GOVERNMENT OF INDIA MINISTRY OF HOUSING AND URBAN AFFAIRS LOK SABHA

UNSTARRED QUESTION NO. 3264 TO BE ANSWERED ON MARCH 20, 2025

ACHIEVEMENTS MADE UNDER LIGHT HOUSE PROJECTS

NO. 3264. SHRIPC MOHAN:

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

- (a) the progress achieved under the Light House Projects (LHPs) initiative at the national level to promote innovative and sustainable construction technologies for affordable housing along with the number of projects completed so far;
- (b) whether Karnataka has been selected for any Light House Project under the said initiative and if so, the details thereof;
- (c) the specific steps taken to adopt new construction technologies in Bengaluru for urban housing needs; and
- (d) the measures adopted to scale up the use of advanced technologies introduced under LHPs across the country along with the initiatives undertaken to build capacity and awareness among urban planners and builders in Karnataka?

ANSWER

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

(a) to (d): Under Pradhan Mantri Awas Yojana - Urban) (PMAY-U), a Technology Sub-Mission (TSM) has been set up for promotion and adoption of innovative, sustainable, eco-friendly and disaster-resilient technologies and building materials by various stakeholders of construction sector for fast, cost effective and quality construction of houses across the country including hilly States/Union Territories (UTs).

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.

Out of the identified 54 technologies under GHTC-India, six Light House Projects (LHPs) of more than 1,000 houses each with allied infrastructure facilities using six distinct technologies are constructed at Indore (Madhya Pradesh), Rajkot (Gujarat), Chennai (Tamil Nadu), Ranchi (Jharkhand), Agartala (Tripura) and Lucknow (Uttar Pradesh). The sites of LHPs were selected through challenge process to showcase use of these technologies for further mainstreaming in the country. The construction of LHPs at Chennai, Rajkot, Indore, Lucknow and Ranchi has been completed and inaugurated by Hon'ble Prime Minister. The LHP at Agartala is in advanced stage of construction. Karnataka has not been selected for any Light House Project under the said initiative.

The LHPs are functional as Live Laboratories to promote widespread learning among urban planners, builders and other stakeholders on the use of innovative construction technologies/ systems on ground and mainstreaming in Indian context.

In addition, the following activities have been undertaken under TSM for promoting modern, innovative and green technology for faster and quality construction of houses to build capacity and awareness among urban planners, builders faculty/students of technical institutions, technical Professionals of private/public sectors, Central/State/Urban Local Body (ULB) officials, start-ups/innovators/entrepreneurs, and other concerned stakeholders across the country including Karnataka meet the urban housing needs:

- Identification, Evaluation and Certification of Emerging Technologies for adoption by Public/Private agencies.
- ii. 13 Demonstration Housing projects (DHPs) using new technologies are built in different parts of the country to showcase innovative and eco-friendly technology and energy-efficient materials to States/UTs and disseminating technical awareness among professionals.
- iii. 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.
- iv. 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.

- v. MoHUA in association with GIZ and Building Materials and Technology Promotion Council (BMTPC) conducted 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 training programmes across the country have been successfully conducted across India, covering over 11,000 stakeholders.
- vi. 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.
- vii. 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.
- viii. Various publications on innovative construction technologies and other areas related to faster, eco-friendly, energy-efficient, cost effective, environment friendly, disaster-resistant, sustainable construction systems have been made.

Further, based on the learning from the experiences of 9 years implementation of PMAY-U, MoHUA has revamped the scheme and launched PMAY-U 2.0 'Housing for All' Mission with effect from 01.09.2024 for implementation in urban areas across the country including State of Karnataka for 1 crore additional eligible beneficiaries.

In order to promote innovative construction technology, a Technology & Innovation Sub-Mission (TISM) has been established under PMAY-U 2.0 to support innovative design and construction practices and build capacity & awareness among urban planners and builders. TISM promotes adoption of layout designs and building plans suitable for various geo-climatic zones through coordination with various regulatory and administrative bodies for mainstreaming and up scaling the deployment of modern construction technologies and material in place of conventional construction materials practices.
