





# 2BHK DIGNITY HOUSING PROJECTS GREATER HYDERABAD MUNICIPAL CORPORATION

# **Background - GHMC**



#### **Greater Hyderabad Municipal Corporation**

- ✓ ULB notified as Greater Hyderabad Municipal Corporation in April 2007
- ✓ Spread over an area of 625 Sq. Km.
- ✓ Population of 6.81 million as per census 2011
- ✓ City divided into 5 zones and 30 circles

#### **Slums in GHMC**

- ✓ No. of notified slums = 1179
- ✓ No. of non-notified slums = 297
- ✓ Total Slums = 1476
- ✓ No. of Households = 4.06 Lakhs
- ✓ Slum population in million = 19.51 Lakhs

#### **Housing Demand in GHMC**

- ✓ SKS Survey Aug 2014 = 4,57,436
- ✓ Target Plan to build for phase I = 1.00 Lakhs
- ✓ Dignity Housing of 560 Sft with 2 Bedrooms, Hall, Kitchen and 2 Bath-cum-Toilets



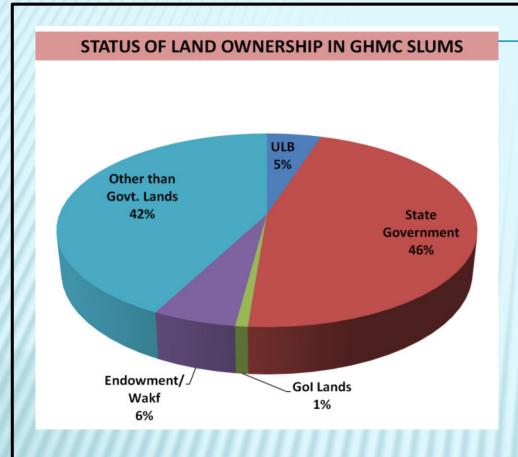


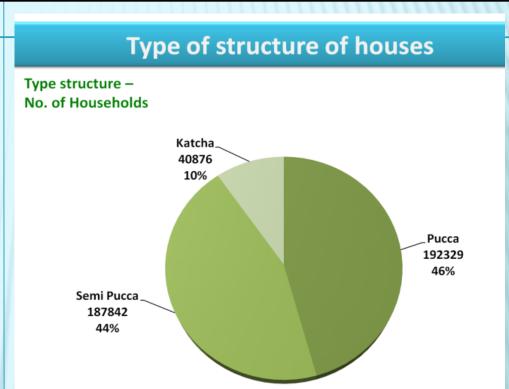




# Background- Slum Details











# Strategy to meet housing demand- Pre Construction



- Area specific demand assessment
- Consultation with stake holders/ slum dwellers/ beneficiaries
- Pinpointing of Trouble free land for development
- Preparation of layout and obtaining approvals
- Preparation of cost estimations
- Ensuring budget provisions





Thursday, February 22, 2018

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Home / Hyderabad / GHMC to conduct counselling sessions for slum dwellers

# **GHMC to conduct counselling sessions for slum dwellers**

GHMC Commissioner B Janardhan Reddy directed the Additional Commissioner (UCD) and Zonal Commissioners to hold counselling sessions for the slum dwellers.







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**Hyderabad:** To expedite construction of two bedroom houses in the city, Greater Hyderabad Municipal Corporation (GHMC) is all set to conduct counselling sessions for slum dwellers, who are reluctant to vacate their houses for construction of two bedroom houses.

GHMC Commissioner B Janardhan Reddy directed the Additional Commissioner (UCD) and Zonal Commissioners to hold counselling sessions for the slum dwellers. During the sessions, officials will explain slum dwellers about advantages of living in double bed room houses, which will be equipped with sufficient parking, drainage, lighting, water and other civic amenities.



# **2BHK Dignity Housing by GHMC**

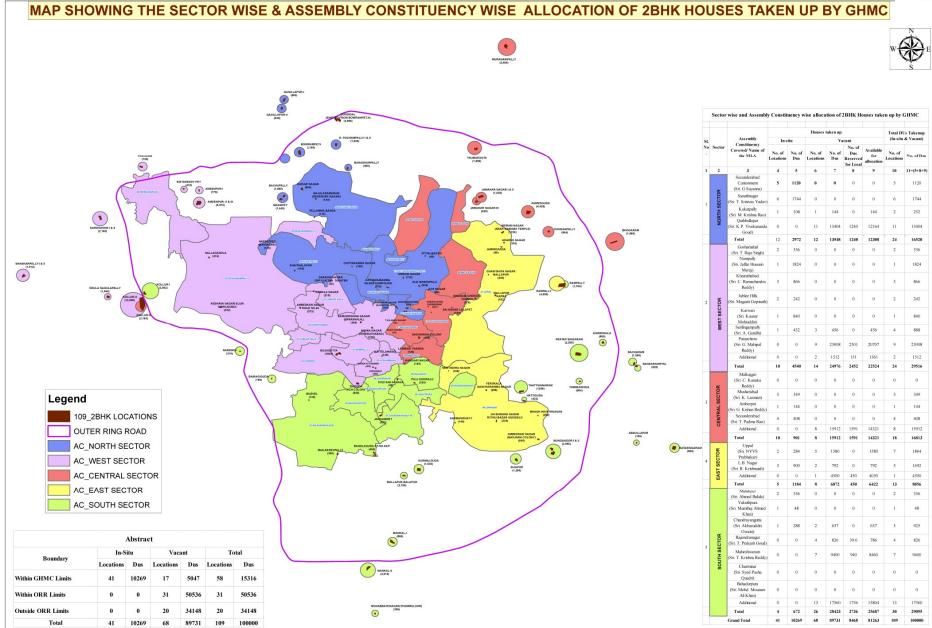


- The Government of Telangana set a target to construct 1,00,000 2BHK houses by GHMC
- 2BHK Houses will be allotted to beneficiaries at free of cost.
- Each house to have 2 Bed rooms, Hall, Kitchen and 2 toilets (Bath-cum-WC) with plinth area of 560 Sft (including common area) carpet area is 430 Sft.
- Works are in brisk progress in 109 locations of Hyderabad, Ranga Reddy, Medchal & Sanga Reddy Districts.

This was possible due to timely amendments to tender rules by Govt.

## Map showing allocation of 2BHK Houses





## 2BHK District wise Breakup



	SI No	Name of the District	In-situ			Vacant			Total (In-situ & Vacant)		
			No. of Location S	Extent In Ac.	No. of DUs	No. of Location S	Extent In Ac.	No. of DUs	No. of Locations	Extent In Ac.	No. of DUs
	1	Hyderabad	34	60.40	8,545	3	9.00	1450	37	69.40	9,995
	2	Ranga Reddy	3	5.65	900	27	147.67	22,966	30	153.32	23,866
	3	Medchal	3	2.65	392	29	253.91	37,527	32	256.56	37,919
	4	Sanga Reddy	0	0.00	0	10	188.27	28,220	10	188.27	28,220
		Total	40	68.70	9,837	69	598.85	90,163	109	667.55	1,00,000

> THE LAND POOLING OF ABOUT 667.50 ACRES WAS POSSIBLE DUE TO "TSUNAMI CONVERGENT MODEL"

Conferred with "Prime Minister Excellence award"

# **Strategy for Land pooling**



• The GHMC adopted two pronged strategy to achieve the target of 1 Lakh houses. One is the development of insitu slums (40 Locations) and the other is development of housing projects in vacant lands (69 Locations) with a requirement of 667.55 Acres of Land.

## **In-Situ Lands: Vacant Lands:** Convergent Model - Coordination with District Counseling by SRACO and Chetana awareness Administration as GHMC comprised four districts programme by media. namely, Hyderabad, Ranga Reddy, Medchal and Sanga Reddy Districts. Seeing is Believing - Field visits to the Modal Coordinated with various State Government slum developed at IDH Colony. institutions and obtained identified open lands from them for the purpose of 2BHK Housing. Tsunami Approach Use of Technology **Common Possession Certificate**

# **Uniqueness of Project**



#### **Beneficiary Share**

To ensure hurdle free and timely completion of the projects, beneficiary share **zero.** 

# Strategy followed in Land Pooling

- Counselling
- Tsunami Approach
- Common Possession Certificate



#### **Best Civic Amenities**

Primary Health Centres Totlots

Greenary

Water Harvesting Structures





# **Uniqueness of Project**



#### **Maintenance Mechanism**

Layouts planned with revenue generating features like shopping malls or shops at stilt floor in order to meet recurring maintenance expenditure towards lift, security, housekeeping of common facilities.

#### **Innovative Technologies**

Shear wall technology

Precast concrete building construction

to complete the project in a short time with higher precision.

Usage of Fly-Ash bricks and PPC cements in constructions in compliance to regulations by Ministry of Environment, GOI.

#### **Linking Infrastructure**

Provision of physical infrastructure like adequate drinking water, road connectivity, efficient drainage and sewerage systems by linking with existing schemes of State Government.

#### **Local Policy Interventions**

The Government was also convinced to provide specific relaxations and incentives to encourage contractors to participate in housing tenders.

#### **Architectural Designs**

Jawaharlal Nehru Architecture &
Fine Arts University (JNAFAU), he
best Architectural University in the
State has been involved for the
design of 2BHK housing.

# Local Policy Initiatives to facilitate implementation



 $GO\ Rt\ No.107\ MAUD,\ Dated\ 28.02.2017: Other\ State\ /\ Central\ Government\ registered\ contractors\ also\ made\ eligible\ to\ participate\ in\ tenders;$ 

GO 849 MAUD, Dated 13.12.2016: Existing GHMC licensed Builders made eligible to participate in tenders;

GO Rt No.380 MAUD, Dated 01.07.2017: To accept the single tenders in the 1st call;

Facilitating the contractors to deal with market fluctuations in procurement of raw materials like cement and steel. The Cement and Steel Manufacturers to provide material at fixed/less than market rates;

Relaxations in building byelaws (largely for in situ development) like height of the buildings, minimal requirement of road widths for high rise buildings;

Sand is supplied at free of cost by TSMDC (Telangana State Mineral Development Corporation);

## Transparency and Accountability



#### **Measures Adopted**

- The tenders for the construction of 1,00,000 Dwelling Units floated online through e-Procurement process
- G.O.Ms.10, HOUSING (RH&C.A1) DEPARTMENT, Dt:15.10.2015 Specifies
  - a. Allotment of flats shall be done by draw of lots
  - b. Preference to differently abled citizens for ground floor allotment
  - c. SC/ST/Minorities caste composition adhered to in selection of beneficiaries SC–17%, ST–6%, Minorities–12%, Others- 65%
- Issuance of Single Possession Certificate to beneficiaries of each in-situ slum as a single document

# Relaxations permitted by Govt. of Telangana



# GO RT NO.107 MAUD, DATED 28.02.2017:

- Permitted to transport construction material during the day time/ No entry time.
- Allowing other technologies in construction of 2BHK houses with approval of the committee comprises members

Secretary to Govt. MA&UD Dept	Chief City Planner, GHMC
Commissioner, GHMC	Superintending Engineer(Housing )GHMC
Engineer-In-Chief/Chief Engineer dealing with Housing	Prof. of Civil Engineering from IIT, Hyderabad
Engineer-In-Chief/Chief Engineer PH	Chief Engineer(Housing) of TSHCL

## **Innovative Technology for Construction**



#### **SHEAR WALL TECHNOLOGY**

Shear wall technology (walls and slab construction using Aluminium form work/Tunnel form work). All the architectural drawings, structural designs and cost analysis pertaining to Shear Wall technology is proof checked by IIT Madras.

#### **Advantages**

- A production cycle of 3 days can be achieved.
- The project can be completed in a short time compared to traditional construction systems.
- Higher precision in production of walls and slab units
- Smooth surfaces for the walls and slabs are obtained. Due to smooth surfaces, walls and slabs do not need any additional finishing such as plaster.



#### **SHEAR WALL TECHNOLOGY**

#### Construction of 6240 Two BHK Houses Stilt+10 floors pattern at Rampally Village

In the Construction **Shear Wall technology** is adopted by using **Tunnel form work imported from Turkey.** 

#### **Tunnel Form:**

- Tunnel form is a formwork system that allows the concrete to cast walls and slabs in one operation.
- ➤ It combines the speed, quality and accuracy of factory/off site production with the flexibility and economy of in-situ construction.
- It gives high quality to require only minimum finishing for direct decoration.
- The system created an efficient load bearing structure for use in a wide variety of applications.

# **Innovative Technology for Construction**



### SHEAR WALL TECHNOLOGY AT RAMPALLY





#### SHEAR WALL/ MONOLITHIC CONSTRUCTION USING ALUMINUM FORMWORK:

#### Methodology:

The structural elements like beams, walls, slabs made of RCC are cast together at one go by using aluminum formwork. The formwork panels will usually be of size 2' in width X 10' in height on either side that are connected with transverse connectors.

#### > Merits:

- Construction speeds can be achieved faster due to light of forms and less labor required for carrying the forms
- > Plastering need not necessarily be required because of the finish obtained
- Formwork components are durable and can be used up to 150 repetitions.

#### **Demerits:**

- Initial investments on formwork will be at higher rate of Rs 10,000/sqm.
- About 150 repetitions are easy to achieve and there after maintenance is required



#### SHEAR WALL TECHNOLOGY WITH ALUMINIUM FORM WORK

# CONSTRUCTION OF 864 TWO BHK HOUSES IN C+S+9 FLOORS AT DUNDIGAL VILLAGE





## **Innovative Technology for Construction**



#### **PRECAST CONSTRUCTION**

Precast concrete building construction. Structural designs proof checked by NIT, Warangal.

#### Advantages

- Increase in speed of construction
- High quality precast concrete units
- Improved durability
- Reduction of in site labour and formwork
- Longer spans can be offered
- All weather working & Faster cycle time



## PRECAST CONCRETE CONSTRUCTION - LIMITATIONS

3 house are distance	Not suitable for residential having closer openings	No page and in the death	Logistics – Production , Handling, Placement and Craneage
	Flexibility to changes		Non – Familiarity of connections
	Mishandling of elements may damage the elements		



# PRECAST CONCRETE CONSTRUCTION

- > Foundation with strip footing along the length of the wall, depth of footing is 600 mm
- > 25 mm dia dowel bars to be fixed in foundation for wall fixing
- ➤ 160 mm thick wall fixed & grouting with GP2(Master flow BASF 718) which is cementitious grout of 25 kg GP2 mixed with 4 liters of water. It is poured into helical sleeves after erecting of walls, grouting material strength reaches upto M60 in 28 days
- > Walls joints are reinforced and filled with self compacting concrete M30 grade
- Columns are casted upto parking floor levels which are cast in situ
- > **Slabs:** Pre-stressed hollow core slabs with grade M40, slab thickness 160 mm and 1.2 meter wide panels casted with high tensile strands of 9.3mm dia
- > Above this HCS reinforcement screed concrete of 60 mm thick
- > The same procedure will be continued for further floors.



# INNOVATIVE TECHNOLOGY FOR CONSTRUCTION

#### PRECAST CONSTRUCTION AT DUNDIGAL-1404 DUS





# **Innovative Technology for Construction**

# PRECAST CONSTRUCTION AT DUNDIGAL-1404 DUs



# PRECAST CONSTRUCTION AT DUNDIGAL-1404 DUS



# PRECAST CONSTRUCTION AT DUNDIGAL-1404 DUS





### Status of 2 BHK Housing scheme by GHMC

#### Physical status of works as on date:

•Earth Work Excavation Stage	-15 Locations	- 7,062 Houses
•Foundation/Footings Stage	-44 Locations	– 48,690 Houses
•RCC Frame works Stage	-37 Locations	– 34,110 Houses
<ul><li>Brick Work/ Finishing works Stage</li></ul>	-08 Locations	– 7,684 Houses
•Completed	-03 Locations	–496 Houses

#### Financial status of works as on date:

•Total Project cost of 1,00,000 Houses	- Rs.8598.58 Cr.
•GoI Subsidy	- Rs.1500.00 Cr
•Govt. of Telangana State Subsidy	- Rs.7098.58 Cr.
•Beneficiary Contribution / Bank Loan	- Nil
•Work carried out	- Rs.2,000 Cr.





**≻**Completed

(Singam Cheruvu thanda, Ameenpur I& Gajularamaram) -496 Houses

➤ By December-2018 -39,669 Houses

➤By June-2019 -33,531 Houses

➤By December-2019 -26,304 Houses

➤ Total -1,00,000 Houses

# IDH COLONY VISIT BY HON'BLE MINISTER-HOUSING GOI







# VISIT OF GHMC HOUSING PROJECTS BY SRI DURGA SHANKER MISHRA, SECRETARY, MOHUA, GOI.

















# KARNATAKA STATE CHIEF ENGINEER & SUPERINTENDENT ENGINEER VISIT TO SINGAM CHERUVU THANDA DIGNITY HOUSING COLONY.







# GOA MUNCIPAL CORPORATION & COUNCILLORS VISIT TO SINGAM CHERUVU









### 2BHK PROJECT – GAJULARAMARAM (144 DUs), GHMC







## AHMEDGUDA Layout displayed at Lucknow



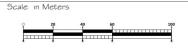


#### 2 BHK Housing at Ahmedguda





PROPOSED 2 BHK HOUSING AT AHMEDGUDA
Sy.No.24/2, 24/3 NEAR RAJIV GRUHA KALPA, MEDCHAL CONSTITUENCY OF GHMC





NCPE Infrastructure India Pvt. Ltd.

Site Area - 20.73 Acres
NOTE:- All Dimensions are in Meters

Infrastructure Designers, Urban Planners and Project Management Consultants (Formerly known as National Consultancy for Planning and Engineering 12-2-826/A1,2 LiC Colony, Meddipatnan, Hyderbads - 500028. Tel: 040-2351 7558. Fax: 040-2351 4379, Cell:: 0-98480 35377, 98490 35377

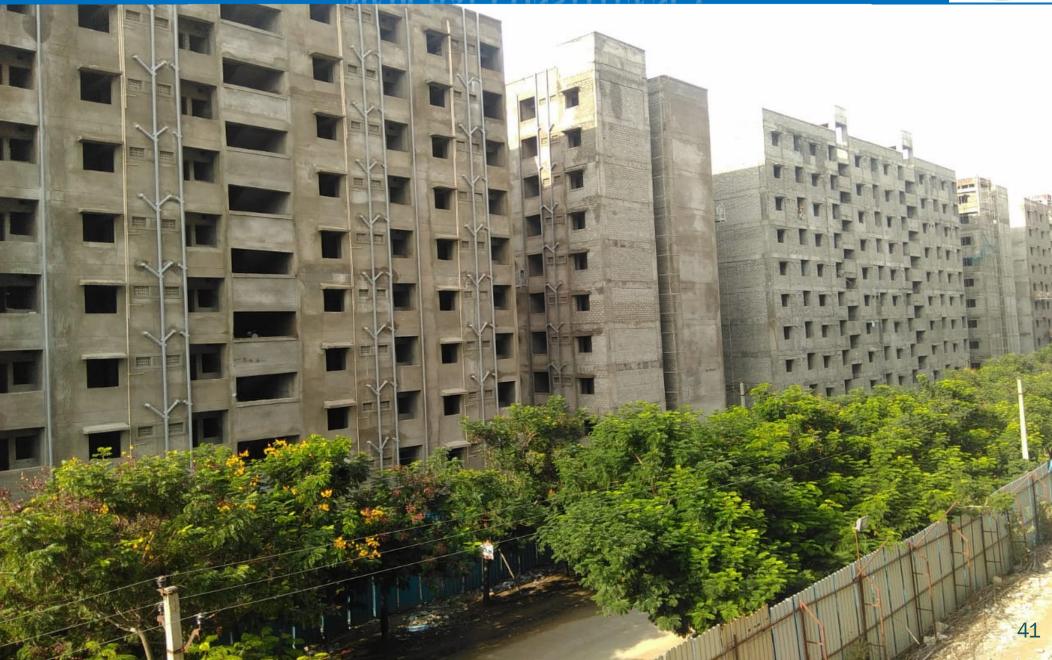
## 4428 DUS IN C+S+9 PATTERN AT AHMEDGUDA OF MEDCHAL CONSTITUENCY





## 4428 DUS IN C+S+9 PATTERN AT AHMEDGUDA OF MEDCHAL CONSTITUENCY





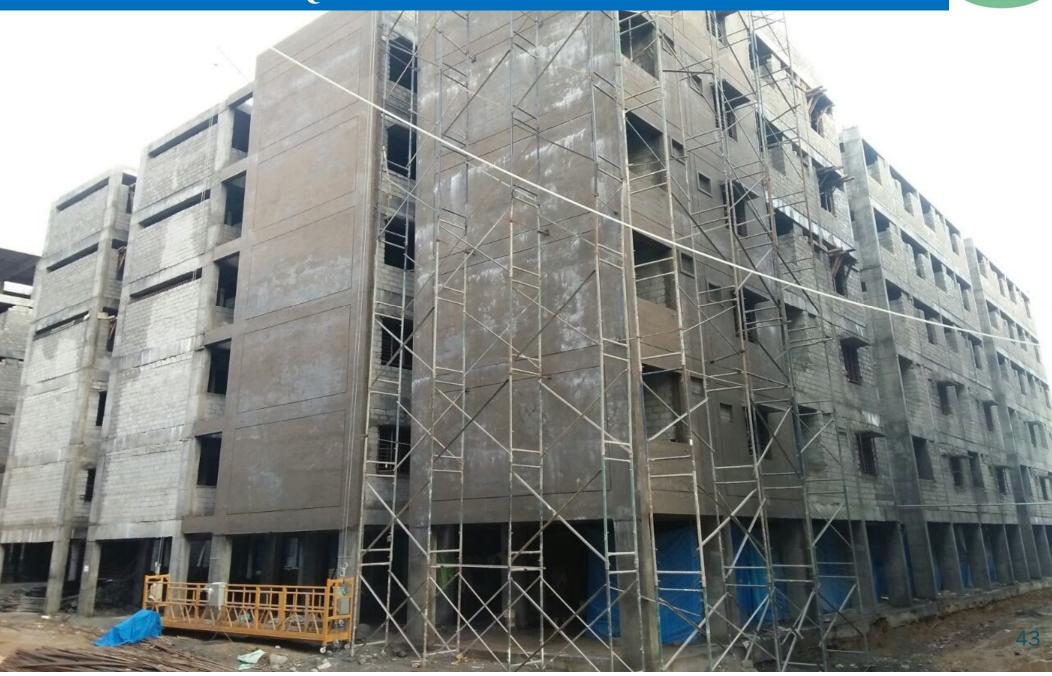
# 1620 DUS IN C+S+9 PATTERN AT D.POCHAMPALLY OF QUTHBULLAPUR CONSTITUENCY





## 900 DUs IN S+5 PATTERN AT BAHADURPALLY OF QUTHBULLAPUR CONSTITUENCY





#### 432 DUs IN C+S+9 PATTERN AT YERUKALA NACHARAMMA BASTHI OF LB NAGAR CONSTITUENCY







## 2052 DUS IN C+S+9 PATTERN AT KOLLUR-I OF PATANCHERU CONSTITUENCY





## 2052 DUS IN C+S+9 PATTERN AT KOLLUR-I OF PATANCHERU CONSTITUENCY





#### **KOLLUR-II LAYOUT**





# 15,660 DUS IN C+S+9 PATTERN AT KOLLUR-II OF PATANCHERU CONSTITUENCY





# 15,660 DUS IN C+S+9 PATTERN AT KOLLUR-II OF PATANCHERU CONSTITUENCY







# GREATER HYDERABAD MUNICIPAL CORPORATION Government of Telangana 2 BHK Housing - HOPE to HOME

