

Strategic Analysis Paper

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The Politics of Water Security between Afghanistan and Iran

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Key Points

- Increasing development and water consumption in upstream Afghanistan negatively affects water supply to Iran, thereby exacerbating latent tensions between the two countries.
- Iran perceives the construction of hydroelectric dams on the Afghan side of the basins as a direct security threat.
- There is no active agreement between Iran and Afghanistan over the management of shared water resources in the Helmand and Harirod-Murghab river basins.
- It is unlikely these points of friction will be resolved without concerted and proactive collaboration between the two countries.
- In addition to political tensions, climactic changes alter patterns of water flow and availability in the shared basins, leading some farmers to claim that insufficient water supply encourages them to plant poppy, a hardy crop.
- Increasing human strain on the Sistan wetlands due to mass migrations is unsustainable and may lead to a major environmental disaster.

Background

Disagreements between Afghanistan and Iran over the sharing of the Helmand River have been brewing since the 'Great Game' of the 19th century. Back then the problem was considered dual – that of border delineation and the respective shares of the two countries in the waters of the Helmandⁱ. Today the problem of transboundary water management festers beneath the otherwise cordial relationship between Afghanistan and Iran. The points of friction now also encompass the other shared water resource, the Harirod-Murghab basin. At stake are the livelihoods of the inhabitants of both basins, the environmental integrity of the region, especially the volatile Sistan wetlands, and the development of hydro-electric power from these shared rivers.

This paper provides an introduction into the complexities of some of these bilateral issues.

The Helmand River Basin

The Helmand River Basin is home to more than seven million peopleⁱⁱ. The Helmand River originates in the Paghman Mountains northwest of Kabul and flows 1,150km to Iran. The Helmand River Basin constitutes some 45 per cent of Afghanistan's surface area but the river contributes only around 10 per cent of the country's total water resourcesⁱⁱⁱ. Of that contribution, some 97 per cent is used in the agricultural sector on the Afghan side of the border and around 80 per cent on the Iranian side^{iv}. Yet the amount of irrigated land in the Helmand River Basin is limited by a lack of sufficient dams and reservoirs to control the water flow during dry and wet years. Some farmers have claimed that insufficient water supply encourages them to plant poppy, a hardy crop^v.

Afghanistan River Systems



An essential mitigating feature of the problem over water was that it was not permanent but exacerbated in times of water scarcity and also by lack of political understanding and coordination^{vi}. This indicates that Afghanistan can expect future problems to continue arising with the regularity of droughts if there is a lack of political will and bilateral coordination to address these underlying issues. The dispute between the two countries has attracted some international attention in recent years because the Chabahar port on the Oman Sea is being redeveloped as a base for the transportation of goods to Afghanistan via Iran's Zabol region^{vii}.

Existing treaty provisions

In the 19th and early 20th century, British assistance was sought primarily by Iran in the arbitration of the dispute over Helmand River waters but by the 1950s, for geopolitical and aid-related reasons it was the US who was appealed to for international advice. However, no

conclusive agreement was reached and although the problem technically lingered, it was assigned a low priority by both Iran and Afghanistan over the next two decades because it was not perennial^{viii}.

Irano-Afghan parleys on the subject were resumed in June 1972 and culminated in the Helmand River Water Treaty of 13 March 1973. Iran's approach to this treaty was based on the idea that international relations are more important than the development of the region and therefore it evinced a spirit of accommodation and conciliation^{ix}.

The treaty contained ten articles and restricted Iranian consumption from the Helmand River to 22 cubic metres per second in a normal year. Other clauses stipulated a variation on this for dry periods and wet periods. Afghanistan was obliged to avoid polluting the water to such an extent as to make it unsuitable for agriculture. In the event of differences in the interpretation of application of the provisions of this treaty, the parties were first to endeavour to obtain a solution through diplomatic negotiations or mediation by a neutral third party. If neither course produced a solution, the differences were to be submitted for arbitration. The treaty presented a bilateral and balanced approach to the problem of sharing water and what in the past was regulated only by the uncertain yardstick of tradition and local usage was now given a firm foundation in a formal understanding^x.

Despite the generous provisions of the treaty and the spirit of cooperation in which it was created, there was much opposition to this treaty on the Afghan side based mostly on suspicions of Iranian motives. Consequently, the treaty was not ratified until 1977^{xi}. Since then, for reasons of increasing political and social instability in Afghanistan the treaty has largely become dormant. Iran has never duly compensated Afghanistan in accordance with this treaty yet has been known to take actions that have adversely affected water supply within Afghanistan to the Sistan Wetlands in the border region^{xii}. If the situation persists it could evolve into an instance of socio-ecological conflict of water use wherein economic and social needs are given priority over ecological ones, resulting in man-made disasters such as the draining of the Aral Sea. It is really this issue of the wetlands that should be the focus of Afghanistan's current approaches to bilateral talks with Iran.

Environmental considerations

The Sistan wetlands are a 2,000km square oasis in the middle of hundreds of kilometres of arid plains located on the border of Afghanistan and Iran and are fed by the Helmand River. The wetlands' location far from any other substantial body of fresh water has made them an ideal stop for around 150 species of migrating birds, such as flamingos, ducks and pelicans, travelling from Russia south to the Indian Ocean. The wetlands' isolation and conflicts in surrounding areas has also led to a dearth of scientific information and monitoring of the wetlands.

Another factor in the increasing vulnerability of the Sistan wetlands is changing patterns of human habitation in the region. Just as with the Aral Sea disaster, many people had lived around the wetlands for generations either moved away or lost livelihoods while at the same time around 320,000 Afghan refugees moved in. Acute water shortages gave rise to an increase in diarrheal and communicable diseases. Furthermore, it is speculated that the

drought that is encompassing the region has been caused by rising temperatures and changes in wind and rainfall over large areas of the Indian and Pacific oceans^{xiii}. As can be seen, the Sistan wetlands face many challenges, and these affect not just Iran but Afghanistan also, thereby requiring a bilateral solution.

Iran certainly perceives the construction of the Salma dam as a direct security threat^{xiv}. Yet it is unclear to what extent latent suspicions and distrust of motives will be stirred up by the recommencement of bilateral talks between Afghanistan and Iran but it is clear that this could cause serious limitations to further rapprochement and potential lead to political tension and regional instability^{xv}.

The Harirod-Murghab River Basin

The Harirod-Murghab Basin is fed by the Harirod and the Murghab rivers. The Murghab River flows from Afghanistan directly to the Karakum desert of Turkmenistan. Due to topographical conditions, Afghanistan's use of Murghab flow is very limited and provides little scope for transboundary dispute^{xvi}.

The Harirod originates in the western slopes of the Koh-e Baba mountains of Afghanistan and flows to Iran and then onto Turkmenistan. Sustainable flow and future demand on the Harirod have not been determined but water demand in Herat province and on the Iranian side of the border is expected to increase. Needless to say this will put further tension on already somewhat strained water-relations between Iran and Afghanistan.

The development of hydro-electric power

Further foreseeable strains on this relationship involve the construction of a controversial dam. In 2006 Afghanistan recommenced construction of the Bandi Salma hydroelectric dam along the Harirod, a major river flowing from Herat province through Iran. Once complete, its capacity will be 547 million cubic metres^{xvii}. This construction has heightened tensions between the two countries and is likely to create a similar situation to the Helmand River dispute because the dam will likely affect the amount of water available to Iran as well as decrease Herat's dependence on Iranian power.

Iran continues to express concern about the probable water storage and supply consequence of the Bandi Salma dam on Iran, and similar complaints about future projects within Afghanistan are expected^{xviii}. On the other hand, Iran and Turkmenistan are both continuing to develop water storage and diversion facilities on the lower reaches of the Harirod but neither country compensates Afghanistan for the water that flows into their territory nor do they consult with Afghanistan on dam construction projects or help pay for the cost of shared water management and dams, reservoirs and other flow control structures^{xix}.

As an upstream country it is in Afghanistan's short term interests to stall negotiations on transboundary water rights of the Harirod in order to continue exploitation of its indigenous water source. However, considering the volatile security situation in the region, a water dispute that should be resolved diplomatically could also easily escalate into aggression – although of course water challenges rarely lead automatically to armed conflict^{xx}. Without a

trilateral agreement, and with the effect of drought, the joint Iranian-Turkmeni Dostluk Dam may not be able to sustain normal operations after the Bandi Salma Dam is completed.

Conclusion

The mounting tensions between Afghanistan and Iran over the management of shared water resources arise out of several issues. The treaty provisions regulating the uses of the Helmand River are inadequate and inconsistently enforced. The increased social and environmental pressures on the Sistan wetland threaten this already precarious ecosystem and create the potential for a man-made ecological disaster. As Afghanistan develops and its energy consumption demand increases, the construction of hydro-electric dams will continue to aggravate downstream Iran. It is unlikely these points of friction will be resolved without concerted and proactive collaboration between the two countries.

Any opinions or views expressed in this paper are those of the individual author, unless stated to be those of Future Directions International.

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[The Politics of Water Security in the Kabul River Basin](#)

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