The Urban Climate Nexus is Not a Sector





Clockwise from the left :
Amit Kapoor & Meenakshi Ajith

IN AN ERA MARKED by structural global transitions, cities have become critical arenas for climate action and for socio-economic progress alike, which is why the number of urban heat resilience plans, city climate action plans and municipal net zero pledges has climbed so sharply in recent years. These efforts have advanced at different speeds, with some running in full mission mode, money and deadlines and a ministry attached, while others are still building the evidence and the institutional arrangements to match. A heavy downpour is a weather event.

It is also a design problem, because a city that has paved its ground and built over its drains leaves the water nowhere to go. But, for the urban population and their lived experience, the consequences are deeply enmeshed in each other. The lost day of work, the flooded road, the broken surface afterwards and the borewell that has to go deeper next summer are one continuous experience that intersect on the ground. Policy has not learnt to reflect that intersectionality, which is why cities end up holding a potpourri of plans that rarely speak to one another.

India's own programmes show how much is lost in the sorting. In 2022 the housing ministry began sinking recharge wells in ten cities under Shallow Aquifer Management, part of AMRUT 2.0, since extended to 75 more. It raises groundwater levels, reduces street flooding and keeps contaminants out of shallow reserves, and it does something else besides, since recharge also displaces the energy spent pumping water in from distant sources, which no city counts.

That is adaptation and mitigation in the same trench. It is also attached to livelihoods and to everyday living in a way that few climate interventions are, since a working shallow aquifer is what a *dhobi*, a dairy household or a small workshop depends on. The scheme is administered as water supply rather than as climate action.

Adaptation & Mitigation

The binary between adaptation and mitigation is the one that most needs breaking, because it holds nowhere on the ground. Each additional degree of warming raises peak electricity demand by close to four per cent globally, and in India in 2024 it worked out at roughly seven gigawatts per degree.

Chennai's own inventory put 71 per cent of the city's 2018 emissions in buildings, most of it thermal power burned for cooling. Shade along a street is therefore not a lesser measure taken because mitigation is unaffordable. For a hot, dense, fast-growing economy, adaptation is a pathway to mitigation, and

Urbanisation in India is driven in mission mode, through the Smart Cities Mission and AMRUT, and a mission expires. Climate obligations have to sit where they outlast a funding cycle, which means the statutory planning system, since development control regulations, building rules and open space reservations are made under state law and bind whoever is in office

often the cheapest one available.

At city level, sectoral action plans on their own are insufficient for a second reason, which is that people fall out of them. Plans count tonnes by source and assets by exposure, and vulnerability tends to enter as a chapter rather than as a criterion for spending. Even the careful work is bounded by what municipal records hold. The Tamil Nadu Agra found outdoor workers losing around 24 days of work a year to heat, close to a tenth of annual earnings. Census 2027 is enumerating housing, amenities and assets as this is written, which is the first chance in 16 years to build that layer properly.

The data has the same problem as the plans. It is collected sector by sector, so a scheme delivering water,



ward-level heat study by ICLEI South Asia and the state's Green Climate Company settled its indicators around ward data availability, so vulnerability came to mean slum population, age profile, sex ratio, chronic illness, and the density of parks, clinics, roads and green cover.

The index is scored by residential ward, which counts a person where they sleep. A vendor who sleeps in a cooler ward and spends her working day in a hotter one appears nowhere, even though IIED's survey of informal worker households in Ajmer, Delhi and drainage, energy and health at once has no ledger to be counted in. It is also collected at district scale, which averages away what matters, since heat risk varies sharply between wards inside a single city.

Cities Need Observatories

The same assessment measured a ward's safety partly by how many automatic weather stations stood in it, treating the capacity to observe as a form of protection. Cities need observatories of their own, dense enough to read a street, sitting beneath the national forecasting system rather than in place of it.

All of this stays advisory until it enters something with legal force. Urbanisation in India is driven in mission mode, through the Smart Cities Mission and AMRUT, and a mission expires. Climate obligations have to sit where they outlast a funding cycle, which means the statutory planning system, since development control regulations, building rules and open space reservations are made under state law and bind whoever is in office.

The master plan is the usual candidate and a poor one on its record, being slow and often decades stale. But the instruments beneath it move faster and carry the same authority. What is lacking is the machinery, since NITI Aayog found the states need over 12,000 town planners against fewer than 4,000 sanctioned posts, half of them vacant.

Cities in India have grown less as they were planned than as they were financed, and ground once set aside for tanks, drains and open space did climate work at no cost to the exchequer. Much of it has since been read as land lying idle, available to be built over.

Getting the urban climate nexus right does not need another mission or another plan. It needs the ones already in place to stop treating climate as a sector of its own. That work belongs in the statutory framework, which is the only place where a city's obligations outlive the government that wrote them. Restoring public purpose to it is a question of conscience, not capability. BW

Amit Kapoor is Chair, Institute for Competitiveness & Meenakshi Ajith is development policy lead at the Institute for Competitiveness