

Affordable Housing in Chennai and Some Notes on Post-Pandemic Prospects

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This note outlines the dynamics and determinants of affordable housing in the Chennai Metropolitan Area (CMA), drawing on data from a five-year period (2013–2018). It estimates Chennai's housing shortage and affordability line, outlines the role of state and private players in supplying affordable housing, and discusses builders' responses to state incentives aimed at increasing their supply of such housing. It ends with some comments on the post-pandemic market for affordable housing.

Housing demand and shortage

Housing demand and shortage need to be distinguished. Housing demand, often used by housing agencies, such as the Tamil Nadu Slum Clearance Board (TNSCB), to determine the quantum of housing stock to be built under supply-driven schemes (such as Pradhan Mantri Awas Yojana [PMAY]), captures subjectively defined demand for new housing, including by middle- and high-income households. Shortage, on the other hand, is an indicator more sharply targeted toward need, gaps, and affordability. As per the Technical Group on Urban Housing Shortage (2011), housing shortage comprises four categories of inadequate housing, namely, congested houses, obsolescent houses, non-serviceable *kuccha* houses, and homeless households. We calculated the housing shortage for Chennai, employing these parameters and using data from Census 2011 and from the most recent NSSO Housing and Amenities survey, that is, the 69th Round.

Ministry of Housing and Urban Poverty Alleviation. 2012. *Report of the Technical Group on Urban Housing Shortage (TG-12) (2012–17)*. Government of India.

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¹ Due to data availability issues, we calculated housing shortage by taking the entire districts of Chennai, Kancheepuram, and Tiruvallur as a proxy for the CMA.

Using this approach, the total housing shortage for Chennai (Greater Corporation of Chennai [GCC] area) was estimated at 2.99 lakh households, comprising 2.96 lakh congested and 0.03 lakh homeless households. For the CMA, the housing shortage was 8.85 lakh households.¹

Housing affordability

Housing affordability is defined by how much a household can spend on housing without compromising on other essential needs. The broadly accepted

High Level Task Force of Ministry of Housing and Urban Poverty Alleviation. 2008, December. *Report of the High Level Task Force on affordable housing for all.* Government of India.

KPMG. 2010. *Affordable housing—a key growth driver in the real estate sector?* (Report).

parameters of housing affordability range from four to five times a household's annual income (as established by the Deepak Parekh Committee Report and the KPMG report, respectively). Assuming that for economically weaker section (EWS) and low-income group (LIG) households, the monthly income is equal to expenditure due to a low savings ratio, and using expenditure data from the NSSO's 66th Round, we calculated the affordability threshold in Chennai

at ₹8 lakh—₹10.2 lakh for EWS households and ₹16 lakh—₹20 lakh for LIG. In practice, however, state agencies as well as private builders tend to define 'affordable housing' by size, referring to units ranging from 300 square feet to 600 square feet. As we show below, this approach has made most 'affordable housing' produced by the state Housing Board as well as the private sector unaffordable to EWS and LIG households.

Housing supply

In Chennai, affordable housing is supplied through both the public and private sectors. Public sector affordable housing supply is generated through two state agencies, the TNSCB, which focuses on EWS sections, and the Tamil Nadu Housing Board (TNHB), which provides for LIG, middle-income group, and high-income group (HIG) households. Over the last 5 years, the two agencies together have created around 1.2 lakh units of 'affordable housing' in Chennai, of which TNSCB accounts for 1.16 lakh units and TNHB for 4,000 units. TNHB has built 6,045 units of LIG housing (including non-'affordable' units) over the past 5 years. The prices of these units range from ₹13 lakh to ₹49.5 lakh, falling far outside the LIG affordability threshold. TNHB no longer offers subsidised housing: the square foot prices of LIG and HIG houses are the same, and are comparable with what the private sector provides. TNSCB housing is the only category that fits the affordability parameters for EWS households. TNSCB housing stock was created through a variety of schemes, such as Jawaharlal Nehru

National Urban Renewal Mission, Rajiv Awas Yojana, State Funds for tenement construction and reconstruction of dilapidated tenements, State-specific grants (13th Finance Commission), Emergency Tsunami Reconstruction Project, and the Housing for All (HFA) scheme under PMAY.

To estimate the affordable housing stock supplied by the private sector, we relied on building approvals issued by the Chennai Metropolitan Development Authority (CMDA) and by local bodies in the CMA. Private sector affordable housing stock is produced predominantly through state regulations. The CMDA, through the previous Development Control Regulations (DCR), mandated that 10% of the area in residential projects greater than one hectare be reserved for LIG housing units, with unit sizes not to exceed 45 square metres. Over the past 5 years, these development regulations have resulted in the production of around 12,200 units in the categories of Special Buildings, Multi-Storeyed Buildings, and Layouts, amounting to around 9% of the total stock. However, since the median price of these units is ₹30.2 lakh, a large proportion fall outside Chennai's affordability ceiling. The majority of these residential developments are located on the outskirts of the city, where land prices are lower.

² However, we faced significant challenges in accessing data on Ordinary Buildings. Approvals for this category are given by local bodies (town panchayats, municipalities, and corporations), which typically fail to aggregate or digitise this data. We succeeded in obtaining approvals data only from the GCC and a few other local bodies, but the absence of comprehensive data on this category remained a significant gap in this study.

The bulk of residential development happens in the form of 'Ordinary Buildings' (floor area under 300 square metres and height no more than G+1). Although this category does not have a regulatory mandate to provide units for LIG households, it generates a substantial number of small-sized residential units. Our study of approvals from the GCC and three municipalities indicates that small units comprise 22% of 45% of the total stock in these jurisdictions.² These figures suggest that a bulk of affordable housing is produced on small plots of land, that is, less than 300 square metres in size.

Private sector perspectives on supplying affordable housing

To private builders, the meaning of affordable housing was determined by size, usually under 600 square feet. The private supply of affordable housing, thus, comprised units sold in the ₹15 lakh to ₹25 lakh range (typically located at the outer peripheries of the city) with an upper limit of ₹40 lakh, in sizes ranging from 300 to 600 square feet. Developers noted that the goods and services tax's (GST) upper threshold for affordable housing, ₹45 lakh, was too high for Chennai where land costs are particularly high, making this price more a base than a ceiling.

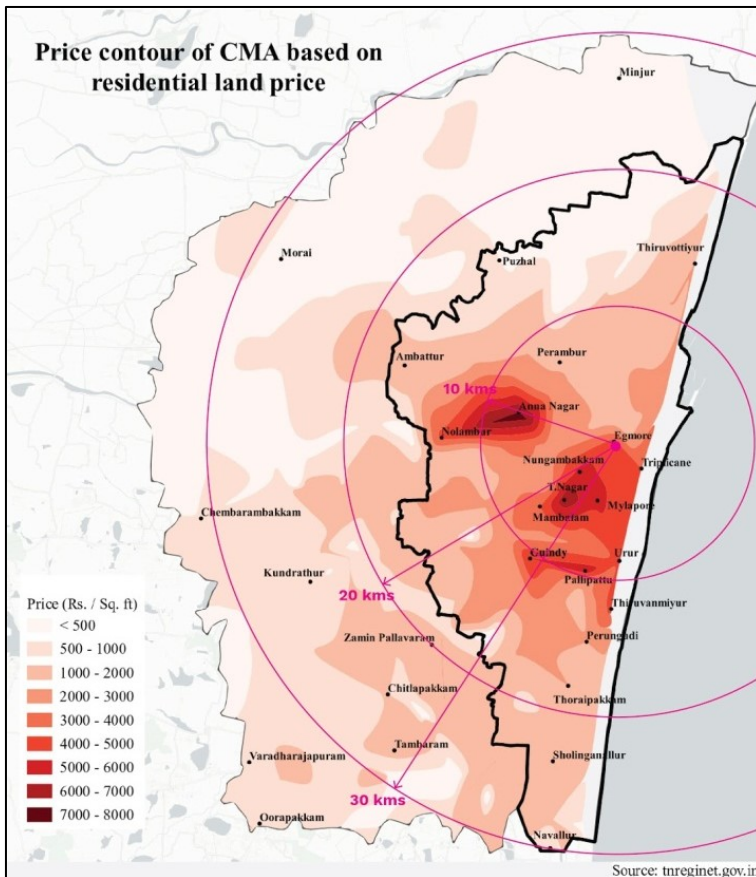
Developers identified two categories of affordable housing buyers: income-based buyers who seek low-priced housing for their residential use; and speculative buyers, who invest in an affordable second home at a slightly higher price range, to maintain an income stream from rentals, or for their higher potential for property appreciation. The latter accounted for over 50% of the affordable housing market.

Developers who had succeeded in providing housing in the sub-₹20-lakh range tended to control all operations internally to lower costs. However, this was possible only for larger players who had the capacity to invest the time, energy, and finance to sustain these allied activities. Smaller builders could deliver housing only in the range of ₹30 lakh—₹50 lakh.

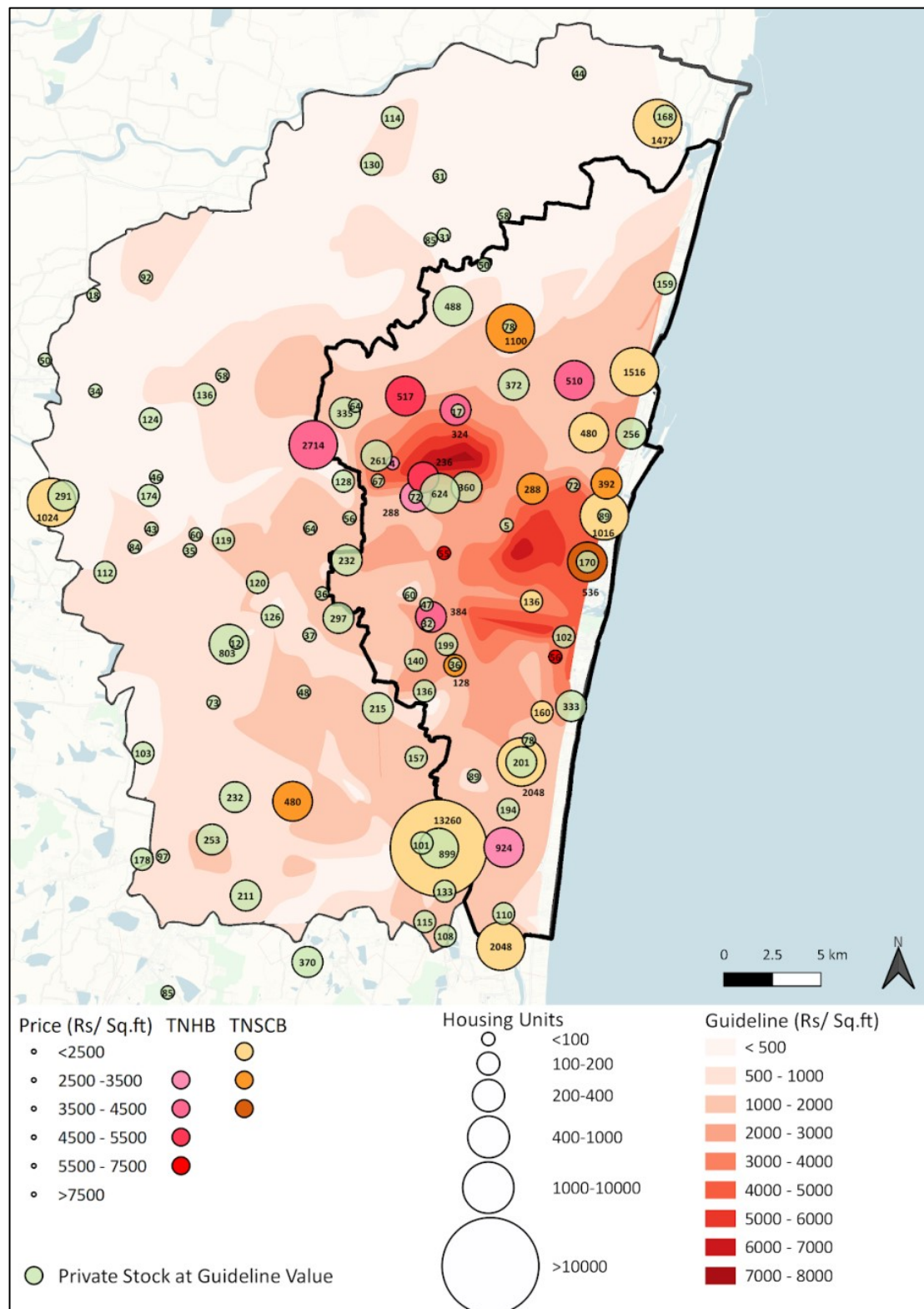
Affordable housing projects are edging away from the city centre, as land is cheaper on the peripheries. Figures 1 and 2 provide a picture of the distribution of the stock of affordable housing across different providers and across the CMA geography. Projects have developed along the two key industrial corridors—

Figure 1

Contour Map of Property Prices in CMA (Based on Residential Guideline Values)



Source: Authors' study 'Dynamics and Determinants of Affordable Housing in Chennai' (2020).

Figure 2**Affordable Housing Stock (Public and Private Sectors) Mapped Onto Price Contours**

Source: Authors' study 'Dynamics and Determinants of Affordable Housing in Chennai' (2020).

the Grand Southern Trunk Road and the Old Mahabalipuram Road—to lure homebuyers and renters with the dual benefit of connectivity and proximity to the workplace. Developers also believe that the expansion of the CMA boundaries will lead to an escalation in property prices, and that having the first-mover advantage in this situation is necessary. Finally, developers feel that current state policies and regulations are reactive and myopic in nature with no real consideration to ensuring the long-term supply of affordable housing.

Effectiveness of state incentives to private builders

Increased floor space index

Increased floor space index (FSI) had a limited impact on selling price. Although it is widely believed that additional FSI can reduce the cost of land, builders revealed that this measure had only a small impact on sale price since land costs are only one component of the total cost. Construction and approval costs and market dynamics significantly impact the sale price. After a certain height, the cost of construction exceeds the cost of land, minimising the benefit of additional FSI. In the case of Special Buildings, developers stated that they were unable to utilise the additional FSI fully due to building-height regulations. Small builders did not utilise the additional FSI as they preferred to concentrate their offerings on units that had a high demand: units sized 700–1,000 square feet, with a selling price of ₹30 lakh—₹50 lakh.

The Credit Linked Subsidy Scheme

The Credit Linked Subsidy Scheme (CLSS), a component of the PMAY, lowers the financing burden of households by providing a subsidy on the housing loan interest and is potentially an important demand-side incentive. However, developers found that it had a limited impact in terms of enabling low-income households to purchase a house, for several reasons. First, formal finance is inaccessible to many low-income households as they do not have formal employment and the necessary documentation. Second, the current housing market does not cater to EWS households as affordable housing prices start at ₹15 lakh. EWS households cannot finance the 10% down payments at these prices. Even with the CLSS benefit, the Equated Monthly Instalment (EMI) to Income ratio amounts to around 54%, which is much higher than the recommended 30%–40%. Third, banks and financial institutions charge low-income households a higher interest rate of 14% due to the perceived threat of default and delinquency. And finally, according to developers, banks are typically not interested in providing loans of lower ticket size due to lower commission and interest earnings.

Land reservation for EWS housing

The previous DCR mandated the reservation of 10% of land in projects over one hectare for the development of 'lower-income housing', defined as units below 45 square metres in size. This ruling was a failure, as these units were largely sold to those who could afford to pay for these small units, or were amalgamated into larger units, rather than being allotted to lower-income households. Developers categorically asserted that a reduction in size does not translate to affordability, especially when projects are located in affluent areas.

Reduction in GST

In March 2019, the GST on affordable housing projects under construction was reduced from 8% to 1%. Although this was hailed as a positive move, developers claimed that it would not have a large effect on house prices, as the input tax credit benefit was withdrawn at the same time. Developers stated that this would raise their costs of raw materials and construction and would neutralise any price reduction for the buyer.

Challenges faced by the private sector

The following factors were listed by private developers as constraining them from providing more affordable housing in Chennai.

Supply of serviced land

In the absence of serviced land, developers either incurred substantial costs in developing road networks, or purchased higher-priced land along main roads. The provision of deep road networks is particularly important for small builders and developers, as this facilitates access to smaller plots of land, allowing builders or households with limited capital to develop these plots. This in turn can lead to a multifold increase in the supply of small and affordable housing units.

Construction costs

Construction costs form a major component of the sale price. The cost of construction is ₹1,600–₹1,800 for special buildings, and can go up to ₹2,200 or more for multi-storeyed buildings, due to requirements for higher quality steel and other raw materials, deeper pilings, and stronger foundations. Developers claimed that poor regulation of the raw materials market results in monopolisation, leading to an escalation in prices.

Other costs

These include costs of approvals, infrastructure, marketing, administrative overheads, and maintenance. All these together form a major component of the sale price. Developers claimed that delays in receiving approvals led to a significant increase in interest costs, as they were forced to pay interest charges even before commencement of construction. Kickbacks also increase costs of approvals, and these charges are ultimately built into the price of the house. Additionally, developers incur heavy expenses in providing civic infrastructure, as this is not provided by the government on the outskirts. These costs are also transferred to the customers, which alone can account for 10% of the total project costs. Developers also called for a reduction of stamp duty, registration, and other mandatory charges for affordable housing projects, as these inflate the price of the housing units.

Incremental self-built housing in Chennai

A third source of affordable housing supply in Chennai is through auto-constructed, 'self-help' housing. The World Bank's interventions in Chennai in the 1980s enabled the large-scale production of such housing through the provision of tenure security, basic services, and loans. They heavily influenced Chennai's housing landscape, creating and upgrading many neighbourhoods through incremental investments by beneficiary households. We studied these processes and their outcomes in three sample neighbourhoods in Chennai.

We found a strong level of overall satisfaction with housing conditions among households in all three neighbourhoods. This derived from three major factors: longevity of residence and spatial inclusion within the city, enhancement and expansion of basic housing in line with household needs over time, and finally, a sense of personal achievement about housing improvements and a long-term commitment to the neighbourhood.

Self-built housing facilitated the emergence of diverse built forms, economies, and cultures of urban settlement. The most positive outcomes in terms of the quality of housing and neighbourhoods derived from three main factors: strong tenure security and property rights arrangements, a strong institutional architecture supporting households in their housing efforts, and access to finance.

Self-help housing did not emerge as the most cost-effective form of housing production in terms of total monetary costs. However, the staggered spending schedules and the option to invest when able make it a viable option for poorer households. The relatively high costs of materials and labour in the informal sector point to the need for more stringent regulation of prices. The role of small

contractors in this sector emerged as significant, highlighting the need to bring these actors under the ambit of regulation, familiarise them with building rules and regulations, and connect them with opportunities for technical and skill upgrades in building technologies. Better enforcement of building regulation also emerged as an important condition for promoting safety, liveability, and quality of life in these neighbourhoods. These findings suggest that in situations where the Beneficiary-Led Construction (BLC) projects of the ongoing PMAY mission can be implemented at a settlement-wide scale with infrastructural and financial support, the outcomes will be more effective than the individual subsidy approach in producing neighbourhood-level transformations.

Rental housing

These auto-constructed neighbourhoods provided a large amount of rental housing. Most of it was informal, affecting the tenure security of renting households. In neighbourhoods where owners had a high degree of tenure security, some formal rental contracts were found. The size and quality of the house played a more important role than tenure security in determining rent levels. Amounts and periodicity of rent increases were uneven. The duration of tenancy was on average rather long, typically about 7–10 years. In many cases, rental income was the sole income source for owners.

Some observations from the study

1. Evidence-based policymaking in housing calls for systematic collection and collation of data across government housing agencies through standardised methods, on housing demand and supply, the amount of affordable stock provided in different sectors, and the geography of such provision. Data available with state housing agencies—CMDA, TNHB, TNSCB, and Tamil Nadu Real Estate Regulatory Authority—must be integrated and made available for intra-departmental reference and research as well as for policymaking and ongoing monitoring. A quarterly summary of the progress of housing construction in general and affordable housing in particular, as evidenced through planning and building permissions, must be computed. Periodic reports similar to the annual *State of the Nation's Housing Report* published in the United States could be produced.
2. Housing agencies must establish a clear threshold for defining affordable housing based on household income and price. Unit size is a misleading and unhelpful metric. The median household income in Chennai should be used to determine and periodically update affordability levels in the city, regulate land and house prices, and target subsidies. Given that most of the housing produced by the private sector and the TNHB in Chennai is currently unaffordable, housing policies should be reconfigured to increase the supply of affordable housing.

3. Incentives such as additional FSI are not directly embraced by market actors to increase supply and reduce prices. The success of such measures depends on factors such as the status of the real estate market, unsold stocks, demand, and

³ For innovative measures attempted in other countries to enhance affordability, along with their applicability for Chennai, see our report *Dynamics and determinants of affordable housing in Chennai* (2020) submitted to the State Planning Commission of Tamil Nadu.

wider economic conditions. Incentives and mandates aimed at providing reservations for LIG households or increasing the supply of affordable housing should be accompanied with clear statements of expected outcomes along with metrics and methods to measure them, and should be regularly assessed for their effectiveness.³

4. Increasing the supply of serviced land is key to enhancing the supply of affordable housing. As seen in Gujarat's town planning and land pooling schemes, when a grid of roads is laid, more land is released for development as residential layouts emerge with smaller plot sizes. This also facilitates incremental housing projects. Such small housing projects are often closer to the affordable price range and are a major source of rental housing supply.
5. Many small developers, who are not members of large and influential real estate associations (such as Confederation of Real Estate Developers' Associations of India), feel that government policies and incentives are not supportive of small-scale projects. Although small developers are the major suppliers of affordable housing, they perceive government initiatives, such as additional FSI, as aligned with megaprojects and big developers. Such incentives are not helpful for small properties as they are unable to consume the enhanced FSI for various reasons. Small builders look for concession in areas such as registration charges in the small property segment and efficient approvals without kickbacks to reduce transaction costs. They claim that such measures will have tangible and direct impact on costs in their segment. In their view, the lower GST rate for affordable housing priced below ₹45 lakh is also not helping much as many projects cannot qualify in this slab given the high cost of land in Chennai. Many builders also concede that not all incentives given to them are passed on to buyers. Hence the question remains as how to target subsidies and other forms of incentives to benefit low-income homebuyers.
6. Earlier state efforts to support autonomous house construction by low-income households through tenure security provisions and loan arrangements resulted in a substantial supply of affordable housing stock within the city. This self-built housing allowed flexible and expansive uses of the unit, and supported the income and livelihoods of residents. Housing policies should pursue this approach of supporting in-situ self-built housing construction wherever feasible. Policies should include measures to upgrade the skills and capacities of local builders and contractors, and to regulate their prices and practices in ways that would safeguard the interests of poor households.

Prospects for affordable housing construction in the post-pandemic scenario

In the pre-Covid-19 situation, the affordable housing market in Chennai, according to industry reports, was booming: 49% of the launches in 2018 were in the '₹40 lakh and below' category. Private builders echoed this view while emphasising that a major reason for this was saturation in the premium and high-end segments. More and more developers were adding affordable housing projects to their portfolios, although some developers were sceptical of this segment due to lower margins and the lack of institutional support from financing agencies and the government.

However, these prospects appear to be shifting radically due to the pandemic. Developers are now unsure whether the ₹30 lakh to ₹45 lakh housing segment will pick up soon. In the post-Covid-19 situation, potential buyers in this segment are likely to be the most affected by the economic downturn, salary cuts, and job uncertainties. This segment has also become more vulnerable in terms of accessing credit. There are cases of existing buyers seeking payment deferments. Thus, effective demand for housing in this price segment may be dampened by market conditions.

Access to credit is also likely to be a problem for builders. They claim that banks are reluctant to offer loans to real estate projects, and when they do offer them, they seek additional collateral. To compound these difficulties, collateral assets are not valued for their current market value but for their distress sale value. Given these uncertainties, it seems likely that the housing market will face poor sentiments and low uptake for another 6–12 months. Market recovery will depend also on how individual developers respond to these conditions.

It is critical to recognise that the private housing market is highly fragmented. The majority of developers supplying housing units at the lower price segment operate in the peri-urban areas. They are highly localised players with limited capital and can undertake only small-scale projects. While access to capital and labour are likely to be challenging in the coming months for all builders, small-scale developers will face more severe impacts.

Small builders who retain a labour force of about 25 members are optimistic that they will be able to manage the post-Covid-19 situation. Their difficulty would lie in securing skilled workers such as bar-benders and carpenters, who come from districts adjacent to Chennai, as restrictions on mobility are affecting the workers' return to their worksites.

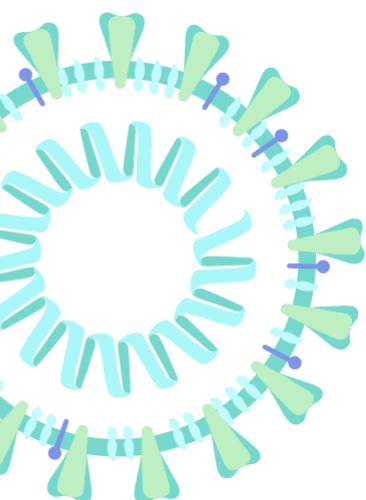
Large developers who have long relied on construction workers from other states have a different kind of problem. Many have lost their workers during the lockdown period. Some have retained their workers by holding back the retention amount, and are currently facing requests from workers for payments and travel.

The current uncertainties have placed much higher expectations on government agencies such as TNHB and TNSCB to supply affordable housing. The pandemic has also brought home the pressing need to revisit the designs of public housing. Layout design and individual unit plans have thus far focused on achieving the maximum number of units per site. The current crisis has highlighted the need to focus on aspects of well-being and health. Designs that endow housing areas with good public spaces and amenities that can double up as emergency community shelters would have to be encouraged. TNHB and TNSCB may not have in-house capacities and hence procuring well-designed and built housing projects from the market is an option. By playing the role of an influential buyer, the state can shape the affordable market effectively.

And finally, ‘Ordinary Buildings’—G + 1 or 300-square-foot buildings usually built by households themselves or by small contractors—accounted for the largest stock of affordable housing in the CMA. This segment may continue to constitute the most promising segment of the housing market, both in terms of demand and supply, in the coming months or years. Casual conversations with real estate brokers suggests that even middle-income buyers are revealing a preference for single-unit homes over apartment complexes. Housing policies in the post-pandemic period may need to turn away from large housing projects and pay closer attention to the small-scale affordable housing sector and its needs as this segment may be where investments and construction activity may be concentrated. For this, the question of urban land, affordability, and effective measures to curtail speculation, are critical. 🌱

Note

This brief draws on the report of a study titled ‘Dynamics and Determinants of Affordable Housing in Chennai’ carried out in 2018–2019 by Karen Coelho and A. Srivathsan, for the Tamil Nadu State Planning Commission.



COVID-19 SERIES

We are in the midst of a pandemic shock as well as a deep economic recession. It necessitates extraordinary policy action. However, we do not have the luxury of time to carry out a new research plan. The situation calls for immediate reflection and action, based on available data. In the Covid-19 Series of Occasional Policy Papers, MIDS faculty contemplate on diverse issues of importance, contextualise their work to the contemporary challenge, draw attention to linkages with interrelated sectors and issues, and suggest short-to-medium-term policy measures. This series would be a useful input in the design of the state's post-pandemic socio-economic policy.

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