Afghanistan's Water Resources and Pollution

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The mountains of Afghanistan have always served as a natural storage facility and source of water. In fact, more than 80% of Afghanistan's water resources originate in the Hindu Kush Mountains. The snow accumulates in the winter, and melts in the spring. This, along with the melting of the glaciers in the summer feed important rivers like the Amu Darya. The Amu Darya basin alone holds more than 55% of Afghanistan's water resources.

Unfortunately, drought and warming of air temperatures have reduced the size of the glaciers in Afghanistan. Major glaciers in the Pamir and Hindu Kush have considerably shrunk, while smaller ones have been reported to have completely vanished. A severe drought in 2001 further prevented the feeding of the Sistan wetlands by the Helmand river, and unfortunately by 2003, satellite images showed that 99% of the Sistan wetlands were dried up. As a result, much of the Sistan basin's natural vegetation has died, and an increase in soil erosion has occurred, as well as the spread of sand on to roads, fields and settlements. Waterfowl were also severely affected as the Sistan wetlands were very important to the birds. In the mid 1970s, there were close to 150 different species of waterfowl that were identified in the area, few to none remain today.

Nationwide, the majority of Afghan households do not have access to safe drinking water. Because of unsafe sanitary facilities, water contamination is a major issue in Afghanistan. Many water sources are contaminated with harmful bacteria such as E. Coli which sickens and kills many people, especially children and the elderly. Valuable water resources are polluted as a result of the disposal of industrial and domestic liquid wastes. It's common for household discharge and street waste to end up in streams. Moreover, in some bodies of water, the amount of hazardous chemicals fail hygienic standards. Even in the capital of Kabul, there are places where the water quality is so poor that it is unsafe for consumption. A Water Law has been developed and will hopefully address the pollution, and water quality standards, however, it is only in a draft form and still in the legislative pipeline. The government must put together a plan to ensure safe drinking water for its citizens, as well as assess and develop adaptation plans for the impacts of climate change on Afghanistan's water resources.

The reduction and loss of Afghanistan's glaciers, drought, war related damage to the irrigation systems it does have, poor management, waste, pollution, and the fact that over 80% of Afghans are engaged in agriculture and livestock-raising, makes the country extremely susceptible to water shortages.

Afghan Water Facts

- 80% of Afghanistan's population is engaged in agriculture, including livestock-raising, and agriculture in Afghanistan uses almost 99 per cent of the water resources.

- The three largest river basins in Afghanistan are the Indus, Amu Darya and Helmand.

- The most irrigated provinces are Balkh, Kunduz and Jowzjan. The least irrigated provinces are Laghman, Kunar and Bamiyan.