

The dying Ganges

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HE Ganges, one of the largest rivers in the world, is providing fresh water to 500 million people in South Asia. The river is particularly important in delivering waters for domestic, industrial, and agricultural sustainability in the region. About 37% (area-wise) of Bangladesh depends solely on the Ganges for freshwater supply, which is not only supporting millions of lives but is also substantially important in maintaining the ecological balance of south-west Bangladesh as well as the largest mangrove forest, the Sundarbans.

In 1975, India commissioned a barrage on the Ganges at Farakka, 18 km above the India-Bangladesh border, in order to divert a portion of dry season flow to increase the navigability of Calcutta port. Right after it went into operation in 1975, the freshwater supply of the Ganges decreased considerably, with a number of consequent effects in the south-west part of Bangladesh.

For instance, the Ganges-Kobadak project, popularly known as the G-K project, is facing acute water shortage since commissioning of the barrage. Salinity both in surface water and in groundwater increased significantly,

which is affecting agricultural production and drinking water availability. In effect, public heath in the Ganges dependent area is under severe threat.

Around 685 km of waterways have already disappeared, and erosion and deposition patterns have changed noticeably. The top-dying disease of Sundari trees in the Sundarbans is believed to be the result of reduced flows of the Ganges. This situation will be aggravated in the context of climate change as IPCC, in 2007, warned that the headwater source of the Ganges at the Gangotri glacier was going to disappear by 2035.

Another study reported that rainfall would be 3-7 times higher in the coming decades due to climate change, which may result in more frequent and catastrophic flooding in Bangladesh. The depositing of sediment of the Ganges system would change dramatically, which could have spectacular impacts on erosion and deposition patterns.

This write-up can be of use in discerning the morphological situation of the Ganges in Bangladesh. Longterm remotely sensed data (1972-2008), mean monthly discharge at Hardinge Bridge (1934-2008) and rainfall data of 10 stations of southwest area (1950-2008) of Bangladesh were utilised. Geographic

ideologues who twisted history, litera-

ture, and even shaped literary figures

in their mold to suit their objectives.

We were told that in choosing between

the two great Bengali poets our choice

should be Nazrul because he fitted the

ideology and the religion of the new

previous rulers selectively chose

poems and writings of Nazrul for

reading in schools -- those on Islamic

topics or with an Islamic overtone. To

an uninitiated young mind with no

understanding of Nazrul's wide hori-

zon of poetry and writing, this selec-

tive choice left the impression that the

poet wrote only of one particular

To strengthen this Islamic image of

Nazrul books and magazines of the

period were adorned with photos of

Nazrul with a cap on (much like hav-

ing a photo of Jinnah with a cap.) Our

radio stations during that period

would also make a special attempt to

broadcast songs of Nazrul that mostly

praised the glory of Islam (Hamd and

Naat), and other Islamic songs as if

these were the only songs that the poet

ing and hearing about Nazrul through

a highly selective curriculum, it was

hard for a child to believe that Nazrul

ever wrote anything else. It required a

deeper literary interest to know the

Growing up at that time, and read-

To prove this twisted logic, our

country.

religion.

ever wrote.

Information Systems (GIS) was used to estimate morphological changes between 1972 and 2008.

Planform analysis revealed that both the right and the left banks of the river underwent dramatic changes since 1972, and the changes were particularly evident during the period before the treaty between the two countries. The main course of the Ganges widened many times in many places in 1984, 1989 and 1995, indicating severe lateral erosion. Erosion was more pronounced near the Ganges-Jamuna confluence near Aricha. Erosion rate per year was about 85 sq. km from 1972 to 1984. The highest erosion was observed in 1984, when more than 160 sqkm land was eroded. During 2001-2008, erosion rate reduced to about 65 sqkm/year.

In contrast, deposition of the Ganges has been increasing with the span of time, which may be attributed to soil erosion upstream as well as increasing human interventions on natural flows. Estimation showed that in 1972, char areas in the Ganges measured 312 sqkm, whereas in 1984 and 2008, char areas increased significantly. Total areas of chars were 454 and 360 sqkm in 1984 and 2008, respectively. Calculation of sinuosity index showed that the Ganges is turning to wandering shape, meaning that the river is neither braided nor meandering in shape. In addition, few pockets throughout its course are being developed, where many-fold increase of lateral erosion is observed.

An assessment has been made to correlate these morphological changes with water flows and rainfall.

The water flow data was divided into treaty and non-treaty periods. This computation clearly indicates that the morpohology of the Ganges is highly correlated with the consistent flows from upstream.

Though a 30-year water treaty has been in effect between the two countries since 1996, recent water flow analysis revealed that Bangladesh is being deprived of its due share during lean season. However, wet season flows of the Ganges have been on the rise in recent years.

Consequently, many tributaries and distributaries of the Ganges are being filled up as a result of increasing sedimentation. The Gorai, which plays a crucial role in flushing salinity further downstream, virtually dries up during dry season. Hence, to keep the Gorai river flowing, the Bangladesh government has started dredging that costs a good amount of money. Rainfall analysis of 10 stations in the Ganges dependent area of Bangladesh shows very subtle changes in the rainfall regime. Hence, water diversion by India is the only factor for the recent morphological changes in the Ganges basin in Bangladesh.

It is claimed that the normal flow of the Ganges from its source has been less than in the past and withdrawal of waters using 34 dams including Farakka in the upstream does have a significant impact on Bangladesh and its economy. If this situation continues, 37% (area wise) and one-third of the population of Bangladesh will face a critical situation in the coming decades. Probable climatic change may also aggravate the hydrological effects.



This was once the mighty Padma.

In order to keep the Ganges system Bangladesh's claim on water alive, Bangladesh should have undertaken the construction of the proposed Ganges Barrage, which would help us to save water to be used during dry season. In addition, the Joint River Commission should play an active role to monitor the guaranteed water flow stipulated in the 1996 treaty.

Management of the large amount of sediment deposited by this river should also be taken into account in order to save people and agricultural lands from persistent water-logging, which has become a common phenomenon in Jessore and Sathkira region due to siltation in the river beds. Since India agreed to consider

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resources during the recent visit of

Bangladesh's prime minister in New

Delhi, we should keep demanding our

due share according to the 1996 treaty.

If we fail to maintain continuous flows

in the Ganges system, it will be really

impossible for us to save the environ-

ment and ecosystem of the entire

south-west region of Bangladesh,

including the largest mangrove forest

of the world, the Sundarbans.

Between the river and the sea

Once again we find ourselves in a pointless debate over Rabindranath Tagore and Nazrul -- the two literary icons that we Bengalis are indebted to. Time and again the detractors of our Bengali culture have tried to foment a controversy in the name of our Muslim identity and imply that this identity alone should be the basis of our choice of a national poet.

A pointless debate



ZIAUDDIN CHOUDHURY

NCE again we find ourselves in a pointless debate over Rabindranath Tagore and Nazrul -- the two literary icons that we Bengalis are indebted to. Time and again the detractors of our Bengali culture have tried to foment a controversy in the name of our Muslim identity and imply that this identity alone should be the basis of our choice of a national poet. I thought we had long passed the stage when our cultural choice was dictated by a political ideology foisted upon us by our Pakistani masters. We thought our liberation had freed us from the likes of an infamous information minister in the pre-liberation period, who had famously declared that Rabindra Sangeet was part of an alien culture.

This unnecessary debate has once again has thrown us back to the days when we were frequently trapped in a dichotomous world. One section tried to introduce us to the new world based on the ideology that laid the foundation of the division of the subcontinent on the basis of religion. The other held before us the centuries of tradition that cut across religion and embraced the rich culture and heri-

tage of the country that we inhabited. We were hapless victims of propaganda that was be led by bigoted poet, and enquiry into the man Nazrul that could lead one to know the real Nazrul. For me, it was sort of a personal

venture well into my college days when I was exposed to the larger person, and the theme of universality of gamut of his writings. I would discover moving pieces on Lord Shiva, goddesses Lakshmi and Saraswati and on the theme of the love of Radha and and Naats, he also wrote and comkirtans. About a hundred of more than 2,600 songs he wrote were based on kirtan.

All his life, Nazrul attacked fanati-

We as a nation should be glad that versality of the human spirit.

Today, when we see ourselves threatened by imputation of religious intolerance, both as a country and as followers of Islam, we need to turn to Nazrul repeatedly for his message and teachings that rise above religion, and poetry that touches humanity across all beliefs.

We disparage not only our culture and tradition, but also belittle the great poet himself if we associate him with anything other than secularism. Our leaders, whichever party they may belong to, will serve the country and the poet better if they truly understand what the great poet had stood for.

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beliefs that ran through the whole how this great mind of all times, who would write eloquent poetry about Prophet Mohammed and Islam, would pen equally elegant and highly Krishna. Just as he composed Hamd posed bhajans, shyamasangeet, and

cism in religion, denouncing it as evil and inherently irreligious. He devoted many works to expound upon the principle of human equality, and amity among followers of different religions.

Yet, the irony was that the neoideologists who were looking for icons to celebrate the duality of nationhood in the sub-continent would turn to him to promote their line of thinking.

we adopted Nazrul as our national poet, not because of what the post 1947 neo-ideologists wanted to portray him as. He did not represent any single religion or any single society. In his own words he belonged to all. He is our national poet because of what he is, and what he gave us. As a poet and as a man Nazrul represented humanity, equality of all religions, and uni-

The choice between living in a refugee camp or living in Myanmar under a hostile regime is, as one refugee stated, like a choice "between jumping into the river or the sea." The Rohingya have been subject to this dilemma for decades.

KRISTY CRABTREE

HORA Khatul crouches on top of a square of bamboo, while curious neighbours, friends, and family swarm into the darkened room to hear her story. At once the room is packed and smoke from the make-shift kitchen fills the open spaces between bodies, until there is barely breathing room. As Jhora begins her story, nods of recognition move through the crowd, no doubt her fellow refugees share the same experiences.

Jhora has been living in this 150 square foot hut in Leda camp with twelve other family members for about forty days. Jhora is an unregistered Rohingya refugee. She fled to Bangladesh after her family's farm was ransacked, their livestock confiscated and her husband tortured. Since then, life in Bangladesh has been "day to day," as she explains, "there is no future to plan." She complains that her husband must seek day labour jobs, but it is never enough and her family often goes to bed fighting hun-

ger pains. For many Rohingya refugees like Jhora the choice to flee to Bangladesh is a difficult one. Since 1982, the Rohingya have been deprived of citizenship in Myanmar, which means they are not protected by national laws and their basic human rights are severely restricted. In Myanmar, the Rohingya need permission to marry or travel, are prohibited from practicing their Muslim faith, and denied access to public education and health facili-

Under these dismal conditions the Rohingya are fleeing to countries such as Bangladesh or taking risky, often life-threatening, journeys by boat to Malaysia and Thailand seeking refuge from persecution. Once in these countries of asylum, their options are still restricted because of their status as refugees. One refugee lamented: "We have nothing here in Bangladesh; our needs are not met here. We can't really work or live in Bangladesh, but we also can't return to Myanmar."

As a nation that respects global human rights, there is a need for Bangladesh to protect and provide basic services for the Rohingya refu-

gees. For decades, Bangladesh has been providing limited protection and services to the Rohingya refugees, but opportunities for integration are restricted.

Without the right to work and facing extreme restrictions on engaging in wage-earning activities, the Rohingya are completely dependent on aid, yet this aid is insufficient to meet their basic needs for security, sanitation, public health, primary education, and mental health.

Because their displacement in Bangladesh is likely to persist, there must be a more long-term solution. The Rohingya will continue to be dependent on aid, raising costs for Bangladesh and international donors unless there is progress towards integration that allows the Rohingya to engage in legal wage-earning employment or income-generating activities.

A durable solution to the displacement of the Rohingya cannot come from Bangladesh alone, though. The US, in particular, should further integrate the Rohingya into their refugee resettlement program. There is an unwarranted distinction made between Burmese refugees and the Rohingya, the latter are resettled in far fewer numbers than other Burmese refugees. In 2008, US resettled 17,000

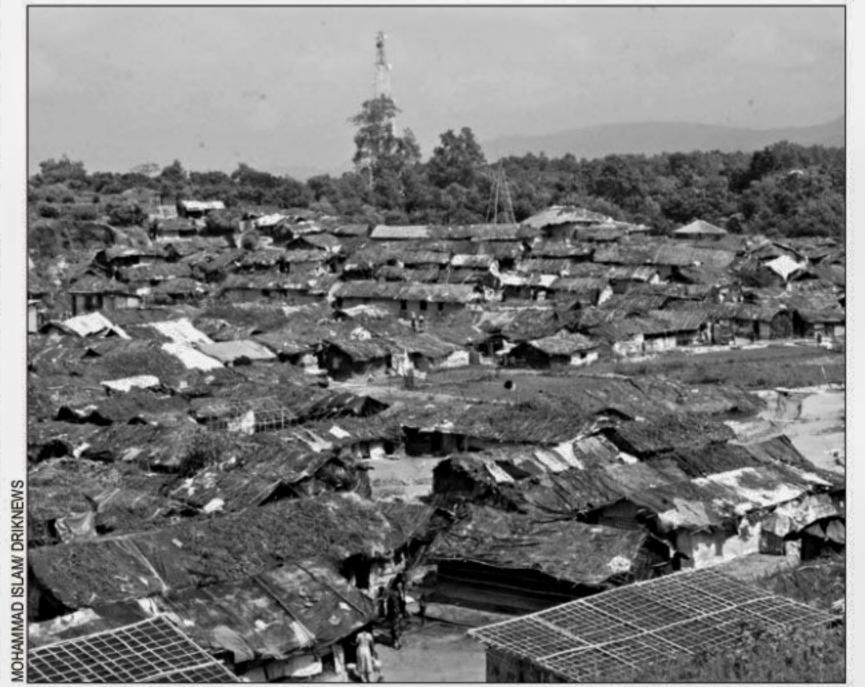
Burmese refugees, but not until 2009 did US begin to resettle Rohingyas, which were only a few families.

Although resettlement cannot be the only solution for the Rohingya, it is a critical factor in seeking a long-term solution to their displacement through the offer of citizenship. Further resettlement of the Rohingya in US would demonstrate the US government's commitment to seeking durable solutions for refugees and provide opportunities for the government of Bangladesh to support refugee integration and programs that promote refugee self-reliance.

The choice between living in a refugee camp or living in Myanmar under a hostile regime is, as one refugee stated, like a choice "between jumping into the river or the sea." The Rohingya have been subject to this dilemma for decades; the choice between languishing inside the confines of a refugee camp, living without documentation or legal protection in a foreign country, or living under a regime that not only refuses to recognise the Rohingya as citizens but systematically persecutes them.

It is a difficult decision for the Rohingya to seek refuge from Myanmar by crossing borders, but Bangladesh and US, as nations that respect human rights, have a duty to protect the persecuted.

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Living in Limbo.