SUSTAINABLE & AFFORDABLE HOUSING

4th GRIHA Regional Conference, Bangalore
16.11.2013

THINK ... ... ...

LESS is MORE
LESS is MORE

LESS is MORE
**Our Interventions**

- Policy framing support
- Programme funding support
- Project Development support

**Our Contributions so far in HOUSING**

**Current Year**
- 42 Projects
- 734025 Houses
- Affordable Houses
  - 722521 (98%)
- Project Cost
  - Rs 10509 Crores

**Cumulative**
- 14840 Projects
- 15536973 Houses
- Affordable Houses
  - 15188364 (97.7%)
- Project Cost
  - Rs 91274.47 Crores

Through Funding
Our Contributions so far in HOUSING

Through Design & Development Consultancy

Our Contributions so far in HOUSING

Through Design Consultancy
Through Design Consultancy

Sustainable Rental Housing _ HAL

Project Advisory Support for Affordable Housing

Geographical Area of Bangalore Urban District: As on 2011 Total (Area 2190 sqkm)

Population Density per sqkm - Bangalore Urban District (2011)

Growth Rate: Bangalore District (BU) & Sub-components

Bangalore Urban District
Through Project Advisory support

<table>
<thead>
<tr>
<th>1991</th>
<th>2001</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.27 lakhs</td>
<td>14.2</td>
<td>23.77 lakhs</td>
</tr>
<tr>
<td>48 lakhs</td>
<td>65 lakhs</td>
<td>95.88 lakhs</td>
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</tbody>
</table>

Percentage of total no of HHs to the total population

House Hold Trend Change in %

<table>
<thead>
<tr>
<th></th>
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Total number of Households (Bangalore District)

Population Projection (2025) Trend - Bangalore Urban District and its Subcomponents

PROJECTED POPULATION 2025 BU Dist
Room Composition of the Households

% Comparison of Room Distribution with in the households from 1991 - 2011

<table>
<thead>
<tr>
<th>Rooms</th>
<th>1991</th>
<th>2001</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Exclusive Rooms</td>
<td>7.05</td>
<td>31.59</td>
<td>6.80</td>
</tr>
<tr>
<td>1 Room</td>
<td>14.47</td>
<td>15.98</td>
<td>6.28</td>
</tr>
<tr>
<td>2 Rooms</td>
<td>39.45</td>
<td>4.96</td>
<td>2.72</td>
</tr>
<tr>
<td>3 Rooms</td>
<td>28.84</td>
<td>7.09</td>
<td>4.52</td>
</tr>
<tr>
<td>4 Rooms</td>
<td>15.98</td>
<td>33.20</td>
<td>6.99</td>
</tr>
<tr>
<td>5+ Rooms</td>
<td>6.80</td>
<td>31.73</td>
<td>3.31</td>
</tr>
</tbody>
</table>

Average Residential Sale Price Market Supply

Average Residential Sale Price per Sqft August 2012 Data

A locality in South East Taluk
Average residential Sale price Vs Flat size

![Bar chart showing average sales price vs flat size](chart)

Estimated income of the Households to own the housing units at the above pricing

<table>
<thead>
<tr>
<th>Dwelling Type</th>
<th>Estimated Monthly Income required to own</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low to medium rise apartments</td>
<td>78170</td>
</tr>
<tr>
<td>High rise buildings</td>
<td>103573</td>
</tr>
<tr>
<td>Villas</td>
<td>157904</td>
</tr>
<tr>
<td>25-50 lakhs</td>
<td>61428</td>
</tr>
<tr>
<td>50-80</td>
<td>122857</td>
</tr>
<tr>
<td>80 lakhs and above</td>
<td>196571</td>
</tr>
</tbody>
</table>
Housing Shortage

28743 HHs

Housing Shortage based on Congestion

66266 HHs
Existing HHs & New Housing stock to be created

Existing (2011) & new Housing stock to be created
- Existing HHs 2011
- New HHs Required-2017
- New HHs Required-2025

<table>
<thead>
<tr>
<th>Total number of Households (Bangalore District)</th>
<th>Rural</th>
<th>Urban</th>
<th>Bang UA+OG</th>
<th>Bangalore South &amp; East Taluk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing HHs 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New HHs Required-2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New HHs Required-2025</td>
<td></td>
<td></td>
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</tbody>
</table>

Affordable Need and Demand Analysis
The HOUSING CONTINUUM

- Safe, Affordable Market Housing
- Long-Term Housing
- Affordable Housing
- Social Housing
- Long-Term Supportive Housing
- Support Services
- Emergency Housing
- Transitional Housing
- Temporary Housing
- Temporary Housing
- Permanent Housing

Homelessness

INTERVENTION

Low

PREVENTION

High
Suggested affordable housing mix

<table>
<thead>
<tr>
<th>Minimum Monthly Income Vs Affordable Housing Sale Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>10000</td>
</tr>
<tr>
<td>Rs. 4,50,000 (Size 300 sqft)</td>
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</tbody>
</table>

Setting Priorities for Affordable Housing Delivery

**Priority -1** • Home Ownership model

Below market ownership housing with prices aimed at households earning incomes between Rs 33333 to Rs 55000/-

**Priority -1** • Lease to own model

- A Lease – to – Own model could slowly take them up the ladder of home –ownership in an effective manner. Some form of assistance by the State to help these modest –income renters move into home ownership will also reduce the pressure on some of the location’s existing rental units.
Setting Priorities for Affordable Housing Delivery

**Priority -2**

- **Affordable Home Ownership For Young Working People**

To address the demand of these single individuals who earn incomes above between Rs 40000 to Rs 50000/- per month, integrated condominiums with self contained facilities could be developed, where the land ownership vests with the State on a long lease period and the individuals pay lease rent, sufficient enough to maintain the habitats in addition to the capital cost of the housing.

**Setting Priorities for Affordable Housing Delivery**

**Priority -3**

- **Other Identified Housing Needs**

Other identified housing needs for the locality includes:

- Supports for service population of the knowledge industries and industrial workers in the industrial areas.
- Supports for Urban poor
- Up gradation housing
## Different Categories of Housing Units

By BDA

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>No of BHK</th>
<th>Units</th>
<th>Built Up Area in Sqft</th>
<th>Cost of Each Unit in Lacs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 BHK</td>
<td>6972</td>
<td>436</td>
<td>8.00</td>
</tr>
<tr>
<td>2</td>
<td>2 BHK</td>
<td>2468</td>
<td>750</td>
<td>17.00</td>
</tr>
<tr>
<td>3</td>
<td>3 BHK</td>
<td>1112</td>
<td>1100</td>
<td>27.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>10552</strong></td>
<td></td>
<td></td>
</tr>
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### Precast Pre-Engineered Load Bearing Wall Panel Method of Constructions

**Precast Plant**
PANEL WITH REINFORCEMENT

CUBE ASSEMBLY

Cube Assembly Area
LIFTING & PLACING AT SITE

COMPLETED STRUCTURE
EMERGING Market Solutions

1854 Houses
Price 16L to 19.50L
1, 2, 3 BHK
351 – 1002 SQFT
Locality: Chandapura Anekal Road
Builder: VBHC

Jannadhar
1128 Houses
ATTIBELE

FINISHED BLOCK
EMERGING Market /Retail Solutions

2BHK Apartment in Sarjapur Road, Bangalore at MSR Flora
Rs. 19.80L 900 Sq. Ft.

Rental
Konankunte
450 Sft Rs 4000/month

HUDCO continues to evolve and contribute
RENT to OWN
Beneficiary + Employer + HUDCO

HuNNY - Nav Nagar Yojana
For Developing Sustainable Habitats
Urban Local Body + HUDCO

Micro Finance for small houses
Equity to SEWA

HUDCO Design Competition
Building Centre rejuvenation
Yet miles to go …
Towards affordability and sustainability

THANK YOU

Vijaya R Vasu, HUDCO
16.11.2013