

The dangers of dredging Jamuna

PIYALI BANERJEE

VULNERABLE riverbeds, shorelines and even fresh water lakes are being damaged by sand dredgers across the world. Sand - a necessary part of making concrete used extensively in the construction industry - helps build the cities of tomorrow. But as these cities go up, the natural environment around them suffers.

This is what will be happening soon in Bangladesh, now that the government has decided to undertake long-term dredging operations in the Jamuna River. The purpose is to clear river channels for shipping lanes. The government will also be making a hefty profit by selling the dredged sand to Maldives and Singapore. While it claims that it will stop dredging operations should it become clear that environmental damage is in fact being done, our river eco-systems cannot avoid this kind of devastating damage because by definition to dredge is to damage.

Studies of the environmental impact caused by lake and river dredging in other parts of Asia unquestionably prove this point.

China's growth is based on its ability to get large quantities of construction sand, and this building sand must come from somewhere. In the past, it has mainly been dredged up from the Yangtze River. But so damaging was the dredging that it has been banned. Now Chinese dredgers are scooping up sand from Poyang Lake. This lake feeds into the northern end of the Yangtze River.

Recent satellite images prove that it is having a widespread and detrimental impact. The photos show that the dredging has widened the river channel significantly. The old sandbars are nearly unrecognisable today.

Natural habitats along the shorelines have been deeply disturbed and aquatic life has disappeared due to the severity of the dredging practices. The balance of nature has been drastically changed.

Dr. James Burnham, an ecologist with the University of Wisconsin and the International Crane Foundation claims, "Sand mining has compromised the ecological integrity of the lake by contributing to less predictable seasonal water fluctuations and to a series of recent low water events." He also says that sand dredging at Poyang Lake is putting the survival of Siberian Cranes and Oriental White Storks at risk. Serious damage is being done to both fresh water reserves and lake habitats.

A similar assault is also taking place in India's rivers. Though the government there is making efforts to regulate sand dredging and police widespread illegal dredging, river dredging is so rampant that the state has almost lost the battle to protect its rivers. Their degradation is apparent all across the nation. And it will only get worse before it gets better because India's sandy rivers feed the vast appetite of its booming construction industry.

India will succeed in building a million more homes to house its poor, but those people will also live in degraded natural environments because river dredging takes a very heavy toll on the life of rivers. It harms biodiversity, affects water turbidity and water table levels. It can also hurt fisheries and damage farmlands. It promotes riverbank erosion and creates unexpected land losses; flooding can become much more severe as a result. These are some of the consequences of

river dredging. The question is not whether there is harm caused by dredging, but how much harm? In the case of India, not to mention China, it's obviously severe.

Now, even Bangladesh is joining in the sand-dredging craze. And the Jamuna dredging project and ensuing exports to Maldives and Singapore raise weighty environmental questions about a) the destruction of Jamuna aquatic ecosystems and b) the heavy metal content and contamination of the sand being dredged.

While the government vows that it will stop dredging if it learns there is environmental damage being done to the river, how likely is this, given that it takes years to fully understand the destruction that is taking place right from the start? Given the hard proof that plant, fish and wildlife devastation happens wherever dredging happens, how could there not be grave ecosystem injury?

Professor Quamrul Haidar of Fordham University, New York, who has studied the adverse impact of river dredging in Bangladesh claims there are two main adverse impacts caused by the dredging. One is precipitated by the dredging process itself; the second is triggered by the disposal of the dredged materials.

He argues that as dredging takes place "effects may arise due to the excavation of sediments at the bed, loss of material during transport to the surface, overflow from the dredger while loading, and loss of material from the dredger and/or pipelines during transport."

What's more, dredging disrupts the "composition, diversity and resilience" of the river in a multitude of ways. For example,

riverbanks become more susceptible to erosion. This, in turn can, cause even greater silt build-up in the river, making navigation of the river's channels by ships more, not less, difficult.

As with China and India, erosion also disturbs and kills riverbank vegetation, stripping the banks of natural plant cover, which is necessary for shade. This then creates deeper light penetration, which, over time, increases water temperature, giving rise to fish migration.

Professor Haidar says that the "loss of natural habitat can render newly dredged habitats unsuitable for shallow-water fish" seeking refuge from river currents. And non-native species can become more invasive because of these deeper habitats. This makes them "more vulnerable to exploitation."

There's no question: Bangladesh's river dredging business will damage the Jamuna River. The only debate will be: who will pay for its repair?

Significant are also the potential health and safety implications that may be created by selling contaminated sand.

According to Bangladesh Poribesh Andolon (BAPA), the Jamuna-Brahmaputra rivers are among the 32 most polluted in Bangladesh. They contain vast quantities of chemical mixed effluents. BAPA claims these rivers "are victims of dangerously toxic industrial discharges, including mercury, lead, chromium, cadmium, arsenic, potassium, calcium, manganese", and many others.

The Brahmaputra-Jamuna riverbed sediments, in particular, are known to have extremely high levels of chemical mixed

effluents and lubricants. They also contain extremely elevated amounts of ammonia, sulfur dioxide, calcium chloride, and sodium hydroxide mixed into river floor sediments. Sodium hydroxide is used by industries for the manufacturing of pulp, paper, textiles, detergents, and drain cleaner. The two rivers also hold huge, caustic volumes of sulfuric acid, which is exceedingly corrosive to metals, biological tissues - even stones.

You do not want to have any of these pollutants anywhere near you.

BAPA argues that the sheer magnitude of the pollution contained in Bangladesh's rivers, including the Jamuna, has the potential "of inflicting chemical injuries to human health and environment." The group contends that water chemical pollutants "induce toxic impacts on all the living entities, including human beings, through water, soil and even air."

Sand dredged from the Jamuna River will certainly contain a not inconsiderable proportion of noxious clay and silt, as much as 10 percent. Heavy metals can also coat the surfaces of the fine-grained sands themselves. Metal-laden fine-grained sand is a prime depository for contaminants.

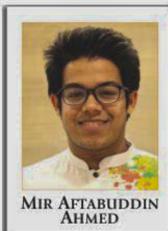
To say the least, potentially poisonous sand is not something Bangladesh should be exporting. And who will be liable for injuries caused by its exportation in the future?

All in all, it's a lose-lose situation and it calls for a reassessment of the government's approach to clearing channels in the Jamuna River.

Translated and edited from Bangla by Edgar J. Wallis.....
The writer is a member of Nature Watch, Bangladesh.

46TH FOUNDING ANNIVERSARY OF SWADHIN BANGLA BETAR KENDRA

A legacy we must not forget



MIR AFTABUDDIN AHMED

THROUGHOUT the history of independent Bangladesh, national actors in politically privileged positions have slowly but steadily monopolised the norms pertaining to this country's struggle for emancipation. As such, Bangladesh and its

citizens have slowly but surely forgotten those figures and organisations who tirelessly worked in the avenues of culture, diplomacy and activism to resist the horrific genocide of 1971. This country owes an immense debt of gratitude to all actors, even those outside the fray of politics and physical warfare. One such institution which vehemently supported and inspired the *Mukti Bahini*, and the people of this country, was the prominent Swadhin Bangla Betar Kendra (SBBK).

Unlike most countries in this world, the term freedom fighter is often used as a partisan weapon in Bangladesh. Misused, undermined and heavily politicised, the term freedom fighter is recycled as a nominal adjective for the artists of the SBBK and many other non-political entities of 1971. The newer generation thereby fails to truly comprehend the significance of such organisations to Bangladesh's freedom struggle. The broader understanding of a freedom fighter goes well beyond the scope of military warfare. In the truest sense of the word, a freedom fighter is a person engaged in a resistance programme against what they believe to be a repressive and illegitimate government. As such, the Head of News of the SBBK, the iconic journalist Kamal Lohani, is as much a freedom fighter as the likes of economist Rehman Sobhan or Sector Commander Khaled Mosharraf, as all these individuals were protesting the heinous massacre ordered by President Yahya Khan and denouncing his efforts to undermine the results of the 1970 Pakistan General Elections. Whether Bangladesh gives artists and journalists like Mr. Lohani their rightful place in history is something which we need to look at much more carefully. Unless Bangladesh wants such organisations to simply die into the remnants of our history books, the legacy of the SBBK is one which this country needs to reassess and applaud further.



Listening for the sounds of freedom.

There are two broad issues pertaining to the Shadhin Bangla Betar Kendra, which literally translates to the Free Bengal Radio Station. One relates to the declaration of independence, whilst the other is related to the broader impact of the radio station. The declaration of independence has sadly been developed into a partisan dispute over the last two decades. However, the birth of SBBK is surrounding this momentous event itself. The established history suggests that on the evening of March 26, 1971, a covert radio station in Kalurghat, Chittagong, identified itself as the Swadhin Bangla Betar Kendra and declared to the world the independence of Bangladesh. Awami League leader MA Hannan made an announcement of independence via this radio station. However, the proclamation which received the highest traction, especially from the foreign press, and has construed itself as a major debate amongst political analysts, was that of then Major and later President Ziaur Rahman.

What is certain, however, is the fact that the SBBK was born simultaneously with the initiation of the liberation struggle. Thus, the first few days of the SBBK and the actors surrounding the declaration of independence, has profoundly impacted the socio-politics of our country for decades to come.

From a different angle, the influence of the SBBK goes well beyond the declaration of

independence. Eminent singers like Apel Mahmud, Abdul Jabbar Khan, Rafiqul Alam, Kaderi Kibria, Lucky Akhand and Majula Dasgupta gave their voices to timeless tunes such as *Purbo Digante Surjo Utthechhe*, *Ekti Phool Ke Bachabo Bole*, *Salam Salam Hajar Salam*. These songs along with information broadcasts by Kamal Lohani, Rokeya Haider and Babul Akhtar, amongst others, formulated a strategically important propaganda campaign to ensure a supportive global environment for Bangladesh's independence movement. Whilst formulating a key mechanism for non-battlefield warfare, the SBBK successfully did two very important things. It rallied and motivated those who were participating in the physical warfare across Bangladesh, whilst concurrently acting as a media conduit for the Mujibnagar Cabinet to get news across to the rest of the world.

The month of May is very significant for the SBBK. Whereas the foundation stones of this organisation were laid in March, the station was formally opened in Kolkata on May 24, 1971. The station went on air the following day, which happened to be the birthday of our national poet Kazi Nazrul Islam. The SBBK effectively brought together academics, artists and other members of the intellectual community under one roof, and gave much needed impetus to the struggle being led by the likes of Tajuddin Ahmed and Syed Nazrul Islam on the political side of things. The station

reminded a struggling people of the inspiring slogans and symbolism of their national leader Bangabandhu Sheikh Mujibur Rahman, and gave motivation to the countrymen to carry on defending their motherland. The broadcasts of the SBBK thus became inseparable from the ongoing war and symbolically protected, promoted and preserved the notion of a free, independent and sovereign Bangladesh.

Today, as Bangladesh struggles in a politically-created confrontation between the idea of a Bengali versus a Bangladeshi, of a secularist versus an Islamist, and confusions pertaining to what our identity truly is, the SBBK should serve as a timeless reminder of what this country is.

Bangladesh achieved independence

through the integrated efforts of people from all walks of life, and we did so with a progressive and independent mindset. Let the SBBK and the emblematic importance it represented, serve as a reminder of how far we are moving away from the open, free and democratic society that Bangladeshis envisioned in 1971. Let the SBBK remind our politicians of the importance of achieving unity, through diversity. Let us truly celebrate the legacy of SBBK for what it was - an organisation of freedom fighters and patriots.

The writer is a fourth year undergraduate student of Economics and International Relations at the University of Toronto.
Email: aftab.ahmed@mail.utoronto.ca

A WORD A DAY



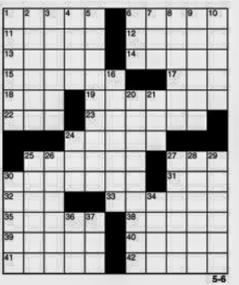
PALIMPSEST

noun

Something reused or altered but still bearing visible traces of its earlier form.

CROSSWORD BY THOMAS JOSEPH

- | | | |
|--------------------------------|------------------------|--------------------------------|
| ACROSS | 30 Songbird | 7 Raw metal |
| 1 Outdoos | 31 Bit of history | 8 Source |
| 6 Churlish ones | 32 Inventor Whitney | 9 "The Thinker" and "The Kiss" |
| 11 Poor sport's cry | 33 Beams | 10 Good man's music |
| 12 Cupid's need | 35 Hilo hello | 16 Dom sharers |
| 13 Simpleton | 38 They're adored | 20 Grapevine |
| 14 Spyri heroine | 39 Schoolbag item | 21 Parched |
| 15 Donut, in slang | 40 Flat form | 24 Position |
| 17 Collins base | 41 Used up | 25 Evoke |
| 18 Low bill | 42 Fills with carge | 26 Jim Palmer, once |
| 19 Domineering, with "it over" | DOWN | 27 Put in more ammo |
| 22 Arya's father | 1 Tries to get | 28 Threat words |
| 23 Laments | 2 Horserelated | 29 Some singers |
| 24 Pry | 3 Tried for a tan | 30 Puts on |
| 25 "Gangsta's Paradise" rapper | 4 Clock sound | 34 Inking |
| 27 Hold up | 5 Sheet metal producer | 36 Egg layer |
| | 6 Derisive cry | 37 Cunning |



YESTERDAY'S ANSWER

SLASH ABHOR
PABLO PEEVE
ASSAM PARES
OVER VENT
ISLE APES
LOU CHORTLE
LOTTTO PSHAW
STERILE EVE
PELE IOES
ARIA SODA
DUTCH SITUP
UNCLE LOCKE
ETHER OTHER

Government of the People's Republic of Bangladesh
Local Government Engineering Department
Office of the Executive Engineer
Noakhali
www.lged.gov.bd

উন্নয়নের গণতন্ত্র
শেখ হাসিনার মূলমন্ত্র

Memo No-LGED/XEN/NOA/TENDER/2015/2025 Dated: 23/05/2017

Invitation for Tenders (IFT for Works) e-Tender Notice No-75/2016-17

Reference No: APP ID-51097

e-Tender is invited in the National e-GP System Portal (<http://www.eprocure.gov.bd>) for the procurement of following tender ID & schemes.

Tender ID & Package No.	Name of scheme	The fees for downloading the e-Tender documents from the National e-GP System Portal have to be deposited online through any registered bank
Tender ID-104935 GNP-2/NOA/SEN/ 16-17/W-337	A. (i) Improvement of Nazarpur Beri Bandh Road Ch. 00-1400m. ID No. 475805026. A. ii Providing 115m Palisading work. A. iii Construction of 2 Nos. 0.900mx0.900m RCC Drain Culvert at Ch. 700m & 800m. B. Improvement of Gola Bari-Nazir Bari-Ahmedpur Munshi Bari Road Ch. 1400-2200m. ID No. 475805131. C. i Improvement of Chandpur Millghar Telipukur RHD-Fakir Bari mosque- Ahmedpur GPS Road Ch. 1100-1800m. ID No. 475805130. C. ii Providing 20m Palisading work.	Up to 14-06-2017 at 3:00pm
Tender ID-104936 GNP-2/NOA/SEN/ 16-17/W-338	A. i Senbag Bazar-Chandpur High School Road Ch. 00-1900m. ID No. 475804011. A. ii Providing 245m Palisading work. B. Pashchim Chandpur Kolifapara Road Ch. 00-700m. ID No. 475805019. C. i Senbag College Road Ch. 00-600m. ID No. 475804043. C. ii Providing 15m Palisading work.	Up to 14-06-2017 at 3:00pm
Tender ID-104937 GNP-2/NOA/SEN/ 16-17/W-339	i Improvement of Kabilpur Pashchim Ahmedpur Primary School Road Ch. 1500-2000m. ID No. 475804113. ii Providing 40m Palisading work.	Up to 14-06-2017 at 3:00pm
Tender ID-104938 GNP-2/NOA/SEN/ 16-17/W-340	i Improvement of Dildar Market-East Lalpur Road Ch. 885-2235m. ID No. 475805011. ii Providing 85m Palisading work.	Up to 14-06-2017 at 3:00pm
Tender ID-104940 GNP-2/NOA/SEN/ 16-17/W-341	i Improvement of Munshi Ilias Road Ch. 00-500m. ID No. 475805049. ii Providing 86m Palisading work.	Up to 14-06-2017 at 3:00pm
Tender ID-104941 GNP-2/NOA/SEN/ 16-17/W-342	i Improvement of West Ahmadpur to Ahmadpur Purbapara Road via Ponditbari Ch. 00-500m. ID No. 475805292. ii Providing 75m Palisading work.	Up to 14-06-2017 at 3:00pm
Tender ID-104942 GNP-2/NOA/SON/ 16-17/W-343	i Improvement of Kegna-Panchbaria-Eidgah-Ahmodia Atimkhana Road Ch. 635-1670m. ID No. 475885317. ii Providing 166m Palisading work. iii Construction of 2 Nos. U-Drain Culvert at Ch. 275m & 800m.	Up to 14-06-2017 at 3:00pm
Tender ID-104943 GNP-2/NOA/BEG/ 16-17/W-344	i Improvement of Kutubpur Jame Masjid-Enayetpur Pool via Forkania Madrasha Road Kirtaner Hat Jamider Hat-Jamider Road Ch. 635-1670m. ID No. 475075199. ii Providing 119m Palisading work. iii Construction of 3 Nos. U-Drain Culvert at Ch. 335m 474m & 894m.	Up to 14-06-2017 at 3:00pm

This is an online tender, where only e-Tender will be accepted in the National e-GP Portal and no offline/hard copies will be accepted.
To submit e-Tender, registration in the National e-GP System Portal (<http://www.eprocure.gov.bd>) is required.
Further information and guidelines are available in the National e-GP System Portal and from e-GP help desk (helpdesk@eprocure.gov.bd).

M A Sattar
Executive Engineer
Phone: 0321-61340
E-mail: xen.noakhali@lged.gov.bd

GD-1098