Innovation & Opportunities
Use of technologies in PMAY(U)

Welcome All

Government of Tamil Nadu

Housing and Urban Development Department
Tamil Nadu Slum Clearance Board (SLNA)

- Tamil Nadu, a leading large State participating in PMAY (U) HFA.
- So far, 4,80,418 units got approved out of 13.91 lakhs, as per demand survey.
- TNSCB as State Nodal Agency has a mandate to build 3.8 Lakh tenements under AHP.
- As the mission period is upto 2022, there is time limitation for implementation.
- Essential for strengthening capacity of the organization or adopt the technology, which helps faster, safer and cleaner construction.
- Constructing 9.5 lakh houses (BLC & AHP) is a challenge and an opportunity for any organization.
- TNSCB being the SLNA, has taken this challenge head on and successfully implementing PMAY (U) HFA.
- In Tamil Nadu under BLC: Interlocking Block Bricks, M-Sand, Fly Ash Bricks, training of persons for use of technology are being adopted.
- In Tamil Nadu under AHP: Pre – Fab and Mivon technologies are being adopted.
Scope of Opportunities in Innovative Technology

- Innovative Technology has become an essential part of development.
- Tamil Nadu is the fastest growing economy with 9.8% GDP in the Country.
- Tamil Nadu is the most urbanized large state in India with 48.5% population living in urban areas.
- Increased pressure on affordable housing sector as there is a mismatch between demand and supply.
- Many dilapidated tenements need to be demolished and reconstructed with higher FSI.
- Increasing land values and real estate prices have pushed urban poor families to occupy marginal lands in and around cities, resulting in the formation of slums and substandard housing with inadequate infrastructure.
- Encroachment/informal settlements on all the waterways need to be rehabilitated without much of relocation so as to support their existing livelihood.
State Initiatives for Affordable Housing and Innovative Technology

- **FSI incentives**
  - Increased FSI for EWS, LIG & MIG Housing.
  - MRTS influence area; 2.00 FSI is permitted [0.5 FSI extra when DU size is less than 75 M²]

- **Permissible Maximum Coverage** is 10% more in MSB developments serving LIG

- **Special Development Rules for Affordable Housing**

- **Reconstruction** in sites with old and dilapidated houses and increasing number of dwelling units by availing higher FSI

- **Single window system** for speedy approvals

- **Premium FSI**

- **Transferable Development Rights (TDR) / Special Transferable Development Rights (Spl. TDR)**

- **Adoption of technology neutral tendering process**

- **Standardization of estimates and PWD norms.**
Key Challenges

- Availability of technology?
- Flexibility of type design?
- High initial cost
- A minimum of 500 units as an assurance to adopt the new technologies so as to establish their production plant.
- Approvals by the authorities concerned (100% repetition, PWD?)
- Availability of land for establishment of production plant
- Training of persons to adopt new technology
# Projects Implemented and Proposed Using Alternative Technology

<table>
<thead>
<tr>
<th></th>
<th>No of Projects</th>
<th>No of Units</th>
<th>Monolithic Concrete Technology</th>
<th>Pre – Fab Technology</th>
<th>Project Cost</th>
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<tbody>
<tr>
<td><strong>Implemented</strong></td>
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<tr>
<td>TNSCB</td>
<td>3</td>
<td>3,225</td>
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<td>TNHB</td>
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<td>-</td>
<td>1</td>
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<td><strong>Total</strong></td>
<td>14</td>
<td>16,872</td>
<td>11</td>
<td>3</td>
<td>1,93,550</td>
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</tbody>
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|                |                |             |                                 |                      |              |
| **Proposed**   |                |             |                                 |                      |              |
| TNSCB          | 10             | 11,820      | 10                              | -                    | 1,36,488     |
| **Total**      | 14             | 16,872      | 11                              | 3                    | 1,93,550     |

(Rs. In Lakh)
BLC at Vilankurichi - Coimbatore
Interlocking Concrete Blocks
Kilkathirpur – Kancheepuram
AHP Project using Monolithic Concrete Construction Technology
Kilkathirpur – Kancheepuram
AHP Project

Elevation

Miniature Model
Nalla Thanneer Odai (NTO) Kuppam, Chennai
AHP Project using Pre – Fab Technology

Commenced on 21.03.2108
Nallathanneer  Odai Kuppam, Chennai
480 EWS tenements  ( Stilt + 10 Floors )

Perspective view

Miniature Model
K.P. Park – Chennai
AHP Project Using Conventional method (Stilt + 9 floors)
K.P. Park scheme – Chennai
Ph.I – 864 units (stilt + 9 floors), Phase – II – 1056 units (stilt + 11 floors)
Project implemented under State Housing Scheme.

Moothingar Street - Chennai
No. of tenements - 960
Project Cost - 112.80 Cr

Using Pre-Fab Technology by TNSCB

Before

After
Project implemented under State Housing Scheme.

**Construction of 1500 MSB Flats at Sholinganallur using Pre-Fab Technology by TNHB**
THANK YOU