

## E-Newsletter-Vol - XIV

# LIGHT HOUSE PROJECTS

March 20, 2022, New Delhi

“You are aware that today six Light House Projects are underway using new technology for affordable housing in six cities of the country. A meaningful and serious discussion is necessary for solutions on how to use this type of technology for houses in villages and for the construction projects taking place in our eco-sensitive zones.”

- Hon'ble Prime Minister  
Post-Budget webinar,  
23<sup>rd</sup> February 2022



## Secretary, MoHUA visits Light House Project in Chennai

Shri Manoj Joshi, Secretary, Ministry of Housing & Urban Affairs (MoHUA), visited Light House Project (LHP) site in Chennai, Tamil Nadu on 20<sup>th</sup> March 2022 to inspect and review the progress work. Shri Joshi chaired a meeting with concerned construction agency officials and other stakeholders to know about the status of the housing project.

'Precast Concrete Construction System - Precast Components Assembled at Site', an already established modern technology from Finland and USA, has been selected to construct 1,152 flats. The technology reduces construction time, is resource-efficient, ensures durability, precision, quality and finish. Over 90% work of LHP Chennai has been done and identification and shortlisting of beneficiaries for the project is also complete.



Regular meetings, LHP site visits are undertaken by Ministry officials at all levels for smooth implementation and monitoring of the housing project. Progress is also monitored through live telecast of work undergoing at all LHP sites.

Chennai, Indore, Rajkot, Lucknow, Ranchi and Agartala are the six locations where LHPs are underway. The project will fulfil the housing dreams of people with a touch of new and innovative technologies.





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

With Light House Projects, we aimed to bring a definite change in the construction technology landscape of India and as the months pass by, I can see that the project is already leaving a mark in the affordable housing sector. Every day at the six LHP locations, several Technograhis are being taught about different construction technologies and their use so that in the future, we gradually move towards bringing a technological transition in the country.

I frequently take site visits to monitor the progress of LHPs and sometime ago, I visited the location at Lucknow. There is encouraging progress in the construction front and the officials have been directed to expedite the work. Meanwhile, Shri Manoj Joshi, Secretary, MoHUA, inspected and reviewed the progress of LHP Chennai. At this point, I would also like to congratulate the technology providers, construction agencies and various other

stakeholders associated with Light House Projects. You truly are the gamechangers!

It also gives me immense satisfaction to share with the readers that International Women's Day was also celebrated at the LHP sites, wherein the women workforce was honoured and felicitated for their unending support. Women Empowerment forms the very core of Pradhan Mantri Awas Yojana - Urban Under the mission, houses are allotted in the name of woman of the household or in joint ownership.

This month, we also came up with the initiative of organising series of e-Learning sessions and webinars to share and disseminate about LHP technologies and construction processes. This would create wide scale knowledge dissemination and awareness about latest technologies in housing construction which can be further replicated. I urge all stakeholders to register themselves for the webinar and become a change agent to transform the urban landscape for new urban India.

Let us all do our bit in the making of an Aatma Nirbhar Bharat.

## JS&MD, HFA, visits LHP site in Lucknow

Shri Kuldip Narayan, JS&MD (HFA), MoHUA, visited Light House Project site in the Lucknow, Uttar Pradesh, on 28<sup>th</sup> February 2022. Shri Narayan reviewed the progress of the project with respect to construction and its implementation at various stages. The construction agency was directed to expedite the construction work so that benefits reach the LHP beneficiaries on time.

Lucknow will be host to 1,040 modern, well-equipped houses for eligible beneficiaries. 'Stay In Place PVC Formwork with Pre-Engineered Steel Structural System' technology from Canada is being used here for construction purposes. In this system, plaster and paint will not be required and walls prepared in advance will be used to build houses faster. In Lucknow too, identification and shortlisting of beneficiaries is complete. Over 50% of the work has been done at the location.



## LHPs: Live Laboratories

### Webinar Series: e-Learning & webcasting of LHPs for Technograhis

#### Webinar 1 on Light House Project Rajkot, Gujarat



To facilitate learning and mass replication of new-age innovative technologies being used in construction of Light House Projects, MoHUA started nationwide trainings and pool of experts' initiatives named TECHNOGRAHIs. It includes faculty and research students, technical professionals, Central/States/ULB officials, construction agencies, builders/ developers, start-ups/entrepreneurs/innovators, and other concerned stakeholders. Today, over 20,000 stakeholders have enrolled as Technograhis and are learning the use of such technologies to promote their replication in Indian context.

MoHUA is hosting series of 'e-Learning sessions and webcasting of LHP construction process' webinar to widespread the knowledge about the technologies, construction processes, sustainability, and mass-cum-fast construction to Technograhis. The main purpose is to create awareness of the different technologies used in the construction of LHPs through technical session and webcasting of work at site.

The e-Learning and webinars are planned in partnership with BMTPC and GIZ (Climate Smart Building Cell) to educate the Technograhis on various stages of construction, new techniques, and key features. The sessions are planned every month, focusing on LHP.

40 such training sessions are spread across eight months covering a wide range of topics on different technologies, construction processes and need for thermal comfort. The main outline of the training sessions would focus on use of new-age technologies, materials, and processes in the construction sector.



#### The broad areas of topics covered during the webinars are:

- 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

#### Outcomes & Benefits

- Create wide scale knowledge dissemination
- Learn use of latest technology in housing construction for further replication in other housing or real estate projects
- Exposure to innovative construction technologies
- Technograhis to act as catalysts to transform the urban landscape for new urban India to fulfil vision of AatmaNirbhar Bharat

The first webinar was organised on 11<sup>th</sup> March 2022 under the chairmanship of Shri Kuldip Narayan, JS&MD (HFA), MoHUA and other senior officials of Ministry. The technical session, explaining in detail about specifications of the technologies, their use and how they were selected through a Global Housing Technology Challenge-India, was shared by BMTPC. In the first session, a virtual tour of LHP Rajkot site was undertaken. At LHP Rajkot the construction agency was present to brief about the construction process ongoing at site.

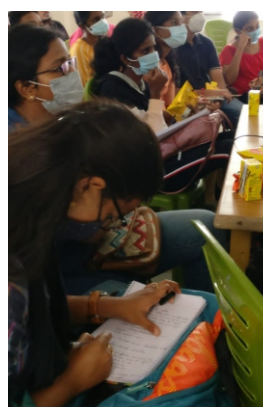
To participate & know more about the series, visit: <https://ghct-india.gov.in/>.

## Technograhis visit to LHP sites

A training session was organised for over 100 Technograhis of Sushila Devi Bansal College, Shri Vaishnav Vidyapeeth Vishwavidyalaya and Institute of Engineering & Technology, DAVV, Indore at the Light House Project site in the city on 23<sup>rd</sup> February 7<sup>th</sup> March and 9<sup>th</sup> March 2022, respectively. The Technograhis were briefed about 'Prefabricated Sandwich Panel System' technology being used for construction of 1,024 houses.

Similarly, in Chennai, an on-site training programme was organised at the LHP location for students of Anna University on 3<sup>rd</sup> and 4<sup>th</sup> March 2022. The students were briefed about 'Precast Concrete Construction System - Precast Components Assembled at Site' technology which is being used for construction of 1,152 houses.

Meanwhile, a team of Task Force of Government of Uttar Pradesh, comprising of Special Secretary, Department of Technical Education, Director of UP Institute of Design, professors, engineer and project officer, also visited LHP Chennai for studying use of new and innovative construction technologies at site.



## Women's Day celebrations at LHP sites

International Women's Day was celebrated on 8<sup>th</sup> March 2022 at construction sites of six Light House Projects sites. The states and construction agencies felicitated the female workers/staff/employees at the sites for their sincerity and contribution in this ambitious project of Government of India. True to the core of PMAY-U Mission, Light House Projects aim to empower women of India by providing them the ownership of their dream homes.

See the glimpses here:



## PROGRESS OF LIGHT HOUSE PROJECTS

### CHENNAI, Tamil Nadu

Technology Name: **Precast Concrete Construction System-Precast Components**



No. of Dwelling Units	: 1,152 Nos. (G+5)	<b>Over all Progress 97%</b>
No. of Block / Tower	: 12 Blocks	
Units in each Block / Tower	: 96 Nos.	

Activities	Progress
Superstructure Work	Completed in 12 blocks
Internal Building work	Around 95% completed
External Building Work	Around 95% completed
External Infrastructure	Overall around 80% works completed. Most works including Sewer line, storm water drains, water supply works, STP, internal road works and other works in progress.
Site development	Compound wall(Around 90% completed) and street light (around 50% completed) works in progress.
Social Infrastructure	Superstructure & Masonry works completed for Anganwadi, shops, milk booth, library and ration shop. Finishing works like Painting, doors & windows, Flooring in progress

### RAJKOT, Gujarat

Technology Name: **Monolithic Concrete Construction using Tunnel Formwork**



No. of Dwelling Units	: 1,144 Nos. (S+13)	<b>Over all Progress 71%</b>
No. of Block / Tower	: 11 Blocks	
Units in each Block / Tower	: 104 Nos.	

Activities	Progress
Foundation work	Completed in all 11 blocks
Superstructure work	8 Blocks completed (Block no.1,3,4,7,8,9,10 & 11) Block No. 2 – Ground+7 work is in progress Block No. 5- Ground +7 work is in progress
Sample Unit	Completed
Masonry work	Completed – 7 blocks In progress – 3 blocks
Internal Building work	Internal plaster is completed in 6 blocks. Kitchen slab, tile work and plumbing are in progress. Installation of lifts is also in progress.
Internal (Electrical work)	In progress – 8 blocks
Social Infrastructure	After completion of Structure work, the Internal finishing is in progress in Anganwadi cum Shopping Complex and Community centre.
External Physical Infrastructure	Infrastructure works including Sewer line, storm water drains, water supply works, boundary wall, etc. are in progress.

## PROGRESS OF LIGHT HOUSE PROJECTS

### INDORE, Madhya Pradesh

Technology Name: **Prefabricated Sandwich Panel System**



No. of Dwelling Units	: 1,024 Nos. (S+8)	<b>Over all Progress 59%</b>
No. of Block / Tower	: 8 Blocks	
Units in each Block / Tower	: 128 Nos.	

Activities	Progress
Superstructure	
• PEB Work	40 Floors completed in 8 blocks
• Slab Work	39 Floors completed in 8 blocks
• EPS Panel work in Wall	13 Floors completed in 8 blocks
Sample Unit	Completed
Infrastructure Work	Boundary wall, Community Centre, Road work, underground tank, STP & Sewer line works are in progress.



### LUCKNOW, Uttar Pradesh

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



No. of Dwelling Units	: 1,040 Nos. (S+13)	<b>Over all Progress 52%</b>
No. of Block / Tower	: 4 Blocks	
Units in each Block / Tower	: A(494), B(130), C(208) & D(208)	

Activities	Progress
<b>Superstructure work of Building Blocks</b>	
Shear Wall Work (Staircase & Lift well)	Stilt to 5 <sup>th</sup> Floor shear wall work is in progress in all 4 Blocks
Pre-Engineered Steel Building (PEB) Work	<ul style="list-style-type: none"> <li>• PEB erection work is in progress upto 10<sup>th</sup> Floor in part of Block A</li> <li>• Upto 6<sup>th</sup> Floor PEB erection work is in progress in other 2 Blocks (Block C &amp; D)</li> </ul>
Slab Work & SIP Wall Form work	<ul style="list-style-type: none"> <li>• Casting of 1<sup>st</sup> floor slab completed in Block C, D &amp; Block A1 (40% of Block A)</li> <li>• SIP Wall form installation is in progress at 2<sup>nd</sup> Floor level in Block A &amp; at 1<sup>st</sup> Floor level in other 2 Blocks (Block C &amp; D)</li> </ul>
Sample Unit	Completed
Social Infrastructure	Community Centre & Commercial Block work completed upto Plinth level.
Infrastructure Work	<ul style="list-style-type: none"> <li>• Underground Water Tank foundation work is in Progress</li> <li>• Boundary Wall work is in Progress.</li> <li>• Electrical Substation excavation work completed</li> </ul>

## PROGRESS OF LIGHT HOUSE PROJECTS

### RANCHI, Jharkhand

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



No. of Dwelling Units	: 1,008 Nos. (G+8)
No. of Block / Tower	: 7 Blocks
Units in each Block / Tower	: 144 Nos.
Over all Progress <b>42%</b>	

Activities	Progress
Casting Yard ( Production of Components)	The casting yard along with steam curing chamber is now functional & 426 numbers of different components have been produced out of total requirement of 12,624 numbers
Foundation work	The Raft slab of 6 blocks out of total 7 Building blocks has been completed. The shear wall concrete casting has been completed in 4 Blocks (Block 1,2,5,& 6). The shear wall shuttering & bar binding of block nos.3 & 4 is in progress. The excavation & GSB laying of one remaining block (No.7) is in progress. The back filling in 2 blocks (No.1 & 2) has been completed and is in progress in block Nos. 5 & 6. The ATT & bar binding work of Grade Slab of building no.1 is in progress
Infrastructure work	The pre-cast boundary wall installation has been completed up to 178 mts.

### AGARTALA, Tripura

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



No. of Dwelling Units	: 1,000 Nos. (G+6)
No. of Block / Tower	: 7 Blocks
Units in each Block / Tower	: A(112), B(154), C(118), D(168), E(168), F(168) & G(112)
Over all Progress <b>36%</b>	

Activities	Progress
Foundation (Dwelling Units)	
Pile Work	• Completed in 4 Blocks • In progress- 3 Blocks
Excavation	A, E, F & G Block completed
Pile head breaking	A, E, F & G Block completed
Raft & Plinth beam	Raft foundation in F block is in progress and PCC in block A, E, F & G completed
Superstructure	F block is in progress



## Social Media Corner



LHP technologies expedite the construction process & deliver affordable, resilient homes to eligible beneficiaries. With LHPs, govt is fulfilling the housing dreams of more & more people. It will bring new dimensions to the country's building construction technology landscape.



7:28 PM - Mar 4, 2022 - Twitter for Android



## Social Media Corner

**Global Housing Technology Challenge - India**  
11 March at 18:39

Today, **#MoHUA** launched a webinar series for e-learning & webcasting of **#LightHouseProjects** for **#Technograhis** under chairmanship of Shri Kuldeep Narayan, JS&MD, Housing for All.

The initiative aims to create awareness about LHP technologies, their construction process & foster an environment of research/development. Technical session, explaining in detail about specifications of the technologies, their use & how they were selected through a global challenge, was shared by BMTPC Delhi.

In the first session, a virtual tour of **#LHPRajkot** site was undertaken. Here's a recap of the session: <https://www.youtube.com/watch?v=r9QW5W0abY>

Such sessions will be organised on regular basis. To participate & know more about the series, visit: <https://ghct-india.gov.in/>

**#HousingForAll #PMAYUrban #LHPs #TransformingUrbanLandscape #TransformingLives #GHCTIndia**



**Housing For All**  
@PMAYUrban

**#LightHouseProjects:** Fulfilling housing dreams of people with a touch of new & innovative technologies!

Take a closer look at the construction work undergoing at Ranchi site. 1,008 houses, spread across 7 towers with 9 floors each, are underway here.



9:59 AM · Feb 26, 2022 · Twitter for Android

**Pradhan Mantri Awas Yojana - Urban, Government of India**  
8 March at 21:49

Celebrating **#WomenPower!** Honouring the women who are contributing in bringing the change.

**#InternationalWomensDay** was celebrated at **#LightHouseProject** sites of Lucknow, Rajkot, Agartala, Indore & Ranchi. Here are the glimpses.

**#InternationalWomensDay2022 #WomensDay #WomensDay2022 #WomenEmpowerment #NariShakti #HousingForAll #PMAYUrban #GHCTIndia #LHPs**



**GHCT INDIA**  
@GhctIndia

The Future of Construction Technology at **#LHPRanchi** as country's first large-scale deployment of 3D Precast Concrete to Construct over 1000 units, also serving as a LIVE Laboratory for further research.

**#HousingForAll #PMAYUrban #GHCTIndia #LightHouseProjects #TransformingLives**



12:21 PM · Mar 7, 2022 · Twitter Web App

**Pradhan Mantri Awas Yojana - Urban, Government of India**  
13 March at 12:42

Another on-site training session for **#Technograhis!**

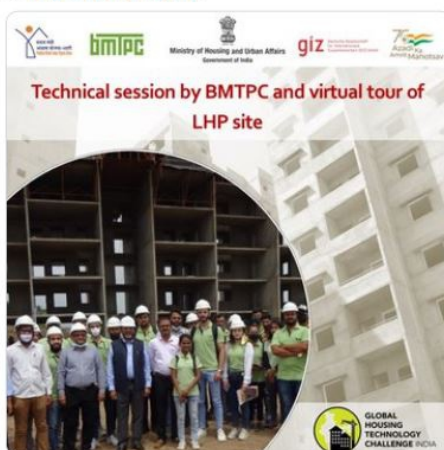
About 60 students of Institute of Engineering & Technology, DAVV, Indore, Madhya Pradesh recently visited **#LightHouseProject** site in the city to learn about use of technologies, its application/benefits & construction practices. Indore is one among the 6 cities where **#LHPs** are being constructed. The other LHP locations are Chennai, Lucknow, Rajkot, Agartala & Ranchi.

Such training sessions for Technograhis are being organ... See more



**Housing For All**  
@PMAYUrban

Webcasting of Construction for **#Technograhis** will include technical session by **@bmtpcdelhi** & virtual tour of **#LightHouseProjects**.



2:50 PM · Mar 9, 2022 · Twitter Web App

**GHCT INDIA**  
@GhctIndia

She works hard, she stands strong, she is what the society needs more of. **#PMAYUrban** & **#LHPRajkot** salutes every woman for making India a better place.

**#LightHouseProjects #HousingForAll #GHCTIndia #TransformingLives #TransformingUrbanLandscape**



5:43 PM · Mar 8, 2022 · Twitter Web App

**GHCT INDIA**  
@GhctIndia

**@MoHUA\_India** is organizing webcast of Construction & e-learning sessions for **#Technograhis** to create awareness on new age technologies & capacity building.

Joining link : [pmayu.webex.com/pmayu/j.php?MT...](https://pmayu.webex.com/pmayu/j.php?MT...)

**#HousingForAll #PMAYUrban #GHCTIndia #TransformingLives #LightHouseProjects**

