

How Bangladesh can turn canal excavation into an environmental win

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For thousands of years, the delta of Bengal has been defined by its intricate relationship with water. This was never a purely natural phenomenon; it was a sophisticated feat of hydraulic engineering. Ancient "overflow irrigation" systems, influenced by Egyptian water engineering techniques, once allowed our ancestors to manage the rhythmic pulse of the delta. These engineered waterways—such as the Mathabhangas, often mistaken for a natural river—were designed to manure the fields with nutrient-rich silt while providing a dependable lifeline for rural settlements.

For nearly three millennia, these waterways provided dependable water supplies, boosted agricultural productivity, and supported rural livelihoods. In recent decades, however, rapid population growth, lack of maintenance, and unplanned development have pushed many rivers and canals in Bangladesh into severe decline. As channels silt up, dry out, or become encroached upon, the country's environmental stability falls increasingly at risk. Our own research using satellite-based night-light data shows how the loss of floodplains is directly linked to rising flood vulnerability across the country.

This concern is not new. In the late 1970s, the then President Ziaur Rahman recognised the danger posed by deteriorating waterways and launched a nationwide canal restoration programme. Between 1977 and 1981, nearly 2,000 miles of canals (an estimated 1,500 of them) were excavated or re-excavated, revitalising rural economies and strengthening food security.

Today, the proposal to excavate 20,000 km of canals has brought the issue back to the centre of national debate. The scale is ambitious, and understandably so. The real question, however, is not whether canals

should be restored, but how this can be done in a way that delivers lasting environmental and economic benefits.

Bangladesh has already experienced the consequences of poorly planned water management. The Flood Action Plan relied heavily on embankments and structural interventions that disrupted natural water flow and damaged wetlands. Dhaka once had one of the most effective gravity-based

ecosystems is intensifying over time and space. Canals dug without understanding how water and sediment move across the delta quickly silt up again, causing erosion, worsening floods, and wastage of public resources. Without a scientific framework and long-term maintenance, excavation alone cannot solve a hydrological problem.

Meanwhile, the dry season is becoming longer. Farmers are increasingly dependent

on groundwater for irrigation, even as climate change makes rainfall more erratic. Arable land is shrinking—from nearly 73 percent of the country in 1990 to about 60 percent in 2023—while the population continues to grow. The pressure on water, food, and

ecosystems is intensifying over time and space.

This is why science and long-term planning must guide the new canal initiative. The country already has such a framework in the Bangladesh Delta Plan 2100, which calls for reconnecting rivers, canals, wetlands, and floodplains so that the landscape can store, move, and release water in a controlled way. Aligning canal restoration with this vision

far more sense, but it must follow the natural flow of the catchment, working upstream to downstream so that newly cleared channels do not silt up again. Some waterways are fully silted and require complete restoration. Others still hold water but need their banks stabilised through the ambitious Green Shield planting pledged by the ruling party in its election manifesto, and protected from encroachment. Many are already functioning and would survive with maintenance, plantation and community monitoring in parallel. Thinking in these tiers turns the 20,000 km target from a large excavation drive into a realistic and cost-effective national water management programme.

Modern technology makes this approach possible. High-resolution digital elevation models created from Light Detection and Ranging (LiDAR) data can reveal the true shape of the land. With such tools, planners can identify lost canals, understand natural flow paths, and decide where excavation is necessary and where protection is enough. We need to understand local geography as well, including soil type and composition. Without this knowledge, we risk repeating past mistakes.

Bangladesh is not short of water, but rather poor in water management. With proper planning, transparent implementation, and strong scientific guidance, canal restoration could deliver multiple benefits: reduced waterlogging, improved flood management, more reliable surface water for irrigation, enhanced groundwater recharge, stronger fisheries and biodiversity, and renewed inland navigation. Countries such as the Netherlands have shown that long-term prosperity in a delta depends on working with water, rather than against it. Bangladesh, with its vast floodplains and dense river network, has even greater natural potential.

A scientifically grounded canal restoration programme can reconnect the country's blue and green landscapes and create a more liveable environment for millions. Done properly, canal excavation is not about digging soil. It is about restoring the hydraulic logic that once made this delta one of the most productive and resilient regions in the world.



The Subhadya Canal in Keraniganj, Dhaka is one of many across Bangladesh that are on the verge of dying and are in desperate need of excavation to restore water flow.

PHOTO: RASHED SHUMON

drainage systems in the world, supported by an intricate network of canals and low-lying retention areas. Much of that system has been lost to unplanned urbanisation and embankments.

Even recent excavation projects have

on groundwater for irrigation, even as climate change makes rainfall more erratic. Arable land is shrinking—from nearly 73 percent of the country in 1990 to about 60 percent in 2023—while the population continues to grow. The pressure on water, food, and

makes it part of a national climate resilience strategy, rather than a series of isolated projects.

It also answers a practical question: does every kilometre need to be excavated? The answer is no. A three-tiered approach makes

MODI'S VISIT TO ISRAEL

Standing on the wrong side of history



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Yesterday, Narendra Modi finished a two-day state visit to Israel. This was his first visit since 2017, when he became the first Indian prime minister ever to step on Israeli soil.

Framed as a leap towards a special strategic partnership, the trip nonetheless has raised difficult questions about what it signalled—and what it left unsaid—amid the continuing devastation in Gaza caused by Israel, which has killed at least 72,073 people and wounded 171,756 since October 2023. At least 615 of these deaths occurred during the "ceasefire" agreed between Israel and Hamas last October.

The urgent calls for justice and dignity from Palestinians received little to no attention in the official agenda of this visit. Instead, during his address to the Knesset on Wednesday, Modi asserted that "India stands with Israel, firmly, with full conviction," offering solidarity after the October 7, 2023 Hamas attacks and reaffirming India's "zero tolerance for terrorism." He also conveyed India's condolences for Israeli losses and spoke of expanding cooperation in defence, trade and technology. But, to no one's surprise, he made no specific reference whatsoever to the scale of the ongoing suffering in Gaza.

Israeli Prime Minister Benjamin Netanyahu, in turn, welcomed Modi warmly and praised the deepening ties between the two nations.

"You are a great friend of Israel and a great leader on the world stage... Narendra, you are more than a friend—you are a brother," Netanyahu said. Modi was also conferred the Speaker of the Knesset Medal, Israel's highest parliamentary honour. Beyond the Knesset, Modi's itinerary included ceremonial receptions, bilateral talks, and interactions with the Indian diaspora in Israel.

Modi and Israeli leadership reviewed progress in the strategic partnership and discussed cooperation across defence, science and technology, innovation, agriculture, water management, trade, and investment. Talks reportedly also touched on advancing negotiations towards a free trade agreement (FTA) and other economic deals. Bilateral merchandise trade between India and Israel was about \$3.62 billion in FY 2024-25, with India as Israel's second-largest Asian trading partner. An FTA is expected to boost trade access for goods and services including high-tech products and agriculture. Defence cooperation remains substantial: Israel's exports to India from 2020 to 2024 were estimated at around \$20.5 billion, covering missile systems, drones, radar and other technologies—figures that illustrate the tangible stakes of the partnership.

Far from making any plea for peace in Gaza, Modi's visit solidified India's alignment

with a state accused internationally of using overwhelming force and enforcing apartheid policies. It can thus be read as not only an economic, but also a political endorsement of Israel's leadership at a moment when it faces accusations of war crimes and genocide from international legal and human rights circles.

India claims to support a two-state solution, but those words appear hollow in light of its deepening ties with Israel, which materially reinforce the mechanisms used to maintain occupation and restrict Palestinian freedom. While trade and technological initiatives with Israel may enhance India's strategic depth, they also entangle the country in systems that perpetuate oppression. This alignment has drawn sharp criticism from voices across India's own political spectrum.

Jairam Ramesh, member of the opposition Indian National Congress, called Modi's trip "moral cowardice," arguing that embracing Israeli PM Benjamin Netanyahu, someone who "has reduced Gaza to rubble and dust" and "orchestrates the expansion of illegal settlements," amounts to abandoning India's historic support for Palestinian rights. Ramesh noted that India once stood with Palestine during earlier conflicts and said the government's current statements about peace are inconsistent with its actions.

MA Baby, leader of the Communist Party of India (Marxist) criticised Modi's trip sharply, saying the visit "will be an indelible blot on our nation's soul" and accused the prime minister of betraying India's anti-colonial legacy and long-standing support for Palestinian self-determination.

The criticism goes beyond party politics. A parliamentary panel led by Shashi Tharoor, chairman of the parliamentary standing committee on external affairs, warned that the timing and symbolism of the visit, especially amid rising tensions with Iran,

could affect India's global image and that foreign policy messaging matters even in complex security situations.

These political criticisms resonate with historical context. India was among the first non-Arab countries to recognise the State of Palestine in 1988 and has long maintained a principled position in support of its sovereignty. Today, however, its stance has shifted towards having closer ties with Israel, while non-Arab and non-Muslim countries like Sweden and Ireland continue to consistently support Palestinian rights.

The geopolitical backdrop amplifies the concerns. West Asia remains volatile, with tensions between the US and Iran simmering, and Israel positioning itself as a key US ally. Netanyahu, in recent times, has openly discussed forming a "hexagon of alliances" with countries including India, Greece, Cyprus, and some Arab states to counter perceived threats in the Middle East, signalling that the relationship is as much about geopolitical alignment as it is about bilateral cooperation.

In this context, Modi's visit strengthens Israel's international position at a moment when many Western and Global South countries are wary of being seen as too close to Jerusalem amid its military campaign in Gaza.

For Israel, Modi's presence—including his address to the Knesset—carries political weight as domestic debates over judicial independence and Netanyahu's leadership continue to dominate. That a prominent leader from a major democracy would visit at this moment lends diplomatic cover to a government facing both domestic and international criticism.

India's strategy is often framed in terms of "strategic autonomy"—that is, balancing relationships with Israel, Arab states, and

Iran. But the material cooperation with Israel complicates India's ability to serve as an honest broker for peace. In recent UN votes, India's positions have oscillated, sometimes abstaining on resolutions critical of Israel while joining others that condemned settlement expansions after many other countries had already articulated opposition, drawing domestic criticism for inconsistency.

Defence cooperation is central to this relationship. Both governments have reiterated their commitment to counterterrorism, intelligence sharing, and joint assessments of emerging security challenges. While there can indeed be some level of concern in India about terrorism threats, linking counter-terrorism so closely with advanced military cooperation obscures how these capabilities are used in the contexts of occupation, border control, and civilian restriction rather than exclusively against combatant threats.

Ultimately, Modi's visit to Israel raises a fundamental question about the moral compass of foreign policy: can strategic interests and technology cooperation justify overlooking profound human suffering? By materially supporting Israel during an ongoing conflict and strengthening ties with its military and intelligence apparatus, India prioritises defence and influence over justice and human dignity. History will evaluate nations not on the basis of ceremonial speeches or bilateral forums, but based on whose suffering they acknowledged and whose rights they chose to defend. In the long run, Modi's visit may be remembered not as a historic moment, but as a point when India, as a country, chose convenience, strategic ties, and defence cooperation over human rights and consistent moral leadership. It would be seen as when India stood, in effect, on the wrong side of history.

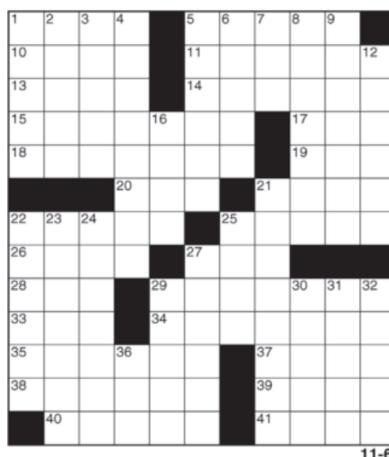
CROSSWORD
BY THOMAS JOSEPH

ACROSS

- 1 Make finer, as flour
- 5 European viper
- 10 One of the Great Lakes
- 11 Less tight
- 13 Animal abodes
- 14 Small
- 15 "What happened next?"
- 17 Lend a hand
- 18 Monetary reserve
- 19 Eastern "way"
- 20 Purpose
- 21 Painter Magritte
- 22 Pretentious people
- 25 Nuisances
- 26 Easy gait
- 27 ___ Angeles

DOWN

- 1 Car type
- 2 Adler who bested Sherlock Holmes
- 3 Locates
- 4 Lab vessel
- 5 State without proof
- 6 Carrying out
- 7 Period
- 8 Fancy homes
- 9 Dependent
- 12 Gives a makeover
- 16 Pianist Myra
- 21 Truckers' haven
- 22 Ad catchphrase
- 23 Lumps
- 24 Becomes chatty
- 25 Do some modelling
- 27 Map key
- 29 Strips for breakfast
- 30 Bangor's state
- 31 Dance's de Mille
- 32 "That's a lie!"
- 36 Verb for you



WEDNESDAY'S ANSWERS



WRITE FOR US. SEND US YOUR
OPINION PIECES TO
dsopinion@gmail.com.