and that amount of money spent has been declining: from 3% in 2004 to 1 % in 2005³.

Besides leaving large holes in the international water effort in Afghanistan, not being actively engaged in Water will make it difficult for the US to exert influence over other donors. It likely will also affect our ability to be a major player in other transboundary issues, since Water is a key limiting factor affecting the prosperity and economic development of all the surrounding countries.

The Afghan-Tajik Water Initiative

The Afghanistan Reconstruction Group, US Embassy – Kabul cooperated with the US Embassy in Dushanbe to organize a visit of Senior Afghan water officials to Tajikistan August 2-9 to discuss bilateral cooperation in developing joint projects along the Amu Darya and Panj Rivers, which form the Afghan-Tajik border.

The highly successful visit initiated a practical dialogue and strong partnership between government officials, resulted in two draft Memorandums of Understanding, and fostered an optimistic and eager outlook on transboundary water cooperation which will help to integrate and develop the economies of Tajikistan and Afghanistan by harnessing hydropower and developing irrigation systems for commercial agriculture. Both governments strongly welcome the U. S. role in fostering technical capacity and political will in both countries towards resolution of complex and sensitive transboundary water issues.

The US Embassy-Kabul priorities and limited USAID-Afghanistan funds have prevented a current commitment to continued support of this initiative. USAID however, did contribute financially to support the visit of August 2-9. The balance of the travel expenses for the Afghans were covered by a grant from the US Embassy – Dushanbe.

³ Approximate money spent on Water programs: 2004 - \$40 million out of \$1.4 billion; 2005 - \$13 million out of \$1.4 billion.