

GOVERNMENT OF INDIA
MINISTRY OF HOUSING AND URBAN AFFAIRS
LOK SABHA
UNSTARRED QUESTION NO. 3578
TO BE ANSWERED ON AUGUST 10, 2023
DEMONSTRATION HOUSING PROJECTS

NO. 3578. SHRIMATI MANJULATA MANDAL:
SHRI C.N. ANNADURAI:

Will the Minister of HOUSING AND URBAN AFFAIRS be pleased to state:

- (a) the aims and objectives for launching Demonstration Housing Projects (DHPs);**
- (b) whether the Government is undertaking DHPs in various parts of the country using innovative, alternate and sustainable technologies and if so, the details of the DHPs projects undertaken, State/UT-wise;**
- (c) the challenges being faced by the Government while implementing DHPs;**
- (d) whether the Government has requested the State Governments for participation in the DHPs and if so, the response of the State Governments along with their requests;**
- (e) the number of the State Governments that have shown interest in DHP;**
- (f) whether the Government is using modern, innovative and green technology for faster and quality construction of houses under Pradhan Mantri Awas Yojana-Urban and if so, the details thereof and the achievement made so far under the scheme; and**
- (g) the other steps taken/being taken by the Government to use modern technology for affordable housing?**

ANSWER

THE MINISTER OF STATE IN THE
MINISTRY OF HOUSING AND URBAN AFFAIRS
(SHRI KAUSHAL KISHORE)

(a) to (e): Under Technology Sub-Mission (TSM) of Pradhan Mantri Awas Yojana – Urban (PMAY-U), Ministry of Housing and Urban Affairs (MoHUA) has taken an initiative to construct Demonstration Housing Projects (DHPs) in different parts of the country which aims to facilitate widespread dissemination and adoption of new/alternate and sustainable building materials and technologies to replace conventional technologies. The objectives of the DHPs are:

- i. To orient housing practitioners, both from public and private sectors, in field application of new/alternate technologies for construction of houses.
- ii. To create awareness among stakeholders (State/UT/ULB officials, technical professionals, builders, development agencies, academic institutions and others) at the State/UT/ULB level on new/alternate technologies being adopted in respective DHPs.
- iii. To gather user feedback and enhanced acceptability with respect to houses built with new/alternate technologies.
- iv. Technical evaluation and documentation of the new/alternate technology adopted.

As per the DHP guidelines, interested State/UT makes a formal request to the Ministry for undertaking the project using proven, green and emerging technologies, after obtaining the approval of the State Level Sanctioning and Monitoring Committee. Based on the request received from various States/UTs, Ministry has sanctioned 14 DHPs in Andhra Pradesh, Uttar Pradesh, Bihar, Telangana, Odisha, Haryana, Gujarat, Madhya Pradesh, Tripura, Assam, Tamil Nadu, Jammu & Kashmir and Nagaland. Out of which, 9 DHPs have already been completed.

While implementing the DHPs across the country, it is important to train and acquaint municipal engineers, architects as well as other personals/entities associated with construction of houses using new/alternate technologies and materials. Further, the perceived hesitation in the acceptance of new technologies by the ultimate end user i.e., the house owner is another challenge observed in mainstreaming the new construction technologies and techniques.

(f) & (g): Yes, Sir. Under PMAY-U, a TSM under PMAY-U has been set up for the adoption of innovative, sustainable, eco-friendly and disaster-resilient technologies and building materials for fast, cost effective and quality construction of houses. Out of the total 118.90 lakh of houses sanctioned so far under PMAY-U, about 16 lakh houses are being constructed/completed using modern and innovative technologies. Following activities have been undertaken under TSM for promoting modern, innovative and green technology for faster and quality construction of houses:

- i. Identification, Evaluation and Certification of Emerging Technologies for adoption by Public/Private agencies.

- ii. **GHTC-India was initiated to identify and mainstream globally best available proven construction technologies that are rapid, sustainable, green and disaster resilient. Under GHTC-India, 54 innovative proven construction technologies shortlisted from across the globe.**
 - iii. **Six Light House Projects (LHPs) using six distinct technologies shortlisted under GHTC-India are constructed at six places in the country.**
 - iv. **14 DHPs using new technologies are built under PMAY-U to showcase innovative technology options to States/UTs and disseminating technical awareness among professionals.**
 - v. **A free online Enrolment of TECHNOGRAHIS has been started for exposing the interested stakeholders to learn different phases of use of innovative technologies in LHPs for adoption and replication.**
 - vi. **An online course named NAVARITIH (New, Affordable, Validated, Research Innovation Technologies for Indian Housing) has been started to enhance the capability of building professionals about the new and emerging building materials, technologies and processes for construction.**
 - vii. **Indian Housing Technology Mela (IHTM) was organized to showcase the domestic indigenous and innovative technologies, building materials and construction processes for low & medium rise houses. 84 innovative technologies/products/materials were shortlisted under IHTM.**
- Under the Indian Urban Housing Conclave (IUHC), a National Exhibition on Innovative construction practices was organized to showcase more than 85 innovative construction systems and materials.**
- viii. **MoHUA in association with GIZ and BMTPC is hosting series of trainings/workshops on Innovative Construction Technologies and Thermal Comfort for Affordable Housing named RACHNA (Resilient, Affordable and Comfortable Housing through National Action). 150 RACHNA training programmes across the country have been successfully conducted across India, covering over 11,000 stakeholders.**

- ix. Performance Appraisal Certification Scheme (PACS) is being operated for Identification, Evaluation and Certification of Emerging Technologies suiting to different geo-climatic conditions of the country, which are safe, sustainable and environment-friendly and ensure faster delivery of quality houses by BMTPC, MoHUA. Under PACS, so far 77 innovative products and systems have been certified.**
- x. A series of offsite Workshops/Webinars, Webcasting, Mentoring on Technical know-how/Modules were organised jointly with State Governments for capacity building and handholding support on innovative construction technologies.**
- xi. Various publications on innovative construction technologies and other areas related to faster, cost effective, environment friendly, disaster-resistant, sustainable construction.**
