

India's Controversial Afghanistan Dams

Indian-built dams in Afghanistan are causing trouble with downstream states Iran and Pakistan.

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India is expected to begin work on the \$236 million Shahtoot Dam project on the Kabul River in Afghanistan in the coming weeks. Scheduled to be completed in three years, the dam has evoked concern in the lower riparian country, Pakistan. In addition to reducing water flow into Pakistan, the project could erode already fraying relations between Afghanistan and Pakistan.

Simultaneously, the project, which is expected to “bring economic prosperity” to Afghans, will “pump up” Afghanistan’s ties with India, Khan Wali Khan Basharmal, technical deputy to the Administrative Office of the President of Afghanistan, told *The Diplomat*.

The 700-km-long Kabul River originates in the Hindu Kush Mountains in central Afghanistan. It flows eastward past the Afghan cities of Kabul, Surobhi, and Jalalabad. East of Jalalabad, it is joined by its main tributary, the Kunar River, which originates in Pakistan, where it is known as the River Chitral. Afghanistan and Pakistan are thus upstream and downstream basin states with regard to the Kabul River.

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After crossing into Pakistan’s Khyber Pakhtunkhwa province, the Kabul River runs past Peshawar and Nowshera and joins the mighty Indus River near Attock, northwest of Islamabad.

The Kabul River Basin extends over nine Afghan provinces and two Pakistani provinces. Nearly 25 million people live in this basin and the Kabul River and its tributaries play a [significant role](#) in their lives and livelihoods. It is the sole source of drinking water for almost 7 million Afghans and Pakistanis.

The Kabul River's value to Afghanistan has grown especially in the wake of the severe water crisis that has gripped its capital, Kabul, over the last several decades.

These water problems can be attributed in part to its geography; Kabul is located in an arid region, which receives an annual rainfall of just around 362 mm. In addition, city's population has increased significantly, with tens of thousands pouring into the capital in search of security and jobs. Demand for water has consequently increased.

Furthermore, Kabul's water infrastructure, as in the rest of Afghanistan, is in a decrepit condition and a growing number of people are drilling wells and digging deeper for water. Ground water levels are therefore falling and this water is contaminated. According to Afghanistan's Urban Water Supply and Sewerage Corporation, 68 percent of Kabul's population doesn't have [access to piped water supply](#) and just 10 percent of its residents have access to potable water

It is in this context that the value of the Shahtoot Dam project must be seen.

To be built on the Maidan River (an upper tributary of the Kabul River) in the Chahar Asiab district in Kabul province, the Shahtoot Dam will have a storage capacity of 147 million cubic meters (MCM) of water. It is designed to meet the [drinking water and sanitation needs](#) of roughly 2 million of Kabul's roughly 6 million residents and irrigate about 400 hectares of agricultural land in Chahar Asiab and Khairabad districts in Kabul province.

While Afghans look to the Shahtoot Dam with hope, across the border in Pakistan the mood is more apprehensive.

Like Afghanistan, Pakistan is a water-stressed country and the overwhelming majority of its people depend on agriculture to earn a living. And while it is the Indus River that dominates Pakistan's geography and economy, the Kabul River is significant too. The waters of this [river and its tributaries are "indispensable"](#) to meet the needs of 2 million residents of Peshawar city as well as for irrigation of the Peshawar Valley and parts of Tank, Dera Ismail Khan, Banuri, and North Waziristan. The Kabul River and its tributaries also augment the waters of the Indus River; they pour 20-28 million acre feet (MAF) of water into the Indus at Attock. Importantly, the [Kabul River powers](#) the 250-megawatt Warsak Dam in Pakistan, which generates 1,100 gigawatt hours of electricity per year.

Pakistanis fear that the benefits they draw from the Kabul River would be jeopardized if Afghanistan builds more dams on this river. According to the Pakistani media, Afghanistan [plans to build 12 hydropower projects](#) with capacity to generate 1,177 MW of electricity on the Kabul River. When completed, these will store 4.7 MAF of water for Afghanistan's use, "squeezing the flow in the river reaching Pakistan."

The impact will be strongest on Khyber Pakhtunkhwa province. Decrease in water flow there will [reduce crop productivity](#) in the three currently fertile districts of Peshawar, Nowshera, and Charsada.

"Pakistan's concern is unrealistic and tangential," Asadullah Meelad, a Transboundary Water Management expert and senior Legal Advisor at Afghanistan's Ministry of Public Works, told *The Diplomat*. "As a tributary to the Kabul River in the upper part of the Kabul River Basin, the Maidan River contributes to less than 0.5 percent of the total flow of Kabul River at the Dahka trans-boundary station."

The project "is not going to cause any significant harm to the downstream watercourse state [Pakistan]," he told *The Diplomat*.

Instead, according to Meelad, "Pakistan is more concerned about the growing

relationships between Kabul and New Delhi on various fronts, including water.”

Indeed, reports in the Pakistani media focus on concerns over India’s central role in the dam project and its implications for Pakistan. Pakistan is already worried that in the event of war with India, New Delhi could choke the Pakistani economy by shutting off the waters of the Indus River, which originates in India. Will its strong relations with Kabul and its role in the Shahtoot and other dam projects on the Kabul River enable India to choke the flow of that river’s waters as well?

As for Afghanistan, Pakistan is worried about its own “unilateral water development strategy.” It is building “several storage dams” on the Chitral River “without notifying Afghanistan,” Meelad pointed out. This has “caused significant harm to water utilization in downstream Kunar Province,” he said.

In addition to tensions with Pakistan over the waters of the Kabul River, Afghanistan is struggling with another neighbor, Iran, over sharing of the waters of the Harirud and the Helmand Rivers.

The Indian-built \$290 million [Afghanistan-India Friendship Dam](#), known earlier as the Salma Dam, in Afghanistan’s Herat province has reduced Kabul’s dependence on its neighbors for electricity and is irrigating around 75,000 hectares of land. But downstream in Iran, it has evoked anger. The reduced flow of water into Iran — it used to receive 30 percent of the Harirud River’s waters but is getting just 13 percent after the Friendship Dam’s construction — could turn the Hamoun wetlands into a dustbowl, impacting the lives and livelihoods of tens of thousands of people living there.

Afghanistan’s [expansion of the Kamal Khan Dam](#) on the Helmand River will have a similar impact on Iran.

Iran and Pakistan blame Afghanistan’s “aggressive dam building” in recent years for the mounting tensions over water. Kabul is “not transparent about its plans for dams and is unwilling to enter into negotiations over river water

sharing,” a Pakistani journalist told *The Diplomat*.

Such arguments fail to take into account the “aggressive dam building” that Pakistan and Iran indulged in for decades, even as Afghanistan, convulsed as it was in civil war for decades, was unable to pay attention to developing its water infrastructure.

It is only since 2014, when President Ashraf Ghani [prioritized water management](#) and building dams for economic growth and development, that Afghanistan rather belatedly began asserting its legitimate rights over its transboundary rivers. It is this assertion that is bringing Kabul into conflict with the lower riparian states.

If Afghanistan has been reluctant to enter into dialogue on water sharing with its neighbors, this is largely because of its insecurity vis-à-vis its larger neighbors. Data on Afghanistan’s surface water and demand and use of water is poor. Additionally, it suffers from a [shortage of technical and diplomatic expertise](#), which could put it in a weak position at the negotiating table.

However, Afghanistan should pursue talks on its transboundary rivers with its neighbors as conflicts over water have the potential to turn violent. Neither Iran nor Pakistan is averse to creating trouble for Afghanistan. Iranian officials, for instance, are reported to have egged Taliban fighters to [sabotage the Friendship Dam](#) during its construction. Pakistan was reportedly involved in [eliminating a local militia leader](#) tasked with protecting Afghanistan’s Machalgho Dam in eastern Paktia province. The possibility of Pakistan doing this with the Shahtoot Dam cannot be ruled out.

Afghanistan’s transboundary rivers also run through restive regions in the lower riparian countries, through Iran’s Sistan Baluchistan Province and Pakistan’s Khyber Pakhtunkhwa province. Water conflicts could therefore ignite an already volatile region.

Afghanistan needs to overcome its insecurities to work toward water-sharing

treaties with its neighbors.

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