

# Revive our rivers by securing flow and stopping pollution

M Inamul Haque talks to Priyam Paul of The Daily Star.



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## What persistent challenges in Bangladesh's river and water resource management demand immediate reform?

Water issues in Bangladesh fall into two categories: domestic and transboundary. The country faces two major transboundary disputes concerning the Teesta and Ganges rivers.

The Teesta River basin in Bangladesh covers approximately 20,000-25,000 square kilometres. However, past water experts, both international and internationally funded, have inaccurately defined the basin as only 3,000 square kilometres, confined within embankments. In reality, the Teesta extends into a larger floodplain with underground water flow connecting the Atrai and Bangali rivers to the Brahmaputra.

Recent estimates suggest that 20-30 million people depend on this basin. Yet, international records, particularly IUCN maps, continue to cite only 3,000 square kilometres, significantly underrepresenting the population reliant on its water. The government must remap and publish a corrected version of the Teesta basin internationally; otherwise, Bangladesh's water entitlements in transboundary negotiations will remain weakened, especially against India, which controls the upstream flow.

In transboundary water-sharing agreements, such as those under the International Watercourses Convention, basin size and dependency determine water rights. Misrepresentation of Bangladesh's basin area undermines its claim to an equitable share of Teesta's water.

A similar challenge exists with the Ganges. The focus should not be solely on the water reaching the Farakka or Gazaldoba barrages. Instead, a fixed proportional sharing system—where Bangladesh receives 70 percent and India 30 percent—should be established. During water shortages, both nations would receive less but in fair proportions. This approach fosters cooperation among dependent communities across borders. If water is blocked upstream, affected communities from both sides can jointly demand its release, promoting shared responsibility over conflict.

The Farakka Barrage has a maximum diversion capacity of 40,000 cusecs, while the Teesta Barrage is limited

## Teesta Barrage.

PHOTO: DILIP ROY



» The government must remap and internationally publish a corrected version of the Teesta basin; otherwise, Bangladesh's water rights in transboundary negotiations will remain compromised, particularly against India, which controls the upstream flow.

» Water rights extend beyond humans to include animals. While some countries recognise animal rights, Bangladesh has yet to embrace this concept. The discourse remains human-centric, overlooking the wildlife that also relies on rivers.

» While climate change remains a global concern, the prediction of Bangladesh's large-scale submersion due to its effects is increasingly being disputed.

» For transboundary rivers, both sides of Bengal must recognise their shared ecosystem. The issue is not one of territory but of mindset, society, and politics.

» Discussions about China's involvement often distract from the core issue—ensuring fair water-sharing between Bangladesh and India. The focus should be on the Bengal Basin and its people, not India as a whole.

essential. The minimum flow of any river—whether the Teesta, Buriganga, or any other—must be preserved. Excess water from rainfall or floods should flow downstream naturally, but minimum flows must never be blocked.

Additionally, river pollution must be strictly controlled. Industrial waste is the greatest threat. Unlike organic waste, which aquatic organisms can break down, chemical pollutants from factories are toxic and irreversible.

Thus, I strongly advocate for two fundamental principles in domestic water management: ensuring a continuous minimum flow in all rivers and preventing industrial pollution.

## How do you assess the Bangladesh Delta Plan 2100, which aims to secure the future of water resources while mitigating climate change and natural disasters?

The Delta Plan addresses two key concerns: managing water resources and mitigating climate change. Regarding climate change, it has been claimed that one-third of Bangladesh's delta will submerge. I have consistently disagreed with this claim. Why? Because around 1,400 million tons of silt flow downstream each year, extending Bangladesh's landmass by roughly 300 square kilometres annually.

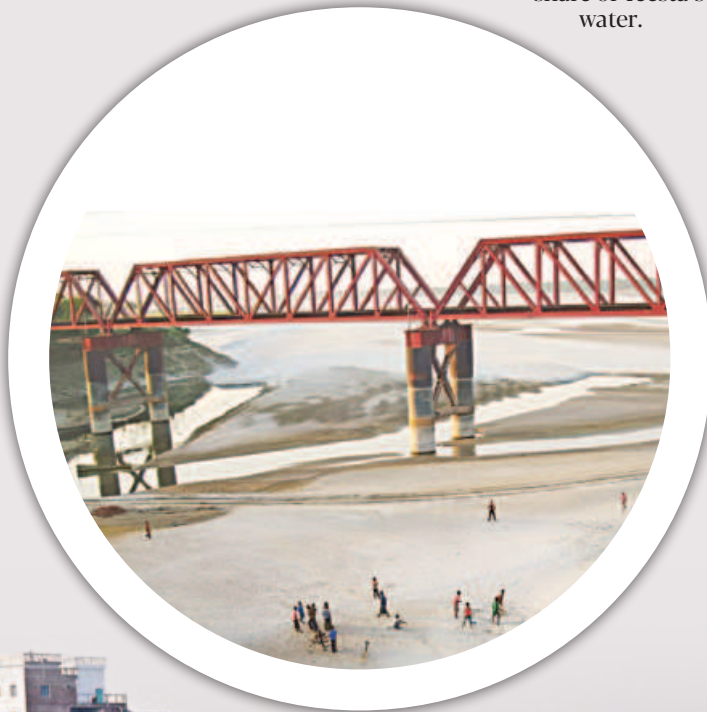
This natural process has been ongoing for millennia. The Bengal region has gradually risen from the sea due to silt deposition. In Dhaka, sedimentary rock layers extend five kilometres deep, while in Kuakata, they reach about 20 kilometres. Moreover, Bangladesh's continental shelf extends 200 nautical miles southward into the sea, also accumulating silt.

Thus, climate change has a minimal impact in this regard. While climate change is a global concern, the theory

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## Hardinge Bridge over the Padma River.

PHOTO: STAR



to 1,000 cusecs. No matter how much water flows upstream, India cannot divert more than these limits. If inflows decrease, both upstream and downstream communities must collaborate on sustainable solutions.

Another emerging concern is the Brahmaputra, where China and India are constructing multiple dams in Arunachal Pradesh and upstream regions. However, these projects are expected to have minimal impact on Bangladesh's water availability. Similarly, the once-contentious Tipaimukh Dam in the Meghna basin is no longer a major concern since its construction was abandoned.

At the domestic level, every river—whether originating from a small stream (chara) or marshland—must maintain a minimum flow. Many Bangladeshi rivers originate from marshlands, and

preserving their natural flow is crucial.

During winter, rivers naturally experience low flow, yet historically, water has always been present. This historical right to water must not be obstructed. In my 2008 book, I argued that water rights extend beyond humans to animals. While some countries recognise animal rights, Bangladesh has yet to acknowledge this concept. The discourse remains human-centric, ignoring the wildlife that also depends on rivers.

For thousands of years, humans and animals coexisted with natural water cycles. While floods and droughts occur, both have adapted to these fluctuations. However, artificially halting river flows disrupts ecosystems, driving species toward extinction.

Protecting domestic rivers is

## It is crucial to protect our domestic rivers and water resources.

PHOTO: PRABIR DAS

