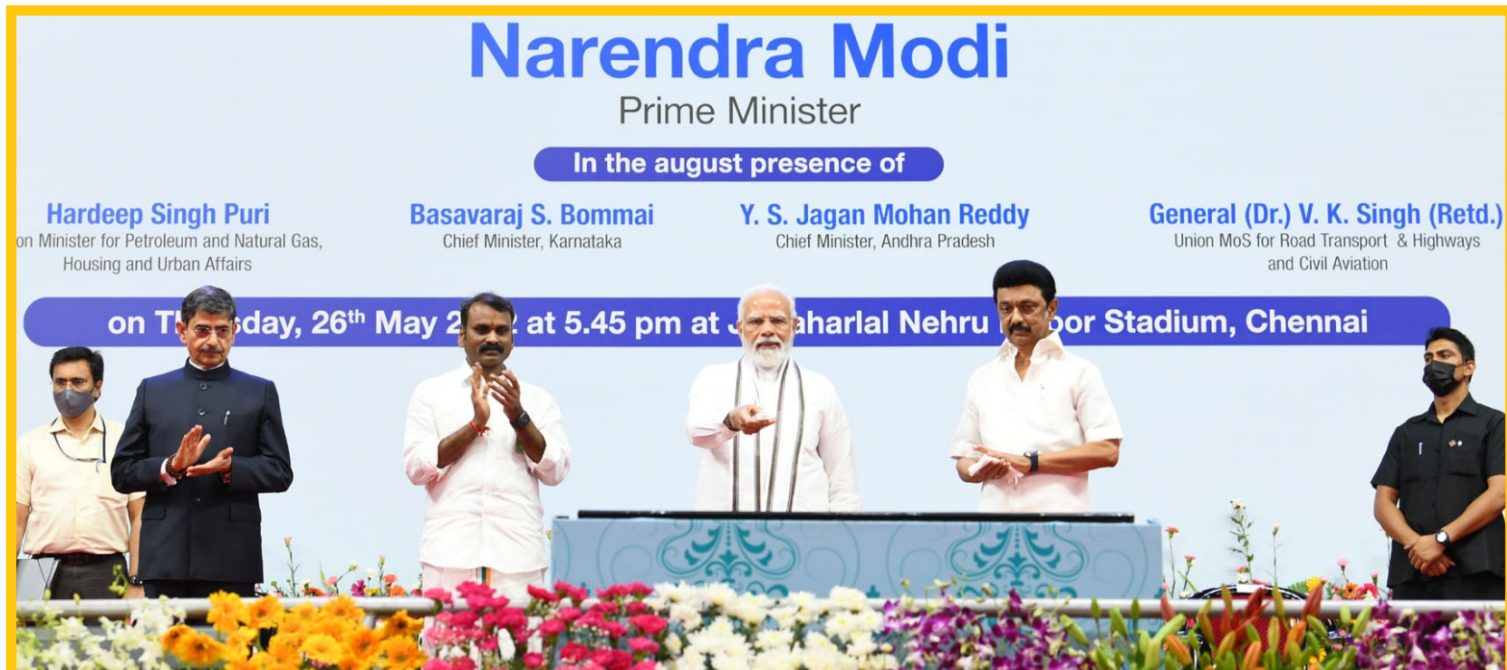


E-Newsletter-Vol - XVI

LIGHT HOUSE PROJECTS

May 26, 2022, New Delhi

Hon'ble Prime Minister inaugurates Light House Project Chennai, dedicates 1,152 houses to beneficiaries



Hon'ble Prime Minister Shri Narendra Modi inaugurated Light House Project (LHP) in Chennai, Tamil Nadu on Thursday (26th May 2022), constructed under Global Housing Technology Challenge-India (GHTC-India) ambit of Pradhan Mantri Awas Yojana (Urban). The event was held at JLN Indoor Stadium in Chennai, wherein Hon'ble Prime Minister dedicated the LHP Chennai along with other projects to the nation and laid the foundation stone of 11 projects worth over 31,500 Crore. Hon'ble Governor of Tamil Nadu Shri RN Ravi and Hon'ble Chief Minister of Tamil Nadu Shri MK Stalin were present on the occasion. Secretary, Ministry of Housing and Urban Affairs (MoHUA), other officials of the Ministry and BMTPC also attended the event.

While inaugurating the LHP, Hon'ble Prime Minister said, "I congratulate all those getting a house under the historic Light House Project at Chennai under the Pradhan Mantri Awas Yojana. It was a very satisfying project for us. We had started a global

challenge to get the best practices involved in making homes that are affordable, durable and environmentally friendly. In record time, the first such LHP has been realised and I am glad it is in Chennai."





A total of 1,152 flats built with modern infrastructure were dedicated to the families, thus fulfilling their housing needs. Some beneficiaries of LHP Chennai were also present on the occasion and five among them were given the keys to their houses by Hon'ble Prime Minister.

With the use of Precast Concrete Construction System- Precast Components Assembled at Site technology, which originated from Finland and the US, LHP Chennai was completed in 12 months.

LHP Chennai is the first one to be completed among the other projects located at Indore (Madhya Pradesh), Rajkot (Gujarat), Ranchi (Jharkhand), Agartala (Tripura) and Lucknow (Uttar Pradesh). 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.

The foundation stone of six LHPs were laid by Hon'ble Prime Minister on 1st January 2021. The work of remaining five LHPs are also in the advanced stage of construction.

LHPs are model housing projects constructed using shortlisted proven technologies under GHTC-India. During the foundation laying ceremony of LHPs,

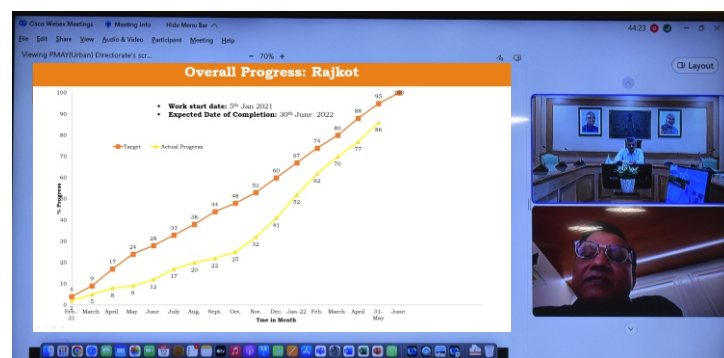
Hon'ble Prime Minister cited the housing project as "lighthouses showing a new direction to the housing sector in the country."



Secretary, MoHUA, reviews progress of Light House Projects

A meeting to review progress of Light House Projects (LHPs) was held on 12th May 2022 under the chairmanship of Shri Manoj Joshi, Secretary, Ministry of Housing and Urban Affairs (MoHUA). Shri RK Gautam, Director, Housing for All, MoHUA, along with other Ministry and Building Materials and Technology Promotion Council (BMTPC) officials were also present at the meeting. Representatives of six construction agencies of LHPs joined the meeting via online mode.

A presentation on the ongoing construction activities at the six LHP sites, namely Chennai (Tamil Nadu), Rajkot (Gujarat), Indore



(Madhya Pradesh), Lucknow (Uttar Pradesh), Agartala (Tripura) and Ranchi (Jharkhand) was made. Subsequently, state-wise presentations, progress of LHPs were reviewed in detail by Secretary, MoHUA.

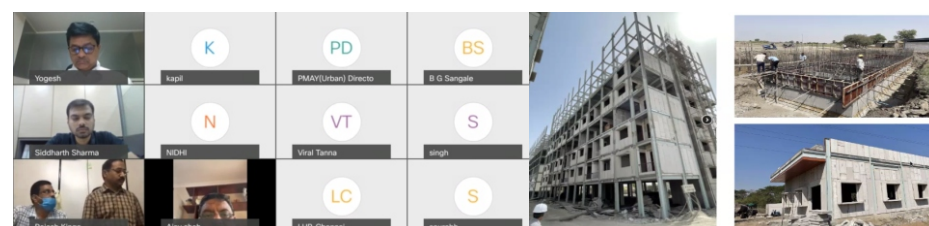
Secretary, MoHUA evaluated state-wise progress and highlighted various issues pertaining to delay in the progress of the projects. Apart from Chennai, five other construction agencies were asked to expedite construction work on the sites to provide maximum benefits to beneficiaries at earliest.

Monitoring of LHPs is being done on regular basis at MoHUA through site visits, live webcasting, etc.

JS&MD reviews progress of LHP sites at Lucknow & Indore

A meeting with construction agencies and technology providers of Light House Projects Lucknow and Indore was convened on 21st April 2022 under the Chairmanship of Shri Kuldeep Narayan, Joint Secretary & Mission Director, Housing For All to discuss and review the implementation of work at the two sites, in particular. The concerned officials were directed to speed up the pace of the construction work and complete the projects within the stipulated timeline.

At LHP Lucknow, 1,040 houses are under construction using Stay In Place PVC Formwork with Pre-Engineered Steel Structural System. Meanwhile, at Indore, Prefabricated Sandwich Panel System with Pre-Engineered Steel Structural System has been adopted to build 1,024 houses.





Message from JS&MD (HFA) Shri Kuldip Narayan

In the month of May, we achieved the milestone of witnessing the inauguration of Light House Project Chennai by Hon'ble Prime Minister Shri Narendra Modi. On 26th May, Hon'ble Prime Minister landed in Chennai to dedicate to the nation some important infrastructure projects & LHP Chennai was inaugurated at the same occasion. It was a proud moment for everyone associated with the housing project. A group of beneficiaries who have been allotted homes under LHPs were invited to be part of the event & among them, 5 women were handed over the keys to their dream house by Hon'ble Prime Minister.

As I write this message, I would like to acknowledge and congratulate the forces behind the successful completion of LHP Chennai. The State Government, the construction agencies and the different stakeholders associated with the housing project need special mention for taking up the task and fulfilling it in time for the benefit of our beneficiaries.

Despite COVID-19 lockdowns & other hindrances, the work was wrapped up in record time of 12 months.

I believe the completion of LHP Chennai will give a major boost for other five agencies to finish the work and handover the sites to the respective beneficiaries at the earliest.

Another initiative of the Ministry which has taken off really well is RACHNA, which we started in April. Several training sessions are being organised pan-India for professionals, students, Technograhis and other stakeholders regularly to disseminate about thermal comfort, affordable housing and construction technologies. Parallely, LHP webinars and webcasting are also acting as a platform to communicate to people about the LHP technologies so that they may be replicated in the future in India.

The advantages of hosting these sessions in different formats are many, primarily being to take the nation forward in building an AatmaNirbhar Bharat!

On that note, I wish everyone associated with Pradhan Mantri Awas Yojana (Urban) Mission all the very best.

RACHNA initiative of MoHUA off to a flying start, workshops/trainings being held across India



RACHNA - Resilient, Affordable, Comfortable Housing with National Action - has been introduced by MoHUA in collaboration with BMTPC and GIZ with the purpose to host 75 training events under the Global Housing Technology Challenge-India and Azadi Ka Amrit Mahotsav (AKAM) for building Sector stakeholders and Technograhis.

The first programme under the series was hosted in Ranchi, followed by an online training for practitioners. Training #3 was held in New Delhi which was chaired by Shri Kuldip Narayan, Joint Secretary & Mission Director, Housing for All. Under training #4, a 2-day awareness programme was organized at the Faculty of Architecture

and Planning, Dr. A.P.J. Abdul Kalam Technical University (AKTU), Lucknow on the 21st and 22nd of April 2022 on Innovative Construction Technologies and Thermal Comfort for Affordable Housing.

In the same series, vocational training #5 was hosted in Indore on 27th April 2022. The day-long event evoked great response from over 70 participants, comprising primarily of construction field workers from Indore Municipal Corporation and different construction agencies. The training session was organised to disseminate about Prefabricated Sandwich Panel Technology being used at LHP Indore to upskill their expertise. The session was followed up by a visit to the construction site, where the participants were given practical knowledge of the technology and its onsite implementation and applications.

Training #6 was organised on 10th May 2022 in Ahmedabad. Many Government officers from the Ahmedabad and nearby regions, including ULBs, UDDS, GEDA, GUDA attended the event, which was graced by the presence of Shri Bipin Talati, Joint Secretary, Climate Change Department, Government of Gujarat. The programme focussed on innovative construction technology and thermal comfort in affordable housing.



construction field workers from LHP site and Rajkot Municipal Corporation attended the training. At the same time, an awareness programme was parallelly hosted in Indore for students of School of Architecture, IPS Academy on the theme of Thermal Comfort in Affordable Housing, marking it the 10th training workshop of the workshop.

The 11th training programme was an awareness workshop conducted on 18th and 19th May at Integral University in

Subsequently, RACHNA trainings #7 and #8 were held in Rajkot and Bengaluru on 12th May and 16th May 2022, respectively. In Rajkot, Thermal Comfort in Affordable Housing & Light House Project Technologies with respect to conventional methods, how Monolithic Tunnel Formwork Technology used at LHP Rajkot is beneficial was explained to participants. In Bengaluru, a session was organised for architecture students of Reva University to create awareness about the need for thermal comfort in affordable housing sector and passive strategies with intent to encourage them to include no-cost or low-cost strategies in their future projects.

The 9th training location was LHP Rajkot on 17th and 18th May 2022. The event focused on making construction workers aware of Monolithic Tunnel Formwork Technology to upskill their expertise. Engineers, masons &



Lucknow. Chennai hosted the 12th vocational training programme at Affordable Rental Housing Complexes (ARHCs) site at Chennai on 19th May. Subsequently, 2-day awareness programme was held at Guwahati's Royal Global University on 19th and 20th May. This was the 13th workshop in the series.

The 14th programme was held on 20th May in Kolkata for senior officials of West Bengal government. On 24th and 25th May, the RACHNA bandwagon moved to Shillong's North-Eastern Hill University, wherein an awareness programme was held, marking the 15th workshop in the series. Vocational trainings were simultaneously held at LHP Lucknow and LHP Indore sites on 25th - 26th May and 26th and 27th May.

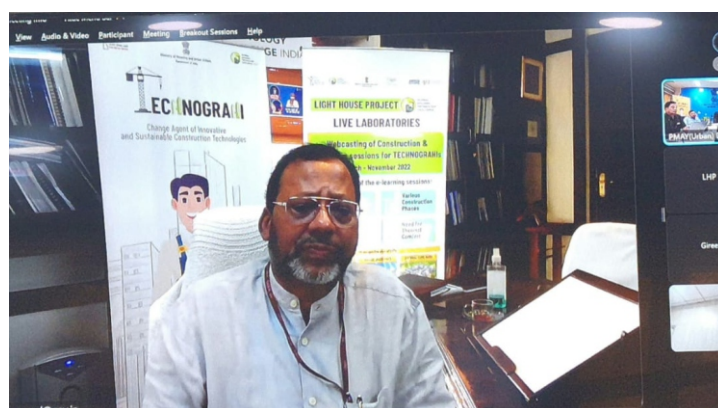


Webinars on e-Learning and webcasting of Light House Projects

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.

So far, eight sessions at the LHP sites have been hosted by MoHUA in collaboration with BMTPC and GIZ. In the series, highlights of the housing project, undertaken initiatives & how construction work is progressing are being explained to the participants. Showcasing the live progress of LHP sites also remains the highlight of the sessions. The webinar is serving as learning platform for all stakeholders interested in learning about innovative construction technologies.

The webinars are chaired by Shri Kuldip Narayan, JS&MD, HFA while detailed technical sessions are taken up by experts of BMTPC. The recent session of this webinar was hosted on 18th May 2022. Shri Shailesh Agarwal, Executive Director, BMTPC began the webinar with a presentation for Technograhis, highlights about the housing project, initiatives undertaken and how construction work is progressing were explained. Live progress of LHP Indore was also shown in this session.



Expert Group Consultation meeting of Design Standard for Thermal Comfort & Action Plan



Under RACHNA, 1st Expert Group Consultation meeting for the development of Design Standard for Thermal Comfort & Action Plan was held on 6th May 2022 in coordination with MoHUA and BMTPC. The expert consultation aims to get the industry perspective on the development of

Design Standard for thermally comfortable and affordable homes. The meeting outlined need to enhance thermal comfort in homes while maintaining affordability.

The programme seeks to develop the thermal comfort action plan, guideline, and standards to enhance the thermal comfort of occupants in affordable housing in India. The vision is to achieve thermally comfortable, resilient, and affordable homes through passive design measures, locally available and low embodied energy material coupled with best available technologies in constructions.

As part of this cooperation, the Climate Smart Buildings (CSB) initiative under the “Indo-German Energy Programme” (IGEN), aims at mainstreaming thermal comfort in affordable housing using sustainable materials and passive design principles. A sub-component of the CSB initiative is the “Development of Design Standard for Affordable Housing based on Thermal Comfort Performance” and the “Development of Thermal Comfort Action Plan - 2050”.

PROGRESS OF LIGHT HOUSE PROJECTS AS ON MAY 26, 2022

CHENNAI, Tamil Nadu

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



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

Over all Progress **100%**

Project completed in all respect and handed over to the beneficiaries by Hon'ble Prime Minister on 26th May 2022



RAJKOT, Gujarat

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



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

Over all Progress **86%**

Activities	Progress
Foundation work	Completed in all 11 blocks
Superstructure work	9 Blocks completed (Block no.1,2,3,4,7,8,9,10 & 11) Block No. 6 – (Ground+9) work is in progress Block No. 5- (Ground +11) work is in progress
Sample Unit	Completed
Masonry work	Completed – 9 blocks; In progress – 2 blocks
Internal Building work	Internal plaster is completed in 8 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 AS ON MAY 26, 2022

INDORE, Madhya Pradesh

Technology Name: **Prefabricated Sandwich Panel System**



No. of Dwelling Units	: 1024 Nos. (S+8)	Over all Progress 68%
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	35 Floors completed in 8 blocks
• EPS Panel work in Wall	14 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	: 1040 Nos. (S+13)	Over all Progress 59%
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	• PEB erection work is in progress upto 12 th Floor in Block A1 (Part of Block A); • PEB erection work is in progress upto 6 th Floor in other 2 Blocks (Block C & D)
Shear Wall Work (Staircase & Lift well)	• Stilt to 8 th Floor shear wall work is in progress in all 4 Blocks
Slab Work & SIP Wall Form work	• Casting of 1 st floor slab completed in Block A1, Block C & Block D and in progress of 2 nd floor in Block A1 & Block D • SIP Wall form installation & Casting is in progress at 2 nd & 3 rd Floor level in Block A1 & at 2 nd Floor level in Block D & 1 st floor level in Block C alongwith Electrical & Plumbing.
Sample Unit	Completed
Social Infrastructure	Community Centre & Commercial Block work completed upto Plinth level.
Infrastructure Work	• Underground Water Tank foundation work is completed & wall casting is in progress; • Major Portion (about 80%) Boundary Wall work is completed; • Electrical Substation excavation work completed, PCC work & Steel binding work is in progress for STP.



PROGRESS OF LIGHT HOUSE PROJECTS AS ON MAY 26, 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.**

Over all Progress 47%

Activities	Progress
Casting Yard (Production of Components)	• The casting yard along with steam curing chamber is now functional & 620 numbers of different components have been produced out of total requirement of 10153 numbers
Foundation work	<ul style="list-style-type: none"> • The Raft slab of all 7 building blocks have been completed. • The shear wall concrete casting have been completed in 6 Blocks & the shear wall reinforcement in one remaining block (Block No.7) is in progress • The Grade Slab of building No.1, 2, 5 & 6 have been completed. • The erection of building components of Block No. 1 & 2 are in progress at 1st Floor level.
Infrastructure work	• The pre-cast boundary wall installation is in progress.

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 44%

Activities	Progress
Foundation (Dwelling Units)	
Pile Work	• Completed in 5 Blocks (A, C, E, F & G) & B & D -Block is in Progress.
Excavation	• A, E, F & G Block completed & C-Block is in Progress.
Pile head breaking	• A, E, F & G Block completed & C-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 & Pedestrial Column Casting	• A, F & G Block is in Progress.
Superstructure	F block is in progress

Social Media Corner



10:33 PM - May 26, 2022 - Twitter Media Studio

Nations which have given top priority to infrastructure have prospered.

Our Government is upgrading social and physical infrastructure. This will benefit the coming generations.

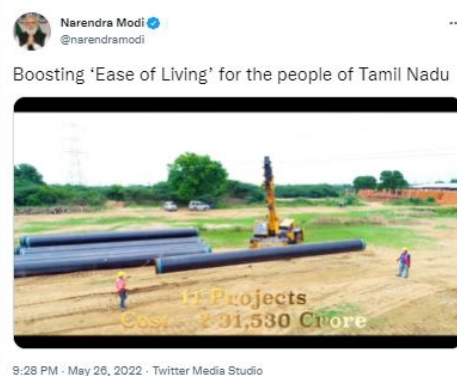


10:32 PM - May 26, 2022 - Twitter Media Studio

Chennai's Light House project is special for numerous reasons. It illustrates our commitment to delivering the best possible infrastructure for the poor.



4:09 | 46.2K views



9:28 PM - May 26, 2022 - Twitter Media Studio

In a major boost to Pradhan Mantri Awas Yojana-Urban @PMAYUrban PM @narendramodi Ji inaugurates 1152 houses constructed at a cost of ₹116 crore as part of the Chennai Light House Project.



PM @narendramodi Ji at the launch of development initiatives in Chennai.

#Vanakkam_Modi

Narendra Modi (@narendramodi) · 17h
It is always special to be in Tamil Nadu. Speaking at launch of development initiatives in Chennai. twitter.com/i/broadcasts/1...

7:12 PM - May 26, 2022 - Twitter for iPhone

18 Retweets 80 Likes

Manoj Joshi (@Secretary_MoHUA)
Here's a quick look at the #Chennai #LightHouse Project under the #PMAY (Urban). The project contains 12 towers with six floors, offering 1,152 model infrastructured houses.



0:32 | 631 views

Manoj Joshi (@Secretary_MoHUA)
With the best of new-age global technologies, materials & processes, the Light House Project furthers the goal of Ghar Hua Apna, Pura Hua Sapna.

10:01 PM - May 26, 2022 - Twitter Web App

PMO India (@PMOIndia)
History has taught us that those nations which gave topmost importance to infrastructure made the transition from developing to developed countries.

The Government of India is fully focussed on building infrastructure that is top quality and sustainable: PM @narendramodi

PMO India (@PMOIndia)

I would like to congratulate all those who will be getting houses as a part of the historic Chennai Light House project under the PM-Awas Yojana.

This has been a very satisfying project for us: PM @narendramodi

DD News (@DDNewsLive)
PM @narendramodi addresses the occasion of the foundation stone laying ceremony for development projects in #Chennai.

Watch Full Address: bit.ly/3NBzXv9

#TransformingTN



8:49 PM - May 26, 2022 - TweetDeck

3 Retweets 20 Likes

The Times Of India (@timesofindia)
#TamilNadu | #PMModi begins his address at #NehruIndoorStadium.

Narendra Modi's #Chennai Visit Live Updates:

timesofindia.indiatimes.com/city/chennai/t...



7:10 PM - May 26, 2022 - Twitter Web App

9 Retweets 102 Likes

Social Media Corner



1st Expert Group Consultation meeting for development of Design Standard for **#ThermalComfort** & Action Plan was held on 6th May in coordination with **@MoHUA_India** and **@bmtpcdelhi**. The meeting outlined need to enhance thermal comfort in homes while maintaining affordability.



9:45 AM - May 7, 2022 - Twitter for Android



Lulu Bhai and 36 others

1 share



6:36 PM - Apr 27, 2022 - Twitter Web App



43

2 comments 1 share



Manan Alam and 54 others

4 comments 2 shares

#LightHouseProjects: Use of technology & innovation to build **#NewUrbanIndia!**

Have a close look at how construction activities are being undertaken at **#LHPAgartala** site to deliver the finest of homes to beneficiaries.



7:01 PM - Apr 30, 2022 - Twitter Web App

Social Media Corner



Training #8 of **#RACHNA** held @ Reva University Bengaluru on 16 May. **#ThermalComfort** in **#AffordableHousing**, **#LightHouseProject** technologies w.r.t. convent'l mthds, how Precast Concrete Construcion System-Precast Components Assembled at Site used @ **#LHPChennai** is beneficial, was expld.



4:16 PM · May 16, 2022 · Twitter Web App



Making Quality a Habit!

The fluidity of concrete is being determined using a flow table test at **#LHPRanchi**. This also reflects the concrete's workability or consistency.

#PMAYUrban **#GHTCIndia** **#LightHouseProjects** **#TransformingLives**



A two-day Awareness Workshop under the **#RACHNA** series initiated by **@MOHUA_India** has been scheduled at the Faculty of Architecture and Planning, GCA, AKTU, Lucknow on 21st & 22nd April 2022.



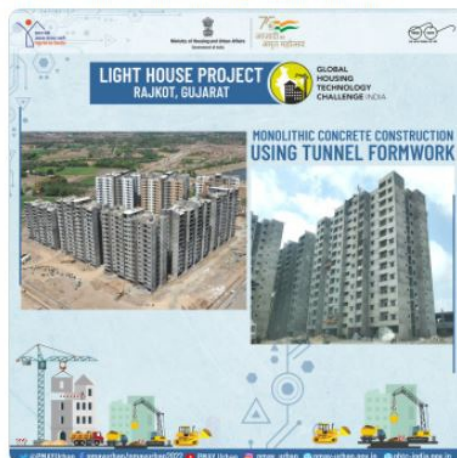
A look at the final stretch of Precast Panel Compound Walls getting erected at **#LightHouseProject** Chennai.

@MoHUA_India **#HousingforAll** **#PMAYUrban** **#LightHouseProjects** **#GHTCIndia** **#TransformingLives** **#TransformingUrbanLandscape**



Houses being built at **#LHPRajkot** are both earthquake proof & long lasting, thanks to the Monolithic Tunnel Formwork Technology being used in the construction of 1,144 dwelling units.

#HousingForAll **#GHTCIndia** **#TransformingLives** **#PMAYUrban** **#TransformingUrbanLandscape**



Global Housing Technology Challenge - India
14 May at 11:58

#TransformingTechnology revolution in India has taken a concrete shape with the completion of **#LightHouseProject** in Chennai.

Here's an overview of how the housing project looks like.

#HousingForAll **#PMAYUrban** **#GHTCIndia** **#HLPs** **#TransformingLives** **#TransformingUrbanLandscape** **#AffordableHousing**

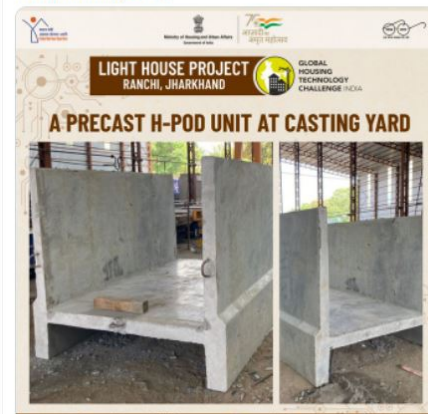


13



A precast H-pod unit fresh out of the **#LHPRanchi** casting yard will be put to good use in the corridors of the 1,008 residences currently under construction.

#PMAYUrban **#GHTCIndia** **#LightHouseProjects** **#TransformingLives**



Small Scale wastewater treatment at **#LHPChennai**!

Sewage Treatment Plant is used to remove contaminants from wastewater. It reduces risk to public health and the environment.

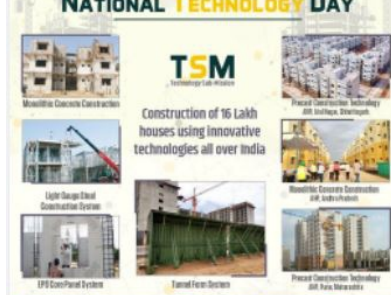


Global Housing Technology Challenge - India
11 May at 10:25

#NationalTechnologyDay is the day to celebrate & recognise contribution of experts, innovators and other stakeholders in the field of technology. They have & are continuously working towards building a **#NewUrbanIndia**.

#PMAYUrban, under **#TechnologySubMission** component, promotes use of innovative & alternative technologies in construction sector for a better tomorrow!

#HousingForAll **#TransformingLives** **#NationalTechnologyDay2022** **#TransformingUrbanLandscape** **#AffordableHousing** **#NationalInnovationDay**



13

3 shares