Chattogram's expansion into flood-prone areas is a dangerous gamble



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Bangladesh's main seaport is in Chattogram, a sprawling metropolis endowed with the distinct natural features of hills, rivers and the sea. Driven by port-centric industrialisation, employment opportunities, trade and commerce, and population growth, the city is expanding rapidly. But how planned and environmentally sound this expansion has been and how prepared it is to withstand future climate risks remains a question.

Findings from the Asian Development Bank's (ADB) Asia-Pacific Climate Report 2026, reported by The Daily Star on October 22, serve as a fresh warning. According to the report, Chattogram's built-up area spanned 66.1 square kilometres in 2016, expanding to 73.5 square kilometres by 2025. Over this period, settlements and infrastructure in flood-prone zones grew by 16.2 percent, compared to a 9.7 percent growth rate on safer land. What's most alarming is that expansion has been fastest in the city's most vulnerable areas. The report noted that nearly a quarter of Chattogram's built-up area is at risk of inundation from severe coastal flooding. In other words, the city is not just expanding; a significant portion of this growth is occurring in areas where coastal floodwaters could reach hazardous levels in the future.

Waterlogging has been a particularly troubling problem in recent years. A combination of heavy rainfall, runoff from the hills, tidal water, inadequate drainage systems, and encroachment on canals and drains makes life extremely difficult during the monsoon. However, seeing it as simply an issue of cleaning drains and canals would leave the root cause unaddressed. A city's natural waterways, low-lying retention basins, ponds, wetlands, and open spaces temporarily hold rainwater. When these areas are filled up to build roads and structures, the soil's capacity to absorb rainwater diminishes. At the same time, natural runoff is restricted, quickly overwhelming the drainage system with massive volumes of water within a short period.

The crisis is further aggravated by hill-cutting, silt accumulation in canals, canal encroachment, unplanned road elevation, and utility infrastructure obstructing water flow. During high tides, rising river and canal levels also prevent rainwater from draining out. When combined with heavy rainfall, these factors make waterlogging particularly devastating.

In various parts of Chattogram, residential and commercial structures have been built on natural water bodies and low-lying areas. Questions have been raised about changes in land use in several areas, including Anannya Residential Area, Kulgaon, Baluchhara, and Jalalabad. Reports have also highlighted encroachment and illegal structures around the Chaktai canal, Mirza canal, Manoharkhali canal, and the Kalirchhara canal. Similarly, development activities along the banks of the Karnaphuli River have again raised concerns about the natural waterways and environmental constraints.

It is important to realise that approval from a housing or infrastructure development authority does not automatically make a project environmentally safe. The soundness of a plan depends on whether it takes into account the nature of the land, drainage routes, the need to preserve water bodies, and future flood risks. These are precisely the criteria against which questions can be, and have been, raised about the filling up of water bodies and low-lying areas in the Chattogram Development Authority's (CDA) own Anannya Residential Project.

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In recent years, a combination of heavy rainfall, inadequate drainage systems and canal encroachments has turned flooding into a recurring problem for Chattogram. FILE PHOTO: RAJIB RAIHAN

Plans exist, but where is the implementation?

The CDA's 1995 Stormwater Drainage and Flood Control Master Plan identified various drainage and waterlogging challenges, offering recommendations on where water would accumulate, which routes it should drain through, and where retention ponds were needed. But identifying problems is one thing; resolving them on the ground is another. Multiple projects are currently underway to alleviate waterlogging in Chattogram, and substantial funds are being spent on re-excavating, widening and renovating canals, digging new ones, and constructing flood control infrastructure. While the necessity of these initiatives is undeniable, a closer review of their planning, design and execution reveals several fundamental shortcomings.

First, out of the city's 104 identified canals, ongoing projects cover only 36. As a result, a large part of the overall drainage network remains outside their scope, even though the effectiveness of any canal depends on its connected upstream channels, tributaries, and adjoining drains. Second, 12 proposed silt traps were dropped due to funding constraints and cost-cutting measures. Given the heavy runoff of sand and silt from the hills into the canals, silt traps are vital. Dropping them risks silting up the re-excavated canals within a short period.

Third, the 1995 master plan recommended constructing retention ponds or temporary water reservoirs in the city's low-lying areas. When heavy rainfall coincides with high tides, the drainage of water into rivers and canals is obstructed. In such situations, retention ponds are indispensable for temporarily holding excess runoff. But the ongoing projects have virtually ignored the construction and preservation of such reservoirs. This is a major planning flaw.

Fourth, the natural width of some canals has been reduced during the construction of regulators, potentially obstructing the normal flow of water. Similarly, questions have been raised about plans to install fewer pumps than necessary or pumps with insufficient capacity. It is urgent to reassess whether these pumps will be able to drain sufficient amounts of water during heavy rainfall combined with high tides.

Fifth, faulty designs and infrastructure at certain locations are obstructing water flow through canals. Examples include the construction of two-way box culverts over the Hijra canal in Panchlaish, opposite the medical college, and the Shital Jharna canal near the entrance to Chattogram Cantonment Public School and College. The partition wall in the middle of these culverts could trap waste and obstruct water flow. Such obstructions further reduce drainage capacity, particularly during heavy rainfall. In addition, there are persistent problems with disconnected canal networks, improperly graded bed levels and flow directions, and obstructions created by utility pipelines and other structures.

Another issue is the piecemeal tendency to raise road levels to combat waterlogging. In many cases, roads have been elevated without factoring in the height of adjoining drains and properties, leaving houses and shops lower than the street. As a result, even light rainfall causes overflow or seepage from drains to enter these properties.

There have also been instances of poor coordination during project implementation. Temporary embankments or barriers have reportedly been constructed at the mouths of the Hijra and Jamalkhan canals to facilitate construction work, obstructing water drainage. Meanwhile, the exchange of accusations between the city corporation and the CDA over canal cleaning, drainage connections, and obstructions caused by construction work highlights the lack of coordination in project implementation. Such disputes are unacceptable when it comes to an integrated task like resolving waterlogging.

Finally, clear arrangements must be made to ensure that the completed canals, regulators, pumps, and silt traps can be effectively operated and maintained, with adequate institutional responsibility and capacity. Without dedicated manpower, equipment, funding, and a clear operations and maintenance manual, sustaining these structures over the long term will be impossible.

Need for an integrated, science-based approach

To protect Chattogram, it is not enough to just drain water after waterlogging occurs. Questions of where water will accumulate, which paths it will take, and which areas are safe for human settlement and infrastructure must be resolved at the very beginning of development planning.

First, a comprehensive flood risk map must be prepared for Chattogram and its expanding peripheries, identifying potential flood depths, water flow routes, water bodies, low-lying areas, hill runoff, and tidal surges. Second, independent experts must review the ongoing projects and designs. Necessary steps must be taken to restore dropped canals and silt traps, build retention ponds, correct regulator and pump capacities, fix culvert flaws, and complete missing canal connections.

Third, canals, ponds, wetlands, and low-lying retention basins must be surveyed, demarcated, and legally protected. Stringent action should be taken against illegal encroachment and land-filling. Fourth, the responsibilities of the CDA, Chittagong City Corporation, Bangladesh Water Development Board, port authority, and utility agencies must be clearly defined by law, with effective coordination mechanisms. A single capable agency should oversee drainage operations and maintenance.

Fifth, planned satellite towns should be developed in neighbouring upazilas to ease demographic and infrastructural pressure on the city. Expanding employment, education, healthcare and public transit in those areas would eliminate the need for people to settle in vulnerable low-lying urban areas.

As much of the country's import and export trade passes through Chattogram port, the city's climate resilience is vital not just to the national economy but also to its residents. Urban expansion may be inevitable, but unplanned growth across floodplains is not. The authorities concerned must ensure that today's development does not become tomorrow's disaster.

Beyond BNP-AL rivalries, the search for a new political path



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■ MOHIUDDIN AHMAD

Politics in Bangladesh is like a vast river at twilight. From afar, it may appear tranquil and unchanging. But a closer look reveals hidden currents, swirling eddies, and relentless undercurrents pulling against one another beneath the surface.

For decades, two political forces stood upon the opposing banks of this river. On one side stood Awami League, now barred from political activities; on the other, the Bangladesh Nationalist Party (BNP), now the ruling party. Much of Bangladesh's political history since independence has been written around these two parties. Parliamentary debates, contested elections, street agitations, mass movements, and even the political arguments of ordinary households have often revolved around these rival poles.

They were adversaries, each other's fiercest critics, and the principal actors in the recurring drama of power and opposition. Ironically, each party, in a sense, has depended upon the existence of the other. Like day and night, they were opposites that derived meaning and relevance from their contrast. The two parties also defined the boundaries within which Bangladesh's political life took place.

History, however, is never static. The mass uprising of 2024, the dramatic political transformations that followed, and the subsequent exclusion of Awami League from active politics have thrust Bangladesh into one of the most consequential turning points in its post-independence history. What becomes of a political order when one of its defining pillars is absent? What happens to a nation long accustomed to a political duopoly when the balance is broken?

The conflict between Awami League and BNP was never about elections alone, but also a contest over history. Who was the "legitimate heir" to the Liberation War? How should the nation define itself? What relationship should exist between religion and the state? What should be Bangladesh's place in the region? Over time, political competition evolved into ideological confrontation. Ideological confrontation, in turn, hardened into mutual suspicion. Eventually, suspicion became a struggle for survival. The tragedy of Bangladesh's democracy lies partly in this transformation of the two parties' relationship.

Political opponents in our part of the world often view each other as existential threats. As a consequence, elections cease to be routine democratic exercises and become high-stakes battles in which defeat appears catastrophic and victory absolute. Compromise can be seen as weakness, while restraint may prove to be politically costly.

Following the restoration of parliamentary democracy in 1991, Bangladesh entered an era where power alternated between Awami League and BNP. Other parties existed, some of whom exercised influence and even played important roles in coalition-building. But the centre of gravity remained firmly fixed between BNP and Awami League.

This arrangement brought a certain predictability as citizens knew that governments could change. No party appeared invincible, no electoral victory seemed permanent. But rivalry between the two parties gradually expanded beyond politics into institutions, bureaucracy, academia, and civil society. Public institutions increasingly found themselves drawn into partisan conflicts. Trust became scarce. Consensus became elusive. The state itself sometimes appeared caught in the struggle between competing political narratives.

Awami League occupies a unique place in Bangladesh's history; its roots stretch into the struggles that shaped modern political consciousness in the country. The party played a profound role in the Language Movement, the Six-Point Movement, the Mass Uprising of 1969 and, ultimately, in the Liberation War. For generations, it was not merely a political party, but also a historical symbol.



VISUAL: SALMAN SAKIB SHAHRYAR

Of course, history offers no permanent immunity. The same party that once embodied the aspirations of a people later became the subject of growing criticism. Years of uninterrupted power brought authoritarian tendencies, shrinking democratic space, weakening opposition politics, and an increasing concentration of authority. Whether one accepts or rejects these criticisms, they accumulated over time.

Like many upheavals in history, the July 2024 uprising appeared sudden, but was built upon years of tension, frustration, and unresolved contradictions. The resulting transformation marked not simply the fall of a government, but the collapse of a political equilibrium that had endured for decades.

At first glance, the weakening of its principal rival might appear an enormous opportunity for BNP. History, however, suggests otherwise. For opposition parties, power often seems simpler from a distance. Democracy is easy to defend when one is excluded from authority. Institutional neutrality is easy to demand when one does not control the institutions. Transparency is easy to advocate when one is not responsible for governing. Now in power, BNP faces a challenge that transcends electoral politics. Can it avoid repeating the patterns that it once criticised? Can it strengthen institutions rather than merely occupy them? Can it demonstrate that political power can be exercised without reproducing the same cycles of domination and exclusion?

Political parties can be weakened, banned, and/or marginalised. But they rarely disappear completely. Jamaat-e-Islami is a glaring example of the same.

Awami League's legacy is woven deeply into the political fabric of Bangladesh. For that reason, its absence from formal politics does not automatically erase its presence from public life. The future may therefore bring reinvention, fragmentation, or transformation under new leadership or in a different form.

A younger generation has emerged whose concerns differ significantly from those of earlier decades. For many young citizens, old ideological battles hold less emotional power than they once did. Their priorities are more immediate: employment, education, merit-based opportunities, transparency, efficient governance, freedom of expression, economic mobility, and so forth. This generation did not live through the foundational conflicts of earlier eras. It inherited their consequences but not necessarily their loyalties. As a result, the politics of the future may not revolve exclusively around the historic Awami League-BNP divide. Instead, it may increasingly revolve around a set of questions: who governs effectively? Who combats corruption? Who delivers opportunities? Who protects freedom? Who builds institutions capable of outlasting individuals?

Nations mature when they learn from their own history, and Bangladesh's recent decades can offer powerful lessons for our politicians. Unchecked political dominance creates distortions. But the complete absence of meaningful competition creates dangers of its own. Perhaps what Bangladesh now requires is not a new political arrangement, but a new covenant; a shared understanding that political rivals are not enemies. That elections should not determine who "owns" the state. That political defeat should not mean political extinction. That institutions must be stronger than personalities. Such transformations are never easy as they demand patience, wisdom, restraint, and virtues not traditionally found in our politics. But without them, the cycle of confrontation risks perpetuating itself indefinitely.

The old political order may not return. New actors have emerged. Fresh alignments are also taking shape. The entire structure of political competition may evolve into something unrecognisable to earlier generations. But one truth remains: the future of Bangladesh cannot be determined by any single party or leader. It will be determined by the resilience of institutions, the wisdom of citizens, and the nation's ability to reconcile freedom with stability.