

Teesta River Basin: A microcosm of multiple water conflicts

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In India and Bangladesh, one thing that is evoked across popular media and the citizens in both nations is that their livelihoods and futures are intertwined with the 56 transboundary rivers criss-crossing through their terrains. These rivers have a significant influence on the social, economic, and political life of two densely populated nations of South Asia, as well as on their foreign relations.

One of the most contested among them is the Teesta River and the sharing of its dry season flow. The inconclusiveness of Teesta water sharing agreement remains consequential for the larger India-Bangladesh foreign relations. The preoccupation in policy circles with regard to Teesta is, however, centred around the international dimension of water sharing. What has often been less discussed are the various contradictions that emerge within nations with the potential to contribute to the growing water security challenges of the region.



Teesta Barrage and the Canal located in Jalpaiguri District, West Bengal. Sanjit Sakhari

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Teesta Barrage Project: Infrastructure and Uncertainty.

The Teesta Barrage Project (TBP), located in the Jalpaiguri district of West Bengal in India and upstream of Bangladesh, is central to the friction between the two riparian nations. TBP was conceived in 1975–76 in three phases as one of the largest multipurpose projects in Eastern India, for irrigation, hydropower generation, navigation, and flood control.

Besides serving irrigation demand in major northern districts of West Bengal, the barrage also channels part of the Teesta water to the Mahananda River (a tributary of the Ganges) through the Teesta-Mahananda link canal. The latter component remains important for providing drinking water to Siliguri, the third-most-populous city in the state of West Bengal.

Downstream, there is a second Teesta Barrage Irrigation Project (TBIP) constructed between 1979 and 1997 by Bangladesh for its own irrigation demands.



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However, the conflict did not start with this project; instead, it amplified it. The negotiations for dry season water sharing of the Teesta started right after Partition during the 1950s, and an ad hoc sharing agreement was reached in 1983, but could not be sustained. In 2011, the Government of India (GoI) negotiated an agreement with Bangladesh, but the state of West Bengal opposed it. The cooperative effort remained unfulfilled, given that water is a state subject in India. West Bengal's contention with the centre hinges upon the significant reduction of Teesta's flow and its inadequacy to serve the existing irrigation and drinking water requirements of North Bengal.

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The projects across the border itself are in a state of uncertainty. A preliminary account from the state of West Bengal suggests that the Teesta Project, as it was conceived, is far short of completion due to various political and environmental challenges (such as inadequate flow/volume).

Bangladesh, too, initiated its own set of responses on account of low flow by initiating the Teesta River Comprehensive Management and Restoration project. It aims to increase water storage capacity, dredging of riverbeds, and other interventions with technical and financial aid from China.

This, coupled with the changed circumstances post the ousting of the Awami League regime in Bangladesh, makes Teesta a protracted issue, complicating the already fragile bilateral relations.

Both sides acknowledge that a reduction in Teesta's flow is an impediment to advancing meaningful negotiations, given that it affects their planned dry season paddy cultivation. Here, food security concerns are often invoked, forestalling any mutually acceptable outcomes.

The project that was originally conceptualised to transform the agricultural and economic potential of North Bengal in India evolved into a bilateral, federal, and local conflict. Here, the state is not a monolith but rather composed of various governmental levels and outcomes are defined by their interaction with each other. This manifested in TBP, a project of national importance, being reduced in both its functional scope and spatial coverage.

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Infrastructure development became both an enabler and a casualty of water (in)security. At the same time, the contested developmental interests within nations at the federal and state levels (which changed the project's scope and outcomes) influenced the willingness to cooperate.

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Second, water is also linked with sectoral concerns such as food and agriculture, which remain potent sites of politicisation by different constituencies. The interplay of these factors also limits the ability of existing transboundary institutional arrangements (such as the Joint River Commission between India and Bangladesh) to contribute to mediation. Moreover, conservation and restoration of the river ecosystem, and the population dependent on it, hardly find any space in the overall policy dialogue. The second case talks about the intersection of climate risks and hydropower development.

Floods and Hydropower

The developments in the upstream of the Teesta barrage –the mountainous region of Sikkim in India—are contrasting and often divorced from downstream dynamics. For instance, the state of Sikkim, from which Teesta originates, is suitable due to its geography for hydropower development.

Since the GoI launched the 50,000 MW ‘hydro initiative’ in 2003, Sikkim has been at the

forefront of India’s quest for energy security through hydropower development.

The initiative was also lucrative for the state of Sikkim, which views hydropower as an important resource for the state’s revenue generation. In line with GoI’s policy, the state government of Sikkim constituted a Hydro Committee to devise a roadmap for fast tracking of hydropower development in the state, including involvement of the private sector and Central Public Sector Undertakings. This manifested in a number of hydropower projects in Sikkim. The rush in hydropower has also been met with local community resistance and political mobilisations.

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The higher elevation in Sikkim is also the site for glacial lakes—with significant potential of creating catastrophic flooding as a result of outbursts of these lakes, known as the Glacial Lake Outburst Flood (GLOF). The Central Water Commission (CWC) is engaged in the identification and preparation



*Sikkim Flood 2023,
Vijayakumarblathur*

of a yearly inventory of glacial lakes as well as regular monitoring and early warning for disaster preparedness, given it requires support from the higher governmental level.

In 2015, the CWC issued a crucial advisory on the high likelihood of the sudden outburst of the South Lhonak Glacial Lake in Sikkim. The advisory was directed at hydropower and disaster management authorities and underlined the significant risk associated with the entire chain of hydropower projects along the Teesta River. The warning became a reality when, in 2023, a landslide triggered an outburst of the South Lhonak Lake, leading to catastrophic flooding. Its impact was not restricted to Sikkim but trickled down to West Bengal and to Bangladesh. The hydropower plants along the Teesta were severely affected, and the Teesta-III (Chungthang) hydropower dam was completely destroyed.

This highlights that rivers are not just about water; they are also linked with the broader political economy of energy and state electoral politics, which are often incongruent with the changing contours of the environmental risks. Moreover, the traditional approach of governance falls short in the face of climate change.

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Take, for instance, the coordination mechanism across various governmental levels. The concerns raised by the CWC in 2015 did not result in consideration of enhanced factors of safety in the construction and operation of the hydropower plants in Sikkim. This is also reflective of the absence of coordination between the line ministries (Ministry of Water Resources and Power in river management vis-à-vis hydropower development).

Moreover, actors such as the private sector and international developmental partners beyond the traditional realm of the states are increasingly shaping river basin governance. Lastly, the human security dimension, both in terms of an objective analysis of the costs and benefits accrued from the hydropower development and the increasing disruption of their lives and livelihoods, is seldom discussed. The last case highlights how external factors complicate the existing conditions of the Teesta basin region.

Beyond Watersheds

In the states and the districts comprising the Teesta Basin, the environmental risks sometimes emerge from outside the known biophysical boundary, further intensifying the existing conditions. Recently, the torrential rainfall on 4-5 October 2025 led to severe flooding in some of the districts in North Bengal that are part of the Teesta basin. Concomitantly, a hydropower dam malfunctioning in Bhutan heightened the severity of the flooding. In anticipation of downstream flooding in North Bengal, Bhutan warned the state of West Bengal of potential consequences. The reciprocity was politicised by West Bengal, which voiced its discontent over the inability of the central government to respond to the state's 'long-standing demand for the Indo-Bhutan River Commission'. This is one of the instances where a subnational state government demanded a transboundary institutional arrangement to address water and related risks. Ironically, it is the same West Bengal government that opposes cooperation on sharing dry season Teesta flow.

These seemingly disparate events are tied together by common underlying logic that water security is intrinsically tied with food and energy concerns as well as the ecology and human security.

The nexus of water and related security concerns is also severely disrupted by the climate-related risks. Finding a common ground even domestically is fraught with various contentions. The Teesta basin is a classic example, where water scarcity co-exists with water surplus (flooding) based on the spatial and temporal context. For large and complex basins like Teesta, the varied intra and inter-sectoral water priorities do not manifest in laws and policies that are harmonised across various levels—resulting in multiple localised conflicts within nations. The domestic challenges further stretch the resiliency of the transboundary water institutions, in whatever limited form they are present. These observations share similar patterns with many other transboundary rivers of the world. However, it makes an argument that the South Asian nations require addressing these multiple contesting challenges for transforming their regional conflicts.

(The views expressed in the article are those of the author and do not reflect in any way his affiliation to any organisation or institution)



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