The Indus Treaty Revisited: India-Pakistan Water Sharing

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Key Points
- The Indus Water Treaty has withstood periods of tension and conflict between India and Pakistan and has provided a pathway for the two neighbours to amicably resolve issues relating to transboundary water supply.
- Both countries clearly have faith in the treaty and believe they benefit from its existence.
- Increased pressure on the Indus River system, from population growth, climate change and other environmental factors, suggests that the treaty could benefit from revision.
- The fragile relationship between India and Pakistan is likely to make any such revision a difficult goal to achieve and implement.

Summary
Since the partition of the Sub-continent in 1947, water has been a divisive issue between India and Pakistan. The Indus Water Treaty was created to lessen and manage any tensions that might arise from the use of the Indus River and its tributaries. Pakistan is highly reliant upon the water of the Indus and fears that India could use this to its strategic advantage as its headwaters pass totally through India. The treaty has been successful in preventing bilateral disputes from escalating and both parties continue to see value in maintaining it. Revisions are necessary, however, as the treaty does not adequately deal with contemporary issues, including increased population, climatic and environmental pressures.
Such revisions are unlikely to occur in the near future, though, as India-Pakistan relations are too fragile for meaningful water governance reform to take place.

Analysis

The Indus Water Treaty (IWT) was negotiated between India and Pakistan under the auspices of the World Bank in 1960. It was designed to allocate the waters of the Indus River Basin after the partition of the two countries in 1947. Prior to independence, the British constructed an intricate canal system to irrigate the region that is modern-day Pakistan. Partition left a large part of this infrastructure that Pakistan relies upon to support its agriculture-based economy in what it sees as a hostile foreign country. The tributaries of the Indus River either originate in India or, like the Indus itself, begin in Tibet. Under the treaty, the waters that flow into the Indus Basin are shared between the two countries. The accord has been hailed as a success as it has survived the four wars that the two neighbours have engaged in since its implementation.

Prior to the signing of the treaty, water sharing arrangements were made on an ad hoc basis. Under the agreement, exclusive usage rights to the three eastern tributaries – the Sutlej, Beas and Ravi – were granted to India and usage of the three western rivers – the Chenab, Jhelum and the Indus proper – were given to Pakistan. Indian rivers represent one-fifth of

![Indus River Basin Source: wikipedia.org](https://www.wikipedia.org)
the total flow of the Indus system while the remainder was granted to Pakistan. All of these six rivers flow through Kashmir, the region that continues to be a contentious issue in the bilateral relationship. As the treaty currently stands, water cannot be tied to the resolution of tensions caused by Kashmir.

The treaty also established the Permanent Indus Commission and the position of Indus Water Commissioner in both countries. This commission continued to meet even during the wars of 1965 and 1971, showing the entrenched nature of the pragmatism that exists between the two countries over water usage rights.

As part of the agreement, India is permitted to limited development on the three western rivers within its own territory. The treaty does not exclude India from utilising the western rivers that were allocated to Pakistan. As they pass through Indian territory, India is permitted limited use of these waters for drinking water, existing agricultural use with some limited expansion, storage of no more than 3.6 million acre-feet and generation of hydroelectric power through run-of-the-river projects.

Hardliners in both countries suggest water could be used as a weapon against the other. Right-wing Hindu groups in India routinely call upon the government to either stop the flow of water to Pakistan or flood it. Radical Islamic groups, such as Lashkar-e-Taiba, in Pakistan, on the other hand, advocate a “water jihad” against India.

Pakistan is a lower riparian state and therefore depends upon India for its water security. A “water jihad” will only damage Pakistan’s own national interests as its economy is heavily reliant upon agriculture and benefits from the provision of water from India. For its part, New Delhi cannot cut off the supply of water to Pakistan, as unilaterally abandoning a treaty mediated by the World Bank would come with its own political risks and ultimately harm its national interests as well.

India and Pakistan have been described as “water-rational” states that seek to secure their long-term supplies of water. As water from the Indus River is so important to both countries they are very reluctant to risk jeopardising the status quo. As it currently stands, conflict between India and Pakistan over the distribution of Indus waters is unlikely in the near future. As the next section of this paper will argue, however, there is still scope for the Indus River to be a cause of hostility between the two neighbours.

**Indian Hydropower Plants: The Source of Contemporary Pakistani Concerns**

Pakistan is concerned by Indian plans to build two hydropower projects in the disputed territory of Jammu and Kashmir. Pakistani officials suggest that India has violated the terms of the IWT on multiple occasions by constructing, or planning to construct, hydropower plants on western rivers within Indian territory. These power plants are designed to be run-of-the-river projects, which do not require large dams, reservoirs or flooding to generate electricity and allow water to flow unabated. Under the IWT, India is permitted to utilise the western rivers within its territory, so long as it does not significantly affect the flow of the Indus within Pakistan.
In the past, India and Pakistan chose to resolve contentious issues concerning the Indus River through bilateral negotiation. In recent years, however, there has been a marked shift towards third-party mediation and arbitration, which is permissible under the IWT but could portend a greater degree of mistrust between the two signatories.

The shift to third-party arbitration began when Islamabad invoked Article IX of the IWT against the Indian Baglihar project, on the Chenab River, in 2005. It had doubts about India’s true intentions behind the project, believing that it was a ploy to gain better control over the flow of the river. A neutral expert was called upon to resolve the dispute and construction of the first phase was completed in 2011 after India made some small adjustments in line with the expert opinion. It now cites the Baglihar dispute as an example of it acting in harmony with the IWT; the process was an obvious political victory for India.

The neutral expert’s verdict was a political setback for Pakistan. It had hoped that it would be able to build support internationally as a lower riparian and show India to be a manipulative upper riparian. Until recently, however, India has not built any storage dams on any of the western rivers even though the IWT allows it to build storage dams up to 3.6 million acre feet (Maf). It also supplies water flow data to Pakistan for free, even though there is nothing in the treaty stipulating that it needs to do so.

Despite these setbacks, Islamabad has informed New Delhi that it will seek the intervention of the World Bank if it continues to go ahead with the construction of the Kishanganga and Ratle Hydroelectric Projects (known by the acronyms KHEP and RHEP, respectively). New Delhi has expressed a willingness to enter talks with Pakistan on the issue of the RHEP but to no avail, as Pakistan continues to press for the appointment of a neutral observer to resolve the issue as per the terms of the treaty.

These cases suggest that both India and Pakistan have faith in the treaty and wish to maintain its operation. As the remainder of this paper will demonstrate, however, there are gaps and potential flaws in the IWT that could significantly weaken it and have disastrous impacts upon the food and water security of the Indus River Basin.

**Revisiting the Treaty**

Much has changed since the treaty was signed in 1960. Its provisions were based upon the knowledge and technology of the time. The adverse environmental and social impacts of river projects were either not known, or not given the attention that they are today. Population growth, climate change, and outdated irrigation practices are putting greater stress on the Indus and the treaty that governs its use.

The combined population of India and Pakistan tripled from 485 million in 1961 to 1.39 billion in 2011. Water demand to supply irrigation networks and electricity production is now far greater than it was in 1960 and necessitates greater attention. When the treaty was originally signed it was believed, correctly, that there was more than enough water for both countries to utilise. Now, due to increased demand, water security in both countries is at

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increased risk as the rate of water extraction exceeds recharge rates, leading to lower water tables and increased withdrawals from surface-water sources.

Climate change could alter the situation on the ground and affect the fragile relationship between the two neighbours. As the rivers of the Indus Basin originate in the mountains of Tibet, they are influenced by the melting of glaciers in that region. There are concerns that the Indus could become a seasonal river by 2040, making the Pakistani Punjab increasingly prone to drought. Climate change also has the potential to increase the severity of extreme weather events, which could lead to more devastating floods, such as those that occurred in 2010.

Unless the treaty is revised, climate change has the potential to complicate the existing allocation of water. While the region has always been prone to floods and drought, changing weather patterns and climatic conditions exacerbated by climate change could result in more frequent and destructive extreme weather events. Such conditions could prove to be the factor that pushes the two countries into conflict, particularly since, after major floods, Pakistani hardliners accuse the upper riparian of contributing to, or engineering, the flood. They claim that the only way to ensure that similar disasters are averted is to “liberate” Indian-held Jammu and Kashmir by force. Such views are held by only a small portion of the Pakistani population but, as glacial melt is likely to increase the potential for flooding in the coming decades, it is a view that might come to be adopted by more in the community.

The IWT does not contain any provision for flood control infrastructure or warning systems. Such mechanisms would be of immense benefit to both countries as they would assist in minimising the risk associated with extreme weather events and lower the cost of humanitarian aid in the aftermath of such an event. Disaster-risk management procedures need to be developed and, perhaps, codified in an updated treaty document.

A revised treaty would benefit from an examination of the environmental protections that could be incorporated into it. As it currently stands, the treaty only stipulates that each party intends to prevent undue pollution from entering the system. Much work has been done in the decades since the signing of the treaty on the importance of river sustainability. There is a common perception that any water that remains unutilised and flows into the sea is wasted. This view is being increasingly challenged as it becomes clear that the outflow of rivers is necessary to sustain the environment at the river mouth.

Ensuring the environmental sustainability of the river system also has economic benefits for individuals living in the delta region. For instance, mangroves, which rely upon the natural outflow of the Indus, provide a habitat for fish which are exploited by fishers in the Indus River Delta. Dwindling flows from the river have led to the loss of almost 90 per cent of the delta’s mangrove cover since 1966. The destruction of this ecosystem would prove catastrophic for Pakistani fish and shrimp exports.

A revised treaty would take population, climatic and environmental factors into greater consideration. In order to revise the treaty, however, a spirit of goodwill and common purpose needs to exist between India and Pakistan. Without that, building upon or altering the existing treaty will prove challenging, if not impossible.
Tensions Remain, Making Revisions Difficult

It is commonly supposed that water resources do not directly contribute to interstate conflict. Transboundary water treaties generally lead to greater levels of co-operation between countries. In the 60 years to 2009, over 200 such agreements were signed and there were only 37 cases of reported violence between states over water. It could reasonably be claimed that transboundary rivers, when properly managed, lead to better working relationships between states. For India and Pakistan, this has perhaps been true, however, the prevailing view is overly deterministic and relies solely upon a narrow historical window to support its argument. History does not determine the future and the potential for conflict over water remains a possible, but currently unlikely, threat.

After Narendra Modi invited his Pakistani counterpart, Nawaz Sharif, to his inauguration in 2014 it was hoped that a détente between the two neighbours was emerging. Such an outcome was soon dashed, however, as Pakistani officials met with Kashmiri separatists, offending New Delhi.

As long as India and Pakistan continue to be “water-rational” actors, the challenging bilateral relationship is unlikely to lead to conflict over water. In the absence of an extreme event, such as drought or floods that could act as a catalyst for reform, however, it is also unlikely that there will be any change to the status quo as far as the IWT is concerned.

Conclusion

The IWT was negotiated after a decade of ad hoc water arrangements made it clear that a formal mechanism was required. The IWT has served India and Pakistan well. It has provided them with a peaceful pathway to resolve issues that could arise from transboundary water sharing. Both countries would benefit from pragmatically re-evaluating the IWT. Challenges that either did not exist, or were downplayed at its signing in 1960, now need to be factored in. The potential for this to occur, however, remains unlikely due to tensions between the two parties and the effort required to overcome institutional inertia.

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