

# Strengthening Urban Water Supply



## Context

Clean drinking water is a precious resource for people living in Afghanistan. While there has been some progress in improving the supply of clean water in the country, the World Health Organization (WHO) reports that only 31% of Afghanistan’s urban population and around 5% of the rural population have access to a regular supply of drinking water. Many Afghans still draw their water from springs, small river courses, traditional rainwater collection systems, domestic wells or boreholes. Supply is irregular and the costs of obtaining water, for instance from privately-operated tankers, are high. Access to clean and affordable water is particularly restricted in rural areas.

Large quantities of well water are lost due to leakages in the pipeline networks connecting wells with households and as a result of overexploitation and technical issues. Additional

pressure is quickly placed on water resources as a result of improper use or the absence of preventative measures, which leads to conflicts over distribution in some regions. Afghanistan is also one of the countries most severely affected by climate change.

There are even more serious issues regarding wastewater management. Large amounts of untreated wastewater are released directly into rivers or seep into the soil. Contaminated drinking water and untreated wastewater have highly adverse impacts on the health of the population, causing illnesses such as cholera and diarrhoea. Experts estimate that 30% of all diseases are caused by contaminated water. In 2006, the city of Kabul, with funding from the World Bank, developed an initial plan for improving wastewater management, though this has not yet been implemented.

Overview	
Programmes	Water supply Kabul (Phases 1-3) Kabul Urban Wastewater Management (planned) Urban Water Supply in Northern Afghanistan (Northern cities 1-2)
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Partners	Afghan Ministry of Urban Development and Housing (MUDH) Afghan Urban Water Supply and Sewerage Corporation (AUWSSC)
Implementing organisation	KfW
Provinces	Kabul, Badakshan, Baghlan, Balkh, Kunduz, Takhar
Programme objective	The supply of high-quality drinking water to Kabul and selected provincial towns in Northern Afghanistan has improved. Locally appropriate wastewater management technologies have been identified for the various urban districts of Kabul.

## Objective

The supply of high-quality drinking water to Kabul and selected provincial towns in Northern Afghanistan has improved. Customised wastewater management technologies according to local needs have been identified for the various urban districts of Kabul.

## Measures and Results

Since 2004, KfW has been working on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) to ensure people in Afghanistan have access to clean drinking water. Alongside construction measures to improve the water supply and wastewater management system in Kabul, KfW is also implementing numerous projects in various cities and municipalities in the North of the country. The development of a new wastewater management strategy for Kabul is also planned.

## Water for Kabul

In the four districts of Kabul, new drinking water wells are being built which will supply 111,000 cubic metres of water per day. A modern drinking water supply network is being established through the construction of new collector and connector pipes, the expansion of pumping stations and the laying of main and secondary pipes in the city centre, and the maintenance and repair of existing infrastructure. 21 new wells are now in place, supplying residents with clean drinking water. Each day, around 54,000 cubic metres of water can now be fed into Kabul's supply networks. Since the project began, the number of households connected to the water supply system has risen from less than 10,000 to nearly 54,000. By 2020, around 87,000 further residents, across seven urban districts, will gain access to clean drinking water. In addition, water losses due to technical faults in the pipeline system have fallen from 70% to 50% and are to be reduced to 40% in the coming years. The aim is also to ensure that there will be no malfunctions or interruptions to water flow in the new supply area.



Around **67,100** new and restored household connections in



Losses from pipeline leakages reduced from **70%** to **50%**

The expansion of Kabul's drinking water supply system is co-financed by the French development agency Agence Française de Développement (AFD) and the United States Agency for International Development (USAID).

## Improving the urban drinking water supply in Northern Afghanistan

In the Northern Afghan cities of Balkh (Balkh province), Feyzabad (Badakhshan province) and Iman Sahib (Kunduz province), new well fields have been developed, and water reservoirs,

pumping stations and distribution and supply networks have been built. Thanks to newly established household connections, many residents now have direct access to drinking water in their homes. Those living outside the area covered by the water network can collect their water from public standpipes. Households in Pol-e Khomri (Baghlan province), Taloqan (Takhar province), Mazar-e Sharif (Balkh province) and Nawabad (Badakhshan province) have also received new water connections.



Around **125,000** water connections in Northern Afghanistan

## The impacts achieved as a direct result of the construction measures are considerable:

- In the city of Balkh, 764 household connections and six standpipes have been financed, supplying around 9,500 people with clean drinking water. The construction of wells and the expansion of storage capacities and distribution networks have also laid the foundations for around 36,000 people to gain access to clean water.
- In Iman Sahib, 1,800 households have been connected to the water supply network and six new standpipes have been financed, supplying over 20,000 people with drinking water.
- New water connections have provided 38,000 people in Pol-e Khomri, 13,000 people in Taloqan and 45,000 people in Mazar-e Sharif with access to clean water.
- In Feyzabad, planning is under way for over 3,500 household connections and 41 standpipes, which will supply water to around 85,000 people.

In total, around 125,000 water connections (household connections and standpipes) have been restored or newly constructed since 2004.

## Improving the sanitation system in Kabul

KfW is supporting the Afghan government in drafting a master plan for wastewater management and drainage in Kabul. This involves the fundamental revision of an existing plan from 2006, adapting it to current needs and extending its scope to include implementation, operation and maintenance and the development of the necessary institutional capacity. The process of drawing up the master plan began in 2017. Half of the associated costs will be borne by the Afghan government. Comprehensive cooperation between the Afghan government and multilateral donors is required in order to ensure the effective implementation of the new concept, which is based on a combination of tailored, decentralised wastewater management technologies for the individual urban districts.

January 2017

## Contact:

**Dr Andreas Schneider**

Director, KfW Office, Kabul

E andreas\_2.schneider@kfw.de

Implemented by:  
تطبيق کننده:

**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

**KfW**