

E-Newsletter-Vol - XXIII

LIGHT HOUSE PROJECTS

December 31, 2022, New Delhi

JS&MD, HFA, chairs PMC meeting to review progress of Light House Projects



On 6th December 2022, Shri Kuldip Narayan, Joint Secretary & Mission Director (JS&MD), Housing For All (HFA), Ministry of Housing and Urban Affairs (MoHUA), chaired the 9th meeting of Project Monitoring Committee (PMC) to review the progress of upcoming Light House Projects (LHPs) at Indore, Lucknow, Ranchi and Agartala. The meeting was attended by respective officials from LHP States and other officers from the Ministry.

A presentation regarding the status of ongoing construction activities at the LHP sites was made. Subsequently, State-wise presentations, progress of LHPs was reviewed in detail. Issues related to the ongoing construction activities and allotment process at other LHP sites was also discussed during the meeting. JS&MD, HFA, directed the respective LHP construction agencies to expedite the construction activities.

Foundation stones for six LHPs across India, namely Chennai, Rajkot, Indore, Lucknow, Ranchi and Agartala were laid on 1st January 2021 by Hon'ble Prime Minister. Subsequently, LHP Chennai was inaugurated by Hon'ble Prime Minister in May 2022 and LHP Rajkot in October 2022.



Message from JS&MD (HFA) Shri Kuldip Narayan

With Light House Projects, we aimed to transform the construction technology sector and with the inauguration of two LHPs - Chennai and Rajkot - we could see that the change is indeed happening. LHPs are known to everybody now, people are talking about it, the construction sector's landscape is changing, the affordable housing sector is gradually seeing a new dawn with availability of affordable, modern and well-equipped flats. Yes, LHPs are a gamechanger for the construction sector of our country.

Work at LHP sites is being monitored continuously so that we are able to deliver first-class homes to its beneficiaries on time. I frequently take site visits, review with technology providers, construction agencies and stakeholders to know about the status of the ongoing projects.

2022 was an eventful year for us as it crossed an important milestone of inauguration of two LHPs. It was so heart-warming to see the beneficiaries receiving the key to their homes by Hon'ble Prime Minister. We also successfully hosted the Indian Urban Housing Conclave, which gave global and domestic exhibitors, technology providers a platform to demonstrate their technologies at such a huge scale. If we talk about initiatives, I am glad to share with you all that our RACHNA programme received an overwhelming response and therefore, we launched the second edition of the training programme across the country.

With 2022 giving us varied different opportunities to grow, I hope 2023 also brings with itself the same prospects. Let us all keep doing our work in taking the Mission to new heights each day.

Exhibition showcasing LHP model

At an event on 19th December 2022 in Bhopal, Hon'ble Chief Minister of Madhya Pradesh Shri Shivraj Singh Chouhan visited an exhibition showcasing models of AHP houses of Gwalior and Light House Project Indore, one among the six cities in India hosting LHPs. LHP Indore is in advanced stages of construction.



Review of LHP Agartala by Secretary, UDD, Government of Tripura

On 12th December 2022, Shri Abhishek Singh, Secretary, Urban Development Department (UDD), Government of Tripura, along with officials from Tripura Urban Development Authority (TUDA), visited Light House Project (LHP) Agartala and reviewed the progress work. He instructed



the agency to expedite the progress to complete the project within a targeted time.

1,000 houses are being built at LHP Agartala using Light Gauge Steel Structural System & Pre-Engineered Steel Structural System.



Training at LHP Agartala

Dr Shailesh Kr. Agrawal, Executive Director, BMTPC, gave training on quality, good construction practices, earthquake resistant practices to the workforce at LHP Agartala site on 18th December 2022.



One-day webinar marked the #6th workshop in the series for officers on the topic of innovative construction technology and to enhance thermal comfort in affordable housing using passive building design.



The 7th training programme was organised at Ahmedabad for government officials, architects, and building environment professionals, wherein they were briefed about Innovative Construction Technologies and Best Construction Practices for Thermal Comfort in Affordable Housing. The programme consisted of sessions on new-age innovative technologies used at LHPs, importance of thermal comfort, building physics and passive strategies, thermal comfort study methods and applicable building codes.



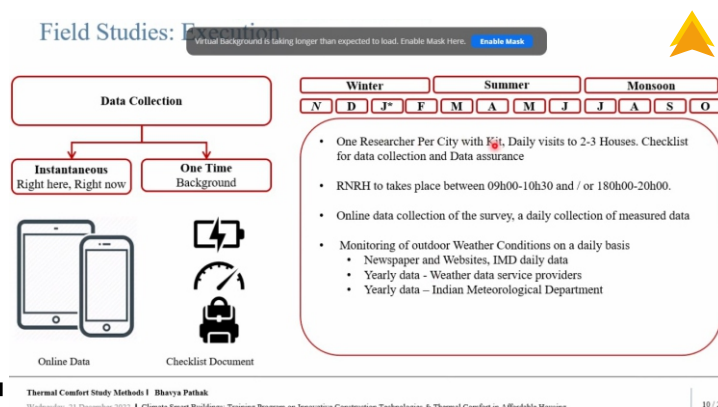
CSB south cluster cell conducted the #9th training programme on Climate Smart Buildings for senior government officials at Tamil Nadu Urban Habitat Development Board in Chennai.



Training #8th under RACHNA was an on-site vocational programme at Akola, organised for construction field staff, contractors & workers to make them aware about innovative construction technologies and standard practices being used at LHPs.



Training #10th was a two-day webinar organised for practitioners on innovative construction technology and to enhance thermal comfort in affordable housing using passive building design.



The #11th training was a two-day programme for government officials and Built-environment professionals held at the Varanasi Development Authority, focussing on innovative technologies and thermal comfort for affordable housing.

Activities under Climate Smart Buildings Programme Roundtable conference for supporting ASHA India initiative



GIZ's Climate Smart Buildings program (CSB), in association with MoHUA and BMTPC, organised a stakeholder workshop with the winners under the Affordable Sustainable Housing Accelerators-India (ASHA-India) whose building technologies and materials are in the pre-prototype stage. The workshop got together the expertise from international experts from Fraunhofer IBP, Germany, and deliberated on the future incubation support required from them.

Site visits by LHP beneficiaries & Technograhis



LHP Indore is on the verge of completion and is witnessing heavy footfall by the beneficiaries. Climate Smart Buildings (CSB) Cell members are assisting the beneficiaries in knowing about the technology, salient features and other advantages of the project as a whole. They are informed by CSB team about the new technology features and the thermal comfort aspects of the buildings.

Many students of various institutions are also visiting the LHPs. CSIR CBRI students from construction domain made a visit to understand the technology used at LHP Ranchi. All aspects of the construction process and technology were discussed in depth with the students.

2022 Rewind

Exhibition on Innovative Construction Technologies & Best Practices at IUHC 2022



'Indian Urban Housing Conclave 2022', a 3-Day expo-cum-conference, was inaugurated by Hon'ble Prime Minister Shri Narendra Modi in Rajkot, Gujarat on 19th October 2022.

Exhibitions on various Urban Missions under MoHUA and on Innovative Building Materials, Construction Technologies and Processes by global and domestic exhibitors was part of IUHC 2022 too. The event saw an overall footfall of more than 5,000 participants and 200 exhibitors. The conclave provided a platform to stakeholders for demonstrating their technologies as well as for deliberating upon various options of materials and processes for large scale adoption and mainstreaming in different type of housing construction in the country.

Hon'ble Prime Minister also walked through the exhibition on innovative technology during Indian Urban Housing Conclave 2022.

Hon'ble Prime Minister inaugurates LHP Chennai & Rajkot

Light House Project (LHP) Chennai and Rajkot under Global Housing Technology Challenge-India (GHTC-India) were inaugurated by Hon'ble Prime Minister in May and October 2022, respectively. LHP Chennai was the first one to be completed, followed by LHP Rajkot. In Chennai, 1,152 flats, and in Rajkot, 1,444 houses, built with modern infrastructure were dedicated to the families.



Chennai



Rajkot

RACHNA training series

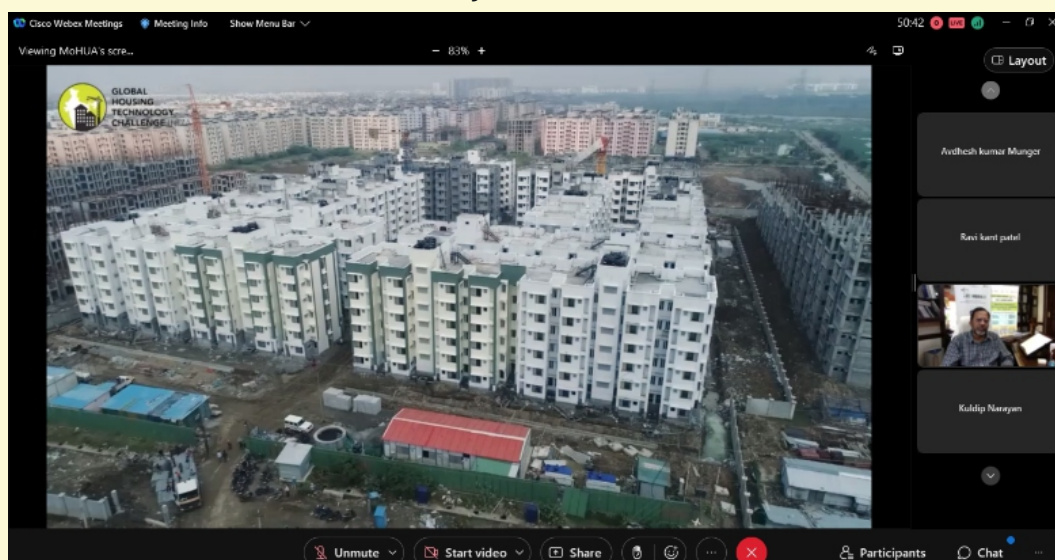
MoHUA, in collaboration with BMTPC and GIZ's Climate Smart Buildings Program, launched the initiative RACHNA: Resilient, Affordable and Comfortable Housing Through National Action. Under RACHNA, 75 trainings and events were hosted on innovative construction technologies and thermal comfort for Affordable Housing to acquaint various stakeholders from the building construction industry with the nuances of thermal comfort through a multi-layered understanding in affordable housing. The trainings were designed in one day and two-day formats targeting different stakeholders including government officials, policy makers, academicians, students, architects, engineers, real estate developers, construction workers, masons, etc.



LHP Webinars

A series of 'e-Learning sessions and webcasting of LHP construction process' webinar was hosted by the Mission to widespread the knowledge about the technologies, construction processes, sustainability, and mass-cum-fast construction to Technograhis. The main purpose was to create awareness of the different technologies used in the construction of LHPs through technical sessions and webcasting of work at site. The broad areas of topics covered during the webinars were:

- Emerging Construction Technologies
- Different Technologies used in construction of LHPs
- Importance of Building Construction Materials and functional requirements of building Thermal Comfort in Affordable Housing



Technograhis visit to LHP sites

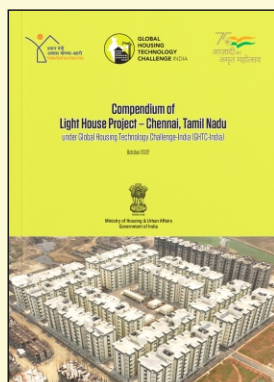
Light House Projects are serving as Live Laboratories for learning, facilitating transfer of technologies to the field and for its further replication through site visits by Technograhis or online training. Stakeholders interested in learning the use of innovative technologies in LHPs have been undertaking visits to all 6 LHPs in large numbers. So far, over **36,000** Technograhis have engaged with the Ministry. The objective is to create technical awareness for learning, experimentation and encouraging innovation.



NAVARITI

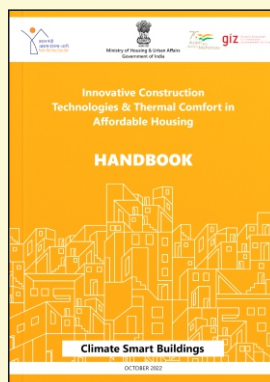
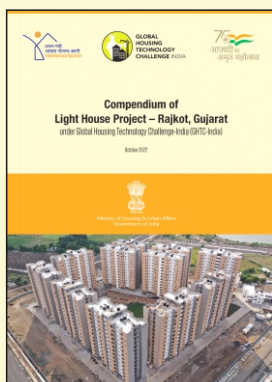
NAVARITI (New, Affordable, Validated, Research Innovation Technologies for Indian Housing) is a Certificate Course on Innovative Construction Technologies, offered jointly by MoHUA, BMTPC and School of Planning & Architecture (SPA), New Delhi. The objectives of the course are to familiarise professionals with latest materials and technologies being used worldwide for housing, to provide an awareness of the state of art of materials and technologies in terms of properties, specifications, performance, design and construction methodologies and to provide exposure to executed projects where such materials and technologies have been implemented. Twelve NAVARITI courses have already been successfully completed and registrations are on for the 13th batch. Register at: <https://bmtpc.org/Default.aspx>.

Publications released



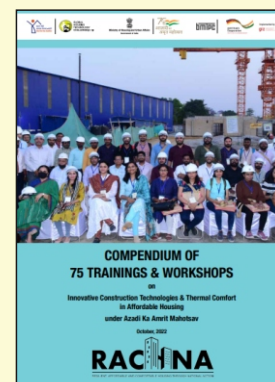
LHP Compendiums

The compendiums on LHP Chennai and Rajkot carries all general & technical information about the housing projects, technology being used, construction processes, project implementation & management including IEC activities.



Handbook on Innovative Construction Technologies & Thermal Comfort in Affordable Housing

This handbook examines an extensive array of national projects & research that can help design thermally comfortable affordable housing.



RACHNA Compendium

This compendium contains detailed information on 75 RACHNA trainings conducted across the country on thermally comfortable affordable housing.

PROGRESS OF LIGHT HOUSE PROJECTS AS ON DECEMBER 31, 2022

INDORE, Madhya Pradesh

Technology Name: **Prefabricated Sandwich Panel System**



No. of Dwelling Units : **1024 Nos. (S+8)**
 No. of Block / Tower : **8 Blocks**
 Units in each Block / Tower : **128 Nos.**

Activities	Progress
Superstructure	
PEB Work	71 out of 72 Floors completed in 8 blocks
Slab Work	71 out of 72 Floors completed in 8 blocks
EPS Panel work in Wall	56 out of 64 Floors completed in 8 blocks
Sample Unit	Completed
Infrastructure Work	Boundary wall in progress, Community Centre, underground tank, STP & Sewer line, SWM Plant complete Central Road STP in progress



LUCKNOW, Uttar Pradesh

Technology Name: **PVC Stay in Place Formwork System**



No. of Dwelling Units : **1040 Nos. (S+13)**
 No. of Block / Tower : **4 Blocks**
 Units in each Block / Tower : **A(494), B(130), C(208) & D(208)**

Activities	Progress
Superstructure work of Building Blocks	
Pre-Engineered Steel Building (PEB) Work	Structural Steel erection work is completed (upto 13 Floors) in Block A1 (Part of Block A) & is in progress upto 13 th Floor in Block C & D. In remaining Blocks (A2 & B), it is in progress upto 4 th floor.
Shear Wall Work (Staircase & Lift well)	Shear wall work is completed in Block A1. It is in progress upto 11 th Floor in Block C & D, & upto 6 th floor in remaining Blocks.
Slab Work & SIP Wall Form work	<ul style="list-style-type: none"> Casting of Slab is in progress on 13th floor in Block A1, and on 11th floor in Block C & D. SIP Wall form installation & casting is completed upto 13th Floor level in Block A1, upto 10th floor level in Block C & Block D along with Electrical & Plumbing work.
Sample Unit	Completed
Social Infrastructure	Community Centre & Commercial Block, the GF & 1 st Floor steel structural work & slab casting is completed. Block masonry with plastering work is in progress.
Infrastructure Work	Underground Water Tank Civil work is completed. About 98% of the Boundary wall work is complete & Wall casting work is in progress for STP.

PROGRESS OF LIGHT HOUSE PROJECTS AS ON DECEMBER 31, 2022

RANCHI, Jharkhand

Technology Name: **Precast Concrete Construction – 3D Volumetric Construction**



No. of Dwelling Units : **1008 Nos. (G+8)**
 No. of Block / Tower : **7 Blocks**
 Units in each Block / Tower : **144 Nos.**

Activities	Progress
Casting Yard (Production of Components)	In the casting yard 4,800 numbers of Modules/ different components have been produced out of total requirement of 9,912 number of components.
Foundation work	The Raft & Grade slabs of all 7 building blocks have been completed.
Superstructure	The erection of Modules/building components have been completed in two Building Blocks (No. 1 & 2). The same is in progress at 2nd floor level in other three blocks (No. 5, 6 & 7).
Infrastructure work	About 56% of pre-cast boundary wall has been completed.

AGARTALA, Tripura

Technology Name: **Light Gauge Steel Structural System & Pre-Engineered Steel Structural System**



No. of Dwelling Units : **1000 Nos. (G+6)**
 No. of Block / Tower : **7 Blocks**
 Units in each Block / Tower : **A(111), B(152), C(125), D(167), E(167), F(167) & G(111)**

Activities	Progress
Foundation (Dwelling Units)	
Pile Work	Completed in 6 Blocks (A,B, C,E,F & G) & D -Block is in Progress.
Pile head breaking	A, B, C, E, F & G Block completed.
PCC for foundation	A, B, C, E, F & G Block Completed.
Raft Foundation	A, E, F & G Block completed and B & C Block is in progress.
Plinth Beam & Pedestal Column Casting	A, F & G Block completed and C & E Block is in progress.
Superstructure	A, F, E & G Block is in progress.
Sample Unit	Partially completed

Social Media Corner

