

# Innovation & Opportunities Use of technologies in PMAY(U)



### **Welcome All**



### 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 f or 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 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 live in urban area.
- 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 formation of slums and substandard ho using 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 M<sup>2</sup>]
- ☐ 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

					Rs. In Lakh
	No of Projects	No of Units	Monolithic Concrete Technology	Pre – Fab Technology	Project Cost
		lm	plemented		
TNSCB	3	3,225	<b>工作情况</b>	2	36,168
TNHB	1	1,500			20,894
		F	Proposed		
TNSCB	10	11,820	10		1,36,488
Total	14	16,872	11	3	1,93,550

#### **BLC** at Vilankurichi - Coimbatore

**Interlocking Concrete Blocks** 









## Kilkathirpur – Kancheepuram AHP Project using Monolithic Concrete Construction Technology









#### Kilkathirpur - Kancheepuram

**AHP Project** 

#### Elevation



#### **Miniature Model**





#### Kilkathirpur - Kancheepuram

AHP Project - Aerial View - 2112 Houses



#### Nalla Thanneer Odai (NTO) Kuppam, Chennai

AHP Project using Pre - Fab Technology







#### Nallathanneer Odai Kuppam, Chennai 480 EWS tenements (Stilt + 10 Floors)







#### 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)





#### Miniature Model





#### Project implemented under State Housing Scheme.



Before

After



**Moothingar Street - Chennai** 

No.of tenements - 960

Project Cost - 112.80 Cr

Using Pre-Fab Technology by TNSCB



#### Project implemented under State Housing Scheme.

#### Construction of 1500 MSB Flats at Sholinganallur

using Pre-Fab Technology by TNHB





