

## The Future of Water-sharing Cooperation in South Asia

Syed Atif RAZA

### Executive Summary

- ▶ With more than one and a half billion people in South Asia, it is one of the most water-stressed regions in the world. Conflicts, nuclearization, melting glaciers, climate change and environmental factors have only exacerbated the already existing water scarcity.
- ▶ As economies and populations grow, the water has become an even more scarce and valuable resource. However, the region also witnessed one of the earliest water-sharing agreements in the developing world with the conclusion of Indus Water Treaty in 1960.
- ▶ The paper seeks to explore how water sharing across international boundaries in South Asia can be put to beneficial use for common interests. Will it lead to war or will countries find new and innovative ways to cooperate? What the future holds for water-sharing cooperation in the region?

Not long ago, Indus Water Treaty (IWT) was considered a model of international cooperation on sharing water resources. When it was signed in 1960, the Treaty became first of its kind in the developing world. Hitherto, most of the water-sharing and navigation-related treaties were among European countries or in some of their colonies. The Treaty served as the basis for similar bilateral arrangements elsewhere. The fact that IWT covered rivers and areas contested by both India and Pakistan, made it a more remarkable accomplishment of international collaboration. It stood the test of time and survived several wars between India and Pakistan as well as the nuclearization of the region.

IWT also allowed the two countries to amicably settle existing and potential conflicts over shared water resources rather than exacerbate frictions in a region already replete with tensions. Nevertheless, there has never been dearth of those in India and Pakistan who

advocated vocally, for various reasons, to terminate the Treaty. Both governments however, continued to hold on to it to a great extent.

That changed with rhetoric emanating from Delhi by the current Indian administration. About two years ago, Indian government called for a review of the Treaty as a retaliation for Pakistan's political and diplomatic support to Kashmiri people. Kashmir has been a longstanding conflict between two neighbours since their independence and partition in 1947. Fresh unrest in the Indian Occupied Kashmir was the direct result of misgovernance and decades of oppression against the Kashmiri people and continued denial to exercise their right to self-determination. Regardless of India's real intentions, threat to use water as mode of coercion and as a tool of foreign policy has far-reaching implications for countries of the region and beyond. Water has become one of the foremost issues in the South-Asian geopolitics.



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In fact, for a long time India has been planning to divert the flow of major rivers in the Indus as well as Ganges/Brahmaputra basins with obvious consequences for millions of people living in downstream countries – Pakistan and Bangladesh. India and Bangladesh entered into a separate water-sharing agreement in 1996 that largely recognized Bangladesh's rights as a lower-riparian country. Unlike IWT, the 1996 agreement between India and Bangladesh is a time bound treaty (30 years).

Some of the projects on the Indus river have already been completed, despite strong reservations from Pakistan owing to their design, maximum storage capacity and the ability to divert the river flow in violation of IWT. Indian dam-building activity continues apace – further testing the treaty regime. IWT dispute mechanisms are not being allowed to function properly leading towards further instability, doubts and lack of confidence. For now, politics is trumping the prospects of amicable cooperation to share water resources among upper and lower riparian countries. Some are even fearing the worst – could this tense situation lead to war and that between two nuclear weapons states?

Analysts have found little evidence of actual water wars in history. However, sub-national and international water-related confrontations have occurred in the past in various regions. Nonetheless, the idea of eruption of an armed conflict over water is gaining currency in academic and common literature. Water is an important but finite source – and like any other important source it can intensify existing conflicts. Growing population, continued urbanization, shrinking glaciers, water pollution, increasing industrial and domestic consumption have already put a great strain on the water system in the Himalaya region. South Asia has all the factors that can and are aggravating tensions among riparian States. Water security situation is likely to get worse in future with the intensification of these factors. Nuclear weapons have only introduced elements of added uncertainty in this deadly mix.

The role of China is also inextricably linked with the politics and development of the wider region, as many of the major rivers in South Asia originate from China (including Indus and Brahmaputra). Due to regional dynamics – especially since the Sino-Indian War of 1962 – Water-sharing cooperation between China and India had never been easy. Although there is a river data sharing agreement in place, most recently both countries have struggled to hold meaningful bilateral engagement on water issues. India has also objected to Chinese construction of run-of-river electricity projects on the Brahmaputra river.

Undoubtedly, current water-sharing regimes remain

critically important for water security in the region. However, there are other factors at play too.

The problem is far worse and deeper than it seems on the surface. Inefficient and unequal water distribution and use in agriculture, industry and homes are contributing to water scarcity in the region more than anything else. The use of advanced technology in water-related sectors is limited. Innovation is almost absent. We cannot fight twenty-first century problems with the tools and methods that were primarily designed to address challenges of the past.

On top of that, climate change phenomenon is wreaking havoc with uncertain weather patterns and glacier melting, which are the main sources of fresh water in the wider region from Vietnam to Central Asia. Recognizing the delicate and complex nature of high-mountain cryosphere, the Intergovernmental Panel on Climate Change (IPCC) has highlighted the potential impact of climate change on the environment and availability of fresh water in the Himalayas region. Whilst overall annual precipitation is projected to increase across eastern Asia, Tibetan plateau and South Asia in the short-term (may lead to flash floods), the precipitation and annual river runoff may eventually decrease in the medium-term. Climate change would also affect existing infrastructure and contribute to unsustainable ground water consumption. In short, climate change would adversely impact the water supply issues in South Asia and affect the livelihood of millions especially those dependent on agriculture and livestock.

It may be appropriate to refer to how the United Nations defines water security: “the capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human well-being and socio-economic development, for ensuring protection against water-borne pollution and water-related disasters, and for preserving ecosystems in a climate of peace and political stability”. Measuring with this yardstick, countries of the region have to go a long way in ensuring sustainable, equitable and judicious availability and use of its water resources.

As it is impossible to envision human, animal or plant life without water, there is absolutely no way to realize any of the Sustainable Development Goals (SDGs) without ensuring adequate, sustainable and quality water. Target 6.5 of SDGs aspires to implement an “integrated water resources management at all levels, including through transboundary cooperation”. Most of the world's (and South Asia's) freshwater resources are transboundary, therefore water-sharing cooperation is absolutely inevitable.

However, the danger is, that being aspirational in nature, SDGs would remain just that. Global economic institutions in the post Second-World-War era had favored and



actively intervened to promote transboundary cooperation in practical terms. IWT was the result of such mindset when the World Bank had brokered it not long after Indian partition, which saw multiple water-related issues. The World Bank also funded large dams in countries like Pakistan which served its growing energy, agriculture and water needs. However, most of the existing infrastructure is hardly sufficient while major new projects would not be fully operational in near future. Therefore, long-term and strategic planning is required which could tap fully into the potential that water resources can provide but in a sustainable way. Most importantly, we need to enhance water storage capacity, including through small dams, to ensure water availability beyond seasons. If drastic measures are not taken to manage water resources, a recent UNDP publication has warned of serious consequences on the well-being and long-term economic and social development of Pakistan.

International legal regime concerning transboundary water resources is not as mature as other areas of international law and much of it concerns navigational uses only. The UN Convention on the Law of the Non-Navigational Uses of International Watercourses, a framework convention establishing international law governing water usage, came into force in 2014 – almost two decades after its adoption by the UN General Assembly. However, most of the key players are still outside the Convention, including India and Pakistan. Therefore, for the foreseeable future, IWT would be the only legal framework governing water sharing arrangements between India and Pakistan. Calls for repealing or weakening it would only add to existing tensions.

But for IWT to remain a valid practical tool of transboundary cooperation, India and Pakistan need to abide by its provision including the confidence-building measures to build trust and remove doubts and uncertainties. Most importantly, the dispute settlement mechanism of the treaty should be fully operationalized and put to effective use to defuse tensions and maximize gains for the Parties. As provided in the Treaty, the World Bank needs to fully support the implementation and continued operationalization of the Treaty, rather than sitting on the fences and allow tensions to fester between two major countries of South Asia.

As a matter of fact, the IWT has never been a popular treaty in Pakistan as the country ceded control of three of the six major rivers of Indus basin. The flow of water to Pakistan from these eastern rivers is just a trickle of its

total flow. However, continued Implementation of IWT in letter and spirit would both alleviate grievances that have built over the recent past and enhance peace prospects in the region. This would be a challenge, given the latest state of affairs between nuclear-armed neighbours. However, without concrete steps towards normalization, the prospects of cooperation on water issues (as on others) would remain bleak.

Most of modern legal documents call for a “integrated water resource management system” – some elements of which are already present in the IWT. Most importantly, it entails water governance in an integrated and planned fashion, taking into account cardinal principles of sustainable development and environmental protection. Policy makers should understand that these precious water resources are absolutely essential for the social and economic development of not only current populations but also for future generations.

Provided that there is political will between India and Pakistan, mechanisms already provided in the IWT can be further improved and brought in line with modern practices prevalent in Europe and other parts of the world including Latin America. It would only benefit the two countries and more than 1.5 billion people living in the region.

There is a tremendous scope of cooperation between other countries of the region including between India and China; Pakistan and Afghanistan; Central Asia on Oxus River; India and Bangladesh; and India and Nepal. Each equation would have different bilateral situations to cope with, however, principles of water-sharing cooperation are the same and should be respected across the board. Non-diversion of natural course of rivers, environmental protection, sustainable development, transboundary cooperation and mutual well-being would ensure peace and prosperity for our future generations.

Addressing existing challenges including resolution of the Kashmir issue (as many of the Indus tributaries flow within the territory) would be critically important for a lasting peace in the region and future prospects of water-sharing cooperation.



## Further reading

Bjørn-Oliver Magsig (2015) *International Water Law and the Quest for Common Security*

Daniel Haines (2018) *Indus Divided: India and Pakistan and the River Basin Dispute*

David Gilmartin (2015) *Blood and Water: The Indus River Basin in Modern History*

Hamid Sarfraz (2013) *Revisiting the 1960 Indus Waters Treaty*

Intergovernmental Panel on Climate Change (IPCC) *Fifth Assessment Report*, 2014

Sarah Hendry (2015) *Frameworks for Water Law Reform*

Shane Mojtjtoy (2005) *The Indus River*

UNESCO Report on Transboundary Water Cooperation and SDGs, August 2018

Zafar Adeel, Robert G. Wirsing eds. (2017) *Imaging Indus: Overcoming Indus Water Insecurity in the Indus Basin*

## About the author

Syed Atif RAZA is the First Secretary in Pakistan Mission to the United Nations and other international organizations in Geneva.

He has been covering security, economic, trade and development issues for Pakistan at various multilateral fora. He was a Fellow of the United Nations Disarmament Fellowship in 2013.

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