

Why trees fall... and why they don't

BONANI KAKKAR

Are uprooted trees simply nature's will? Why is it that some trees fall and others do not? The question becomes pertinent not only in the context of public money spent on planting trees and putting tree guards. It also raises the issue of public safety.

Calcutta saw this first hand on Monday. We are not referring only to broken windowpanes; people died because some trees fell.

A quick survey conducted by PUBLIC (People United for Better Living in Calcutta) on the morning after cyclone Aila passed perilously close to Calcutta suggests that other than obvious causes such as the path of the storm and age of tree, there may be identifiable reasons why some particularly large trees come crashing down with strong winds and heavy rain.

The evidence, while not scientifically collected, is compelling enough for serious thought to be given to the manner in which we manage our green cover.

A principal reason appears to be man-made: many large trees that have been ripped out by their roots also happen to be trees that have been choked by cement around the trunk.

Contractors engaged by the CMC to pave our footpaths seem to be unaware of the old practice of leaving unpaved ground around the base of the tree. This would allow water to seep in around the tree, encourage the roots to spread and strengthen the tree. Very simple, very effective.

This is the reason why areas heavily populated by

WHAT THE CMC CAN DO

- Formulate an overall plan to be followed by other agencies, NGOs and even individuals
- Establish the species appropriate to different streets, localities and open spaces
- Specify distance between saplings
- Specify minimum unpaved area around each type of sapling
- Stop unsupervised, one-sided trimming



large trees, such as the Maidan, saw relatively little damage. The open ground around the base of the trees had allowed water seepage over a large area and given the trees a rock solid base to stand on. The only trees uprooted on the Maidan were the ones in areas that get waterlogged.

Park Street saw all its trees standing firm — not surprising when you realise that there is an unpaved stretch running the entire length of the footpath. And this was by design, not because of neglect.

A second reason why some trees seem to have fallen and not others is site selection: excessive concentration and edge-of-the-footpath planting. Spurred by enthusiasm or public relations, civic agencies have planted trees very close to each other thereby building in competition for sun, rainwater and soil nutrients. Quite commonly, a few bricks from the edge of the footpath are removed and the sapling pushed in.

Here again, past practice

used to be that trees were spaced apart, a rough guide being that the open space should match a fully grown tree's crown cover — the shade cast on the ground by the sun directly overhead.

But now, perhaps because of the 5-for-1 allowance (you can cut a tree if you plant five to compensate), agencies have gone around overpopulating some areas in our city, planting trees right next to each other simply to be able to say that they have fulfilled their quota.

A third reason for some trees being less storm-resistant than others is the haphazard "trimming" that the CMC's contractors are allowed to carry out. This trimming is required when, for instance, street lights or traffic lights are blocked.

But it is conducted for road-repair as fuel to fire up the boilers. It is carried out in a virtually free-for-all manner before Puja. And it is sneakily and criminally conducted by advertisers to "clean up" the line of vision to their billboards. But since this so-called trimming is carried out only from the carriageway side, the result is invariably the same: trees become lopsided, lose their natural balance and become much more vulnerable to storms.

Regardless of cyclones, common sense and good practice need to prevail when it comes to managing the city's green cover (see box). Perhaps there will come a time in Calcutta that when a storm hits we won't have to look at our trees with fear and anxiety.

The author is the founder-member of PUBLIC