GREEN INITIATIVES IN AFFORDABLE HOUSING

HUDCO’s perspective

6th GRIHA Regional Conference, Bangalore
03.02.2015
HUDCO’s role in Affordable Housing

FINANCING

Awareness & Propagation

Planning & Designing

Technology & Training

Policy & Programme Support
<table>
<thead>
<tr>
<th>Current Year (upto Jan 2015)</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 Projects</td>
<td>14852 Projects</td>
</tr>
<tr>
<td>2,45,513 Houses</td>
<td>1,60,20,178 Houses</td>
</tr>
<tr>
<td>Affordable Houses</td>
<td>Affordable Houses</td>
</tr>
<tr>
<td>2,41,520 (98%)</td>
<td>1,56,66,513 (97.8%)</td>
</tr>
<tr>
<td>Project Cost</td>
<td>Project Cost</td>
</tr>
<tr>
<td>Rs 8823 Crores</td>
<td>Rs 99,586 Crores</td>
</tr>
<tr>
<td>HUDCO Loan sanctioned</td>
<td>HUDCO Loan sanctioned</td>
</tr>
<tr>
<td>Rs 4558 Crores</td>
<td>Rs 46,323 Crores</td>
</tr>
</tbody>
</table>
**TYPICAL HOUSE**

The individual beneficiaries own the plots and the titles are jointly registered.

Each unit is approximately 250 sq. ft. (23 sq.m). Each house is planned to accommodate an entrance verandah, a multipurpose room, kitchen and a space for bath. However depending on the beneficiary’s requirements the bath and WC are invariably not provided within the house except for a few cases. Unit cost — Rs 30000/-. 

<table>
<thead>
<tr>
<th>HOUSE PLAN</th>
<th>SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>multipurpose room</td>
<td>Foundation: Stone masonry with cement mortar</td>
</tr>
<tr>
<td></td>
<td>Superstructure: Solid concrete block</td>
</tr>
<tr>
<td></td>
<td>Framing: Steel beams, windows/constellations</td>
</tr>
<tr>
<td></td>
<td>Roofing: Asbestos / mangalore tiles on steel truss</td>
</tr>
<tr>
<td></td>
<td>Flooring: Cement</td>
</tr>
<tr>
<td></td>
<td>Finishing: whitewash</td>
</tr>
</tbody>
</table>

The above specifications are also modified in some cases to suit beneficiary’s requirements.

**SL NO — 18**
**BENEFICIARY NAME — Cheluvaiah**
**Husband’s name — Muthiah**
**ADDRESS — Sangali Beslea, HARCHALLI**

**STAGE OF CONSTRUCTION**
completed and occupied

**AMOUNT RELEASED**
Rs 30000/-
GREEN VALLEY Shelters (40)
, Vidyaranyapura (2004-06)
19687 Sft Rs 850 per sft
Rs 3.22 Cr HUDCO loan - Rs 2.25 Cr

GANGA CHELSTON (112)
, Varthur Road (2006-08)
19687 Sft
Constn cost Rs 2000 per sft
Rs 23.00 Cr HUDCO loan - Rs 12.00 Cr

SILVER MANOR (34)
, RT Nagar (2006-08)
16150 Sft Rs 2400 per sft
Rs 6.96 Cr HUDCO loan - Rs 4.87 Cr
VITHOLA, Bannerghatta road (2001-05)

1.3 lakh Sft Rs 690 per sft cc - 132 Houses

Rs 24.00 Cr

HUDCO loan - Rs 12.00 Cr
MS Palazzo, Jakkur road (2007-10)
Rs 28.25 Cr, 2 lakh Sft Rs 1154 per sft
128 Houses
HUDCO loan - Rs 10.00 Cr
Were they affordable?
Were they green?

Difficulties

Competitive financing – Banks vs techno
Financing
Builder’s business interests/sense of Greenness
Planning permits /FSI/DCR
Mass individual houses with Govt subsidy

HUDCO’s strategies

Appointment of consultants
Project monitoring and advisory
Training and capacity building
Scaling?
Sustainability ???

HUDCO’s financing to private developers/builders
1996 – 2010
Put on hold
Soft introduction – 2014

Financing of affordable housing projects by private developers/builders reintroduced For new projects under this category
Sale Price of the Dwelling Unit up to Rs. 4.25 lakh HUDCO’s EWS/LIG interest rates i.e., 8.75% to 10.00 % RoI
Sale Price of the Dwelling Unit above Rs. 4.25 lakh and upto Rs. 12 lakh - 13.50% 14.50%
Sale Price of the Dwelling Unit above Rs. 12 lakh and upto Rs. 25 lakh 14.50% 15.50%
Sale Price of the Dwelling Unit is above Rs. 25 lakh 15.25% 16.25%

HUDCO’s financing to Govt agencies continue /affordable ....

ACCELERATION for affordable n green???
Plan & Design

HAL Staff Quarters
584 units
53 to 111 Sqm

Proposed for
GRIHA 3 Star rating
Plan & Design

URBAN POOR Housing, RAY, GADAG

504 units

26 Sqm

Can expand to

33 Sqm –

Rs 5.00 lakhs/unit
LIDKAR Housing, GADAG
250 units
26 Sqm
Rs 5.00 lakhs/unit
Are they affordable?
Are they green?

Difficulties

Cost effectiveness
Suitable contractor to implement (L1)
Labour ??? for cost effective/ alternate technologies

HUDCO’s approach

Design concepts has built in incremental scope for greening with cost efficiency
Scaling?  
Sustainability ???

HUDCO’s consultancy
Complimentary
Small teams

ACCELERATION for affordable n green designs
Good possibilities
Green Building Initiatives for Affordable Housing
To MoHUPA

Affordable Housing Need and demand assessment
To BDA
- Are they affordable?
- Are they green?

Scope for acceleration
Sustainable development
- Are they affordable?
- Are they green?

Scope for acceleration vs Sustainable development
Building Centres in Karnataka

In Karnataka State alone, over 42,000 people have been trained on following:

- Stabilised mud blocks
- Cement concrete blocks
- Pavement tiles
- Fly ash bricks
- Various types of Masonry
- Various types of roofing
- Welding / Plumbing / Electrician
- Bar Bending etc.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unskilled to semi-skilled</td>
<td>7000</td>
</tr>
<tr>
<td>Semi-skilled to skilled</td>
<td>16000</td>
</tr>
<tr>
<td>Awareness programmes</td>
<td>19000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42,000</strong></td>
</tr>
</tbody>
</table>
Technology & Training

- Training and Capacity Building
- From Unskilled to Semi-skilled; from Semi-skilled to Skilled
- Forming Self-help group of construction workers
- Special focus on woman workers to enhance their earning capacity.
- Focus on Artisans, Construction Workers, Masons, Project Managers
National Network of Building Centres were launched by the MoHUPA in August 1988 with grant support through HUDCO, for providing decentralized delivery system for technology transfer from lab to land.

- Total Number Sanctioned: 577 in 399 Districts
- Works Executed: Rs. 1453 Crore
- Materials Produced: Rs. 367 Crore
- No. of Persons Trained: 2.58 lacs

The support was discontinued by the Planning Commission in the 10th Plan.
Awareness/Propagation

PAINTING COMPETITION for children from Bangalore Slums
5 October, 2006
Sponsored by Housing and Urban Development Corporation Ltd
On behalf of Ministry of Housing & Urban Poverty Alleviation, Govt of India
Awareness/Propagation

HUDCO DESIGN AWARDS 2014
1: Cost Effective Rural/Urban Housing Including Disaster Resistant Housing Category
2: New and Innovative Town Design Solutions/Eco-Cities
3: Conservation of Heritage Category
4: Green Buildings
5: Landscape Planning and Design

HUDCO PUBLICATIONS
Affordability vs Green
Green vs Acceleration
Acceleration vs Sustainable Development

The challenge remains ...
till all the stakeholders
start from the same page
and march towards the common goal

THANK YOU

Vijaya R Vasu, HUDCO
03.02.2015