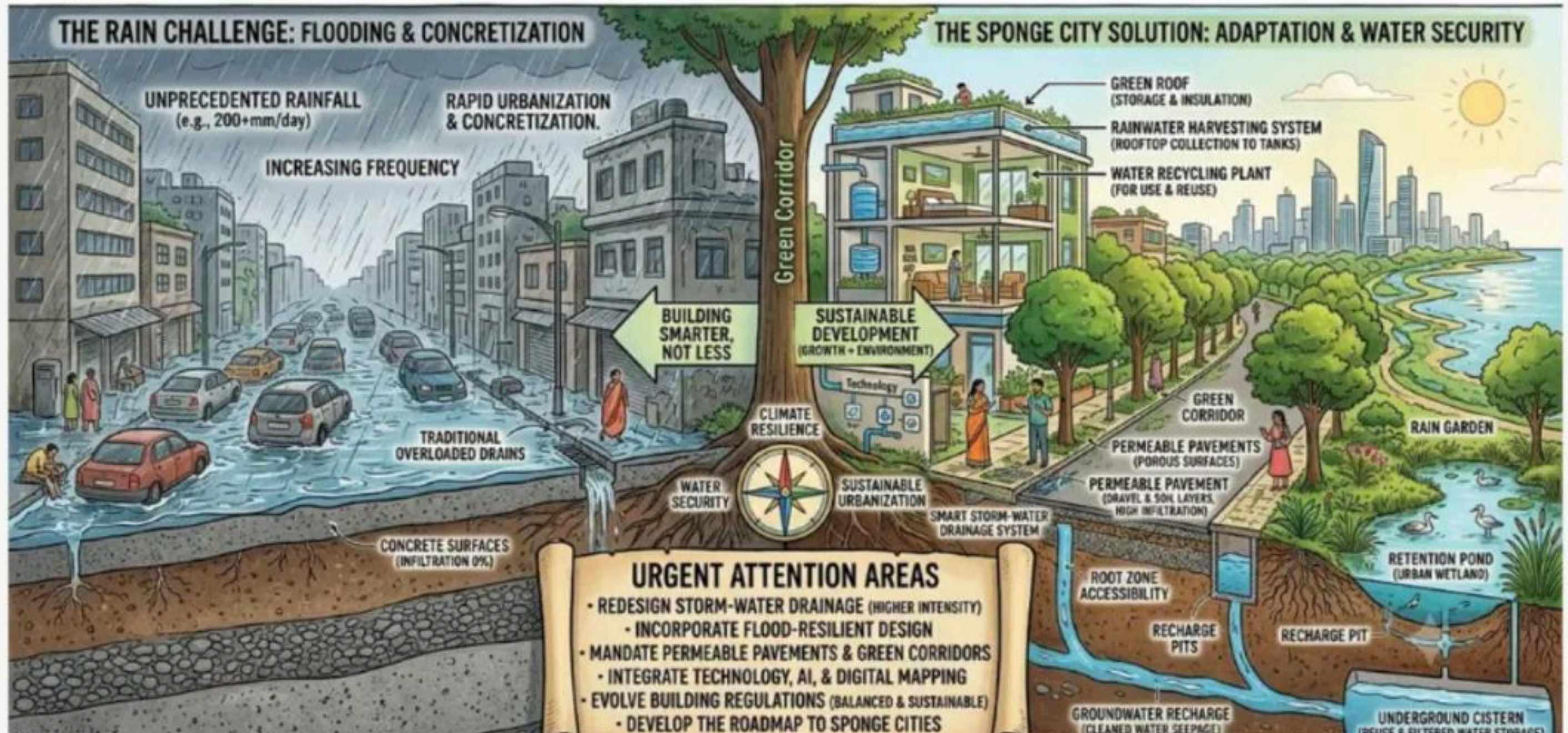


Rethinking URBAN INFRASTRUCTURE FOR A NEW CLIMATE REALITY: THE SPONGE CITY OF MUMBAI



Kamlesh Thakur, President, NAREDCO Maharashtra

The unprecedented rainfall witnessed across Mumbai and Maharashtra recently is another reminder that climate patterns have fundamentally changed. What was once considered a “once-in-a-century” event is becoming increasingly frequent. The real question is no longer how do we respond after such events, but how do we plan our cities to withstand them?

Our urban challenges are no longer limited to flooding. Ironically, the same cities that struggle with waterlogging during the monsoon also face severe water shortages for the rest of the year. With increasing urbanization and population growth, demand for water continues to rise, making rainwater harvesting, groundwater recharge and water conservation essential—not optional.

At the same time, rapid concretization has significantly reduced permeable surfaces. Water that should naturally seep into the ground is instead forced into overloaded drainage systems, increasing the risk of flooding while reducing groundwater replenishment.

Another growing concern is the increasing number of trees falling during heavy rains and strong winds. Years of excessive paving and concretization around tree roots have restricted their natural growth, weakened their anchorage, and reduced the soil’s ability to absorb water. Preserving urban greenery requires more than planting trees—it requires creating an environment where they can thrive.

Construction activity is often blamed whenever cities face flooding. While responsible construction practices are essential, the larger challenge is creating resilient urban ecosystems where infrastructure, planning, governance, and development work together.