

**GOVERNMENT OF INDIA
MINISTRY OF HOUSING AND URBAN AFFAIRS
LOK SABHA**

UNSTARRED QUESTION NO. 1840

TO BE ANSWERED ON DECEMBER 05, 2024

PROMOTION OF PRE-FABRICATED HOUSING

NO. 1840. SHRI SUKANTA KUMAR PANIGRAHI:

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

- (a) whether the Government has taken any initiatives to promote pre-fabricated house construction technology as an affordable and sustainable solution for addressing housing shortage in urban areas across the country particularly in the State of Odisha including Kandhamal Parliamentary constituency and if so, the details thereof;**
- (b) whether pre-fabricated housing technology has been incorporated in the PMAY (Urban) scheme and if so, the details thereof along with the road map for the next five years;**
- (c) whether the Government is ensuring the adoption of eco-friendly and energy-efficient materials and if so, the details thereof;**
- (d) the measures taken/being taken to enhance the capacity of construction for pre-fabricated housing;**
- (e) the estimated reduction in construction time and costs achieved through pre-fabricated housing projects in the country; and**
- (f) the manner in which the Government address the challenges related to land acquisition and zoning regulations for pre-fabricated housing projects with a focus on densely populated tribal pockets?**

ANSWER

**THE MINISTER OF STATE IN THE
MINISTRY OF HOUSING AND URBAN AFFAIRS
(SHRI TOKHAN SAHU)**

- (a) to (d): Yes. Under PMAY-U, a Technology Sub-Mission (TSM) has been set up for promotion and adoption of innovative, sustainable, eco-friendly, energy efficient and disaster-resilient technologies**

and building materials including pre-fabricated technologies by various stakeholders of construction sector for fast, cost effective and quality construction of houses across the country along with Kandhamal Parliamentary constituency of Odisha.

About 10 lakh houses have been constructed using innovative construction technologies including pre-fabricated technology in the country so far under PMAY-U. In this system, components such as walls, slabs, and beams are manufactured in a factory and then assembled at the construction site which significantly reduces construction time while enhancing quality control.

In addition, 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. Global Housing Technology Challenge - India (GHTC-India) was initiated to identify and mainstream globally best available proven construction technologies including prefabricated technology 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. These projects mark a significant advancement in the Indian Government's endeavour to address urban housing shortages by adopting sustainable and disaster-resilient technologies.**
- iv. 13 Demonstration Housing projects (DHPs) using new technologies are built in different part of the country to showcase innovative and eco-friendly technology and energy-efficient materials to States/Union Territories (UTs) and disseminating technical awareness among professionals.**
- v. 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.**
- vi. Indian Housing Technology Mela (IHTM) in 2021 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. In addition, under the Indian Urban Housing Conclave 2022, a National Exhibition on Innovative construction practices was organized to showcase more than 85 innovative construction systems and materials.**

- vii. MoHUA in association with GIZ and Building Materials and Technology Promotion Council (BMTPC) has hosted series of trainings/workshops on Innovative Construction Technologies and Thermal Comfort for Affordable Housing named RACHNA (Resilient, Affordable and Comfortable Housing through National Action). More than 150 RACHNA training programmes across the country have been successfully conducted across India, covering over 11,000 stakeholders.**
- viii. 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. Under PACS, so far, 77 innovative products and systems have been certified.**
- ix. 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.**
- x. Various publications on innovative construction technologies and other areas related to faster, eco-friendly, energy-efficient, cost effective, environment friendly, disaster-resistant, sustainable construction system has been made.**

Learning from the experiences of PMAY-U, MoHUA has launched PMAY-U 2.0 'Housing for All' Mission with effect from 01.09.2024 for implementation in urban areas across the country to construct, purchase and rent a house by eligible beneficiaries at affordable cost. The TSM set up under PMAY-U continue to guide and facilitate States/UTs and other stakeholders in adoption of modern, innovative and green technologies and alternate building material for faster and quality construction of houses under PMAY-U 2.0. It is further expanded into Technology & Innovation Sub-Mission (TISM) to support innovative construction practices and projects. It also assists States/UTs/Cities in deploying disaster resistant and environment friendly technologies for climate smart buildings and resilient housing. TISM also facilitates preparation and adoption of layout designs and building plans suitable for various geo-climatic zones.

- (e) & (f): Based on the field experience, the reduction in time and cost using prefabricated houses depends upon type of technology, location and scale of the project etc.**

With regard to prefabricated housing projects, there is no special requirement related to land acquisition and zoning regulations in the country including densely populated tribal pockets.