

ENVIRONMENT



Towards a liveable Dhaka

Heavy rain compounded by a poor drainage system worsens waterlogging in the Dhaka-Narayanganj-Demra (DND) embankment area.

PHOTO: ANISUR RAHMAN



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THE crucial environmental challenges for Dhaka at present would be:

1. Encroachment and pollution of its water channels, rivers, wetlands, retention areas, *beels* and *jheels*.
2. Unplanned development resulting in increased vulnerability and disaster in terms of resilience, earthquake preparedness and scarcity of open spaces.
3. Waterlogging resulting in water borne diseases, economic loss for people living in the lower basin of the city and risk to public health.
4. Vulnerable, unplanned and noncompliant structures in terms of structural stability; squatters and slums without appropriate living conditions.
5. Traffic jam and lack of public transportation. Fundamentally, the 'cordon approach' around the city instead of an 'open approach' has led to pseudo protection from flooding, resulting in uncontrolled development without conservation and protection of wetlands, flood plains and retention areas. The result is that the city has become vulnerable to urban flooding (rain induced flooding).
6. Air and noise pollution.

With the rapid 'concretisation' of the urban surface, the increased city rainwater runoff creates acute waterlogging since most of the canals which are supposed to lead water to the surrounding rivers are either encroached completely or blocked by solid waste/ garbage. At the same time,

the drainage system is becoming completely blocked and non-functional because of its ineffective 'box culvert' system and lack of regular maintenance. As a consequence, mid or low income people living in 'affordable', low lying parts of the city are becoming vulnerable as well as financially endangered.

The lack of a coordinated drainage master plan encouraged a kind of 'boundless mad rush' encroachment process, endangering water corridors and retention areas vital for the city's survival and resilience. In the absence of 'city government', Dhaka City Corporation, the only elected body (out of 54 service providers under 11 ministries), can adopt the role of the lead agency and coordinator to initiate its comprehensive solution-based efforts. It is also important that they execute these efforts by keeping 'inclusiveness' in mind, in terms of all the agencies.

Besides restoring city canals and water bodies as per the CS or RS map, a new approach towards 'acquisition of required land' needs to be initiated just as we are doing for other less prioritised projects such as elevated expressway or flyovers. Every initiative and ruling of the Supreme Court will be in vain without a strong political leadership and public participation. The latter is needed for an integrated work plan and execution to revive and reverse the extreme vulnerable situations of waterlogging.

Our structural plan 2016-2035 has yet to incorporate these issues in a comprehensive and executable manner. It is also important that we emphasise the importance of resolving these issues, because the economic loss every year is enormous and the destruction is irreversible.

Extreme dense development in low lying areas was carried out indiscriminately

without considering the geotectonic character of the soil, with a pseudo sense of protection by proposed embankment. Gas, electricity, drainage and sewer infrastructure was also developed improperly. With climate change induced vulnerabilities to earthquake and heavy rains in short hours, the city with its dwellers is in constant threat of a catastrophic disaster. Any tremor or shock can trigger interruption of gas and electricity services resulting in urban fire hazards. There isn't much space left for 'refuge' in emergency.

As RAJUK failed to perform its two major responsibilities out of three, namely, city planning and development control, most of the five hundred thousand plus structures are, on one hand, 'structurally' vulnerable as a result of violation in construction laws and not engaging professionals in the process. On the other hand, in changing its use from residential to commercial or even industrial, inhabitants are forced to live in these 'danger dens' as government authorities failed to confirm the actual compliance of their structures to date.

At the same time, despite paying extremely high rent, slum dwellers are living in inhumane conditions. There hasn't been any mentionable designated area or project but many land projects have been initiated for the rich by acquiring land from the poor farmers living around this city.

Inadequate road networks, increase in private cars and inappropriate implementation of projects non-compliant to STP (Strategic Transport Plan) have made the city unbearable. As per STP and on the basis of the pattern analysis of 'Trip Modal Share', the city transportation projects and initiatives are to be prioritised to serve most of the commuters. Instead, large investment projects are being

initiated with priority to serve private cars having its modal share ranging 7 to 8 percent only. As more than 40 percent of almost 3 crore trips generated per day are within 2 km range, pedestrian centric development and traffic management are obvious solutions besides prioritising the Bus Rapid Transportation (BRT) system. These two are also the most affordable modalities that would serve the maximum number of people. The other two prioritised mass public transportation for this city should be commuter rail service from Gazipur to Narayanganj and water bus services interlinked with other bus services. These are low investment projects that would serve more of the masses compared to high investment ones like elevated expressway, flyovers and metro rail. These private car patronised projects are taking a toll on the potential of the mass public transport modes which can cause irreversible damage to future equitable transportation solutions for the city.

The sewer-mixed dirt leftover on top of the city surface after every waterlogging session creates enormous health hazards when they mix in the air as suspended particles. A lack of regular cleaning of roads also exacerbates air pollution. The dry season, which is also the 'season of construction', creates havoc in terms of air and noise pollution as our construction codes are inadequate to enforce safety and security in terms of noise and dust. These irresponsible acts are also jeopardising photosynthesis of tree leaves vis-à-vis the production of our 'oxygen factories', resulting in a lack of oxygen in the air. A comprehensive and immediate action plan to address these issues should be the first and obvious priority of the City Corporations.

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