

E-Newsletter-Vol - XIII

LIGHT HOUSE PROJECTS

February 20, 2022, New Delhi

“ Tripura is doing commendable work in providing pucca houses to the poor, while on the other hand, it is also adopting new technology rapidly. Tripura is also one of the six states in the country where new technology is being used in housing construction.”

- Hon'ble Prime Minister



HON'BLE PRIME MINISTER TALKS ABOUT USE OF NEW TECHNOLOGY IN HOUSING CONSTRUCTION

On 21st January 2022, Hon'ble Prime Minister while addressing the 50th Statehood Day of Tripura, spoke about good work done in the State regarding providing pucca houses to the poor and use of new technology in housing construction. Hon'ble Prime Minister also mentioned about Light House Projects (LHPs), under Pradhan Mantri Awas Yojana (Urban), which are being built in six parts of the country, Tripura being one of them.

LHPs have been conceptualised as part of Global Housing Technology Challenge - India (GHTC-India). The Ministry of Housing and Urban Affairs (MoHUA), under Technology Sub-Mission (TSM) component of PMAY(U), initiated GHTC-India in 2019 to identify and mainstream globally available best proven technologies. Under this initiative, six globally proven innovative technologies were selected for construction of six Light House Projects (LHPs) with allied infrastructure in Agartala (Tripura), Chennai (Tamil Nadu), Lucknow (Uttar Pradesh), Indore (Madhya Pradesh), Rajkot (Gujarat) and Ranchi (Jharkhand).



3D Perspective view of Light House Projects

The Ministry is regularly following up with the construction agencies for timely completion of LHPs as per the timeline. Frequent field visits are being conducted by State Government officials, officials from HFA division, BMTPC and GIZ officials to ensure speedy construction at sites. The progress is also being monitored through live telecast of progress at sites at the Ministry for ensuring timely completion of work in each tower/block at all six sites.



Message from JS&MD (HFA) Shri Kuldip Narayan

We, at PMAY(U), are committed to provide pucca houses to all eligible beneficiaries of urban India. For that, several innovative and technological measures have been taken over the years which provide fillip to our goals. A pucca house brings with itself access to dignified living in a society for a family and hence, we have been at the forefront to cater to the housing demand of people and give them a much-transformed life.

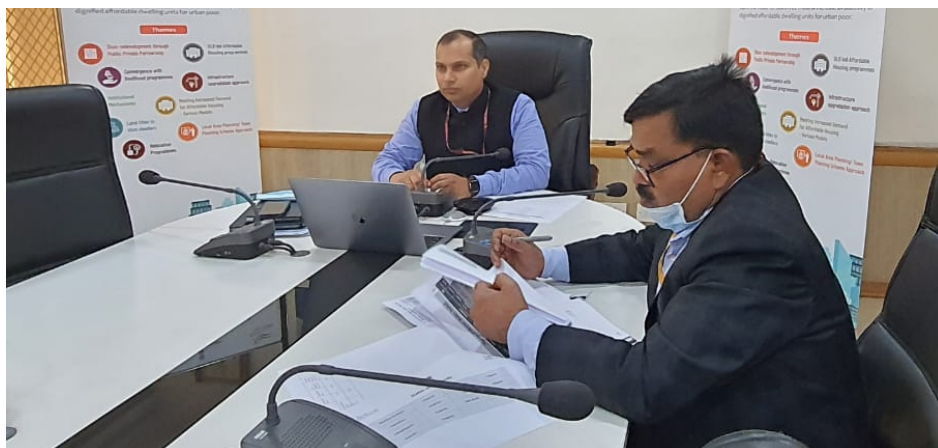
When we launched Light House Projects, we were of the opinion that this initiative of ours will bring new dimensions to the country's construction technology landscape. Rightly so, LHPs, in months to come, will bring in a new dawn in the building construction sector. The LHP technologies are being promoted at large scale by teaching students, professionals and builders their use so that they may be further replicated. On a daily basis, large number of stakeholders, better known as 'Technograhis', are taking part in the knowledge-exchange programme, wherein they are explained the nitty-gritties of these technologies.

We are closely monitoring the progress work at the six LHP sites by visiting the cities or by being in constant touch with the construction agencies. We are also welcoming elected representatives to these sites who review the progress on-ground. Recently, Hon'ble Chief Ministers of Gujarat and Tripura visited LHP sites in Rajkot and Agartala, respectively, to monitor the progress.

Light House Projects show India's commitment towards affordable housing. Let's work towards this goal of ours with utmost dedication and proudly be part of the revolution.

JS&MD, HFA reviews progress of LHPs

On 4th February 2022, Shri Kuldip Narayan, Joint Secretary & Mission Director (JS&MD), Housing for All, reviewed the work progress of all six LHP locations in close coordination with the construction agencies, State government officials.



Work on the six LHP sites are in full swing. Close to 1,000 affordable houses at each location are being built to provide a dignified living to the poor. Use of these technologies will expedite the construction process and deliver quality, affordable and resilient homes to them.

Identification and shortlisting of Beneficiaries for LHP Chennai, Lucknow and Rajkot has been completed. The process of shortlisting of Beneficiaries for LHP Ranchi, Agartala and Indore is in advance stage which will be completed soon.

Hon'ble Minister of Urban Development, Government of Tripura, visits LHP site in Agartala

Meanwhile, on 24th January 2022, Smt Santana Chakma, Hon'ble Minister of Urban Development, Government of Tripura visited Light House Project site in Agartala and reviewed the progress of construction work. In Agartala, 1,000 flats are under construction using New Zealand's 'Light Gauge Steel Framed (LGSF) System with Pre-engineered Steel Structural System' technology.



Smt Santana Chakma, Hon'ble Minister of Urban Development, at LHP site in Agartala

Construction of Light House Project in Lucknow reviewed by Director (HFA), MoHUA

Shri RK Gautam, Director (HFA), MoHUA, paid a visit to the Light House Project site in Lucknow, Uttar Pradesh, on 11th February 2022. He reviewed the progress of the project with respect to construction and its implementation at various stages.

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.



Benefits of LHP Technology of Agartala explained to students



Shri Mihir Gope, Chief Town Planner of Tripura Urban Development Authority and Vishrut Shah, authorised representative of Mitsumi Housing Private Limited, the construction agency and technology provider of Light House Project Agartala, visited Tripura Institute of Technology (TIT) on 7th February 2022 to explain to the students about the model housing project. Over 40 students attended the programme, wherein the functionality and benefits of the Light Gauge steel Frame (LGSF) technology, which has been adopted in Agartala for the construction process, was also explained. It fast-tracks construction process, is resource-efficient, disaster-resilient and durable.

PMAY(U) officials from Assam visit Lucknow, Rajkot and Indore LHP sites

A delegation of PMAY(U) officials from Assam, headed by the Mission Director, toured the LHP sites in Lucknow, Rajkot and Indore to know about the different construction technologies and their use. Through various presentations, the team was briefed about the construction system, pattern and the other details about the technologies.



Technograhis visit to LHP sites



Training sessions are being organised on a regular basis at all 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. Students of various colleges/universities, faculty members, professionals and other concerned stakeholders are getting trained at LHP sites through on-site or off-site training programmes.

On 7th February 2022, 40 Technograhis, comprising of students & faculty from IET DAVV, Govt Engineering College, visited LHP Indore. The team was explained about advantages of Prefabricated Sandwich Panel system & other nitty-gritties involved in construction system. They also visited the sample flats.

All these sites are serving as Live Laboratories for real time experience, learning & consultation. MoHUA is also encouraging visit of PMAY(U) officials from different States/UTs at the six LHP location so that they may be able to learn the use of these technologies and replicate the use in their respective areas.

PROGRESS OF LIGHT HOUSE PROJECTS AS ON FEBRUARY 20, 2022

CHENNAI, Tamil Nadu

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



No. of Dwelling Units	: 1152 Nos. (G+5)	Over all Progress 92%
No. of Block / Tower	: 12 Blocks	
Units in each Block / Tower	: 96 Nos.	

Activities	Progress
Superstructure Work	Completed
Sample Unit	Completed
Internal Building work	Around 85% completed
External Plastering	Around 90% completed
External Infrastructure	Works including Sewer line, storm water drains, underground water tank, water supply, STP, Internal road works and other works are in progress.
Site development	Compound wall and street light 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 are in progress

INDORE, Madhya Pradesh

Technology Name: **Prefabricated Sandwich Panel System**



No. of Dwelling Units	: 1024 Nos. (S+8)	Over all Progress 50%
No. of Block / Tower	: 8 Blocks	
Units in each Block / Tower	: 128 Nos.	

Activities	Progress
Superstructure work	
• PEB Work	38 Floors completed in 8 blocks
• Slab Work	30 Floors completed in 8 blocks
• EPS Panel work in Wall	11 Floors completed in 8 blocks
Sample Unit	Completed
Infrastructure Work	Boundary wall, Community Centre, Internal road work, underground tank, STP & Sewer line, Drainage system works are in progress



PROGRESS OF LIGHT HOUSE PROJECTS AS ON FEBRUARY 20, 2022

LUCKNOW, Uttar Pradesh

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



No. of Dwelling Units	: 1040 Nos. (S+13)	Over all Progress 47%
No. of Block / Tower	: 4 Blocks	
Units in each Block / Tower	: A(494), B(130), C(208) & D(208)	

Activities	Progress
Superstructure Work in Building Blocks	
Shear Wall Work (Staircase & Lift well)	Stilt to 5 th Floor shear wall work is in progress in all 4 Blocks.
PEB Work	<ul style="list-style-type: none"> Upto 8th Floor Pre-engineered Steel (PEB) erection work is in progress in Block A Upto 6th Floor Pre-engineered Steel (PEB) erection work is in progress in 2 Blocks (Block C & D)
Slab Work & SIP Wall Form work	<ul style="list-style-type: none"> Casting of 1st floor slab completed in Block C & Block A1 (40% of Block A) and is in progress in Block D SIP Wall erection is in progress at 1st Floor level in 3 Blocks (Block A, C & D) In Block A, after erection & casting of SIP Walls of 12 No. of DUs at 1st Floor level, the work of SIP Walls of 4 DUs is in progress at 2nd Floor level
Sample Unit	Completed
Social & Physical Infrastructure Work	Community Centre & Commercial Block work completed upto Plinth beam. Underground Water Tank foundation work is in Progress Boundary Wall work is in Progress. Electrical Substation excavation work completed.

RAJKOT, Gujarat

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



No. of Dwelling Units	: 1144 Nos. (S+13)	Over all Progress 64%
No. of Block / Tower	: 11 Blocks	
Units in each Block / Tower	: 104 Nos.	

Activities	Progress
Foundation work	Completed in all 11 blocks.
Superstructure works	<ul style="list-style-type: none"> 7 Blocks completed (Block no.3,4,7,8,9,10 & 11) Block No. 1- Ground +12 work is in progress Block No. 2- Ground floor is completed
Sample Unit	Completed
Masonry work	<ul style="list-style-type: none"> Completed – 6 blocks In progress – 2 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 & Physical Infrastructure works	After completion of Structure work, the Internal finishing is in progress in Anganwadi cum Shopping Complex and community centre both.
External Infrastructure	Infrastructure works including Sewer line, storm water drains, water supply works, boundary wall,

PROGRESS OF LIGHT HOUSE PROJECTS AS ON FEBRUARY 20, 2022

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(112), B(154), C(118), D(168), E(168), F(168) & G(112)**

Over all Progress 34%

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 & G completed



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.**

Over all Progress 32%

Activities	Progress
Casting Yard (Production of Components)	• The casting yard is now equipped with requisite Moulds & Steam curing facility and the production of various components has started.
Foundation work	• The Raft foundation has been completed in 4 Building Blocks & the bar binding for Raft of 3 rd Block is in progress. • The shear wall concrete casting has been completed in 2 Blocks (1 & 2) & the shuttering work of shear wall is in progress in 3 Blocks (5,6&7). • The excavation work has started in 6 th Block.
Infrastructure work	• The pre-cast boundary wall installation has been completed up to 178 mts.



Social Media Corner

