

Improving Indian Urban Planning

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Indian cities are more vulnerable to Covid-19 type contagions because of their extreme crowding and lack of public space. Both of these are a result of many decades of misguided urban planning based on faulty beliefs. What are these beliefs? How have they contributed to extreme crowding and the lack of public space?

At first, extreme crowding. Indian urban planners do not seem to appreciate the simple fact that, in cities, the availability of floor space is far more important than the availability of land. Unlike rural areas, it is covered floor space in cities and how much of it one commands that have the most bearing on one's quality of life, not land. If planners were to take this proposition seriously, they would continually monitor the per capita consumption of floor space in cities and try to improve it. They would adopt policies and make infrastructure investments that result in expanding the availability of floor space. And, what's more, in this they would even have a good chance of being successful.

Instead, planners seem to be more concerned by the per capita consumption of land. Their prime concern seems to be monitoring population densities – the number of people per unit of land – and lowering it. Since, unlike floor space, land in any given area of a city is limited and cannot be expanded, the only recourse they have is to lower the number of people in that area. Since they do not have the power to stop people from residing in any area, they do what appears to be the next best thing – they restrict the amount of floor space that can be built in the area. By restricting floor space, they believe that they will lower the area's population density.

In reality, no such thing happens. Since there are powerful reasons why people want to agglomerate, instead of looking for more space in a distant location, people make do with less floor space and live in crowded conditions. As Mumbai shows us, this crowding can get quite extreme.

Unfortunately, planners have not learned from this phenomenon. Instead of ensuring decent living conditions by accepting increases in urban densities and increasing per capita consumption of floor space by expanding the availability of floor space, they have continued to worsen living conditions by trying to lower densities, thereby creating artificial scarcities of floor space and forcing people to lower their per capita consumption of floor space!

Next, why do Indian cities lack public space? The short answer is as follows. Indian planning regulations force people to waste a lot of their land in setbacks, space between buildings and mandatory open spaces. The proportion of their land that landowners can effectively build on is very low. The result is an overall extremely poor use of land: too much that landowners have to leave open and can only use sub-optimally, too little land to build on, and too little that planners can appropriate for streets and gardens. And what's more, urban planners are not even aware of how much land their regulations force people to leave uncovered as wasteful open space.

The reason planners are not aware is that the officially approved method of classifying various land-uses does not provide them with the data for measuring land-use efficiency. Typically, planners must quantify the proportion of land used for streets, greens, industries, commercial facilities, housing of various types, etc. They are not required to distinguish between land that may be built upon and that which has to be statutorily left open because of building regulations. Consequently, they

know how much land is devoted to what purpose but do not see how (in)efficiently land is being used.

To focus on land-use efficiency, they should use a simple tripartite classification. First, they should measure how much land is devoted to the public domain—land covered by streets and public open spaces. Second, they should measure how much land is—or can be—covered by buildings. Here they need not bother to distinguish between different types of building uses. Third, they should measure how much land is—or has to be—mandatorily leftover as private open space because of statutory planning regulations.

The consequence of not focusing on land use efficiency is not small. In well-planned cities like London, Paris and New York, approximately 40% of the land is devoted to the public domain, 45% covered by buildings and 15% leftover as private open space. In stark contrast, for Mumbai (Island City), the proportion is 24% in the public domain, 24% covered by buildings and 52% leftover as private open space! The low allocation for the public domain diminishes transport efficiency, environmental quality and quality of life. The low allocation for land on which buildings can be built reduces the amount of precious ground floor space that can be built, drives up the cost of floor space by forcing people to build tall, and exacerbates floor space scarcity. The high proportion of land that people are forced to leave uncovered as open space is a sheer waste. It neither creates significant public benefit nor can it be well used. Planners should be deeply concerned about this. Land, unlike floor space and infrastructure, is a truly limited resource.

In the past, diseases like Cholera, Plague, Tuberculosis and the Spanish Flu, and the resulting public health crises, have had a major influence on reorienting urban planning. Whether the Covid-19 crisis will help reorient Indian urban planning is a question that remains to be answered.

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