प्रधान मंत्री आवास योजना-शहरी
Pradhan Mantri Awas Yojana-Urban

सत्यमेव जयते

Ministry of Housing & Urban Affairs
Government of India

GLOBAL HOUSING TECHNOLOGY CHALLENGE INDIA

स्वच्छ भारत
एक कदम स्वच्छता की ओर

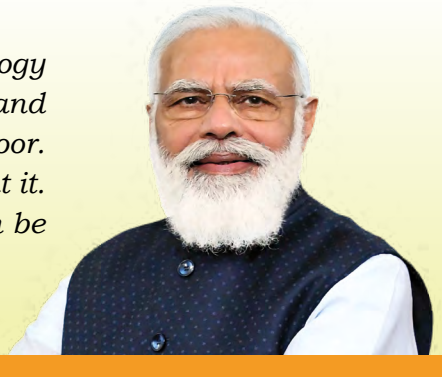
E-Newsletter:Vol-V

LIGHT HOUSE PROJECTS

May 31, 2021, New Delhi

"These Light House Projects will be constructed through modern technology and innovative processes. This will reduce the construction time and prepare the more resilient, affordable and comfortable homes for the poor. The experts are aware of it, but the countrymen also need to know about it. Because today this technology is being used in a city and the same can be expanded all over the country in future"

- Hon'ble Prime Minister



Light House Projects: Leading India Towards A New Direction In Construction Sector

Ministry of Housing and Urban Affairs (MoHUA), under Technology Sub-Mission (TSM) component of Pradhan Mantri Awas Yojana-Urban (PMAY-U), initiated Global Housing Technology Challenge-India (GHTC-India) in 2019 which aimed to identify and mainstream globally available best proven technologies to enable a paradigm shift in the construction sector of the country. Under this, six innovative technologies were selected from among 54 globally best proven technologies for constructing six Light House Projects (LHPs) of about 1,000 houses each with allied infrastructure at six places across India, namely Chennai, Lucknow, Indore, Rajkot, Ranchi and Agartala.

LHPs are model housing projects which showcase the use of best of new-age technologies, materials and processes in the construction sector. In order to create wide scale knowledge dissemination and awareness, the Ministry is conducting series of activities for all stakeholders to learn the use of latest technology in housing construction which can be further replicated in other housing or real estate projects to address the vision of transforming urban landscape for the New India. Construction of the six LHPs, along with all necessary infrastructure, will be completed within 12 months from the date of getting all statutory approvals. Hon'ble Prime Minister laid the foundation stone of the six LHPs on 1st January 2021.

3D View of Light House Projects


Agartala


Chennai


Indore

Lucknow


Rajkot


Ranchi

JS&MD (HFA) Message
Shri Amrit Abhijat

For us, every day at PMAY(U) has been full of challenges and opportunities. In June, we will complete six years of running one of world's largest housing mass housing programmes. Since the inception of PMAY(U) in 2015, we have devised various strategic and innovative measures for proper implementation of the Scheme, so that it benefits our beneficiaries to the fullest.

Now we are steadily moving towards our goal - 'Housing for All' by 2022 - when the Nation celebrates 75 years of Independence. The best way to expedite the construction process is working with a focussed approach and by adopting to the futuristic technological innovations. With LHPs, India's commitment towards affordable housing will be fulfilled and the project will cater to the growing housing demands. LHPs are being promoted as Live Laboratories to promote technology. Further, the concept of Technograhis has also been introduced. Students, faculty members, technical professionals, Central/State/ULB officials, construction agencies/builders and other stakeholders can enrol themselves as Technograhis to visit LHP sites and become ambassadors of technology transition.

Times have been tough owing to the COVID-19 pandemic. However, as it is famously said that the 'Show Must Go On', we carried on the construction activities, ensuring that COVID-appropriate behaviour is followed. Labours at the construction sites, officials of the agencies are being vaccinated so that the work is not hampered. Nevertheless, our spirits remain high.

As we come close to the Mission period, efforts are on to fulfil Hon'ble Prime Minister's vision of 'Housing For All' by 2022. With providing all-weather pucca houses to the eligible beneficiaries. Nothing is more satisfying than seeing the smiles on their faces!

Constant Monitoring of Light House Projects

The progress of Light House Projects is monitored continuously by the Central team in close coordination with the States/ULBs and construction agencies. The agencies have been asked to expedite the construction work, maintain the pace in full swing so that these ambitious projects are completed within 12 months. Follow-up with various stakeholders for enrolment as Technograhis to visit the LHPs is also done.

Shri Durga Shanker Mishra, Secretary, MoHUA, reviews progress of LHPs at PMC Meeting.

Under the chairmanship of Shri Amrit Abhijat, JS&MD (HFA), series of web based meeting to review the current status of LHPs was conducted. All officials of the construction agencies, along with necessary stakeholders were invited to brief JS&MD, HFA, regarding the progress work.

During the second wave of COVID-19, the 6 LHP states were asked to take necessary permissions from the State Disaster Management Authority (SDMA) to declare the construction activity at LHPs an essential work. COVID appropriate behaviour was followed at the sites.

Meanwhile, the State Governments were given necessary directions to parallelly continue with beneficiary identification for accommodation of the houses, conduct on-ground programmes for promotion of LHPs and build the approach road leading to the sites.

Series of webinars with Technograhis, multi-stakeholders, private/Government agencies, ASHA-India stakeholders, etc., was conducted for knowledge dissemination and learning.

A vaccination drive for labourers and construction agencies officials has been carried out to ensure safety.

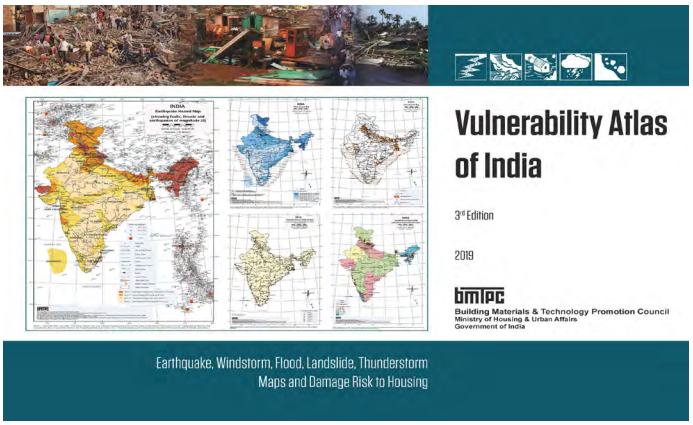
NAVARITIH: Certificate Course on Innovative Construction Technologies

With an aim to enhance the capacities amongst building professionals about the new and emerging building materials and technologies for housing and building construction, MoHUA, in collaboration with Building Materials and Technology Promotion Council (BMTPC) and School of Planning & Architecture (SPA), New Delhi, has started a Certificate Course on Innovative Construction Technologies.

The NAVARITIH Course was launched by Hon'ble Prime Minister on January 1, 2021, during the foundation stone laying ceremony of six Light House Projects through video conferencing. Subsequently, the first batch of NAVARITIH was launched by Shri Durga Shanker Mishra, Secretary MoHUA, in February 11, 2021. The course has received overwhelming response so far, with approximately 540 participants enrolling for the first four batches. The registrations for the fifth batch is now open. The online classes are scheduled from July 16, 2021 onwards and as of now, 135 registrations have been received.

Out of the total 540 participants, 283 have already completed the course and awarded certificates.

E-Course on Vulnerability Atlas of India



An E-Course on Vulnerability Atlas of India has also been launched by MoHUA in collaboration with BMTPC and SPA. This course offers awareness and technical understanding about natural hazards such as earthquakes, cyclones, landslides, floods, etc., and helps to identify regions with high vulnerability and specifies district-wise level of damage risks to the existing housing stock. The E-Course is a tool for effective & efficient disaster mitigation management in the field of Architecture, Civil Engineering, Urban & Regional Planning, Housing & Infrastructure Planning, Construction Engineering & Management and Building & Materials Research. More than 1,200 persons have registered for the E-Course, out of which 222 have been awarded certificate for successful completion.

Testimonials from Students

"The whole NAVARITIH programme was very well planned and organized. The reference material covered details of the technology used in theory and construction. Very happy to be a Technograhi."

"As I have done my MTech in Construction Technology and Management, the NAVARITIH course really helped me learn about new technologies and opportunities where we can work more in this time."

"The vulnerability Atlas of India is a boon to all the engineers and geologists in this country."

PROGRESS OF LIGHT HOUSE PROJECTS AS ON 31ST MAY, 2021

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.**

Activities	Progress
Foundation Work	Completed all 12 blocks
Superstructure Work	
Superstructure Work	Ground Floor work in progress- 6 Blocks First Floor work in progress - 2 Blocks Second Floor work in progress - 2 Blocks Third Floor work in progress - 1 Block Fourth Floor work in progress - 1 Block

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
Foundation (Dwelling Units)	
Excavation & PCC	Completed in all 8 blocks
RCC Footing / Raft	Completed in 8 blocks
RCC Column upto plinth level	Completed in 8 blocks
Plinth beam	Completed in all 8 blocks
Infrastructure Work	
Boundary Wall	Foundation work in progress
Community Centre	Foundation work in progress

PROGRESS OF LIGHT HOUSE PROJECTS AS ON 31ST MAY, 2021

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
Foundation (Dwelling Units)	
Excavation & PCC	Completed in all 4 Blocks
RCC Footing / Raft	Completed in all 4 Blocks
Casting of column / shear wall	Completed in all 4 Blocks upto 1.45 mt of total 2.25 mt height
Backfilling of Earth	Completed in 3 Blocks (A, B & C) upto 300mm below from bottom of plinth beam & in progress in Block D

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.**

Activities	Progress
Foundation (Dwelling Units)	
Excavation & PCC	Completed in 9 Blocks, and yet to start in 2 Blocks
RCC Footing / Raft	Completed in 4 Blocks, In progress in 5 Block
Plinth Beam	Completed in 2 Blocks

PROGRESS OF LIGHT HOUSE PROJECTS AS ON 31ST MAY, 2021

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)**

Activities	Progress
Foundation (Dwelling Units)	
Pile	Piling work in 4 Blocks in progress.
Excavation	
PCC	
RCC Footing/ Raft	

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
Statutory Approvals & Site Mobilization	
Status of statutory approvals & Site mobilization	Architectural drawings & other statutory approvals are in various stages. Site mobilization is in progress & the soil investigation work was stopped due to local protest.

SOCIAL MEDIA CORNER

Durga Shanker Mishra
@Secretary_MoHUA

.@GhtcIndia has identified innovative, sustainable, resource-efficient, eco-friendly, rapid & disaster-resilient construction technologies from across globe. 6 such lighthouse projects for PMAY-U complexes are under progress in Chennai, Rajkot, Indore, Lucknow, Ranchi & Agartala

Light House Projects

GLOBAL HOUSING TECHNOLOGY CHALLENGE INDIA

Location	Technology	Houses
Indore	Prefabricate sandwich Panel System	1024
Rajkot	Monolithic Concrete Construction System	1144
Chennai	Precast Concrete Construction System Precast Components Assembled at Site	1152
Ranchi	Precast Concrete Construction System - 3D Pre -cast Volumetric	1008
Agartale	Light Gauge Steel Structural System Pre- Engineered Steel Structural System	1000
Lucknow	Stay in-Place Formwork System	1040

Durga Shanker Mishra
@Secretary_MoHUA

Technological innovation via lighthouse projects, ease of doing business in construction permits, various tax reliefs & availability of finance including foreign investments etc have boosted the sector.

Ministry of Housing and Urban Affairs
@MoHUA_India

#LightHouseProjects are being implemented in 6 states of the country under #GHTCIndia.

Six globally proven innovative technologies have been selected for construction of a minimum of 1,000 houses each in Rajkot, Chennai, Lucknow, Indore, Ranchi, and Agartala.

#HousingForAll

Ministry of Housing and Urban Affairs
@MoHUA_India

#LightHouseProjects have ushered in a new era in the construction sector, showcasing the best of new-age global technologies. In Chennai, 1,152 houses are being constructed using Precast Concrete Construction System, suitable in all weather conditions.

#HousingForAll

Housing For All @PMAYUrban · May 4

MoHUA initiated GHTC-India to identify & mainstream proven innovative construction technologies from across the globe. Under the initiative, six innovative technologies were chosen for construction of six #LightHouseProjects at six places across India.

#HousingForAll

Housing For All @PMAYUrban · May 4

These technologies are sustainable, eco-friendly, disaster-resilient, cost-effective & promote speedier construction.

LHPs will bring a technological transition in India and will serve as Live Laboratories for on-site & off-site learning, facilitating transfer of technologies.

Housing For All @PMAYUrban · May 4

To learn the use of these innovative technologies, interested stakeholders can enrol as #Technogrihis for free and help in transform the urban landscape of 'New Urban India'.

Visit: ghtc-india.gov.in

Housing For All
@PMAYUrban

#LightHouseProjects are being implemented as part of #GHTCIndia which reflects India's commitment towards affordable housing. Houses under #LHPs are being constructed using globally-proven, modern & innovative technologies to make disaster-resilient, affordable homes for people.

1:18 PM · May 6, 2021 · Twitter for Android

Housing For All
@PMAYUrban

Rajkot witnessed a massive change in the building construction front with the launch of #LightHouseProjects in January 2021.

Under LHPs, construction of 1,144 houses, using technology named 'Monolithic Concrete Construction using Tunnel Formwork', is being done.

5:56 PM · May 11, 2021 · Twitter for Android

Housing For All
@PMAYUrban

On #NationalTechnologyDay, we celebrate the achievements of our technology experts, innovators, other stakeholders who have contributed immensely towards building a new India.

#HousingForAll