









**E-Newsletter-Vol - XVIII** 

## **LIGHT HOUSE PROJECTS**

July 25, 2022, New Delhi

Shri Durga Shanker Mishra, Chief Secretary, **Government of Uttar Pradesh visits Light House Project Lucknow** 



On 5<sup>th</sup> July 2022, Shri Durga Shanker Mishra, Chief Secretary, Government of Uttar Pradesh, and Shri Amrit Abhijat, Principal Secretary, Government of Uttar Pradesh, visited Light House Project (LHP) in Lucknow, Uttar Pradesh to review the progress on site. A detailed review of the housing project was undertaken by Shri Mishra as he was briefed about the progress by construction agency officials and other State Government officers.

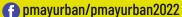
In Lucknow, 1,040 affordable houses are under construction. Already in use in Canada and Australia - 'Stay In Place PVC Formwork with Pre-Engineered Steel Structural System' technology - has been adopted here for construction purposes. The plant manufactured rigid poly-vinyl chloride (PVC) based polymer components serve as a permanent stay-in-place finished formwork for concrete walls. The formwork system acts as pre-finished walls requiring no plaster and can be constructed instantly. This System is suitable for residential and commercial buildings of any height from low to high rise.

The advantage of this technology is many as having formwork already as part of system, the construction of building is faster as compared to conventional buildings. It also saves water and formwork system does not have plastering requirement and gives a very aesthetic look.











#### **Message from** JS&MD (HFA) **Shri Kuldip Narayan**

For PMAY-U Mission, the achievements of the last seven years speak for itself. So far under the Mission, 122.69 Lakh houses have been sanctioned, out of which over 102 Lakh have already been grounded for construction and 61.5 Lakh have already been completed and delivered to beneficiaries.

LHPs too have become a game-changer in the building construction sector. In January 2021, the foundation stone for 6 LHPs were laid by Hon'ble Prime Minister and in May 2022, he inaugurated the first LHP in Chennai for the benefit of common people. It was wonderful to see the beneficiaries of LHP Chennai living happily in their own pucca house. The one Rajkot is also getting readied for inauguration while the rest are in advanced stage of construction.

Meanwhile at Ranchi, the pivotal step of allotting the LHP flats to beneficiaries was taken. The happiness and excitement on the faces of these families were quite evident from the numerous photos which I

Our Technograhi module has been quite a success. Every so often students, professionals, and other stakeholders visit the LHP sites to gain knowledge about the technologies and I am hopeful that soon, the learnings will be adapted for replication and on ground-progress is made rapidly.

The RACHNA trainings, too, are in the advanced stage. We recently completed the milestone of hosting 50 workshops. It's a great feeling to see such a large number of stakeholders coming forward to gain and also share their knowledge about thermal comfort in affordable housing. In no time, the target of 75 workshops will be achieved, thus completing another successful initiative under the Mission.

Here's to all the success, achievements and working for the betterment of the society!

#### Shri Vinay Kumar Choubey, Secretary, Urban Development & Housing Department, Government of Jharkhand inspects work at LHP Ranchi

Shri Vinay Kumar Choubey, Secretary, Urban Development and Housing Department, Government of Jharkhand, along with Shri Aditya Kumar Anand, Director, Directorate of Municipal Administration and



Mission Director, Government of Jharkhand inspected the progress of Light House Project Ranchi on 20th July 2022. Shri Shashi Ranjan, Municipal Commissioner, Ranchi Municipal Corporation, also accompanied them along with other State Government officials.

'Precast Concrete Construction System - 3D Volumetric' has been adopted to construct 1,008 houses. It is the modern method of building by which solid precast concrete structural modules like room, toilet, kitchen, bathroom, stairs are cast monolithically in plant or casting yard in a controlled condition. These modules are then transported, erected, installed and integrated together in the form of complete building unit. About 90% of the building work including finishing is complete in plant/casting yard leading to significant reduction in construction & occupancy time.

#### Distribution of flat allotment letters to beneficiaries of LHP Ranchi



On 19th July 2022, Ranchi Municipal Corporation (RMC) organised house allotment programme at LHP Ranchi. During the event, 1008 houses, being constructed at LHP Ranchi, were allotted to beneficiaries through a lottery system. Over 1,500 applications were received against the 1,008 houses, out of which 1,302 applications were found suitable after scrutiny, for which the lottery program was organised. The smiling faces explain the happiness and joy of families who will soon be able to live in their own pucca houses.





Apart from Chennai and Ranchi, allotment of flats at other LHP sites -Indore, Lucknow and Rajkot - has been completed. Meanwhile in Agartala, it is under process.

# LIGHT HOUSE PROJECT CHENNAI, TAMIL NADU GLOBAL HOUSING TECHNOLOGY CHALLENGE INDIA

## Inaugurated by Hon'ble Prime Minister on 26th May 2022

LHP Chennai was the first one to be completed among the other projects in record time of 12 months. The 1,152 houses at LHP Chennai are spread across 12 towers and 6 floors with basic infrastructure such as internal water supply, sewer lines, internal electrification, internal roads, lifts, LED Street lights, solar streetlight system, sewerage treatment plant, rainwater harvesting, etc., in place. It also comprises of anganwadi, shops, milk booth and library for the ease of families living inside the premises.





There is no greater feeling than living in your own house and beneficiaries of LHP Chennai are now living this dream. Grih pravesh ceremonies are being held by beneficiaries as they enter their own pucca house with smiles on their faces.





## LIGHT HOUSE PROJECT CHENNAI, TAMIL NADU





Literally, dreams do come true. I realised it when I got my own house. >> - Smt Malliga, Flat No - 308



Thanks to PMAY-U, I am now living in a gated society and not in a slum area, where we earlier used to reside. >> - Smt Valliamma, Flat No - 314



Feeling so happy to be here. I hope PMAY-U continues so that more and more people are able to get a home like me.

- Smt Jayaseeli, Flat No - 514

We suffered a lot in our previous house when it came to paying rent due to our financial situation. Today, we feel blessed to have our own house.

- Smt R. Manimegalai, Flat No - 210



Feeli

Feeling proud to be a house owner.
- Smt Ambika, Flat No – 301

With my kid, I am really enjoying the amenities provided inside this gated premises of LHP Chennai. I can drop my daughter to the anganwadi & I also don't have to walk much for a ration shop or a milk booth.

- Smt Uthiriya Mary, Flat No – 503





#### Shri RK Gautam, Director, HFA reviews progress of Light House Project Indore

Shri RK Gautam, Director, Housing For All (HFA), Ministry of Housing and Urban Affairs (MoHUA), monitored implementation of Light House Project in Indore, Madhya Pradesh, on 9th July 2022. Shri Gautam evaluated the progress of the project with respect to construction and its execution at different stages. He also undertook a visit to the sample flat constructed on site. The agency was directed to expedite the construction process so that the work on the project is completed on time for the benefit of its beneficiaries.

'Prefabricated Sandwich Panel System with Pre-Engineered Steel Structural





System', an already established system for building construction in China, Australia, African and Gulf countries, has been selected for construction of 1,024 houses at LHP Indore. It replaces conventional brick and mortar walling construction practices.

This technology brings speed in construction, helps in water conservation. The sandwich panels have light weight material as core, which brings resource efficiency, better thermal insulation, acoustics and energy efficiency.

#### **Visit of Technograhis to Light House Project sites**

Training sessions have been organised on regular basis at the LHP sites for Technograhis to teach them about use of the innovative technologies. This exercise promotes knowledge dissemination and cross-learning for the further use of these resources in future construction projects. A total of 35,301 stakeholders have registered themselves as Technograhis, including students, faculty members, Central, State/UT Government, ULB officials and individuals. Out of this, about 14,692 students/faculty members from various educational institutions across the country have enrolled as Technograhis.









#### 64 RACHNA training programmes on Innovative Construction Technologies & Thermal Comfort in Affordable Housing hosted across India



Under the aegis of Azadi Ka Amrit Mahotsav, RACHNA is a unique concept started by MoHUA to organise training programmes and workshops across the country for different range of stakeholders to disseminate knowledge on Innovative Construction Technologies and Thermal Comfort in Affordable Housing. The initiative kicked off in April and the target is to host 75 workshops in different parts of the country. So far, 64 trainings have been conducted across, covering about 3,800 stakeholders.

RACHNA, which stands for Resilient, Affordable, Comfortable Housing with National Action, is a joint effort of MoHUA, Building Materials and Technology Promotion Council (BMTPC) and GIZ. The stakeholders are urban practitioners, Government officials, architects, engineers, builders, students and construction workers. The workshops and trainings are conducted by domain experts, wherein they speak about the importance of thermal comfort, building materials, methods of construction for affordable housing and technology.

In the series, 2-day vocational trainings #42<sup>nd</sup> and #43<sup>rd</sup> was conducted in Ahmedabad and Agartala simultaneously for construction labourers. The #44<sup>th</sup> workshop was held for practitioners in Kolkata. Training #45 was on the theme of emerging construction technologies & thermal comfort and was





designed specifically for Government officials in Bengaluru. Training #47 in Guwahati and #49 in Gorakhpur was also held on the same topic targeting Government officials; whereas the #46<sup>th</sup> workshop was hosted online for practitioners while the #48<sup>th</sup> was a vocational training for construction labourers held at Affordable Housing in Partnership (AHP) site in Vavdi, Rajkot.

At Benguluru, RACHNA marked the milestone of completing the  $50^{\text{th}}$  workshop, held for practitioners for two days.

The #51<sup>st</sup> and #52<sup>nd</sup> trainings were held online for Government officials. The #53<sup>rd</sup> training was an awareness drive at an architectural college in Bhubaneswar. Subsequently, the #54<sup>th</sup>, #56<sup>th</sup> and #58<sup>th</sup> trainings were on emerging construction technologies for thermal comfort, designed for practitioners. The



#57<sup>th</sup> training, however, was held online for practitioners.

Training #23, which earlier got postponed was held in Mumbai for practitioners. The 59th programme was also held for practitioners via online mode. Training #60<sup>th</sup> was held in on emerging construction technologies for thermal comfort for Practitioners. The #61<sup>st</sup>, #63<sup>rd</sup> and #64<sup>th</sup> trainings were on Climate Smart Building, held at Bhopal, Agartala and Gandhinagar, respectively, while the #62<sup>nd</sup> was an awareness drive at architectural college in Jharkhand.

### Webinar on e-Learning and Webcasting of Light House Project for Technograhis held at Lucknow & Chennai

#### 11 webcasting sessions held so far

The 10<sup>th</sup> and 11<sup>th</sup> editions of on 'e-Learning sessions and webcasting of LHPs for Technograhis' were held in Lucknow and Chennai on 30<sup>th</sup> June 2022 and 14th July 2022, respectively. Both the webinars were held at the LHP sites – Lucknow is currently under construction while Chennai has already been inaugurated and now being occupied by beneficiaries.

Under the series hosted by the Ministry for Technograhis and other





stakeholders, technical sessions are organised by BMTPC on LHP technologies, construction processes and how they can be replicated in Indian context. The participants are also given detailed presentations on LHP technology specification through live photos and videos. During each session, the focus is on one LHP site. The webinars have turned into a one-stop learning and knowledge sharing platform for Technograhis and other stakeholders.

The webinar in Chennai was held for the first time after its inauguration. The webinar witnessed a significant moment when beneficiaries of LHP Chennai came live to share their life transforming experiences with participants.

The 11 webcasting sessions at LHPs sites have been attended by more than 6,500 stakeholders virtually/physically.

#### **LIGHT HOUSE PROJECTS**



These six light house projects would give a new direction to the housing construction in the country. This will reduce the construction time and prepare the more resilient, affordable and comfortable homes for the poor. In a way, these projects will be incubation centres and our planners, architects, engineers and students will be able to learn and experiment with new technology.

- Hon'ble Prime Minister during foundation laying ceremony of LHPs on 1st January 2021

LHPs are being promoted as Live Laboratories for learning, facilitating transfer of technology to the field and its further replication. The objective is to encourage large scale citizen participation and create technical awareness for technical learning, learning by finding ideas for solutions, experimentation and encouraging innovation.



### PROGRESS OF LIGHT HOUSE PROJECTS AS ON JULY 25, 2022

## RAJKOT, Gujarat

Technology Name: Monolithic Concrete Construction using Tunnel Formwork



	Sample Unif	Completed
	Masonry work	Completed
	Internal Building work	Internal plaster is completed in 10 blocks. Kitchen slab, tile work and plumbing are in progress. Installation of lifts is also in progress.
	Internal (Electrical work)	In progress
	Social Infrastructure	After completion of Structure work, the Internal finishing is in progress in Anganwadi cum Shopping Complex and Community centre.
		Infrastructure works including Sewer line,

No. of Dwelling Units

No. of Block / Tower

Units in each Block / Tower

**Activities** 

Foundation work

Superstructure work

1144 Nos. (S+13)

11 Blocks

104 Nos.

**Progress** 

Completed in all 11 blocks

Completed

storm water drains, water supply works, boundary wall etc. are in progress.

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External Physical Infrastructure

## PROGRESS OF LIGHT HOUSE PROJECTS AS ON JULY 25, 2022

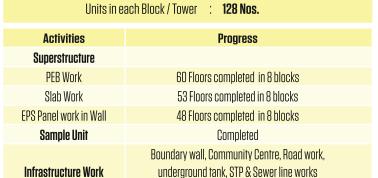
## INDORE, Madhya Pradesh

Technology Name: Prefabricated Sandwich Panel System with Pre-engineered Steel Structural System

No. of Dwelling Units

No. of Block / Tower





1024 Nos. (S+8)

8 Blocks

are in progress.









## **LUCKNOW**, Uttar Pradesh

Technology Name: Stay In Place PVC Formwork with Pre-Engineered Steel Structural System





No. of Dwelling Units 1040 Nos. (S+13) 4 Blocks No. of Block / Tower

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	<ul> <li>PEB erection work is in progress upto 12<sup>th</sup> Floor         in Block A1 (Part of Block A)</li> <li>PEB erection work is in progress upto 9<sup>th</sup> Floor         in other 2 Blocks (Block C &amp; D). Started in A2 Block</li> </ul>			
Shear Wall Work (Staircase & Lift well)	• Stilt to 8th Floor shear wall work is in progress in all 4 Blocks			
Slab Work & SIP Wall Form work	• Casting of Slab upto 6th floor is in progress in Block A1, & upto 3 <sup>rd</sup> floor in Block C & D • SIP Wall form installation & casting is in progress uoto 7 <sup>th</sup> Floor level in Block A1, at 3 <sup>rd</sup> Floor level in Block D & 2 <sup>nd</sup> floor level in Block C along with Electrical & Plumbing work.			
Sample Unit	Completed			
Social Infrastructure	Community Centre & Commercial Block work completed upto Plinth level			
Infrastructure Work	<ul> <li>Underground Water Tank is completed</li> <li>About 82% of the Boundary Wall work is completed</li> <li>Wall casting work is in progress for STP</li> </ul>			



1008 Nos. (G+8)

: 7 Blocks

## PROGRESS OF LIGHT HOUSE PROJECTS AS ON JULY 25, 2022

## RANCHI, Jharkhand Technology Name: Precast Concrete Construction System – 3D Volumetric





Units in each Block / Tower : <b>144 Nos.</b>		
Activities	Progress	
Casting Yard (Production of Components)	In the casting yard equipped with steam curing chamber, 820 numbers of different components/modules have been produced out of total requirement of 11151 numbers	
Foundation work	• The Raft slab of all 7 building blocks has been completed. • The shear wall concrete casting have been completed in 6 blocks & near completion in one remaining Block (No.7) • The Grade Slab of all building has been completed except for 1 Block (Block 7). • The erection of building components is in progress at 2 <sup>nd</sup> & 1 <sup>st</sup> floor level in Block 1 & Block 2 respectively.	
Infrastructure work	The pre-cast boundary wall installation has been completed in south and west side with a length of 323 mt out of total length of 578 mt.	

No. of Dwelling Units

No. of Block / Tower

## **AGARTALA**, Tripura

Technology Name: Light Gauge Steel Framed (LGSF) System with Pre-engineered Steel Structural System





No. of Dwelling Units : 1000 Nos. (G+6) 7 Blocks No. of Block / Tower :

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
Excavation	A, B, C, E, F & G Block completed
Pile head breaking	A, C, E, F & G Block completed & B-Block is in Progress
PCC for foundation	A, E, F & G Block completed.
Raft Foundation	A, F & G Block completed & E-Block is in Progress
Plinth Beam & Pedestal Column Casting	A, F & G Block is in Progress
Superstructure	A & F Block is in progress

#### **Social Media Corner**



#LightHouseProjects paving way for future construction in country.

Work at #LHP Rajkot is in the ending phase & very soon, the housing project will be inaugurated for beneficiaries to move into their dream homes.

#### #AffordableHousing



GHTC INDIA

Technology & innovation fulfilling #affordablehousing dreams of people!

At #LightHouseProject Indore, construction of 1,024 houses is underway. Houses here will not have brick & mortar walls, but prefabricated sandwich panel system.



The 50th training under #RACHNA programme was recently organised in Bengaluru for professionals and Govt officials on the theme of innovative construction technology &

Meanwhile, in Rajkot, 2-day training on similar theme was held for Rajkot Municipal Corporation officials, engineers, masons & construction field workers at Affordable Housing in Partnership site in Vavdi, where they were briefed about benefits of new age construction technologies used at

using For AII #PMAYUrban #GHTCIndia #LHPs #Construction Technology nsforming Urban Landscape #Transforming Lives #Construction Technology



Housing For All 📀

Yan-

Pradhan Mantri Awas Yojana - Urban, Government of India ◎ 20 July at 16:35 · ③

The 1008 houses, being constructed under #LightHouseProject Ranchi as a part or extractive were allotted to beneficiaries through a lottery system on 19th July 2022 organised by Ranchi

The selected beneficiaries were given allotment letters of their dream houses. These smiling faces explain the happiness & joy of families who will soon be able to live in their own pucca houses.... See more



GHTC INDIA @Ghtclrvf-After successfully hosting 10 webinars of e-Learning session & webcasting of #LHPs for #Technograhis, we move on to the 11th series of this programme. On 14th July at 3 pm, join us for the session to know in detail about #LightHouseProjects & take a virtual tour to



Under #RACHNA series, more & more stakeholders across the country are being trained about #ThermalComfort for #AffordableHousing & new age innovative #constructiontechnologies used at #LightHouseProjects with live design challenge.



नगरीय प्रशासन निदेशालय, झारखंड ዕ

कल दिनांक 19.07.2022 को रांची नगर निगम के क्षेत्र अंतर्गत निर्माणाधीन "#लाइट\_हाउस\_प्रोजेक्ट" के 1,008 आवासों हेतु सुयोग्य लाभार्थियों को ई-लॉटरी से आवास आवंटन कार्यक्रम की झलकियाँ।

#PMAYUrban #GHTCIndia #TransformingLives #LightHouseProjects #LHP #LHPRanchi #UrbanHomeless



Pradhan Mantri Awas Yojana - Urban, Government of India o 16 July at 13:34 • @

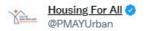
Get acquainted with new construction technologies & help in bringing technology transition is construction sector. Registrations for 11th batch of #NAVARITIH - online certificate course on Innovative Construction Technologies - is open! Classes begin from 29th July, Enrol now.

The course is offered jointly by Ministry of Housing and Urban Affairs in collaboration with School of Planning & Architecture, New Delhi and BMTPC. #HousingForAll #PMAYUrban #GHTCIndia #TransformigUrbanLandscape #TransformingLive





#### **Social Media Corner**



On 9th July 2022, Shri RK Gautam, Director, Housing For All, MoHUA reviewed progress of #LightHouseProject Indore, Madhya Pradesh & inspected the sample flat constructed at site. He was briefed about the work status by construction agency & state govt officials present there.











ssingForAll #PMAYUrban #GHTCIndia #LHPs istructionTechnology #AffordableHousing isformingLives #TransformingUrbanLandscape

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Pradhan Mantri Awas Yojana - Urban, Government of India 🥏

#LightHouseProjects promote innovative, affordable, environment friendly & disaster-resilient constructiontechnologies. Have a closer look at the ongoing work being done at #LHPLucknow, where 1,040 houses are being built for beneficiaries.

- #HousingForAll #PMAYUrban #GHTCIndia #LHPs
- #ConstructionTechnology #AffordableHousing #TransformingLives
- #TransformingUrbanLandscape





There is no greater feeling than living in your own house & beneficiaries of #LightHouseProject Chennal are now living this dream!

After inauguration of the #affordatilehousing project this May, grit-pravesh ceremonies are being performed by beneficiaries as they enter their own pucca house with smiles on their faces.

LHP Chennai, equipped with all modern & basic infrastructure facilities, comprises of 1,152

#HousingForAll #PMAYUrban #GHTCIndia #TransformingLives #TransformingUrbanLandscape #AffordableHousing #ConstructionTechnolog



Pradhan Mantri Awas Yojana - Urban, Government of India Yesterday at 12:43 - 🗷

In the various training programs being organised under #RACHNA in different cities, information on Innovative #ConstructionTechnologies & #ThermalComfort for #AffordableHousing is being

In Chennai, senior Govt officials were given training on similar theme. Likewise in Raipur, the target audience was Govt officials & private practitioners.

Another training programme was held at #LightHouseProject Agartala for 2 days for construction sector stakeholders with an aim to make them aware about importance of #thermalcomfort in #affordablehousing.

In Bhubaneswar, a 2-day #RACHNA awareness programme was organised at KIIT school of Architecture & Planning to share knowledge on thermal comfort & innovative housing technologies with students.

#HousingForAll #PMAYUrban #GHTCIndia #TransformingUrbanLandscape #AffordableHousing #Construction



#### **Media Coverage**

