

# HOUSING FOR INDIA'S LOW-INCOME URBAN HOUSEHOLDS: A DEMAND PERSPECTIVE

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## Key Highlights

- Urban housing shortage has increased in 2018 compared to 2012
- The shortage has been almost exclusively confined to EWS and LIG households in 2018
- Employing the latest available nationally representative household data on housing conditions, we find EWS and LIG households' demand for housing to be price and income inelastic
- Further analysis reveals these households have accepted congestion in housing as a way of life, making the task of addressing housing inadequacy a challenging prospect
- The study recommends housing policies for low income households - should work in tandem with efforts to improve their health, education, and livelihoods; focus on rental housing for the most vulnerable economic groups among low income households; and incentivise incremental housing to address congestion

## EXECUTIVE SUMMARY

Housing, particularly for low income urban households, is a long-standing challenge in India. This study empirically analyses three demand side aspects of this challenge employing nationally representative household data and draws relevant policy implications based on the findings.

In 2012, urban housing shortage of 18.78 million units affected about a quarter of urban households. About 96 per cent of this shortage was accounted for by housing for low-income groups. The first objective of this study is to present a more contemporary picture of the urban housing challenge by estimating the number of inadequately housed households, and thereafter, the urban housing shortage. The second objective is to understand the nature of households' consumption demand for housing, i.e., their demand for housing for residing in the house. This will help address the issue of inadequate housing in low income households. Since congestion is a major cause of physical inadequacy of housing, the third objective is to understand the effect of living in congested conditions on the

demand behaviour of households for housing.

### HOUSEHOLDS LIVING IN INADEQUATE HOUSES AND HOUSING SHORTAGE

Past estimates of housing shortage focused on the physical inadequacy of housing. It included households which were homeless, households that lived in *katcha* houses that cannot be upgraded, or in houses that were obsolete, and households that lived in congested conditions. Households where married couples do not have a separate room are considered as households living in congested conditions. This paper finds that in 2018, urban housing shortage based on the number of physically inadequately housed households was 29 million, 54 per cent higher than 2012. Congestion emerges as the primary cause of physical inadequacy in housing.



For a more holistic understanding of the urban housing challenge, the study goes beyond considering only physical inadequacy of housing. Slum housing has been a key focus area of housing policy. Policy interventions included rehabilitation of slum households in new houses elsewhere, *in situ* redevelopment and *in situ* upgradation of slum houses, and conferment of property rights for slum houses. Due to reasons pertaining to slum tenability for *in situ* upgradation and redevelopment of slums, and household eligibility criteria, there is a possibility that slum households considered for these interventions are not the same as those living in physically inadequate houses. Besides, an all-India estimate of the number of slum households that need to be considered for such interventions is not available in the public domain. So, this paper considers an estimate of the total number of slum households as the upper bound of the size of India's housing challenge on account of slums.

Considering homeless households, non-slum households living in physically inadequate houses and slum households, the estimated number of inadequately housed households in 2018 works out to a maximum of 47.3 million or 41 per cent of urban households. Taking into account the number of congested households living in houses where it might not be

possible to build the required number of additional rooms to address congestion, the estimated maximum urban housing shortage or the number of new houses and existing housing in need of some form of intervention, in 2018 is around 50 million.

The distribution of shortage across income groups is as follows: 40.6 per cent is in EWS 1 or below poverty line (BPL) households, 56.8 per cent in EWS 2 households or non-BPL EWS households, i.e., non-BPL households whose monthly income is Rs.25000 or less, 2.6 per cent in the LIG group, i.e., households whose monthly income is more than Rs.25000 but less than Rs.50000 and a miniscule 0.04 per cent in MIG and other high-income group households, i.e., households whose monthly income is more than Rs.50000.

#### EFFECT OF PRICE AND INCOME CHANGES ON HOUSING DEMAND

Given that the housing shortage is almost exclusively confined to the EWS and LIG categories of urban households, the paper also looks at the housing consumption demand among EWS1, EWS 2 and LIG households. Consumption demand is the demand for a house for living in or residing, and does not consider demand for housing as an asset. The analysis, based on the 76th round of NSS urban household level data for 2018 on housing

conditions and household characteristics, has been done in two steps. First, a hedonic price function has been used to predict the rent of rented houses and imputed rent of owner-occupied houses. Second, the consumption demand for housing for 14 sub-groups of households categorised by income group, tenure type and settlement type (slum or non-slum), has been estimated using the predicted rent and imputed rent estimated in the first step as one of the inputs.

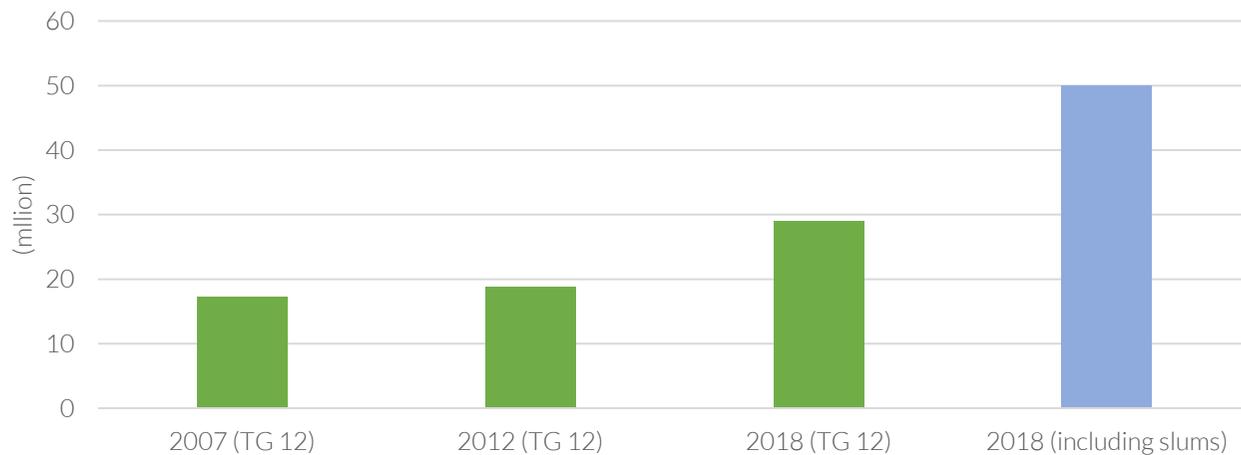
Key findings indicate that consumption demand for housing

1. Is price and income inelastic
2. Price elasticity is less than the income elasticity across income groups
3. Vulnerable households require greater attention for improving their permanent income to stimulate consumption housing demand
4. Price elasticity is lowest in magnitude and positive, and income elasticity insignificant for the most vulnerable – EWS 1 tenant households residing in slums – amongst all households.

#### CONGESTION AND DEMAND FOR NUMBER OF ROOMS

The per capita floor area of congested households declined from 111 sq ft in

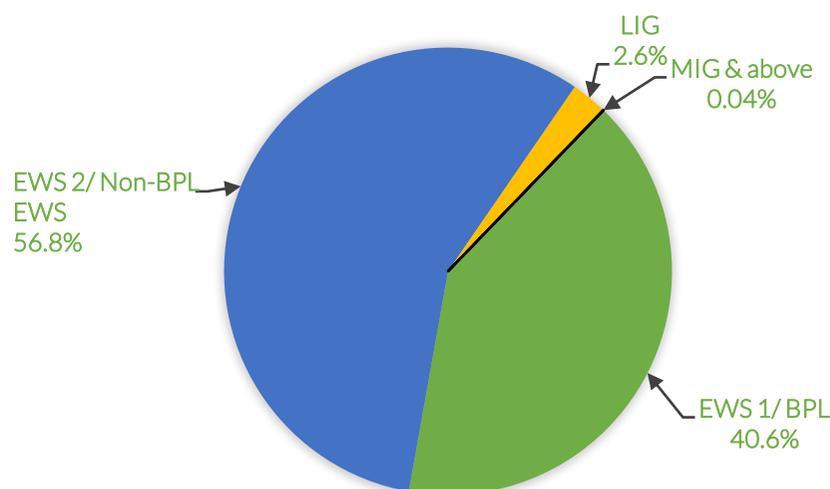
Graph 1: Housing shortage – 2007 to 2018



Source: Estimates from Planning Commission and authors' calculations

Note: Green bars depict housing shortage for the respective years estimated using the TG 12 method. Blue bar depicts the upper bound of urban housing shortage in 2018.

Graph 2: Housing shortage across household categories in 2018



Source: Authors' calculations

2012 to 83 sq ft in 2018, signalling the urgent need to address congestion. An analysis of the demand behaviour of such households indicates that these households, in general, are unwilling to pay for additional rooms to address congestion. This lack of willingness is most pronounced in the case of EWS 1 or below poverty line households. There is the possibility that outcomes of policy interventions targeted at enhancement of housing through construction of additional rooms, or renting or purchase of another house might be sub-optimal due to this lack of willingness to resolve congestion. Also, interventions may not have much of an impact in terms of beneficiary coverage of congested households.

#### CONCLUSION AND IMPLICATIONS FOR POLICY

*Standalone housing policies are not the best housing solution for low income households:* The findings of this study reinforce the importance of household permanent income or present value of its earnings over its lifetime in determining the quality and quantity of housing services demanded and consumed by the household. While the effect of income and permanent income is assumed to be positive for policy purposes, the effect of housing policy intervention on a household's

permanent income, and hence on its consumption demand for housing is usually ignored. Health, education and access to livelihood are some determinants of a household's permanent income. In the past, overlooking the adverse effect of housing interventions such as slum rehabilitation and redevelopment on household permanent income and its subsequent impact on the consumption demand for housing, could be one reason why slum households rehabilitated to formal housing relocated back to slums.

As part of the ongoing PMAY U mission, the 'Angikaar' campaign seeks to create awareness about various central government schemes among PMAY U beneficiaries. Schemes such as *Ayushman Bharat Yojana* (ABY), which provides health insurance, and *Pradhan Mantri Ujjawala Yojana* for access to LPG cylinders can be expected to positively impact permanent income. Our findings suggest that where convergence among various schemes has been achieved, beneficiary households are likely to exhibit a more permanent increase in their consumption of housing as compared to a situation where such convergence across schemes has not been achieved. The findings also highlight the need to think beyond traditional standalone price-based 'housing policies' and focus on a more

holistic approach encompassing access to basic services, health, education, employment and established social networks.

*Social rental housing for BPL slum tenants:* The findings of this study indicate that EWS 1 or BPL households living as tenants in slums are the most vulnerable households to any price or income shock. Hence, this study recommends that *social rental housing* schemes such as the recently announced Affordable Rental Housing Complexes (ARHCs) targeting migrant workers, EWS and LIG households should reserve a specific number of units in each ARHC for EWS 1 households at a rent lower than that payable by other beneficiary households. The financial viability of the ARHCs have to be ensured at rents affordable to EWS 1/BPL households. Checks should be carried out at the time of initial allotment and subsequent contract renewal to ascertain the eligibility of households as tenants of these complexes. In case a household is found ineligible to continue as a tenant, the household should be required to vacate the rental unit after having been given requisite notice. Otherwise, over time, these rental units might be usurped by beneficiaries who have moved up the income ladder and fail to cater to the needs of those who need it the most. Besides, providing schooling and

skilling centres as part of the ARHC will go a long way in improving the long-term welfare of these households and increase their demand for housing services over the long term. Most importantly, all ARHCs should be located close to existing employment centres of EWS 1 households.

*Addressing housing inadequacy through enhancement of existing house:* The study finds that the issue of congestion can be addressed by constructing one more room in houses occupied by 17-18 million households, and by constructing two or more rooms in houses occupied by 2 million households. Improvements and repairs might also address the issues of obsolescence plaguing an estimated 3.5 million non-slum households. Housing enhancements undertaken by

landlord households for renting purposes is also a common practice. With more than 60 per cent of households living in independent houses, the potential to create more rental housing through this method is substantial and merits greater policy attention. Housing enhancement has received policy attention with subsidies being provided to households under the BLC vertical of PMAY U, also referred to as BLC (Enhancement) or BLC (E). Based on our estimates and available information on the number of beneficiaries, there is scope to increase the number of households covered under BLC (E) or similar schemes that focus only on housing enhancement with additional incentives and revised eligibility conditions. The scheme could also be expanded to include houses larger than 30 sq m. Simultaneously,

similar schemes could be launched at the central and state government level for the construction of bigger houses. Under the CLSS vertical of PMAY U, EWS, LIG and MIG households can also avail of subsidised home loans to carry out housing enhancement as well as for construction or purchase of a house. In light of the findings of this paper which indicate acceptance of congestion as a way of life among EWS and LIG households, it is important to identify households living in congested conditions, and ensure their participation in ongoing schemes through better information, education and communication (IEC) strategies and counselling.

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