

## The “sorrow of Chittagong City”

**S M Gubair Bin Arafat**

The problem of waterlogging in Chittagong has reached such an extent that the first monsoon rain is enough to shut down the city. The most vulnerable places are Bakalia, Chawkbazar, Agrabad, Halishahar, Kapasgola, Chandgaon, Shulakbahar, Bahaddarhat and the Probartak intersection, which went under water due to heavy rains, causing immense sufferings to the people living in these areas.

Chittagong is located in the tropical zone, where high temperature and heavy rainfall with high humidity is a general characteristic of the summer season. Annual rainfall in the city fluctuates between 2100mm and 3800mm, of which 2400mm occurs only during the monsoon. However, such climate has been there for centuries, while water logging is a comparatively recent phenomenon. In the last decade or so, this problem has been increasing due to population growth, economic agglomeration with unplanned urbanisation, illegal refilling of natural water channels, and encroachment of drains.

Most of the drainages are obstructed by building structures, that have overtaken the natural gravitational drainage systems of the city, which were organised enough to cope with the natural rainfall.

The causes behind waterlogging are well known and the media have been vocal on these issues. Despite that, why is there little policy intervention to improve the situation? First of all, the governance of drainage systems does not belong to any particular authority. Besides, the distribution of management of the drainage system follows the drainage hierarchy, namely the primary, secondary and tertiary drainage. The Chittagong City Corporation (CCC), for example, mainly deals with the drainages besides houses, roads and small scale, unstructured rainwater runoffs. While the Chittagong Development Authority (CDA) deals with primary and larger canals, Chittagong WASA (CWASA) is responsible for sanitation and storm water management. Hence, drainage system management is either over-mandated or under-mandated to these institutions.

Some critics allege that coordination meetings among stakeholders are held only during the monsoon when the water logging issue surfaces. Recently, the CCC and CDA were given the responsibility to reclaim the Chaktai khal (canals) at a coordination meeting. However, past experiences show that the decisions made in such meetings are barely implemented. After developing the CMMP 1995 guideline, the drainage system was supposed to be implemented

within one and a half years but the plan has not been put into effect in the last 13 years. Lack of coordination also hindered the construction work of the canal (Mirza- Chaktai), which could have protected a huge area under Panchlaish and Chandgaon Police Station from waterlogging (The Daily Star, 2008).

Several authoritative bodies are responsible for managing the drainage system of the city. The core responsibility for storm water drainage and sewerage belongs to CWASA. However, CWASA has neither developed any sewerage system nor storm water drainage infrastructure till date. CCC is mainly working on the local and tertiary drainage development and construction and is also responsible to keep the drains clean. CDA's role is to incorporate drains in land-use and structural plans and allot space in city designs. The Bangladesh Water Development Board (BWDB), another statutory body, is responsible to plan the flood management of CCC and they are both involved in linking embankment with the drainage system.

Budget constraints add to the problem of proper drainage. The Chittagong Storm Water Drainage and Flood Control Master Plan 1995 proposed for developing the drainage system in five phases within the plan period of 1995-2015. Regrettably, eight years have passed since the gazette publication of the Drainage Master Plan in 1999 with no visible progress in its implementation. No progress is noticed in the reclamation of the Chaktai canal, the backbone of drainage system of the port city, either.

Moreover, one of the biggest challenges for CCC in managing the drainage system is to deal with the illegal occupation of the canals. Many of the primary canals have disappeared and several secondary canals are either completely or partially occupied. The occupiers are very powerful and no government authority wants to recover any of them. It was only during the period of the caretaker government in 2007-08 that the CCC managed to recover the Chaktai khal. The CDA and CCC are now planning to excavate new canals instead of reclaiming the old ones.

The blueprint of the city is the main source of the problems, as the management of waterlogging issue was not planned accordingly in the city's design. In 1961 the first master plan was devised, with the main focus being on zoning maps for housing and industries and very little or no reference to drainage planning (CMMP-4 1995). Since then, major drainage planning has been devised without any integration with the planning process of land use. As a result, engineers built drains, rehabilitated canals on an ad hoc basis. The future use of flood plains was not considered in the provisions for flood storage works. Building of flood plains is allowed without providing for the appropriate drainage that is 20 feet or 60 feet long. However, the drain width mysteriously remained constant at 2 to 3 feet.

There is also a lack of coordination in the entire drainage management. There has to be one central authority under which CDA, WASA and other bodies can work together, towards the same goal. Such mechanisms can only be implemented with collective, coordinated efforts under a city government arrangement.

**The writer is Research Associate and Lecturer, BRAC Institute of Governance and Development, BRAC University.**