



INDIAN URBAN HOUSING CONCLAVE

RAJKOT, GUJARAT

2022

CONCEPT NOTE

19 - 21 OCTOBER 2022



A. Background:

1. Ministry of Housing and Urban Affairs (MoHUA) has been implementing Pradhan Mantri Awas Yojana-Urban (PMAY-U) since 25th June 2015 for construction of all-weather pucca houses with all basic amenities for all eligible families/beneficiaries in urban areas of the country. The scheme is implemented through four verticals i.e. Beneficiary Led Construction (BLC), Affordable Housing in Partnership (AHP), In-Situ Slum Redevelopment (ISSR) and Credit Linked Subsidy Scheme (CLSS). Under the Mission, so far, we have sanctioned 1.23 crore houses; out of this over 1.03 crore have been grounded for construction and more than 63 lakhs have been completed and delivered to the beneficiaries.
2. Within the ambit of the overarching PMAY-U, a Technology Sub-Mission (TSM) has been set up, to facilitate the adoption of innovative, sustainable, eco-friendly and disaster-resilient technologies and building materials for cost effective, speedier and quality construction of houses. For promoting new and innovative construction technologies and systems under, so far following activities have been taken up:
 - i. Global Housing Technology Challenge- India (GHTC-India) was initiated in January 2019 with an aim to identify and mainstream globally best available proven construction technologies that are sustainable, green and disaster resilient through a challenge format to bring technology transition in construction sector.
 - ii. Construction Technology India (CTI) - 2019: Expo-cum-Conference was inaugurated by Hon'ble Prime Minister on 2nd March 2019 at Vigyan Bhawan, New Delhi. Hon'ble Prime minister declared the year 2019-20 as 'Construction Technology Year' to promote new and alternate technologies at large scale in the country.
 - iii. Six distinct technologies were selected amongst 54 shortlisted globally best technologies that participated in GHTC-India for constructing six Light House Projects (LHPs) at Indore, Rajkot, Chennai, Ranchi, Agartala and Lucknow. The foundation stone of all 6 LHPs was laid by the Hon'ble Prime Minister on 01.01.2021 through Video Conferencing jointly with concerned Governors/ Chief Ministers/ State Ministers at the site of the LHPs.
 - iv. Out of the 6 LHPs, LHP Chennai was inaugurated by Hon'ble Prime Minister on 26th May 2022. LHP Rajkot is at finishing stage and ready for inauguration. The other four LHPs are at advance stages of construction.
 - v. The LHPs are functional as Live Laboratories to promote wide spread learning on the use of innovative construction technologies/ systems on ground and mainstreaming in Indian context. For propagation on use of innovative technologies, a drive for free online enrolment of Faculty & Students of IITs/ NITs/ Engineering colleges/ Planning & Architecture colleges; Technical Professionals engaged in Private/ Public sectors; Central/State/ULB officials; Start-ups/ Innovators/

Entrepreneurs; and other concerned stakeholders as TECHNOGRAHIS was initiated. So far about 36,000 Technograhis have been enrolled.

- vi. In addition, Hon'ble Prime Minister inaugurated the Indian Housing Technology Mela (IHTM) on 5th October, 2021 in Lucknow, Uttar Pradesh. IHTM was conducted to promote indigenous Alternate/ Sustainable Building Materials and Innovative Construction Systems/ Technologies for Low & Mid-Rise Structures for Affordable Housing in the country. Under IHTM, 84 indigenous innovative technologies, materials and processes were shortlisted.
- vii. A compendium of the 54 innovative housing construction technologies identified through GHTC-India and a compendium of 84 technologies identified under IHTM has been published and circulated to all stakeholders for wider dissemination, learning and adoption.
- viii. Subsequently, the technologies sourced under GHTC-India and IHTM are being used by various stakeholders such as Central Government Agencies, State/UT Govts, Central/State PSUs and other construction agencies across the country in their housing projects.
- ix. Further, under Affordable Sustainable Housing Accelerators (ASHA)-India initiative, five ASHA-India centres are functional for providing Incubation support to the shortlisted domestic potential construction technologies to make them market ready. Strategic guidance, acceleration support, exposure, networking and business opportunities have also been provided to the shortlisted Start-ups which were market ready to mainstream their product in the market.
- x. A Certificate Course on Innovative Construction Technologies namely NAVARITIH (New, Affordable, Validated, Research Innovation Technologies for Indian Housing) was launched by Hon'ble Prime Minister on 1st Jan 2021. So far, 11 batches have successfully completed the course covering about 1,000 participants.
- xi. To promote climate responsive, disaster resilient and thermally comfortable construction and design practices in the affordable housing sector, MoHUA in collaboration with GIZ and BMTPC has organised 75 RACHNA (Resilient Affordable Comfortable Housing through National Action) region wise training programs for more than 4,500 participants of Government/Private sector, Academia, Masons/Artisans etc. under Azadi ka Amrit Mahotsav.

B. Use of innovative indigenous technologies in PMAY-U

- i. The Union Cabinet has approved for continuation of PMAY-U up to 31st December 2024 for the completion of already sanctioned houses till 31st March 2022.
- ii. Through Technology Sub Mission, adoption of innovative construction systems including green & disaster-resistant technologies across states

is being facilitated. Over 16 lakh houses under PMAY(U) are being constructed with innovative technologies across the country.

- iii. The global technologies shortlisted under GHTC-India are being adopted for multistorey construction under AHP/ISSR and other housing projects of Public/private sector including other Govt. departments.
- iv. The indigenous innovative technologies/materials showcased under IHTM are apt for low and mid -rise houses including BLC vertical of PMAY(U) and individual houses of PMAY-G with diverse climatic and hazard conditions. Also, the low and mid-rise houses constructed by individuals are also adopting the construction practices identified under IHTM.

C. Rationale for organising Indian Urban Housing Conclave

- i. Since inception of GHTC-India in 2019 and IHTM, various other innovative construction technologies, materials and processes may have been developed through R & D by various stakeholders across the world which may also be included for further adoption and mainstreaming in the domestic context.
- ii. Further, there is tremendous scope and interest among Innovators, Start-ups, Entrepreneurs, and Small & Medium Developers on use of Innovative and Alternate Construction Systems, Materials, Components and Processes for housing construction who may also be called on to showcase their products for cross learning and adoption.
- iii. Therefore, in order to widen the horizon and to bring technology transition in the construction sector for sustainable development, it is imperative to bring together all global and indigenous innovative technologies, materials and process shortlisted under GHTC-India as well as under IHTM and showcase them to the relevant stakeholders on a common platform.
- iv. The said platform will provide stakeholders a venue to demonstrate their technologies as well as deliberate upon various options of technologies, materials and processes for large scale adoption and mainstreaming in different type of housing construction suited to different Geo-climatic regions of the country.
- v. Additionally, Shortlisted potential technologies that are market ready (post prototype applicants) as evaluated by the TEC will receive Acceleration support and potential technologies that are not yet market ready (*pre- prototype applicants*) as evaluated by the TEC will receive Incubation Support at the already existing ASHA-India centres.

INDIAN URBAN HOUSING CONCLAVE

19-21 OCTOBER 2022, RAJKOT, GUJARAT

Inauguration of LHP Rajkot

3 Day Urban Conclave

National Exhibition on Innovative construction practices

PMAY-U Exhibition of States/UTs

Deliberations on Affordable Housing Discourses

Felicitation of PMAY-U Awards 2021

- ▶ Invite Global and Domestic technology/ Material provides/ Start-ups

- ▶ Screening by TEC

- ▶ Exhibition through online stall booking

- ▶ Exhibition- Global Technology
Indigenous technology
Start-Ups

- ▶ Cross Learning

- ▶ States/UTs to be invited for putting exhibition
- ▶ Highlighting best practices (convergence, innovation, technology adoption, houses for special groups etc

- ▶ Urban Transformation of Gujarat

- ▶ Various dialogues, thematic sessions, roundtable discussions on Urban Housing theme

- ▶ Cross learning: transforming urban landscape to take resolve for future urban development in improving 'Ease of Living' - Vision 2047

- ▶ Winners of PMAY-U awards 2021 to be felicitated at the event

- ▶ Announcement of PMAY-U Awards -2022

Participants

Innovators/Start-ups/Entrepreneurs, Proven Global Innovative Technology providers, Innovative/Indigenous Technology providers, Innovative Material/Components Providers, Professionals/ Architects/Engineers, Innovative Construction Tool/Equipment providers, State/UTs/ULBs, Public/Private Agencies in the Construction Sector, R&D/Academic Institutes, Contractors/Developers, Relevant Civil Society Organizations, Local Artisans/ Craftsmen, Public/Beneficiaries

Outcomes

- ▶ **Demonstration of Global/Domestic Construction Technologies**

- ▶ **Creating enabling an eco-system for Technology Adoption/Transition**

- ▶ **Roadmap/Action Plan for Vision India @2047**

- ▶ **Capacity Building of various stakeholders/ Skill Development of construction workers**

- ▶ **Innovative, rapid and cost-effective technologies for beneficiaries**

- ▶ **Cross learning on best practices adopted by States/UTs**

D. Indian Urban Housing Conclave: Components

A three-days '**Indian Urban Housing Conclave**' comprising of following components is proposed to be held in October 2022 at Rajkot, Gujarat and shall be inaugurated by Hon'ble Prime Minister:

- a) **Inauguration of Light House Project, Rajkot:** The LHP of Rajkot, Gujarat has been completed in all respect. The beneficiaries for all 1,144 houses of LHP Rajkot has already been identified. The LHP Rajkot will be inaugurated and handed over to the beneficiaries by the Hon'ble Prime Minister. During the event, various publications, Compendiums, books will also be released.
- b) **National Exhibition on Innovative construction practices:** An exhibition on Innovative building materials, Construction Technologies & processes including Affordable Housing will be set up where Global and Domestic exhibitors will showcase the prototype models on new and innovative construction technologies/materials. Technology providers from across the globe, domestic indigenous technologies, potential future technologies (start-ups) from the country will be invited through a simple online screening process. A Technical Evaluation Committee (TEC) constituted for GHTC-India will evaluate and assess their suitability in Indian context. Concerned stakeholders eg. Research and Development (R&D) Institutions, Academia, Students of technical institutes, Engineers, Architects, Government agencies including State PWDs, Housing Boards, Developers, Entrepreneurs, Private entities, Foreign collaborators etc. will also be invited to participate in the event.
- c) **Exhibition on best practices adopted by States/UTs under PMAY-U including Gujarat:** The implementation structure of the Mission promotes cooperative federalism. The States/UTs have innovated their implementation structure as per the local context such as adopting innovative construction practices, convergence of PMAY(U) with other housing, livelihood programs, providing housing to special groups, etc. The exhibition aims to showcase the efforts of States/UTs in the successful implementation of PMAY(U).
- d) **Deliberations on Affordable Housing Discourses:** Various dialogues, thematic sessions, roundtable discussions will be conducted with stakeholders from across the country to discuss, share and learn the progress in transforming urban landscape to take resolve for future urban development in improving 'Ease of Living' which will be participated by State/UT officials, academia, civil society organisations and other stakeholders.
- e) **Felicitation of PMAY(U) Awards 2021:** In order to recognize the outstanding contribution by States, UTs and ULBs, MoHUA had introduced annual awards for excellence in implementation of PMAY(U). The winners for PMAY(U) Awards 2021 have been identified and will be felicitated.

E. Administration of the event

- a) Technology Sub-Mission is being implemented under PMAY-U by MoHUA. The Joint Secretary & Mission Director (Housing for All) will be the nodal officer for conducting this event. Approval of any other activities/processes evolved during the event will be taken from Secretary, MoHUA.
- b) All the local arrangements such as security, necessary approval from the concerned department for organizing the event will be done by the State Govt. of Gujarat.
- c) To assist the Ministry in organizing the three days event, BMTPC will work as technical partner. BMTPC will provide necessary technical inputs for designing and development of forms and online registration system on GHTC-India website, if required.
- d) Existing Knowledge Partners (WRI, NAREDCO and CREDAI) under GHTC-India will function as Knowledge partners for the proposed event along with GIZ and UN Habitat.
- e) Complete documentation of the Urban conclave will be ensured for future reference and learning.

F. Expected outcomes

- i. **Shortlisted technologies:** Readily available basket of shortlisted & approved innovative, rapid, climate resilience and disaster resistant technologies & materials suitable for different geo-climatic regions bringing paradigm shift in the construction sector.
- ii. **Enabling eco-system:** To create enabling eco-system for further adoption, the shortlisted innovative technologies will be incorporated in Schedule of Rates (SoRs) and standards, receiving certifications and fast track approvals.
- iii. **Propagation of world best innovative construction technologies:** Public/ Private Agencies, R&D and Technical institutions, Construction Agencies, Developers, Contractors, Start-ups and other stakeholders will get exposure to the world best innovative construction practices and knowhow unleashing business opportunities and skill upgradation in the construction sector.
- iv. **Access to innovative technologies to common public:** Beneficiaries (house owners) will have access to innovative, rapid and cost-effective construction technologies and materials for use and thereby improved living conditions and environment with a sense of dignity.
- v. **Vision India@ 2047:** Devising strategies, action plan and roadmap for achieving the vision of “Future Ready Urban India” focussed on urban housing during the Amrit Kaal.