India’s Low-Income Urban Settlements
How livable, inclusive and accessible are they?

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Sustainable Buildings and Habitat Programme
Centre for Science and Environment
Who do we plan our cities for?
Plethora of guidelines but lack of a mandated address

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Guideline</th>
<th>From</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>National Building Code</td>
<td>Bureau of Indian Standards</td>
<td>2016</td>
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<tr>
<td>2</td>
<td>URDPFI Guidelines</td>
<td>MoUD, GOI</td>
<td>2014</td>
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<td>3</td>
<td>Model Building Bye-laws</td>
<td>MoUD, GOI</td>
<td>2016</td>
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<td>4</td>
<td>Ayushman Bharat: Comprehensive Primary Health Care through Health and Wellness Centres</td>
<td>Ministry of Health and Family Welfare, GOI</td>
<td>2018</td>
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<tr>
<td>5</td>
<td>Model Right to Education Rules</td>
<td>MHRD, GOI</td>
<td>2009</td>
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<td>6</td>
<td>Handbook of Service-level Benchmarking</td>
<td>MoUD, GOI</td>
<td>2008</td>
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<td>7</td>
<td>EIA Guidelines</td>
<td>MoEFCC, GoI</td>
<td>2016</td>
</tr>
<tr>
<td>8</td>
<td>GRIHA for Affordable Housing</td>
<td>GRIHA Council, TERI</td>
<td>2017</td>
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<tr>
<td>9</td>
<td>IGBC Green Affordable Housing</td>
<td>Indian Green Building Council</td>
<td>2017</td>
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<td>10</td>
<td>Solid Waste Management Rules</td>
<td>MoEF&amp;CC, GOI</td>
<td>2016</td>
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<tr>
<td>11</td>
<td>C&amp;D waste Rules</td>
<td>MoEF&amp;CC, GOI</td>
<td>2016</td>
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</tbody>
</table>
Accessibility analysis of the housing schemes

CSE’s three methodologies for investigation:

• Understanding market pattern for accessibility
• Assessment of PMAY housing for accessibility
• Deep-dive liveability analysis in Delhi

Geo-spatial proximity analysis
Geo-spatial proximity analysis + empirical observations
Understanding market pattern for accessibility
Tracking new development to capture market pattern for accessibility

Mohali
Gurugram
Noida
Faridabad
Jaipur

...Udaipur, Jodhpur, etc.
Guidelines used for analysis

Compiled from multiple sources
As cities move towards sprawl, self-sufficient neighbourhoods are needed.
As cities move towards sprawl, self-sufficient neighbourhoods are needed.

Gurugram

- Satisfactory
- Need improvement
- Satisfactory

Average trip length: 5.76 km

City centre

X 2.5
As cities move towards sprawl, self-sufficient neighbourhoods are needed.
As cities move towards sprawl, self-sufficient neighbourhoods are needed.
As cities move towards sprawl, self-sufficient neighbourhoods are needed. Transit-oriented development model demonstrates effectiveness.
<table>
<thead>
<tr>
<th>City</th>
<th>School</th>
<th>Hospitals</th>
<th>Bus Stops</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gurugram</td>
<td>Satisfactory</td>
<td>Need improvement</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Mohali</td>
<td>Satisfactory</td>
<td>Good</td>
<td>Need improvement</td>
</tr>
<tr>
<td>Noida</td>
<td>Need improvement</td>
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<td>Good</td>
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<tr>
<td>Jaipur</td>
<td>Satisfactory</td>
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</tr>
<tr>
<td>Faridabad</td>
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*Need city-level address: Current practices reveal gaps and pave the way for reforms.*
DUSIB’s action plan for slum rehabilitation

- Over 10 million in low-income settlements
- 15 projects (52,584 units) for slum rehabilitation

<table>
<thead>
<tr>
<th>Total Housing Inventory for Urban Poor (DUSIB +DSIIDC)</th>
<th>Constr. completed</th>
<th>Under-constructi on</th>
<th>Occupied (as of Dec, 2019)</th>
<th>Targeted/Proposed for 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>52,584 units</td>
<td>24,504 units</td>
<td>28,080 units</td>
<td>2,147 units</td>
<td>89,400 units</td>
</tr>
</tbody>
</table>

- **Only 8.76 per cent occupancy**: attributed to the non-availability of required infrastructure, services and apprehension of allottees of losing livelihood after moving to the units
- Preference to in-situ rehabilitation as per MPD-2021
Relocation plan

Original Slum Location

- Sunheri Bagh & Dhobi Ghat 7 & 9, Minto Road
- Kali Bari, Gole Market & Janpath Bapraula, Phase II
- JJ Basti Near Railway Crossing No. 7 Std Booth
- Shalimar Bagh Gaon
- Vishwas Nagar, 18 Quarters Sector 16-B Dwarka, Site-3
- DSIDD, PKT-D, Sec-3, Bawana

All relocations exceed the average trip length
Baprola relocation project

- Constructed under Rajiv Ratan Awas Yojana (RRAY) by DSIIDC
- Allotments in 958 of 5,500 dwelling units since 2015
- Beneficiary contribution: Rs 112,000 + 30,000 (one time maintenance)
Sultanpuri in-situ rehabilitation project

- 278 households spread across 5912 sqm of DUSIB’s land
- Beneficiary contribution for a 25 sqm flat: Rs 1.12 lakh + 30,000 (5-year maintenance)
- 200 households identified for allotment who have paid Rs 32,000 as booking, loans for the rest of the amount
Social infrastructure

Baprola

Sultanpuri

Legend
- EWS Housing, Baprola, Phase II
- EWS Housing, Sultanpuri
- Existing Ration Shops
- Community centre with Proposed Shops
- Aanganwadi
- Private Primary School
- Private Secondary School
- Government Secondary School
- Non-bedded Govt. Healthcare facility
- Private Healthcare Facility
- Roads
  - pedestrian
  - residential
- primary
- secondary
- service
- tertiary
- trunk

Legend
- Police Station
- EWS Housing
- Aanganwadi
- Community Toilet
- Govt. Secondary School
- Private Healthcare Facility
- Private Primary School
- Private Secondary School
- Govt. Primary School
- Roads
  - pedestrian
  - residential
  - primary
  - secondary
Green infrastructure

• Organised greens: 20 per cent of the total site area
• 3.5 sqm per capita green space at current occupancy, will reduce to 0.87 sqm per capita on 100 per cent occupancy.
• Green spaces inaccessible at times due to safety issues – being occupied by notorious people
PMAY-U needs location and access-specific criteria to enable inclusive planning

- **Weak scrutiny criteria**: Housing for All Plan of Action (HFAPoA) guidelines and checklist lack any criteria for regulation of mobility and liveability

Need to embed regulatory mechanism

### Mandatory Conditions

Availability of urban land is the biggest constraint in providing housing to all including weaker sections. Therefore, to ease administrative and regulatory bottlenecks, a set of Mandatory Conditions has been included in the Mission to facilitate growth of housing sector including affordable housing. For participating in the mission and to avail financial assistance from Central Government, States/UTs should agree to fulfil following Mandatory Conditions:

11.1 **State/UTs to make suitable changes in the procedure and rules for obviating the need for separate Non Agricultural (NA) Permission if land already falls in the residential zone earmarked in Master Plan of city or area.**

11.2 **States/UTs shall prepare/amend their Master Plans earmarking land for Affordable Housing.**
Is rental housing a game changer?

GoI launches Affordable Rental Housing Complexes under PMAY-U

Incentives include:
- Additional FAR/FSI
- Income tax and GST exemption
- Single window approval within 30 days
- Project finance at lower interest rate
- Trunk infrastructure till project site
- Municipal services at residential rates
- Use permission changes for houses in case of vacant land

GoI launches Affordable Rental Housing Complexes under PMAY-U

COVID-19 lockdown shows why India needs social rental housing

Poor, low-income population needs rents below market rates


And the informal economy

By Rajneesh Saman, Mithali Singh
Last Updated Monday 20 April 2020
Discussion

• What kind of urban form and structure should be targeted to cater to the liveability requirements?
• Urbanization and economics are directly proportional to each other, but the current model shows an opposite impact, which needs address, how to address it?
• Need performance standards: how to consciously integrate quality and performance of habitat? How can the housing scheme guidelines (PMAY, HFAPoA, etc.) categorically address access and liveability?
• Strengthening master plans to optimize accessibility and limit urban sprawl: is using zoning to ensure and integrate low-income settlements with the urban form a good idea?
• How to scale up grassroots action to guide communities for livability and healthy housing? Can there be a template for self-construction?