Transboundary Water Disputes between Afghanistan and Iran

Conflict Summary

Afghanistan’s efforts to harness the waters of the Helmand River and the Harirud to support post-conflict reconstruction and development have alarmed Iran. The Iranian government perceives Afghanistan’s agricultural expansion and dam construction activities as threats to water security in its eastern and northeastern provinces. With a largely ineffective water treaty in place, cooperative initiatives have not yet achieved a breakthrough. Afghanistan’s reluctance to engage in water negotiations, coupled with Iran’s alleged “paradoxical” activities of support vs. disruption, have further complicated the resolution of transboundary water disputes between the two countries.
Conceptual Model

Environmental Change
- Gradual Change in Temperature and/or Precipitation
- Change in Access / Availability of Natural Resources
- Increased Water Scarcity

Climate Change

Social and Economic Drivers
- Demographic Change
- Economic Development
- Infrastructure Development

Context Factors

Weak Institutions
- Water-stressed Area
- Weak Institutions

Intermediary Mechanisms
- Interestate Tensions

Fragility and Conflict Risks
- Water-stressed Area
- Weak Institutions
Conflict History

As a landlocked country, Afghanistan shares many of its river basins with neighboring countries. As part of reconstruction efforts, Afghanistan has formulated plans for significant water infrastructure development on these transboundary rivers to fully exploit their irrigation and hydro-electric potential. As a result, water-related concerns have been intensifying in downstream riparian states. Since no formal dialogue processes or effective agreements on water are in place between Afghanistan and its neighbors, few direct institutional venues exist for resolving these tensions in a cooperative manner (King & Sturtewagen, 2010). To illustrate the state of water cooperation in the region, this case study focuses on the two river basins that Afghanistan as the upstream riparian shares with downstream Iran: The Helmand River Basin and the Harirud-Murghab River Basin. Afghanistan's agricultural and dam projects in these two basins have been perceived by Iran as security threats. Climate change can be expected to further exacerbate the existing political tensions between the two countries.

The Helmand River Basin

The Helmand River is the longest of Afghanistan’s rivers (1,150km). It originates northwest of Kabul, from where it travels to Iran. The basin is inhabited by more than 7 million people. Both Afghan and Iranian farmers are highly dependent on the Helmand waters for irrigated agriculture. In Afghanistan, approximately 97 percent of the water withdrawn from the river is used in the agricultural sector. Similarly, in Iran, around 80 percent of the downstream flow is allocated to irrigation purposes (Hanasz, 2012). At the same time, the river is also crucial for sustaining wildlife and biodiversity in the Hamun wetlands, which span parts of Afghanistan and Iran and whose international importance has been recognized under the Ramsar Convention.

While three decades of war have prevented Afghanistan from fully harnessing the Helmand River waters, the country has now embarked upon a path of agricultural expansion under U.S.-supported plans for post-conflict reconstruction. Increased agricultural production is not only supposed to feed Afghanistan’s growing population, but it is also intended to serve as a bulwark against the opium economy by providing alternative livelihood strategies. To achieve its ambitious objectives, Afghanistan urgently needs to rehabilitate or construct new water infrastructure on the Helmand River in order to increase storage capacity, improve irrigation efficiency, and generate electricity. One current project is the Kamal Khan dam on the Helmand River, which was resumed in 2011 after having stalled for a long time because of the war (Aman, 2016).

While such projects can be expected to benefit socio-economic development in Afghanistan, they have caused alarm in Iran, which perceives Afghanistan’s aspirations on the Helmand as a direct security threat. If upstream water consumption increases, water supply to Iran could be diminished. Iran fears that the resulting water shortages could further destabilize its eastern province of Sistan and Baluchistan. The Helmand is the only water source for the main cities in this province, which is generally regarded as the country’s most volatile region due to its disenfranchised Sunni majority (Dehgan et al., 2014; King & Sturtewagen, 2010).
The Harirud-Murghab River Basin
Similar tensions between Afghanistan and Iran have developed over the waters of the Harirud. This river flows from the mountains of central Afghanistan to Iran, and then on to Turkmenistan. Today, about 5 million people live in the basin. After the end of the war, Afghanistan began revitalizing water development efforts on the upstream portion of the Harirud, especially in the form of dam construction. The most controversial project is the Salma dam, which is currently being constructed by India. The dam was first commissioned and initiated in 1976, but construction was halted soon after due to the war. The most recent attempt to finish the dam began in 2012 (Ahlers et al., 2014), although unexpected cost increases have once again resulted in delays. Despite these challenges, Afghanistan has high hopes for this dam and regards it as a major opportunity for increasing self-sufficiency in food production and electricity generation.

However, similar to the situation on the Helmand, Iran feels threatened by Afghanistan’s dam construction activities on the Harirud. It fears that these activities might negatively affect the amount of water available to Iran’s northeast, where 3.4 million Iranians rely on the Harirud. At the same time, hydro-power generation upstream would decrease Afghan dependence on Iranian energy. Iran has applied strong pressure on Afghanistan and India to halt dam construction, and has requested to negotiate over shared waters. However, these requests for water negotiations have apparently been rejected by Afghanistan (Dehgan et al., 2014). Given Iran’s strong opposition to upstream dams, Afghan officials have accused Iran of being behind dam-related attacks and sabotage to stop construction from going forward (Houk, 2011; Mashal, 2012; Peterson, 2013).

Climate change
Existing water-related tensions on the Helmand River and the Harirud will likely be further exacerbated by a changing climate, which is expected to alter patterns of water flow and availability in the shared basins. While the exact impacts of climate change are difficult to predict, it has been estimated that glacial melt, decreases in rainfall, and increases in temperatures may cause long-term water stress in parts of Iran and Afghanistan (Dehgan et al., 2014; McSweeney et al., 2010).

Resolution Efforts
The 1973 Helmand River Water Treaty
Although Iran has indicated its readiness to engage in bilateral or trilateral negotiations with Afghanistan and Turkmenistan, no water treaties have been signed specifically on the Harirud (King & Sturtewagen, 2010). Regarding the Helmand River, however, negotiations between Afghanistan and Iran date as far back as the 1870s. In 1973, the two countries signed the Helmand River Water Treaty, which allotted 22 cubic meters per second to Iran, with the option to buy an additional 4 cubic meters per second in “normal” water years (Dehgan et al., 2014; Hanasz, 2012). This treaty, which has been criticized by researchers for its inadequacies in terms of sustainable transboundary water resources development (Thomas & Varzi, 2015), was never fully implemented due to domestic political instability in Afghanistan and Iran. Trust was further eroded when Afghanistan violated the agreement during a drought from 1998 to 2002 (Houk, 2011).
In recent years, some constructive steps to revive cooperation have been taken. For example, Afghanistan and Iran have assigned a joint Helmand River Commissioners Delegation, which meets on a quarterly basis to promote bilateral cooperation on water. Also, together with the United Nations Environment Program (UNEP), the two countries have made cooperative efforts to rehabilitate the Hamun wetlands (King & Sturtewagen, 2010).

Despite these encouraging signs, water cooperation has not been fully institutionalized, and mutual distrust continues to exist on both sides. Afghanistan accuses Iran of diverting as much as three-fourths of water from the Helmand through illegal canals (Dehgan et al., 2014). Iran, for its part, complains that the provisions of the 1973 treaty are enforced “inadequately and inconsistently” by the Afghan government, and demands full commitment to the bilateral water treaty (Mehr News Agency, 2015).

Afghanistan’s reluctance to negotiate
As noted above, Iran has repeatedly requested water negotiations with Afghanistan. However, Afghanistan has been disinclined to negotiate with Iran over the use of the Helmand and Harirud waters. To a certain extent, this reluctance has been attributed to the country’s thirty-year knowledge gap in hydro-meteorological data and weak technical capacity, as well as lack of human resources trained in international law and negotiation. Without such resources, formulating national interests and policy proposals appears challenging, and many in Afghanistan fear that these weaknesses may compromise the strength of the government’s bargaining position vis-à-vis its co-riparians. Capacity-building supported by the U.S., partner states, and the U.N. may help address these weaknesses (Dehgan et al., 2014; King & Sturtewagen, 2010). At the same time, it has been suggested that the argument of inadequate capacity might also serve the Afghan government as a “stalling tactic.” Arguably, as an upstream country in the midst of post-war reconstruction and development, Afghanistan has little incentive to engage in negotiations that might restrict its access to water resources (Dehgan et al., 2014).

Iran’s paradoxical moves
Besides its readiness to engage in bilateral water negotiations, the Iranian government has been willing to support Afghanistan in strengthening its capacities in the water and agricultural sectors, in particular with regard to water efficiency. Iran has also helped to establish a research institute in the Afghan Ministry of Energy and Water for the enhancement of regional data and information sharing (King & Sturtewagen, 2010), although this move has been received with suspicion by some in Afghanistan (Mashal, 2012). On the other hand, however, there are reports that Iran offers support to Taliban insurgent groups to disrupt reconstruction projects in the water sector (Houk, 2011). As Dehgan et al. (2014, 318) observe, “[i]t is difficult to determine whether this paradox is a reflection of the different interests in the cacophonous Iranian leadership or a manifestation of an Iranian hedging strategy toward Afghanistan that seeks to improve the efficiency of Afghanistan’s water systems in amity while simultaneously undermining any attempt by the Afghans to divert a greater share of the water.” What seems likely is that such an inconsistent approach of support vs. disruption would undermine trust on the part of Afghanistan, thereby further alienating the government from considering a negotiated solution to transboundary water disputes with Iran.
### Intensities & Influences

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**INTENSITIES**

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**INFLUENCES**

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**Diplomatic Crisis**

*Note of diplomatic crisis in case history, conflict purely verbal*

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**Violent Conflict**

*No*

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**Salience with nation**

*National*

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### Resolution Success

**Reduction in geographical scope**

_There has been no reduction in geographical scope._

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**Increased capacity to address grievance in the future**

_The capacity to address grievances in the future has increased._

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**Grievance Resolution**

_Grievances have been mostly ignored._

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**Causal Attribution of Decrease in Conflict Intensity**

_There has been no reduction in intensity_
Entry Points for Resilience and Peace Building

Cooperation
Afghanistan and Iran have assigned a joint Helmand River Commissioners Delegation, which meets on a quarterly basis to promote bilateral cooperation on water. The countries have also cooperated together to rehabilitate the Hamun wetlands. Furthermore, the Iranian government has supported Afghanistan in strengthening its capacities for water efficiency, as well as establishing a research institute for regional information sharing. However, low trust from Afghanistan is impeding a negotiated solution to the conflict.

Treaty/agreement
The Helmand River Water Treaty was signed between Afghanistan and Iran in 1973. However, the treaty has been criticized for its inadequacies in terms of sustainable transboundary water resources development, and was never fully implemented due to political instability in both countries. No treaties have been signed regarding the Haridud River.

Improving state capacity & legitimacy
The Afghan government could improve its capacity for formulating national interests and policy proposals with support from the U.S., partner states, and the U.N.

Resources and Materials

References with URL
Aman, F. (2016). Iran-Afghan Differences over Helmand River Threaten Both Countries. Atlantic Council
Mehr News Agency (2015). Iran-Afghanistan Talks Focused on Helmand Water Right