Round Table on India Housing Construction Technology Challenge

The Ministry of Housing & Urban Affairs (MoHUA) organized a Round Table Conference on 25th August 2017 for the “India Housing Construction Technology Challenge (IHCTC)” at New Delhi. The end objective of this technology challenge event is to bring innovative technologies into the affordable housing construction sector for providing safe, sustainable and all weather houses at a rapid pace. The IHCTC is proposed to be organized in 2018-19.

The objectives of the Round Table Conference were following:

a) To deliberate the challenges and opportunities in achieving the goal of housing for all in urban area.

b) To discuss on the various components of IHCTC, finalize the roadmap for the event and takeaway for adopting such technologies for affordable housing in Indian context.

Around 200 delegates/stakeholders from Central/State governments, major construction companies/portals, academic institutions, professional organizations, real estate agencies, private sector developers and Technology Certification & Standardization Agencies participated in the Round Table.

The roundtable focused on aspects like rollout of the housing challenge, branding, promotion, awareness creation, defining role of stakeholders, criteria for technical evaluation for selecting technologies, awards and incentives, B2B discussions and signing of MoUs, institutionalization and adoption of selected technologies by Central and State governments etc.

Secretary, MoHUA addressed the delegation with detailed background, prime objectives and draft framework of the event. He emphasised on the need for adoption of emerging technologies to achieve the target of providing house to all eligible urban poor by 2022. He further elaborated the relevance of participation of technocrats from all over India by stating the same to be a leap towards the vision of Hon’ble Prime Minister along with the vision of “New India”, where the adoption and application of
innovative technologies in every sector is the prime concern.

CEO, NITI Aayog, was the Chief Guest for the occasion. He appreciated for having initiated the Construction Technology Challenge event. During his keynote address, he gave an example of global pattern, that when urbanization began in the western countries, they could afford to have sprawling constructions since land cost then was low. However, today India needs to have systematized and innovative urbanization keeping in view of the mammoth urban agglomeration and limited land resources.

He emphasised that if a house is being constructed in 3 years then it is not an affordable house. Rate of interest is so high that it will never be affordable. The affordable house need to be constructed in three to four months and that is possible with the help of technology. He concluded that NITI Aayog would look forward and support this grand initiative of the IHCTC proposed by the Ministry.

Additional Secretary (Housing), MoHUA in his brief presentation set the context of the Round Table Conference and shared about the indicative agenda and roles of the sub-groups for the next part of the conference. The attention was drawn to the global framework and India’s commitment in terms of Sustainable Development Goals (SDG) which speaks about having ‘access for all to adequate, safe and affordable housing and basic services and upgrade slums’ and also Climate Change. The need of pre-engineered construction technologies was highlighted and it was informed that various innovative construction technologies have already been adopted and certified in India.

CEO, MyGov provided with a detail introduction of the MyGov which is the citizen engagement platform with 47 lakh registered users to crowdsource ideas and knowledge with three sets of activities i.e. Do, Discuss and Disseminate. It was reiterated that this Platform may be appropriate for the Housing Technology Challenge, proposed by MoHUA and shared a relevant Flow Chart as: Contest Published on MyGov - Entries Submitted on MyGov - Evaluation by the concerned Ministry and Winner Announcement in MyGov Blog Section. The need of having a simple, concise and clear and not over specified ‘Problem Statement’ was impressed upon. The example of ‘Tata Nano’ car which promoted it as ‘a car below 1 lakh price’ was cited and suggested that the contest should be online as well as through ‘on ground demonstration’, to be evaluated by qualified jury and by conducting third party evaluation. It was suggested that few more meetings with more participation and dissemination through internet and social media might be useful.
Progress of PMAY(U)

Under PMAY(U), as on September 30, 2017, **28,57,321 houses** have been given nod from Central Government with a Central Assistance of **Rs 44,278 Cr** and a total investment of **Rs 1,54,180 Cr**. This includes **Rs. 1199 Cr.** disbursed towards loan subsidy to **60,872** beneficiaries under the ‘Credit Linked Subsidy Scheme’ (CLSS).

Central Sanctioning & Monitoring Committee (CSMC) Meetings

Central Sanctioning & Monitoring Committee (CSMC) is a decision making body for the PMAY(U) chaired by Secretary, Ministry of Housing & Urban Affairs and members from other concerned departments. The main function of CSMC includes accepting projects submitted by States/UTs for release of central assistance, overall review and monitoring of the Mission.

During the quarter July-September, 2017, three CSMC meetings were held in which a total of 1103 projects under Affordable Housing in Partnership (AHP), Beneficiary Led Construction (BLC) and In-Situ Slum Development (ISSR) components involving 7,38,757 houses were accepted from 15 States. These include 96 houses under BLC enhancement from the state of Kerala.

A total Central Share of Rs.11,043 Cr. is involved for 7.39 Lakh houses accepted as above.
Public Private Partnership (PPP) Model

While implementing components of PMAY(U) Mission, some of the States have used the capacity of private sector in different ways especially for the verticals related to In-Situ Slum Redevelopment (ISSR) and Affordable Housing in Partnership (AHP). Since commencement of the Mission, private sector has shown a lot of interest in investment as well as partnering the State Governments/public authorities in fulfilling the Mission objective of providing affordable housing to EWS/LIG segments.

In order to boost this public private partnership and harness the strengths of the private sector, the Ministry, in consultation with the states and other stakeholders, has developed 8 public private partnership (PPP) models for affordable housing (6 on public land and 2 on the private land).

Generic PPP Models for Affordable Housing are:
Model 1: Government-land Based Subsidized Housing (GLSH)
Model 2: Mixed Development Cross-subsidized Housing (MDCH)
Model 3: Annuity Based Subsidized Housing (ABSH)

Model 4: DBFMT – Annuity cum Capital Grant based Subsidized Housing (AGSH)
Model 5: Direct Relationship Ownership Housing (DROH)
Model 6: Direct Relationship Rental Housing (DRRH)

Two PPP models for PPP projects on privately owned land, supplementing the two verticals of PMAY (Urban) i.e. Credit Linked Subsidy Scheme (CLSS) and Affordable Housing in Partnership (AHP) are:

Model A: Taking advantage of CLSS
Model B: Private Land Based Models under AHP scheme

If required, these models may be tweaked to suit the State Governments requirements to promote public private partnership (PPP) in a big way to fulfill the Mission objective. In these models, public land has been used as a resource to cut down the cost or cross-subsidise the cost of EWS/LIG houses or allowing deferred payment (as annuity or hybrid) to bring down upfront burden to the State exchequer.
Information Dissemination through Social Media

Completed BLC dwelling unit in Tamil Nadu under PMAY-Urban.

Completed Beneficiary Led Construction (BLC) house in Mango, Jharkhand.

A.P. STATE HOUSING CORPORATION
Chittoor

Completed Beneficiary Led Construction House in Karnataka

First "Griha Pravesh" is a completed Beneficiary Led Construction (BLC) house in Durg, Chhattisgarh

Mr. Sankar Kamkhar, a daily wage labourer, is the first beneficiary under PMAY-U from Houkela Municipal Corporation and the first to vision building his house under this scheme. After benefiting from the scheme, he has managed to save money for his child’s education and is thankful to the Government.
**Best Practices**

**Women Construction Groups – Convergence with PMAY**

Kudumbashree is the State Level Nodal Agency for PMAY(U) in Kerala. Under PMAY(U), they have got nearly 30,000 houses approved in the State till date. They have estimated to get approval of 80,000 houses in 2017-18. Hence, it can be foreseen that there would be huge demand for construction labour in the State for construction of these houses. Government of Kerala has given accreditation for women construction groups to undertake construction activities under Local Self Government Department. Majority of the beneficiaries are members of Kudumbashree network. Hence, apart from filling the gap between demand and supply side, this will instill a sense of ownership as well. These affordable housing projects under PMAY(U) would be constructed by the trained women construction groups, thereby empowering the women by providing them with livelihood.

**Highlights of the Women construction team**

- It is an innovative livelihood activity promoted by the Mission.
- Targeted group of beneficiaries constitutes the women laborers, professional and experienced engineers in construction and allied sectors from economically weaker sections.

**Impact**

- A total of 217 women were trained under HUDCO.
- 400 women were trained and 59 Micro Contracting Construction Groups have been constituted under Kudumbashree. Work to the quantum of Rs.51 lakh has been awarded to the groups.
- 87 houses have been completed, constructed by these teams.

**Women Hollow Bricks Unit**
- There are 10 Women Hollow Brick Units under the support of District Panchayat and Kudumbashree Mission in Ernakulam District of Kerala.
- Kudumbashree partnered with HUDCO and trained them in brick construction.
- The initial working capital was Rs.12 lakhs for a single hollow brick unit mobilized through Local Self Government and Kudumbashree.
- Kudumbashree Mission provided them a subsidy through its Rural Micro Enterprises project.
- On an average, about 1000 bricks of bigger size (8x6 inches) and 1500 bricks of smaller size (8x4 inches) are produced on a daily basis.
- It is sold at a cost of Rs 22/- and Rs 18/- respectively.
- Getting contracts and orders from the adjacent Panchayats for the units.
- Rs. 450-500 is the average/day earning of member of the unit.

**Convergence with PMAY(U)**
- Under PMAY(U), nearly 28,967 houses approved in the State.
- Around 80,000 houses to be constructed in 2017-18 under PMAY(U).
- Needs 16 crore (@2000x80000) hollow bricks for the construction of houses under PMAY(U).
- It is proposed to construct atleast 1000 houses/district under PMAY(U) through these construction groups.
- Filling the gap between demand and supply side.
**Success Stories**

**A Winning story of a widow under PMAY**

**Name:** Babyammal  
**Address:** Ramar Kovil Street Karai, Ranipet, Vellore District, Tamil Nadu

Babyammal is a widow, living with her married son, his wife and two children. The son works as a daily laborer in Parry Ware Company located in Ranipet Industrial Estate, Tamil Nadu.

In 2015, her Kutcha House was surveyed under PMAY(U) and was eventually sanctioned benefits of a new house under BLC vertical. She managed to construct the house using funds from State & Central government and with some additional support extended by her son from his daily wages.

She has constructed a toilet inside the house, through which open defecation practice came to an end. Now she feels proud among neighborhoods. Her daughter in law and children are now relieved from the stress of going in the open, they feel safe now.

**Story of Change under PMAY**

**Name:** Dhiren Kumar Das  
**Age:** 44

Mr. Dhiren Kumar Das was living in Rourkela for 30 years in a semi pucca house. He is a small time businessmen, runs a beetle shop at Balijodi, Rourkela. His monthly income is around 4000-5000 per month. He had to struggle hard all his life due to financial constraints. He never thought of owning a house even in his dreams. He had learnt to live in a semi pucca damaged dwelling with seepage, water draining from ceiling during rains and much more. He accepted it as his destiny.

He came to know about PMAY(U) scheme through a community level meeting during a programme conducted by community organizers of Rourkela Municipal Corporation and just like that he applied as a beneficiary in the programme. He still had no hopes. But few months later, one fine day he received a sanction from the state government. He and his wife are grateful to the government, they now have faith in government. Dhiren’s family even without any hopes, finally constructed their dream house, which was destined to be owned by them.