

Urbanisation and Housing

Nearly half a million people live in India's cities and towns today. Over the next 25 years, this number will increase substantially. Conservative estimates suggest that another 300 million people will move into urbanized areas by 2047. Many of our cities are already bursting at their seams and are facing considerable challenges in delivering basic urban services. Not everyone has access to safe drinking water, and even fewer are connected to wastewater networks (nearly 60% of urban sewage is untreated). Large urban agglomerations generate considerable amounts of solid waste that municipalities struggle to collect and safely manage. Travel times are starting to increase in several cities due to traffic congestion on the roads and the lack of reliable mass-transit options.

The development of our existing cities has also happened in a haphazard manner. In contrast to planned development where infrastructure services precede the development of residences, commercial and industrial facilities; low land costs have led to development outpacing the delivery of infrastructure in the periphery of cities leading to the phenomenon of urban sprawl in many Indian cities. Such development has several environmental and social consequences and has resulted in the loss of agricultural land, open green spaces and water bodies. Furthermore, several of our cities are characterized by the rise of informal settlements and encroachment of water bodies, especially among low-income residents. All of this decreases the resilience of cities to withstand shocks and stresses and leads to cities becoming prone to disasters such as flooding and places an ever-increasing burden on municipalities to deliver water, transport and other services. How do we fix our cities? How will we simultaneously cater to a massive increase in the population of cities over the next 25 years? These are key questions to ponder.

One of the challenges that India's urban settlements have faced stems from a fragmentation in the governance framework for urban management. While cities such as Paris and London have elected Mayors who are vested with powers to coordinate services across the city, our municipal governments are not vested with sufficient responsibilities or resources – both human and financial. Decision making is in the hands of multiple authorities. Take for instance the management of water resources in the city of Chennai. Various responsibilities pertaining to water sources, distribution and management are divided between multiple agencies such as the Public Works Department, the Chennai Metrowater Sewerage and Sanitation Board, The Chennai Metropolitan Development Authority, the Greater Chennai Corporation, and the Chennai River Restoration Trust to name a few. This scenario persists in other sectors and in other cities as well. Policies for each of these agencies are often made independently, coordinating these policies is extremely challenging and the result is often policy incoherence leading to haphazard growth.

Further, our planning processes are often outdated and assume predictable growth in cities. Masterplans are often reduced to zoning plans which do not take into consideration the nature of cities as dynamic, complex systems. We lack a scientific understanding of critical parameters of our cities – trends in land-use and density changes, the hydrology of cities and so on. In some cases, the data for scientifically understanding the state and evolution of cities

is not available, while in other cases the data is dispersed and hard to aggregate. As a result, while several cities across the world have used Urban Simulation models and other sophisticated methods to understand and plan for urban growth, these techniques are at a very nascent stage of adoption in India.

How do we then approach this problem? First we have to rethink our urbanization strategy. Currently India is in the process of expanding the boundaries of many of its cities and is creating mega-cities. Alternate options to explore are whether we can create and strengthen smaller agglomerations. Can we make Tier 2 and Tier 3 cities more attractive destinations for urban expansion? Can we develop satellite towns and cities or industrial townships that can decrease the requirements for travel? Should we consider building new towns altogether and if so where would we situate them in relation to existing cities? How would we motivate investment in physical and social infrastructure in these towns in order to entice communities to form?

Second, we need to think through how we would design these cities. What spatial and technological choices would we make? For instance, would we increase urban density by building vertically in our cities. If so, how would we deal with associated challenges such as the quantum of solid and liquid waste that would be generated, the need for parking and so on? Can we consider decentralizing these functions through smaller scale infrastructure such as decentralized water supply and treatment plants. Can innovative technologies be developed in this area? Can a new-urbanism style philosophy be applied to urban design to ensure mixed-use development leading to reduced transportation requirements and congestion. These and a number of similar issues need to be thought through.

Third, we will need to relook at the business and economic models that underly the growth of cities. Land economics often dictates urbanization and low land prices at the periphery lead to urban sprawl. Can mechanisms such as transferable development rights (TDRs) lead to more even urban development? For long governments have been the primary providers of urban services. What role can Public Private Partnerships (PPPs) play in providing urban services? PPPs have been extensively used for developing infrastructure such as national highways but their role in developing cities remains nascent. What PPP models are likely to work best for urban infrastructure? What other innovative business models can entrepreneurs come up with to decongest cities.

To make the cities of tomorrow function better, we need to promote policy coherence (policymakers), develop a better scientific understanding of how cities work (academics from the technological and social sciences) and develop new technologies and business models for how to deliver better services in cities (entrepreneurs). We therefore need policymakers, academics and entrepreneurs to join hands to build more vibrant cities.