

Tipaimukh Dam: For whose benefit?

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HONOURABLE Foreign Affairs Adviser to the Prime Minister, Mr. Gowher Rizvi, wrote an article in *The Daily Star* (December 13) on Tipaimukh, and appealed for rational and scientific discussion, rising above emotion or partisanship. He wrote that he had spoken to many experts, environmental scientists, policy makers and politicians from all shades of opinion to understand the impact of the Tipaimukh project prior to traveling to Delhi. They helped him to understand the issues and raised concerns on which he was to seek clarifications and assurances. He met with the key decision makers in India, including the prime minister, and raised those concerns. Finally, he summarised the facts and information he was able to gather in 15 points.

Tipaimukh is on the border of Kolashib district of Mizoram and Churachandpur district of Manipur, where the Tipai (Tuivai) River falls into the Barak River. Here, the Barak River, arriving from northeast through the Kala (Kacha) Naga areas of Manipur, makes a U turn. The Tipai River originates in Myanmar, arriving from the south to fall on this turning point. The Barak River then flows towards the Cachhar district of Assam through the eastern valley of Bhuban Hills. Through the hills and plains of Assam it flows for about 180 km to reach the Bangladesh border point at Amalshid. Here, the river bifurcates into the Surma and Kushiara Rivers to enter Bangladesh. Reacting to the article of the adviser, I am expressing my opinions on his points to make it clear who will benefit from the dam.

Tipaimukh Dam Project is expected to generate 1,500 MW of electricity, which is actually too ambitious a figure. The Barak River upstream of the dam point has catchments of about 12,000 sq km area, with an average annual rainfall of 1,500 mm. The Kaptai Dam in Bangladesh has double the rainfall intensity, double the catchment areas, and double the storage capacity, but can produce only 450 MW. A

dam at Tipaimukh will restrict some flood flow towards the lowlands of the Kushiara and Surma valleys in summer, but cannot check monsoon floods because of being at full storage. Anyway, storage in the dam will augment low flows in the rivers during dry months of autumn, winter and spring. But this augmentation shall keep the *haors* covered in water until February.

Whatever the scientists and hydrologists argue, a hydel reservoir in flood season is kept to full capacity to get the highest output of electricity. As per the design of a dam, the water overflows through its spillway in case of heavy rainfall. Thus, all regulations fail to mitigate flooding in monsoon. This happened this year in Damodar Valley, when the Panchet, Mython, Barakar and Tilaiya hydel dams were over flown and severe floods occurred in Bardhaman, Bankura, Hoogly, and Haora districts. It is true, as Mr. Rizvi observed, that a dam with a reservoir augments the flow of the river in the lean period and does the opposite in the rainy season. It would have been good news to us if the dam was to operate in this manner in Rangpur Division. In Sylhet Division, it is the reason of threat.

The Surma and Kushiara Rivers flow through the *haor* areas of Sylhet Division. They feed the lowlands with floods during monsoon and drain them in winter. Its ground elevation has a natural slope towards the Tanguar Haor in Sunamganj, which has surrounding elevation about 3m average above mean sea level. The Surma

River has catchments in the Garo, Khasia and Jaintia Hills. The flash floods in the *haors* arrive in April, after any heavy downpour in the Barak valley. A dam at Tipaimukh will restrict some flood flow towards the lowlands of the Kushiara and Surma valleys, if the flood arrives in April. But the dam to produce hydroelectricity will augment low flow in the rivers during autumn, winter and mid-spring. This will restrict drainage of crop lands in *haor* areas

the proposed Tipaimukh Dam. Nagaland is not lower but upstream of the Barak river. I agree with Mr. Rizvi that the agreement is only for intent for funding the project. The World Bank is to arrive but is yet to come. I also agree with his environmental concern. I appreciate his argument that the environmental impact of the dam -- flooding, submerging of land, displacement of people, disruption of livelihood and destruction of wild animal habits, etc. -- will

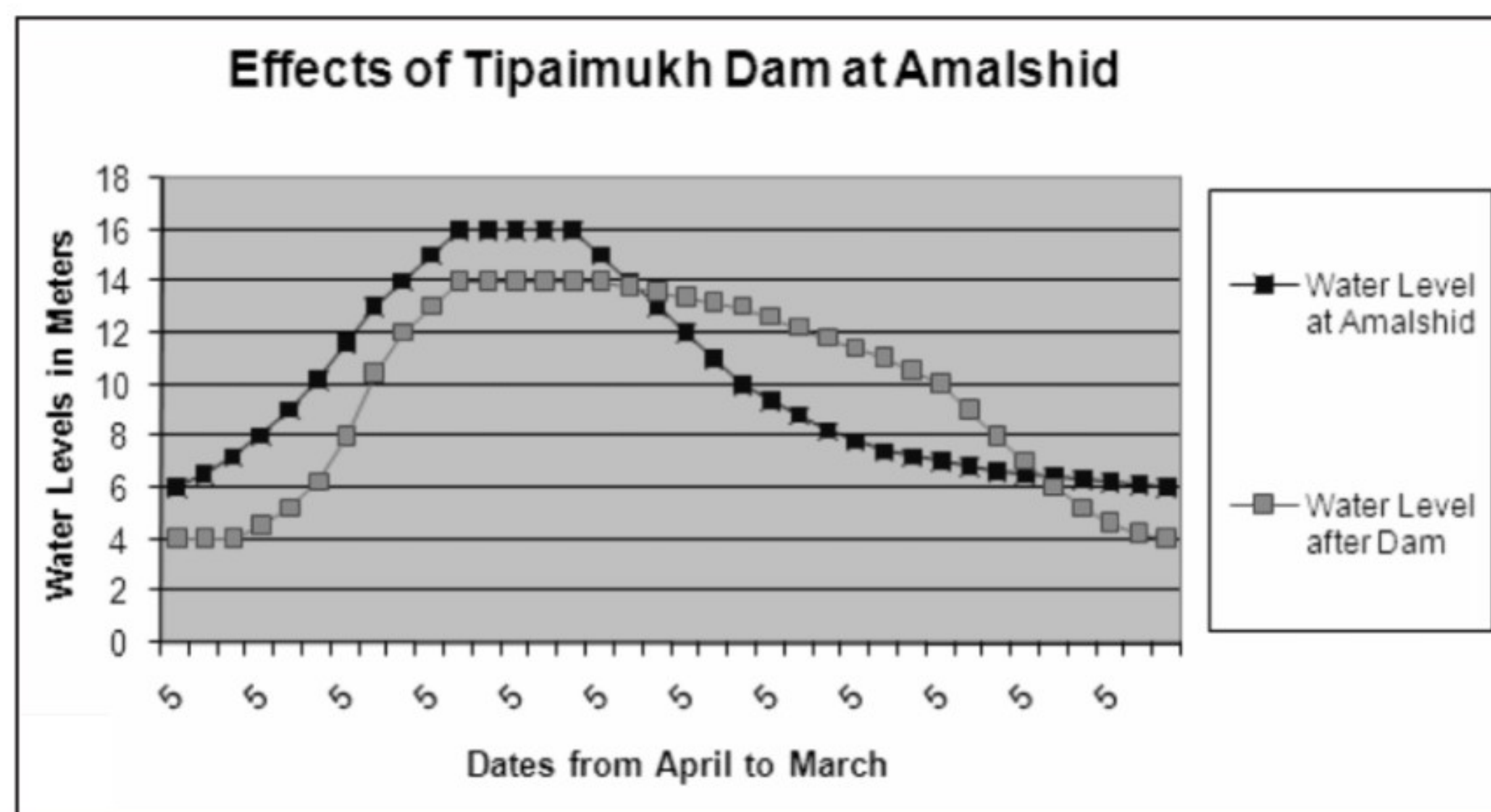
be largely confined to India. But in Bangladesh it has other impacts, apart from the loss of the *haor* crops. India is likely to stop the low flows of Barak during midspring to summer; which shall reduce the low flows and water levels of the Kushiara River inside Bangladesh, leading to negative impacts in river ecology.

project with Bangladesh, and to welcome any study team from Bangladesh, sounds great. Bangladesh civil society and scientists should definitely take advantage of this offer.

The Indian prime minister's assurance that the Tipaimukh project has provisions for flood control and will increase supply of water during the lean season would have been great if it was in the case of Teesta River. Though there is no diversion in Sikkim, water in lean period is being stopped inside the low flow dams, for which Teesta River flow is lowering down upstream of the Gazaldoba Barrage. A similar situation will arise during Barak River low flows in summer, though India may not construct a barrage to divert water for irrigation or any other use. India's invitation to Bangladesh to be their equity partner in the Tipaimukh project, to take a share of the power to be generated, is not acceptable at all. This would bind us in a trap in case of any adverse effects to Bangladesh.

Building of dams for generating hydroelectricity and other purposes was considered a great civil engineering feat during the 1950s and 1960s. But in the 1970s, eviction of human population, loss of agricultural land, and damage to the ecosystem were quantified several times higher than the benefit achieved. Public sentiment against dams started in the 1980s, and spread worldwide in the 1990s. Dams may have benefits in developed countries where substantial compensation is given to the evicted people. But in under developed countries of Asia, eviction means extinction or slavery. When Farakka Barrage came into operation, some experts in Bangladesh advocated building dams in Nepal to store up Himalayan waters to augment Ganga flows. The dams in Sikkim are not augmenting but eating up the low flows of the Teesta River, reducing its flow down to the Bengal Plain.

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Barak is an international river, so the interests of Bangladesh have to be taken into account according to current international practices.

from December to February. Bangladesh will lose boro crops worth Tk.1,000 crore per year because of this.

A barrage is planned at Fulertal in Cahra District of Assam, so it does not come under the purview of the Promoter's Agreement. India may not construct this barrage to keep navigability of the Barak River towards 80 km upstream, to the discharge point of

A face encountered

RIFFAT JAHAN

AFTER returning from my recent visit to Barisal, a haunting sense of powerlessness has crept inside me. Among the blur of social and psychological oppression, one face has been engraved in my mind: that of Masuda, a 17 year old girl living with her brother's family. Their parents died two years ago. During our visit, she was hardly able to speak because of her brother's repeated interruptions. She did not have the courage to say what her eyes clearly portrayed.

Masuda's eyes told me tales that her voice could not articulate; tales of despondency, subjugation and a lifetime of sacrifice. The shackles of society that held back her words could not overshadow the pain in her eyes. Realisation pricked my conscience: we dwell in an era where women are no longer expected to be confined within the boundaries of their home; where the right to freedom and speech is emphasised repeatedly and with considerable vigour. However, the broken, muddy paths of Bangladeshi villages are yet to be free from the iron grip of a society made up of superstitious beliefs and unreasonable social barriers.

Her face, which reflected a silent plea for help, is one of the thousand faces of rural Bangladesh, where adolescent girls are considered nothing more than a mere liability.

It was clear that non-cooperation from her brothers and other family members held back this girl's urge to grow and blocked her potential with a wall of solid religious boundary, through which she could not escape. Her hope for a better future was choked by society and circumstances. She was made to feel like a burden, not a tiny miracle of God. Ironically, the conservatism and religious attitude of her family created a greater hindrance than society itself.

The norms of our society -- those which are

meant to assist in improving our lives -- are the very issues which appear as lethal thorns in the road to development and progress. Adolescent girls who are struggling in the black depths of extreme poverty are most vulnerable. Families and communities put the blocks of "norms and regulations" of society inside girls' ears without thinking of the livelihood of these girls. NGO field facilitators, who work with adolescent girls, confront constant struggles from the community and respective families regarding the assistance they offer.

As a result, the sparks of hope which reside in extreme poor girls die out eventually and they are forced to accept a life void of education and individual identity. Their presence of mind and sense of individualism is shredded to pieces by the constant suppression they face from their families and community. Those who try to stand against this usually face tragic consequences.

In this typical situation: where girls' potentials are not acknowledged, where investing in girls is not equally accepted or appreciated, can we visualise a way to develop towards achieving the MDGs? I believe the challenge remains in creating an agreeable environment where gender discrimination will not stand as an issue and

where rural communities will be motivated to educate their daughters, sisters and wives. But this requires the co-operation and support from the communities along with a change in attitude of those striving for a healthier, brighter Bangladesh.

Maybe a time will arrive when the girl's face will light up with hope and happiness and the painful subjugation which swam in her eyes will finally disappear.

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How to write academic papers



You just need to know the jargon Watch out, Prof! Universities all over Asia are clamping down on lecturers. Unless they get research papers published at regular intervals, they'll be thrown out.

Aiyeeah. Your humble narrator, who works from an office at a university, asked whether newspaper columns and books counted. "No," said Syed Siddique, a reader who has been a professor for more than 20 years. They have to be works in "academic-style writing" published in "learned journals."

But what exactly does that mean? Reader Denise Luk tried to help by showing me a paper published by top academic publisher Routledge. It opened with this line in the introduction: "Since thought is seen to be rhizomatic rather than arboreal, the movement of differentiation and becoming is already imbued with its own positive trajectory."

I read the sentence three times but could not make sense of it. And I'm supposedly a writer. "Is it English?" I asked. She replied: "No, it's 'Professorspeak,' the world's most baffling language."

To the rescue came reader Chaminda Da Silva, a Tokyo-based research fellow in computer science. He offered to give me lessons, saying: "The title has to follow a certain pattern: (i) Short baffling phrase, (ii) colon, (iii) long boring phrase. For example, Harry Potter and the Sorcerer's Stone would become PotStone: a Study of Harry Potter's Experiences Related to the Sorcerer's Rock Specimen."

Hmm. I tried it myself. Batman would become: Going into Bat: A Narrative

of a Tycoon in a Pointy-Eared Mask Inspired by the Aerial Winged Rodent Chiroptera.

It wasn't as hard as I thought. I decided to compile tips from academic types I know.

As a service to the thousands of university lecturers across Asia worried about this, here are Top Tips from experts.

After you've made a hypothesis, done some experiments to see if it is true, and then written up your notes, edit your phrases as follows.

Instead of "I think" you write "It is widely believed." Instead of "Me and my friend think" you put "It is universally accepted that."

But beware. Some tricks are too well known, Denise said. For example, the phrase "the lead researchers would like to acknowledge the assistance given by students" is known to mean "I made my students do the work and then stole it."

And sentences such as "we selected three examples at random" inevitably mean "out of 2,368 attempts, only three results supported our hypothesis so those are the ones we here record."

If you want to sound really smart, the final three steps are these.

Rewrite your sentences to be in the passive voice, so that "I lit a fire" becomes "The fire was lit by I."

Remove easy words and substitute hard ones. So "I lit a fire" becomes "The conflagration was ignited by a two-legged mammalian animal of the species *humanus academica boringus*."

As a final step, true academics go through their papers and replace every occurrence of the word "I" with the word "we" however absurd it sounds.

"On the day of the experiment, we woke up, blew our nose and kissed our wife. Our experiment was delayed when we dropped our test tube on our left foot after we were distracted by our departmental secretary, who sat on our lap."

If all the above sounds too exhausting, take a break and read a comic book.

I recommend Aerial Winged Rodent Chiroptera.

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