# F. No N-11011/46//2015- HFA-3 (FTS 14150) Government of India M/o Housing & Urban Poverty Alleviation (HFA Directorate)

Nirman Bhawan, New Delhi, Dated: 26 November, 2015

# OFFICE MEMORANDUM

Sub: Minutes of the 3<sup>rd</sup> meeting of the Central Sanctioning-cum-Monitoring Committee (CSMC) for Pradhan Mantri Awas Yojana (PMAY) Urban.

The undersigned is directed to forward herewith a copy of the minutes of the 3<sup>rd</sup> meeting of the Central Sanctioning-cum-Monitoring Committee (CSMC) for Pradhan Mantri Awas Yojana (PMAY)-Housing for All (Urban) Mission held on 18<sup>th</sup> November, 2015 at New Delhi with Secretary, Ministry of Housing & Urban Poverty Alleviation in chair, for information and necessary action.

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(Vinod Gupta)

Encl: As above

Under Secretary to the Govt. of India

Tel: 011-23062859

## To,

## Members of the CSMC as follows:

- 1. Secretary, Ministry of Urban Development, Nirman Bhavan, New Delhi
- 2. Secretary, Department of Expenditure, Ministry of Finance, North Block, New Delhi.
- 3. Secretary, Ministry of Social Justice and Empowerment Shastri Bhavan, New Delhi.
- 4. Secretary, Department of Health and Family Welfare, Nirman Bhawan, New Delhi.
- 5. Secretary, Department of Financial Services, Ministry of Finance.
- 6. Secretary, Ministry of Labour & Employment, Shram Shakti Bhawan, New Delhi
- 7. Secretary, Ministry of Minority Affairs, Paryavaran Bhawan, New Delhi
- 8. Joint Secretary (UPA), MoHUPA.
- 9. Joint Secretary (Housing), M/o HUPA
- Joint Secretary and Financial Adviser, Ministry of U D & M/o HUPA, Nirman Bhavan, New Delhi.
- 11. Mission Director (Smart Cities), MoUD.
- 12. Joint Secretary & Mission Director -in charge of HFA, MoHUPA

# Special Invitees:

- 1. The Secretary to Government, Housing Department, Govt. of Andhra Pradesh.
- 2. The Secretary, Housing and Urban Development Department, Government of Tamil Nadu, Secretariat, Chennai 600009.
- The Principal Secretary to Government, Municipal Administration & Urban Development Department, Government of Telangana, D-Block, 1st Floor, Secretariat, Hyderabad- 500022
- 4. The Principal Secretary, LSG&CEO, RUIFDCO, Government of Rajasthan.
- 5. The Secretary to Government, Housing Department, Government of Gujarat, 3rd Floor, Pragatinagar, Naranpura, Ahmedabad-380013.
- 6. RICS School of Built Environment, Amity University, Noida.
- 7. Central Building Research Institute (CBRI), Roorkee.

# Copy to:

- 1. CCA, M/o (UD & HUPA)
- 2. CMD, HPL
- 3. ED (BMTPC), India Habitat Centre, Lodhi Road, New Delhi
- 4. DCP (Projects), HUDCO, India Habitat Centre, Delhi
- 5. Director-(HFA-1), M/o HUPA
- 6. Deputy Secretary (IFD)
- 7. Deputy Secretary-HFA-4
- 8. Deputy Secretary-HFA-3
- 9. Under Secretary-HFA-1
- 10. Under Secretary-HFA-2
- 11. Under Secretary-HFA-4

Dupolis.

(Vinod Gupta)

Under Secretary to the Govt. of India

## Copy also to:-

- 1. PPS to Secretary (HUPA)
- 2. PS to JS (UPA)
- 3. PS to JS (H)
- 4. P.S. to D G (NBO)
- 5. G.M (Projects), HUDCO, India Habitat Centre, Delhi
- 6. Head PMU, HFA mission.
- 7. Section Officer-HFA-1/HFA-2/HFA-3/HFA-4
- 8. Accounts Officer (JNNURM/HFA)

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(Vinod Gupta)

Under Secretary to the Govt. of India

Minutes of the 3<sup>rd</sup> Central Sanctioning and Monitoring Committee (CSMC) meeting of Pradhan Mantri Awas Yojana, Housing for All (Urban) Mission held on November 18, 2015

The 3<sup>rd</sup> Meeting of the Central Sanctioning and Monitoring Committee (CSMC) of Pradhan Mantri Awas Yojana (PMAY) Housing for all (Urban) Mission was held *on* **18**<sup>th</sup> **November, 2015 at 11.30 A.M.** in NBO Conference Hall, Room No:120, G-Wing, Nirman Bhawan, New Delhi with Secretary, Ministry of Housing and Urban Poverty Alleviation in Chair. The list of participants is enclosed at **Annexure - I** 

2. Joint Secretary and Mission Director (HFA) welcomed the Chairperson and other Members of the Committee, representatives of States and other participants and briefed the Committee on the agenda listed for consideration. Thereafter, the Committee considered the following agenda items:

Agenda 1: Confirmation of the minutes of the 2<sup>nd</sup> meeting of CSMC (HFA) held on 27.10.2015.

3. The CSMC confirmed the minutes of the 2<sup>nd</sup> meeting held on 27.10.2015.

Agenda 2: Consideration of Proposal from RICS, School of Built Environment, Amity University, Noida for preparation of Comprehensive Implementation Manual for the Factory Made Fast Track Modular Building System under the Pradhan Mantri Awas Yojana- Housing for All (Urban) Mission.

4.1 Joint Secretary & Mission Director provided a brief introduction to the agenda item. BMTPC had short listed 8 alternative building technologies which were released during the launch of PMAY – Housing for All (Urban) Mission. Under technology submission of PMAY, MoHUPA is encouraging the evolution of manuals, SoRs, Guidelines, Tender Documents etc for these eight technologies to facilitate their deployment in field. Present proposal is for development of implementation manuals for one of the eight technologies. JS & MD then invited ED, BMTPC to brief the CSMC about the proposal.

- 4.2 ED, BMTPC, submitted that BMTPC has short listed following eight technologies through its Performance Appraisal Certification programme:
  - (i) Monolithic Concrete Construction System using Plastic Aluminium Formwork
  - (ii) Monolithic Concrete Construction System using Aluminium Formwork
  - (iii) Expanded Polystyrene Core Panel System
  - (iv) Industrialized 3-S System using Precast RCC Columns, Beams & Cellular Light Weight Concrete Precast RCC Slabs
  - (v) Speed Floor System
  - (vi) Glass Fibre Reinforced Gypsum (GFRG) Panel Building System
  - (vii) Factory Made Fast Track Modular Building System
  - (viii) Light Gauge Steel Framed Structures (LGSF)
- 4.3. ED, BMTPC, explained that BMTPC has prepared a list of technical documents & Manuals required for facilitating deployment of these eight technologies. These are:
- Detailed Technology description along with specifications & properties.
- Description on advantages, limitations, economy of scale, life-cycle cost, sustainability, hazard resistance and comparison with conventional construction systems
- Design manual comprising Design philosophy, methodology, design principle, software, applicable standards (national/international)
- Construction manual comprising construction sequence, process including plant & machinery requirement at site, manpower requirement (skilled, unskilled)
- Compatibility & installation details of internal services i.e. plumbing, sanitary, electrical, waterproofing, HVAC etc.
- Quality Control and Assurance manual
- Rate analysis and estimation including SOR and other relevant parameters required for tender preparation
- Plinth area rates (PAR) on the lines of CPWD
- Maintenance requirements and methodology
- Training Modules for Professionals, Supervisors & Artisans
- Case studies of few projects completed with time period, cost, constraints, if any.
- Detailed estimates including architectural, structural & construction drawings for a typical building of G+3 storeys having 4 DUs on a floor with minimum carpet area of 30 Sq M.

- 4.4. The instant proposal is to develop technical documentation for Factory Made Fast Track Modular Building System, one of the eight technologies identified, for which RICS has submitted its proposal. ED, BMTPC requested Prof Sawhney of RICS to give further details of the proposal.
- 4.5. Prof. Sawhney of RICS apprised CSMC of the proposal and time frame for the same through a presentation. He further informed CSMC that the institute has requisite expertise in this field as they have been working on alternate technologies since last fifteen years. A budget estimate of Rs.17.25 lakhs was presented which is kept at **Annexure 2**. Prof. Sawhney also informed that RICS is a not-for-profit institution, and is governed by the guidelines of Royal Charter of Public Good, UK; the accounts of RICS are regularly audited. He presented the methodology to be adopted and the expected deliverables from the project and also informed CSMC that expected timelines for the assignment is about 4 months. Copy of the presentation made by Prof Sawhney is attached with minutes at **Annexure 3**.
- 4.6 CSMC approved the proposal subject to:
- (i) RICS entering into a formal institutional arrangement with the Ministry on the lines of similar MoUs agreed to by other technical institutions under the Technology Sub-mission.
- (ii) The rates of manpower budgeted by RICS may be adjusted at par with the rates quoted by IIT, Kanpur, for similar proposal approved in 2<sup>nd</sup> CSMC. Prof Sawhney of RICS agreed to the same. The detailed break-up of the manpower costing on the lines of IIT Kanpur will be submitted to the Ministry. Prof. Sawhney also submitted that consumable & travels etc would be as per actual with upper ceiling as per proposal.
- 4.7 CSMC decided to release 50% of the amount as 1<sup>st</sup> instalment after meeting the above compliances with the approval of Chairperson of the CSMC, in file.

Agenda No. 3 Consideration of Proposal from CBRI, Roorkee for Preparation of a Manual for Expanded Polystyrene (EPS) Core Panel System and its field Application" under Technology Sub-Mission of Housing for All.

- 5.1 In the absence of the representative from CBRI, ED, BMTPC was requested to present the proposal. CSMC, noted that the proposal is from a Government funded technical institution and covered an important aspect of the Sub-mission. Proposal is for development of technical documentation and guidance for deployment of EPS core panel system, one of the eight technologies shortlisted by BMTPC. Project is to be completed in 10 months and will have the deliverables as mentioned in 4.3. The proposal is for Rs. 33.06 lakh.
- 5.2 CSMC observed that the budgetary estimates needed to be worked out in greater detail and submitted to the Ministry ensuring that the action plan is in sync with the costing elements indicated in the proposal. CSMC also indicated that international travel cannot be considered as part of project cost. The detailed budgetary estimates have been worked out and submitted to the Ministry, before finalisation of the minutes which may be seen at **Annexure-4**. As per revised proposal project cost is Rs. 29.00 lakh. Approval and sanction will be accorded with the concurrence of Finance Wing and with the approval of Chairperson after processing revised cost estimates in file. It was also decided that 1<sup>st</sup> instalment of 50% can be released to CBRI, Roorkee, on compliance of above observations.

# Agenda 4: Consideration for approval of Central Assistance for the 78 Projects submitted by Government of Andhra Pradesh under Affordable Housing in Partnership.

- 6.1 JS&MD submitted that Agenda No. 4 is for consideration of 78 AHP projects submitted by Government of Andhra Pradesh and requested Secretary (Housing) and Mission Director, Government of Andhra Pradesh to give further details.
- 6.2 Secretary (Housing), Government of Andhra Pradesh made a detailed presentation on housing requirements both in rural and urban areas in Andhra Pradesh as well as on the strategy being adopted by Government of Andhra Pradesh for meeting

the housing shortage. He submitted that Government of Andhra Pradesh is focussed on providing housing for all using innovative building technologies for achieving faster and better construction. He further submitted that though the present CSMC's agenda is for 78 AHP projects in 38 cities consisting of 1,20,106 houses, State Government requests CSMC to consider 32 beneficiary led construction projects submitted by State along with these 78 AHP projects. The State Secretary cited the strength of Government of Andhra Pradesh in implementing beneficiary led construction projects in past.

- 6.3 Chairperson permitted Secretary (Housing) of Andhra Pradesh to present 78 AHP projects followed by a presentation on 32 beneficiary led projects.
- 6.4 Secretary (Housing), Government of Andhra Pradesh highlighted following points while making presentation on proposals:
- (i) These projects will be implemented by Andhra Pradesh State Housing Corporation Ltd (APSHCL). The State Government reported sufficiency of expertise and technical resources in implementing state-wise projects.
- (ii) State Government land is being made available for all these projects.
- (iii) Operational and Maintenance of all these projects in the first 2 years will be the responsibility of State Government implementing agency. Thereafter the houses will be maintained by individual beneficiary on their own or through some collective mechanism.
- (iv) It was submitted that State Government has prepared quality assurance plans which will be implemented for these projects.
- (v) He further informed that State will use innovative and disaster resistant technology in implementing these projects. Infrastructure will be provided by concerned ULBs/concerned State Government agencies in all these projects and projects will be completed in 2 years.
- (vi) On the question of 13 projects with less than 250 houses, Secretary (Housing), Government of Andhra Pradesh explained that out of 13 projects, 9 projects are in one city which collectively have more than 250 DUs if entire city is taken into account and only 4 projects have less than 250 houses if taken on city basis. On the question of adversity to cost economics in implementing these small projects,

he assured that since these projects are being implemented across the State, there will be no adversity to cost economics in implementing these projects. CSMC agreed to the submission of Government of Andhra Pradesh in relaxation of para 6.4 of the Guidelines.

- (vii) Secretary (Housing), Government of Andhra Pradesh further informed that cost of the houses is expected around Rs. 5.5 Lakhs. Gol assistance of Rs. 1.5 lakh will be factored in while finalising the cost to the beneficiary. Government of Andhra Pradesh is providing land free of cost and in addition, it is contemplating financial assistance of Rs. 1 lakh to Rs. 1.5 lakh and in that case final cost to the beneficiary will range from Rs. 2.50 lakhs to Rs. 3.00 lakhs.
- (viii) SLSMC has approved these projects in its meetings held on 30.10.2015 and 03.11.2015 respectively.
- 6.5 CSMC, after detailed deliberation approved total Central Assistance amounting to Rs. 1,80,159.00 Lakhs (Rs. One lakh eighty thousand and one hundred fifty nine lakhs only) @ 1.50 Lakhs per EWS house for 1,20,106 EWS houses of 78 AHP projects in 38 cities approved by the SLSMC of the State Government of Andhra Pradesh. The details of the projects are at **Annexure-5**. CSMC also approved release of first instalment of 40% of amount of Central assistance i.e. Rs.72,063.60 Lakhs. CSMC also noted that Government of Andhra Pradesh will extend financial assistance of Rs. 1.0 Lakh to Rs. 1.5 Lakh per DU and cost to the beneficiary will range from Rs. 2.5 lakh to Rs. 3.0 Lakh.
- 6.6 CSMC also observed the following for compliance from the State Government
- (i) List of beneficiaries should be finalised along with their social and other categories before release of 2<sup>nd</sup> instalment. Beneficiary should be identified as per Mission Guidelines with adherence to all criteria.
- (ii) State and ULB need to ensure availability of infrastructure and deploy disaster resistant features in implementing these projects.
- (iii) Since financing of these projects also depends on contribution from beneficiary, therefore these AHP projects should be started on ground only after minimum number of beneficiaries have booked their houses in these projects.

- 6.7 Thereafter on the request of Secretary(Housing), Government of Andhra Pradesh, CSMC considered 32 beneficiary led projects for 73,041 EWS houses in 31 cities at the cost of Rs. 3865.62 crores with Central assistance of Rs. 1095.61 crore at the rate of Rs. 1.5 lakh per house. Secretary (Housing), Government of Andhra Pradesh informed that these beneficiaries have been selected and verified by revenue authorities headed by District Collector and these beneficiaries have land in their name and building plans have also been approved by competent authority. It was informed that beneficiaries have been selected as per Mission Guidelines. Secretary (GoAP) also emphasised on the capacity and experience of the State Government in implementing and monitoring beneficiary led construction of houses in the past. It was also submitted that SLSMC has approved these projects in its meeting held on 30.10.2015, 03.11.2015 & 10.11.2015 respectively. Details of these projects are at **Annexure-6**.
- 6.8 CSMC, after detailed discussion, provided 'in-principle' approval to these 32 projects and requested for following compliances:
- (i) State to give an undertaking that entire city has been covered for beneficiary Led construction of houses under the proposed project and each beneficiary family has been identified as per mission guideline.
- (ii) Housing status of beneficiary has been verified and validated with SECC data and only kutcha or half kutcha houses have been proposed under the project.
- (iii) Remaining amount, other than GOI assistance, required for completion of houses has been tied up and GoI fund will be released as per mission guidelines. Construction of houses would be monitored using NRSC system of geo-tagging of photographs being developed for PMAY.
- (iv) The beneficiaries are availing of only one benefit under the Mission.
- 6.9 CSMC also directed HUDCO to scrutinise DPRs of selected beneficiary led projects along with beneficiaries' details, availability of land etc. and to submit their report by 10<sup>th</sup> December, 2015 before the next CSMC meeting which is tentatively scheduled on 14<sup>th</sup> December, 2015. CSMC further directed that only on receipt of compliance of State Government and DPR scrutiny report from HUDCO, CSMC will consider release of first instalment for these 32 beneficiary led projects.

Agenda no. 5 Consideration for approval of Central Assistance for the 8 Projects submitted by Government of Gujarat under Affordable Housing in Partnership component of PMAY- HFA (Urban).

- 7.1 JS&MD submitted that Agenda No. 5 is for consideration of 8 AHP projects submitted by Government of Gujarat and requested Secretary (Housing), Government of Gujarat to give further details.
- 7.2 Secretary (Housing), Government of Gujarat made a presentation on strategy being adopted by Government of Gujarat for meeting the housing shortage. He submitted that the current proposal is for 8 AHP projects in 5 cities consisting of 5125 EWS houses.
- 7.3 Secretary (Housing), Government of Gujarat highlighted the following while making presentation on proposals:
  - (i) These projects will be implemented by City Urban Development Authority, Municipal Corporation and Gujarat Housing Board. These organisations have enough expertise and technical resources for implementing these projects.
  - (ii) All projects are proposed on Government or ULB Land
  - (iii) Beneficiaries have been selected for all the projects and initial booking amount have been taken from these beneficiaries. Further, the eligibility of the beneficiaries have been checked and is in compliance with the PMAY guidelines.
  - (iv) Indicative timeline for completion of the project is 2 years.
  - (v) Secretary (Housing), Government of Gujarat further informed that cost of the houses is expected to be about Rs. 6.00 Lakhs. Gol assistance of Rs. 1.5 lakh will be factored in while finalising the cost to the beneficiary. Government of Gujarat is providing land free of cost and in addition, it is contemplating financial assistance of Rs. 1.5 lakh; in that case final cost to the beneficiary will be Rs. 3.00 lakhs.
  - (vi) It was also informed by the State representative that the all 8 proposed AHP projects are from AMRUT towns, therefore infrastructure gap, if any, would be dealt by ULB either under AMRUT or under their own initiative.

- (vii) Secretary(H), Government of Gujarat further, informed that SLSMC has approved these projects on 06.11.2015.
- 7.4 CSMC, after detailed deliberation, approved total Central Assistance amounting to Rs. 7687.50 Lakhs (Rs. Seven thousand and six hundred eighty seven lakhs and fifty thousand only) at the rate of Rs. 1.50 Lakhs per EWS house for 5125 EWS houses in 8 AHP projects in 5 cities. The details of the projects are at **Annexure-7**. CSMC also approved release of first instalment of 40% of amount of Rs.3075.00 Lakhs
- 7.5 CSMC also observed the following for compliance from the State Government
  - (i) List of beneficiaries should be finalised along with their social and other categories before release of 2<sup>nd</sup> instalment. Beneficiary should be identified as per Mission Guidelines with adherence to all categories.
  - (ii) State and ULB need to ensure availability of infrastructure and deploy disaster resistant features in implementing these projects.

# Agenda 6: Consideration for approval of Central Assistance for 26 Projects submitted by Government of Telangana under Affordable Housing in Partnership component of PMAY.

- 8.1 JS&MD submitted that Agenda No. 6 is for consideration of 26 AHP projects submitted by Government of Telangana and requested Secretary (Housing), Government of Telangana to provide further details of the proposal. These projects have been submitted by Government of Telangana on 17.11.2015 to the Ministry.
- 8.2 Secretary (Housing), Government of Telangana made a detailed presentation on housing requirements both in rural and urban areas in Telangana and on the strategy being adopted by Government of Telangana for meeting the housing shortage. The State representative submitted that the Government of Telangana is focussed on providing housing for all using innovative building technologies for achieving faster and better construction. It was further submitted that the proposal is for 26 AHP projects in 10 cities consisting of 10290 EWS houses.

- 8.3 Secretary (Housing), Government of Telangana highlighted the following issues while presenting the proposals:
  - (i) These projects will be implemented by respective ULBs. Concerned ULBs have enough expertise and technical resources in implementing these projects.
  - (ii) The State of Telangana has announced a 2 BHK housing Scheme with a size of 60 sq. mt. free of cost to the EWS households in the State. During the year 2015-16, the State has targeted construction of 60,000 houses where urban component is 24000. The State representative also informed that 400 units of model houses under 2 BHK housing Scheme has already been handed over to the beneficiaries in Hyderabad.
  - (iii) The State government is providing Rs. 5.3 Lakhs for each housing unit and additional Rs. 75000/- for infrastructure and house will be provided to beneficiary free of cost.
  - (iv) In all 26 proposed projects, land belongs to the respective ULBs and projects will be implemented by ULBs only.
  - (v) The beneficiaries of all these projects are already identified by district authorities and comply with PMAY Guidelines. On further inquiry on beneficiary selection process, the Secretary of State of Telangana informed that a comprehensive household survey was conducted in year 2014 on the single day by involving all State Government officials to get correct lists of beneficiaries. Further, a sub divisional level revenue officer is responsible for verification of beneficiary. This verification is further validated by District Collector. The survey has resulted in demand of 4 lakh houses in urban areas and total demand of 13 lakh including rural areas.
  - (vi) Secretary(H), Government of Telangana, further mentioned that these 26 projects would be completed in 2 years.
  - (vii) On the question of 10 projects with less than 250 houses, Secretary (Housing), Government of Telangana explained that out of 10 projects, 5 projects are in two cities having more than 250 DUs if entire city is taken into account and only 5 projects have less than 250 houses. On the

question of negative impact on cost economics in implementing these small projects, he assured that since these projects are being implemented across the State, there will be no negative cost economics in implementing these projects.

- (viii) Secretary(H), State Government of Telangana further submitted that these projects have been approved by SLSMC on 09.11.2015.
- 8.4 CSMC, after detailed deliberation, approved total Central Assistance amounting to Rs. 15,435.00 Lakhs (Rs. Fifteen thousand and four hundred thirty five lakhs only) @ 1.50 Lakhs per EWS house for 10290 EWS houses of 26 AHP projects in 10 cities approved by the SLSMC of the State Government of Telangana. The details of the projects are at **Annexure-8**. CSMC also approved release of first instalment of 40% of amount of Rs.6174.00 Lakhs
- 8.5 CSMC also observed the following for compliance from the State Government
- (i) List of beneficiaries should be finalised along with their social and other categories before release of 2<sup>nd</sup> instalment. Beneficiary should be identified as per Mission Guidelines with the adherence to all categories.
- (ii) State and ULB need to ensure availability of infrastructure and deploy disaster resistant features in implementing these projects.
- (iii) State Government should ensure that only eligible beneficiaries get allotment and State Government should take necessary action to prevent unauthorised transfer to non eligible beneficiary.

# Agenda no. 7 Consideration for approval of Central Assistance for the 8 AHP Projects submitted by Tamil Nadu under Affordable Housing in Partnership (AHP)

- 9.1 JS&MD submitted that Agenda No. 7 is for consideration of 8 AHP projects submitted by Government of Tamil Nadu and requested Managing Director, Tamil Nadu Slum Clearance Board (TNSCB), Government of Tamil Nadu to give further details.
- 9.2 Managing Director, TNSCB provided a detailed presentation on these 8 AHP projects in 7 cities consisting of 3024 EWS houses.

- 9.3 Managing Director, TNSCB highlighted following points while making presentation on proposals:
- (i) These projects will be implemented by Tamil Nadu Slum Clearance Board. The TNSCB has enough expertise and technical resources in implementing state-wise projects. All projects are proposed on Government Land.
- (ii) The beneficiaries are already identified for each Project and are from the slums, and they have agreed to be relocated at the proposed sites.
- (iii) Beneficiary contribution of EWS DUs will range from 0.66 Lakhs to 2 Lakhs. As the project of Chennai has 32 beneficiaries, no beneficiary contribution is proposed for this projects given that the beneficiaries in this project are very poor.
- (iv) The State representative further submitted that SLSMC of Government of Tamil Nadu for HFA has approved these projects on 03.11.2015.
- 9.4 CSMC observed that two projects of Chennai and Madurai have proposed only 32 and 76 houses respectively. The CSMC decided to scrutinize the DPRs of Chennai & Madurai, which may be considered in the next meeting likely to be scheduled on 14.12.2015. CSMC directed HUDCO to scrutinize these two DPRs and submit their reports within 07/12/2015.
- 9.5 CSMC, after detailed deliberation, approved total Central Assistance amounting to Rs. 4374.00 Lakhs (Rs. Four thousand and three hundred seventy four lakhs only) @ 1.50 Lakhs per EWS house for 2916 EWS houses for 6 AHP projects in 5 cities. The details of the projects are at **Annexure-9**. CSMC also approved release of first instalment of 40% of amount of Rs.1749.60 Lakhs
- 9.6 CSMC also observed the following for compliance from the State Government
- (i) List of beneficiaries should be finalised along with their social and other categories before release of 2<sup>nd</sup> instalment. Beneficiary should be identified as per Mission Guidelines with the adherence to all categories.
- (ii) State and ULB need to ensure availability of infrastructure and deploy disaster resistant features in implementing these projects.

(iii) Since financing of these projects also depends on contribution from beneficiary, therefore these AHP projects should be started on ground only after minimum number of beneficiaries have accorded their willingness to avail of houses in these projects along with financial commitment for the same.

Agenda 8: Consideration for approval of Central Assistance for the 13 Projects submitted by Government of Rajasthan under Affordable Housing in Partnership (AHP) of PMAY (Urban).

- 10.1 JS&MD submitted that Agenda No. 8 is for consideration of 13 AHP projects submitted by Government of Rajasthan and requested Managing Director, Rajasthan Awas Vikas Infrastructure Ltd (RAVIL) to give further details.
- 10.2 Managing Director, RAVIL made detailed presentation on 13 AHP projects in 9 cities consisting of 6255 EWS houses.
- 10.3 Managing Director, RAVIL highlighted following points while making presentation on proposals:
- (i) These projects will be implemented by Urban Local Bodies and Development Authorities. These agencies have enough expertise and technical resources in implementing projects.
- (ii) Beneficiaries have been identified and registration has been done. Beneficiaries are as per PMAY guidelines.
- (iii) State representative informed CSMC that these projects will be implemented by Private Developers selected by the State Government through transparent bidding process. Land has been provided by State Government with certain incentives to private developers. Private developers will hand over EWS houses to Rajasthan Government for allotment to selected beneficiaries.
- (iv) The State/ ULB share is in the form of land for the projects.
- (v) The implementing agency share would be in the form of 'Waiver of Land use change' charges, Plan approval fee and external developmental charges.
- (vi) Operation and Maintenance for first year will be done by the Developer and subsequently by local resident Welfare Society.

- (vii) The cost of the houses is varying from Rs.3.01 lakhs to Rs. 5.04 lakhs but State Government of Rajasthan has fixed sale price of EWS units ranging from Rs.2.7 lakh to rs.4.16 lakh. After factoring Gol assistance of Rs. 1.5 lakh, the final sale price to the beneficiary will range from Rs.1.2 lakh to Rs.2.66 lakh.
- (viii) The State representative further informed that SLSMC has approved these projects in its meeting held on 10.11.2015.
- 10.4 CSMC, after detailed deliberation, approved total Central Assistance amounting to Rs. 9,382.50 Lakhs (Rs. Nine thousand and three hundred eighty two lakhs and fifty thousand only) @ 1.50 Lakhs per EWS house for 6255 EWS houses of 13 AHP projects in 9 cities. The details of the projects are at **Annexure-10**. CSMC also approved release of first instalment of 40% of amount of Rs.3753.00 Lakhs. CSMC also noted that final cost of the beneficiary would be ranging from Rs.1.2 lakh to Rs.2.66 lakh.
- 10.5 CSMC also observed following for compliance from the State Government:
- (i) List of beneficiaries should be finalised along with their social and other categories before release of 2<sup>nd</sup> instalment. Beneficiary should be identified as per Mission Guidelines with the adherence to all categories.
- (ii) State and ULB need to ensure availability of infrastructure and deploy disaster resistant features in implementing these projects.
- 11. The CSMC placed on record its appreciation of the contribution of Shri Sanjeev Kumar, Joint Secretary & Mission Director (HFA) whose tenure in the Ministry of Housing & Urban Poverty Alleviation will be ending on 25<sup>th</sup> November, 2015.

The meeting ended with a vote of thanks to the Chair

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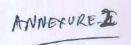
# LIST OF PARTICIPANTS

# 3<sup>rd</sup> meeting of the CSMC for Pradhan Mantri Awas Yojana -Housing for All (Urban) Mission

# 18<sup>th</sup> November,2015 at 120-G conference Room,

	Name and Designation	Organisation
	MINISTRIES	Organisation
1	Dr. Nandita Chatterjee, Secretary (HUPA)	M/o HUPA, In Chair
2	Ms. Jhanjha Tripathi, JS & FA	M/o HUPA
3	Shri Sanjeev Kumar, Jt Secy & Mission Director (HFA)	M/o HUPA
4	Shri R. S. Singh, Director (HFA I)	M/o HUPA
5	Shri S B Sinha, Director	M/o HUPA
6	Shri S. K. Valiathan, DS (HFA-IV)	M/o HUPA
7	Shri Angna Ram, DS (IFD & HOUSING)	M/o HUPA
8	Shri S. C. Jana, DS (HFA-III)	M/o HUPA
9	Shri Umraw Singh, Addl. Economic Adviser	M/o HUPA
10	Shri Rahul Mahna, US (HFA-IV)	M/o HUPA
11	Shri R. D. Talukdar, US	M/o HUPA
12	Shri Nagendra, SO (HFA-III)	M/o HUPA
13	Shri Rajiv Jha, SO (HFA-II)	M/o HUPA
14	Shri Arvind Kumar, Dy. Chief, MIS	M/o HUPA
	STATE GOVERNMENTS	
1	Shri R. Palaniswamy, M.D. Tamilnadu Slum Clearance Board	Tamilnadu
2	Shri Lav Agrawal, IAS, Secretary Housing	Andhra Pradesh
3	Shri T.K Kama Asst. EXE Engineer	
4	Shri Ch. Mallikaarjuna Rao ,Chief Engineer, AP State Housing	Andhra Pradesh
	corporation department of Housing Govt. Of AP	
5	Shri M.Danakishore, IAS	Commissioner & Division of
		Municipal Administration, J.S
6	Shri R.K.Agrawal, Managing Director, RAVIL	Rajasthan
7	Shri J.S. Nagpal, General Manager, RAVIL	Rajasthan
8	Shri Mukesh, Assistant Town Planner, URBAN Development	Rajasthan
	& Housing Deppt. Govt. of Rajasthan	
9	Shri Ashvini Kumar, IAS, Secretary Housing	Gujarat
10	Shri A.K Patel , Chief Engineer, Affordable Housing Mission	Gujarat
11	Shri Bhavin.B.Patel , Affordable Housing Mission	Gujarat
12	Shri D.Kaval Kumar, MEPMA (HFA) SLNA Consultant / TS.	Telangana
13	Shailendra Jain , AEN, UIT KOTA AEN	Rajasthan
14	Shri A.A. Rao, Add Dir (Media)	
	HUDCO/ BMTPC	
1	Shri Shailesh Kumar Agrawal, ED, BMTPC	BMTPC
2	Smt. Usha P Mahavir, GM (Project)	HUDCO

3	Smt. Radha Roy	HUDCO
4	Shri Pankaj Gupta, Dy Chief	ВМТРС
	OTHER INSTITUTES/ORGA	
1	Shri Rajesh Goel, CMD, HPL	HPL (1996)
2	Shri Anil Sawhney, Professor, RICS, SBE	AMITY UNIVERSITY
	PROJECT MANAGEMENT/ SU	
1	Shri Rakesh Srivastava M.E. Engineer	SNPUPR
2	Shri Gautam Banerjee (Lead Eng.)	PMU, HFA
3	Shri Khatibullah Sheikh Lead Urban Planning	PMU, HFA
4	Shri Arup Khan, Coordinator	PMU, HFA
5	Shri Krupal Bhavsar, Urban Planner	PMU, HFA





# Comprehensive Implementation Manual for the Factory Made Fast Track Modular Building System

Project Budget in the Revised Format

	ltem	BUDGET (in Rupees)
Α	Recurring	
	1. Salaries/Wages	
	Sr. Project Engineer	₹ 1,75,000.00
	Project Associate	₹ 1,00,000.00
	Project Assistant	₹ 75,000.00
	Subtotal	₹ 3,50,000.00
	Contingency/Consumables/Stationery, Photocopying, Printing (workshop brochures etc.), postage, Telephone Charges etc.	₹ 62,500.00
	3. Travel (Including site visits, visit to manufacturers' locations etc.)	₹ 3,75,000.00
1	4. Other Costs (Purchase of publications, books and codes)	₹ 1,25,000.00
	Total Recurring (A)	₹ 9,12,500.00
В	Non-Consumables (Equipment) (Computer accessories, such as a cameras, printer, scanner, mobile, etc.)	₹ 1,25,000.00
	Total (A+B)	₹ 10,37,500.00
С	Faculty Cost	₹ 4,00,000.00
	Total (A+B+C)	₹ 14,37,500.00
	Institute Overhead @20% (of A+B+C)	₹ 2,87,500.00
	Grand Total	₹ 17,25,000.00

<sup>1</sup> The salary structure for the proposed staff is as per norms of RICS

<sup>#</sup> Excludes service tax and other statutory charges

Pradhan Mantri Awas Yojana- Housing for All (Urban)

# Comprehensive Implementation Manual for Factory Made Fast Track Modular Building System

**Project Proposal** 





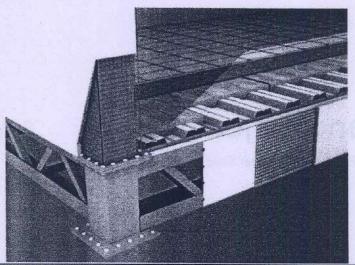
# Introduction

Factory Made Fast Track Modular Building System

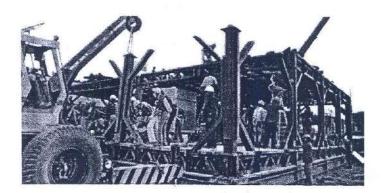
# Eight Emerging Technologies (BMTPC)

- Monolithic Concrete Construction System using Plastic Aluminium Formwork
- Monolithic Concrete Construction System using Aluminium Formwork
- Expanded Polystyrene Core Panel System
- Industrialized 3-S System using Precast RCC Columns, Beams & Cellular Light Weight Concrete Precast RCC Slabs
- Speed Floor System
- Glass Fibre Reinforced Gypsum (GFRG) Panel Building System
- Factory Made Fast Track Modular Building System
- Light Gauge Steel Framed Structures (LGSF)

# Factory Made Fast Track Modular Building System



# Factory Made Fast Track Modular Building System



# Goal and Objectives

Factory Made Fast Track Modular Building System

# Goal

- The goal of this project is to develop a detailed manual that provides the design, construction and costing details of the Factory Made Fast Track Modular Building System (PAC No. 1011-5/2013)
- This project is in sync with the following specific objectives of the Technology Sub-Mission:
  - To identify, evaluate and adapt new emerging technologies for facilitating their speedy introduction in the states taking into consideration the diverse geo-climatic and hazard condition of the country.
  - To extend technical support, capacity building and hand holding to state Government by creating a pool of professionals and skilled manpower through association with technical institutes like IITs and NITs.
  - Provide support in planning and designing of housing projects for building affordable housing including technical documentation such as specifications, standards, manuals, etc.

# **Objectives**

- To accomplish these broad objectives of the Technology Sub-Mission and the goal of this project following specific project objectives are set for the project:
  - Project Objective 1: to review the documentation submitted for the PACS scheme for the Factory Made Fast Track Modular Building System (PAC No. 1011-S/2013);
  - Project Objective 2: to collect all data relevant to the design, construction and costing of Factory Made Fast Track Modular Building System from the technology provider;
  - Project Objectives 3: to visit construction/completed project to see the actual implementation and application of Factory Made Fast Track Modular Building System;
  - Project Objective 4: using the above information develop a comprehensive manual for the Factory Made Fast Track Modular Building System.

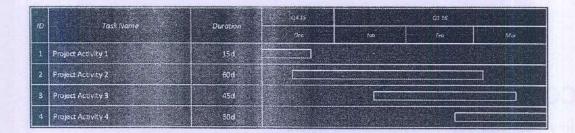
# Project Activities and Deliverables

Factory Made Fast Track Modular Building System

# **Project Activities**

- Project Activity 1: Collect and collate technical information from the PACS documentation for Factory Made Fast Track Modular Building System.
- Project Activity 2: Collect relevant data including design details, construction details, costing details and other pertinent information from the technology provider.
- Project Activity 3: Collect data from project site(s) including photographs, construction details, shop drawings, material requirements, labour deployment, equipment requirements, etc.
- · Project Activity 4: Develop the manual with the following information:
  - Design details
  - Construction details
  - Schedule of items
  - Analysis of rates

# Schedule



# **Deliverables**

- D1 Collated and compiled information for Factory Made Fast Track Modular Building System
- D2 Final report with design details, construction details, schedule of items, and analysis of rates for the Factory Made Fast Track Modular Building System

# Scope of Work and Assumptions

Factory Made Fast Track Modular Building System

# Scope of Work and Assumptions

- The deliverables of this project are based on following scope of work and assumptions:
  - The project team in consultation with the HFA Mission Directorate and BMTPC will develop an outline of the final report
  - HFA Mission Directorate and BMTPC will provide support in receiving input from the technology provider
  - Secondary data and information available will be used for developing the final report
  - Designing, engineering or testing activities are not included in the scope of work

# Budget

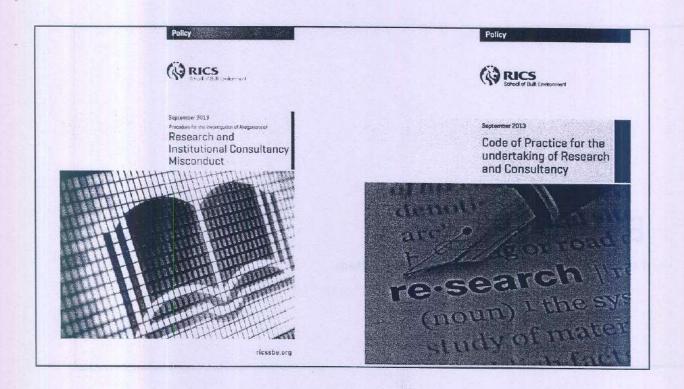
Factory Made Fast Track Modular Building System

# Budget

	Item	BUDGET (in Rupees)
A	Recurring	
	1. Salaries/Wages	
	Sr. Project Engineer	-1,75,000.00
	Project Associate	+1,00,000.00
	Project Assistant	+75,000.00
	Subtotal	*3,50,000.0
	<ol> <li>Contingency/Consumables/Stationery, Photocopying, Printing (workshop brochures etc.), postage, Telephone Charges etc.</li> </ol>	•62,500.0
i,	3. Travel (Including site visits, visit to manufacturers' locations etc.)	+3,75,000.0
8 .	4. Other Costs (Purchase of publications, books and codes)	*1,25,000.0
	Total Recurring (A)	*9,12,500.0
В	Non-Consumables (Equipment) (Computer accessories, such as a cameras, printer, scanner, mobile, etc.)	*1,25,000.0
	Total (A+B)	*10,37,500.0
С	Faculty Cost	*4,00,000.0
	Total (A+B+C)	*14,37,500.0
	Institute Overhead @ 20% (of A+8+C)	•2,87,500.0
	Grand Total	•17,25,000.0

1 The salary structure for the proposed staff is as per norms of RICS

Excludes service tax and other statutory charges



Dated: 18.11.2015

Title: Preparation of a Manual for Expanded Polystyrene (EPS) Core Panel System and its field Application

Duration: 10 Months; (Starting - January 2016; Ending - October 2016)

Coordinator/Head: Dr. A. K. Mittal, Group Leader (SE)

Ph. 94 1207 4408; email: achal\_cbri@rediffmail.com

## Preamble

Today we are seeing a lot of advancements when it comes to adopting new technologies onsite, and many countries like Australia, China, Japan, Malaysia, South Africa etc. and construction industries are moving towards precast construction technologies. However, while some countries are adapting quickly, others are finding it more difficult to make the jump. The threat of this growing technological divide makes right now a more important time than ever for CSIR-CBRI to pay attention to emerging trends in construction technology and ideate around how these trends can help in the affordable mass housing.

The Central Building Research Institute, Roorkee, India, has been bestowed with the responsibility of generating, cultivating and promoting building science and technology in the service of the country.

Since its inception in 1947, the institute has been assisting the building construction and building material industries in finding timely, appropriate and economical solutions to the problems of building materials, health monitoring and rehabilitation of structures, disaster mitigation, fire safety, energy efficient rural and urban housing. CSIR-CBRI has been focusing on various mass-housing technologies for last 50 years. The institute has also developed and implemented some of the prefabricated construction technologies at various locations in New Delhi, Uttarakhand, Himachal Pradesh etc.

The Institute is committed to serve the people through R&D in the development process and maintains linkages at international and national level.

The growth of new technologies in the construction industry is expected to have an impact on the way construction will be performed in the future. With any new methodologies, there are expected to be changes in the composition of the workforce. New construction technologies may require the attainment of new skills or trades with the consequence of establishing new or redesigned training programs. All of these impacts are expected to require new training methodologies and/or associated up-skilling of the workforce.

## Introduction

Considering the present housing shortage in urban areas Government of India has a vision to provide inclusive, sustainable and affordable urban facilities and particularly to provide "Housing for All by 2022". It calls for construction of about 20 million (2 crore) houses in the period. To achieve this, appropriate actions are required at all fronts. This necessarily includes, among other measures, identification and selection of appropriate building materials and technologies to bring not only economy but also quality, durability, speed with due care for safety and environment concern of the country. The construction of dwelling units and infrastructure in different parts of the country with diverse geo-climatic and hazard conditions with due care for quality, durability, environmental concerns and speed require fresh approach in using building materials & construction technologies in vogue.

In spite of so many existing prefab technologies there is a lack of will at the part of clients (CPWD, PWD, MES, Housing Board, Builders etc.), executing agencies (Vendors, Construction companies etc.) in implementing the same for mass housing. The main limitation of the present scenario is lack of a proper frame work where the available technologies can be reviewed for various attributes suiting to Indian context. To address the above mentioned problem a framework has been thought of in form of this project, where CBRI will work not only as a technology transferring partner, but will also ensure that the transferred technology gets implemented in the field without any hassle. In this suitable mass housing technology will be identified, will get evaluated (for composite climatic region) and demonstrated. Apart from these as a confidence building measure a list of potential vendors will be identified and trained in the process of tendering system, procurement policies, construction practices pertaining exclusively for prefab mass housing systems.

## **Objectives**

- Detailed Technology description including design philosophy & methodology of Expanded Polystyrene (EPS) Core Panel System along with specifications as per applicable standards (national/international).
- Description on advantages, limitations, economy of scale, sustainability, hazard resistance and comparison of EPS with conventional construction system.
- Typical construction sequence, process including plant and machinery requirement at site, manpower requirement (skilled/unskilled).
- Compatibility and installation details of internal services, i.e., plumbing, sanitary, electrical, waterproofing, HVAC etc.

- Quality control/ assurance guidelines including general maintenance requirements of EPS.
- Cost analysis and estimation including SOR and other relevant parameters required for tender preparation.
- Training Modules for Professionals & Artisans.
- Requirements of plant & machineries including their sources and list of existing manufacturing units along with their production capacity.
- Case studies of a few projects completed with time period, cost, constraints, if any, nationally or internationally.
- Tentative list of Architects, Designers, Structural Engineers and Executing Agencies.
- Detailed estimates including architectural and structural drawings for a typical building of G+3 storey's having 4 DUs on floor with minimum carpet area of 30m<sup>2</sup>.

# **Manpower Deployment**

Designation	Qualification	Area of Expertise	% of Involvement
Sr. Civil/Structural Engineer	M.Tech/B. Tech	Civil/Strc. Engg/BEDM*	100
Project Fellow (2 Nos.)	B.Tech/B.Arch.	Civil/Arch.	100
Computer Operator (1 Nos.)	Graduate/Diploma	Computer	100
Office Support			100

<sup>\*</sup> Building Engineering and Disaster Mitigation

# Activity Chart (Milestones in the form of Bar-Chart)

	Activity	Jan '16- March '16	April '16 – May '16	June '16- Aug. '16	Sept. '16- Oct. '16
	Detailed Technology description including design philosophy & methodology with specifications as per applicable standards (national/international).  Description on advantages, limitations, economy of scale, sustainability, hazard resistance and comparison of EPS with conventional construction system.	e service e service e dise go- odorado	one) of be made one and states grant on the control of the control	etabelit po etabelit po e etapmes detabelit e esibate no il cente d'os set set	
•	Typical construction sequence, process including plant and machinery requirement at site, manpower requirement (skilled/unskilled).	sykselvites A pravar	dibatini s a enas 2+0	Sec sentia, be spiloue i	
•	Compatibility and installation details of internal services, i.e., plumbing, sanitary, electrical, waterproofing, HVAC etc.			Name to	
•	Quality control/ assurance guidelines including general maintenance requirements.				
•	Cost analysis and estimation including SOR and other relevant parameters required for tender preparation.		na francis	in the	to militario so
	Training Modules for Professionals & Artisans.		E MANUEL TO		
	Requirements of plant & machineries including their sources and list of existing manufacturing units along with their production capacity.				(eoH t)); H goris anily
•	Case studies of a few projects completed with time period, cost, constraints, if any, nationally or internationally.				
•	Tentative list of Architects, Designers, Structural Engineers and Executing Agencies.				
	Detailed estimates including architectural and structural drawings for a typical building of G+3 storey's having 4 DUs on floor with minimum carpet area of 30m <sup>2</sup> .				
0	Preparation of Manual				

# **Financial Aspects**

	Item	BUDGET (in Rupees)
A.	Recurring	
	1.Salaries/wages#	
	Scientific and Technical Staff of CBRI	3,60,000
	Sr. Civil/Structural Engineer (1Nos.)	2,00,000
	Project Fellow (2 Nos.)	3,20,000
	Computer Operator (1 Nos.)	1,40,000
	Office Support	80,000
	Sub Total	11,00,000
	Contingency/Consumables:     Stationery, Photocopying, Books,     Printing, Postage, Telephone     charges etc.	3,00,000
	Travel (including TA for invited expert)	6,00,000
	Cost of physical inputs / services     (expert)/ utilities, raw materials     /components	2,16,666
101	Total Recurring (A)	22,16,666
В.	Non-consumables (Equipment) (Computer accessories, such as a printer, scanner, mobile, etc.)	2,00,000
7 1	Total (A+B)	24,16,666
C.	Institute's Overheads 20%	4,83,334
	Total (A+B+C)	29,00,000

<sup>\*</sup>The salary structure for the proposed staff is as per the norms at CBRI Roorkee
\*Service Tax as applicable is to be paid on Total (A+B+C)

# Salient Features of Andhra Pradesh 78 AHP Projects

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Gol Grant (Rs. In Lakhs)  894.00 417.00 2454.00 1530.00 1542.00 768.00
In L

in Paradesipalem				
in Madurawda	da 96		96	96 96
in Aganampudi	ii 96		96	96 96
ō	S.No.3/location of GVMC.  S.No.3/location of GVMC.		350	350 350
Construction of 320 EWS houses in Malkapuram location of GVMC.	m 320		320	320 320
2	Construction of 256 EWS houses in Chinnamushidivada S.No.114 location of GVMC.		256	256 256
13	192	192 192		192
in Raticheruvu	128		128	128 128
in Aganampudi	di 256		256	256 256
ad	in Madhurawada 320		320	320 320
d	in Madhurawada 320		320	320 320
Z	Construction of 608 EWS houses in Kommadi S.No.83 608 location of GVMC.		608	608 608
1	Construction of 84 EWS houses in Peddajalaripeta (Bit- 1) location of GVMC.		84	84 84
S	Construction of 96 EWS houses in MVP Colony (Sector- 7 & 8) location of GVMC.		96	96 96
0	EWS houses in Paradesi palem 192		192	192 192
EWS houses in Rathicheruvu	/u 448		448	448 448
Ca	Construction of 512 EWS houses in Parawada location 512 of GVMC.		512	512 512
	Total Houses Proposed	Total Houses EWS Houses Proposed Proposed		EWS Houses Proposed

No.	City	Project Name	Total Houses Proposed	EWS Houses Proposed	Total Project Cost (Rs. In Lakhs)	Gol Grant (Rs. In Lakhs)	1st Installment @40% (Rs. In Lakhs)
35	VISHAKHA PATTANAM	Construction of 96 EWS houses in Kurmannapalem Sani vada location of GVMC.	96	96	528.00	144.00	57.60
36	VISHAKHA PATTANAM	Construction of 256 EWS houses in Satvanarayanapuram location of GVMC.	256	256	1408.00	384.00	153.60
37	VISHAKHA PATTANAM	Construction of 500 EWS houses in Kommadi S.No.161 location of GVMC.	500	500	2924.98	750.00	300.00
38	KAKINADA	Construction of 912 EWS houses in Cheedilapora location of Kakinada MC.	912	912	4995.04	1368.00	547.20
39 K	KAKINADA	Construction of 648 EWS houses in Yetimoga location of Kakinada MC.	648	648	3578.16	972.00	388.80
40	KAKINADA	Construction of 1920 EWS houses in Parlovapeta location of Kakinada MC.	1920	1920	10578.40	2880.00	1152.00
41	KAKINADA	Construction of 984 EWS houses in Dummalapeta location of Kakinada MC.	984	984	5402.78	1476.00	590.40
42 K	KAKINADA	Construction of 144 EWS houses in Rellipeta location of Kakinada MC.	144	144	832.48	216.00	86.40
43 F	RAJAHAMUNDRY	Construction of 840 EWS houses in Endowment site location of Rajahmundry MC.	840	840	4925.00	1260.00	504.00
44 F	RAJAHAMUNDRY	Construction of 2528 EWS houses in Diet Centre Dhavaleswaram location of Rajahmundry MC.	2528	2528	13855.40	3792.00	1516.80
45 F	RAJAHAMUNDRY	Construction of 832 EWS houses in Torredu location of Rajahmundry MC.	f 832	832	4679.60	1248.00	499.20
46 F	PEDDAPURAM	Construction of 408 EWS houses in Pandavulamitta location of Peddapuram Municipality.	408	408	2030.70	612.00	244.80
		Construction of 1316 EWS houses in	1	1010	7600 60		789 6
47 F	PEDDAPURAM	Valuthimmapuram location of Peddapuram Municipality.	1316	1316	7698.60	19/4.00	/89.60
48 \$	SAMALKOTA	Construction of 576 EWS houses in Jaggammagaripeta location of Samalkota Municipality.	576	576	3168.00	864.00	345.60
49 9	SAMALKOTA	Construction of 472 EWS houses in Uppuvarisatram location of Samalkota Municipality.	472	472	2784.80	708.00	283.20
50 1	MANDAPETA	Construction of 4064 EWS houses in Gollapuntha location of Mandapeta Municipality.	4064	4064	23774.40	6096.00	2438.40
51 F	RAMACHANDRAPURAM	Construction of 1088 EWS houses in Kothuru & Utrumilli location of Ramachandrapuram Municipality.	1088	1088	6245.12	1632.00	652.80

S. No.	City	Project Name  Construction of 360 EWS houses in Eluru Municipal	Total Houses Proposed	Proposed	sed 360	Total F Cost ( Lak	Total Project Gol Gra Cost (Rs. In In La Lakhs) In La
52	ELURU	Construction of 360 EWS houses in Eluru Municipal Corporation.	360	118	360	360 1817.23	
53	TADEPALLIGUDEM	Construction of 5376 EWS houses in Tadepalligudem Municipality.	5376		5376	5376 29288.84	
54	PALACOLE	Construction of 7159 EWS houses in Palacole Municipality.	7159		7159	7159 39374.50	
55	BHIMAVARAM	Construction of 9500 EWS houses in Bhimavaram Municipality.	9500		9500	9500 52250.00	
56	GUDIVADA	Construction of 3312 EWS houses in Mallaiahpalem location in Gudivada Municipality.	3312		3312	3312 18216.00	
57	PONNURU	Construction of 2368 EWS houses in Nidabrolu layout in Ponnuru Municipality.	2368		2368	2368 14179.14	
58	MANGALAGIRI	Construction of 2592 EWS houses in Ratnalacheruvu layout in Mangalagiri Municipality.	2592		2592	2592 16477.60	
59	TENALI	Construction of 1152 EWS houses in Chinaravuru location in Tenali Municipality.	1152		1152	1152 7723.71	
60	NARASARAOPET	Construction of 1504 EWS houses in Bapanaiahnagar location in Narasaraopeta Municipality.	1504		1504	1504 9141.92	
		Construction of 4512 EWS houses in					
61	CHILAKALURIPET	Purushottampatnam location in Chilakaluripeta  Municipality.	4512		4512	4512 28750.48	
62	SATTENAPALLY	Construction of 640 EWS houses in Vaddavalli location in Sattenapalli Municipality.	640		640	640 3859.63	
		Construction of 2092 EWS houses in Mamillapalli					
63	KADAPA	layout near Bugga dam in Kadapa Municipal Corporation.	2092		2092	2092 11506.00	
64	PRODDATUR	Construction of 1100 EWS houses in Amruthanagar layout in Proddatur Municipality.	1100	3	1100	1100 5953.06	
65	PRODDATUR	Construction of 900 EWS houses in Rameswaram location in Proddatur Municipality.	900		900	900 4894.00	
66	SRIKALAHATHI	Construction of 2916 EWS houses in Srikalahasti Municipality.	2916	120	2916	2916 16038.00	
67	KAVALI	Construction of 2700 EWS houses in Maddurupadu location in Kavali Municipality.	2700		2700	2700 14960.00	700

# Salient Features of Andhra Pradesh 78 AHP Projects

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To	78 AI	77 YE	76 KI	75 TA	74 K	73 01	72 GI	71 NI	70 KJ	69 K/	68 K/	No.
Total (78 Projects)	ADONI	YEMMIGANUR	KURNOOL	TADIPATRI	KANDUKURU	ONGOLE	GUDUR	NELLORE	KAVALI	KAVALI	KAVALI	City
	Construction of 4704 EWS houses in Mandageri, ChachaNehru Nagar layout in Adoni Municipality	Construction of 3264 EWS houses in Sivannanagar, Minority colony and Uppara colony layout in Yemmiganur Municipality	Construction of 10000 EWS houses in Jagannathagattu and Pandipadu road layout in Kurnool Municipal Corporation	Construction of 3009 EWS houses in location in Tadipatri Municipality.	Construction of 1437 EWS houses in Kandukur location in Kandukur Municipality.	Construction of 1500 EWS houses in Pernamitta location in Ongole Municipal Corporation.	Construction of 5103 EWS houses in Divipalem location in Guduru Municipality.	Construction of 4800 EWS houses in Akkacheruvupadu location in Nellore Municipal Corporation.	Construction of 180 EWS houses in Musunur location in Kavali Municipality.	Construction of 270 EWS houses in Maddurupadu location in Kavali Municipality.	Construction of 360 EWS houses in Maddurupadu location in Kavali Municipality.	Project Name
vupadu         4800         4800         23376.00         7200.00           ocation         5103         5103         28066.50         7654.50         3           ocation         1500         1500         8250.00         2250.00         3         3           ocation         1437         1437         7975.00         2155.50         3         3           hagattu         10000         10000         55000.05         15000.00         3         3           gar,         3264         3264         17952.00         4896.00         3         3         3         4704         25872.00         7056.00         3 <t< td=""><td></td><td>3009</td><td></td><td>1500</td><td></td><td></td><td>180</td><td>270</td><td>360</td><td>Total Houses Proposed</td></t<>		3009		1500			180	270	360	Total Houses Proposed		
		180	270		Proposed							
	du         360         360         360         2228.45         540.00         216.00           du         270         270         1796.00         405.00         162.00           action         180         180         864.00         270.00         108.00           vulpadu         4800         4800         23376.00         7200.00         2880.00           ocation         5103         5103         28066.50         7654.50         3061.80           ocation         1437         1437         7975.00         2250.00         900.00           ocation         1437         1437         7975.00         2155.50         862.20           nagattu         10000         10000         55000.05         15000.00         6000.00           gar,         3264         3264         17952.00         4896.00         1958.40           i,         4704         4704         25872.00         7056.00         2822.40	Total Project Cost (Rs. In Lakhs)										
Lakhs)         In Lakhs)         @40% (Rs. In Lakhs)           0         2228.45         540.00         216.00           0         1796.00         405.00         162.00           0         864.00         270.00         108.00           0         23376.00         7200.00         2880.00           3         28066.50         7654.50         3061.80           0         8250.00         2250.00         900.00           7         7975.00         2155.50         862.20           3         17082.00         4513.50         1805.40           4         17952.00         4896.00         1958.40           4         25872.00         7056.00         2822.40           6         671325.15         180159         72063.6	Gol Grant (Rs. In Lakhs)											
					Total Project Cost (Rs. In Lakhs)         Gol Grant (Rs. ln In Stallment ln Lakhs)         Installment ln Machallment ln Lakhs)         (240% (Rs. In Lakhs)           1796.00         405.00         216.00           864.00         270.00         162.00           23376.00         7200.00         2880.00           8250.00         2250.00         900.00           7975.00         2155.50         862.20							
		ı.		Lakhs	will range from Rs. 2.50 Lakhs to Rs. 3.0	725	_					Sale Price of Dwelling Units (Rs. In Lakhs)



# Andhra Pradesh Beneficiary Led Construction Projects

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Total	8 RAJKOT	7 MEHMDAVAD	6 VADODARA	5 JAMNAGAR	4 SURAT	3 SURAT	2 SURAT	1 SURAT	S. City
	DPR under AHP for EWS-1266 at 5 locations in Rajkot Municipal Corporation Area	AVAD DPR under AHP for EWS-256 at Sahyog society, Mahemdavad Area	ARA In Vadodara Urban Development Authority Area	5AR In Jamnagar Municipal Corporation Area	DPR under AHP for EWS (275) & LIG (490) at 4 locations in Surat Urban Development Authority Area	DPR-III under AHP for EWS (848) at 13 locations in Surat Municipal Corporation Area	DPR-II under AHP for EWS (744) at 9 locations in Surat Municipal Corporation Area	DPR-I under AHP for EWS (704) at 9 locations in Surat Municipal Corporation Area	ry Project Name
6859	1266	256	820	1456	765	t 848	744	704	Total Houses Proposed
	1266	256	520	512	275	848	744	704	Proposed Proposed
	8454.74	1343.98	6044.03	10030.29	5917.65	5316.85	4417.56	4585.76	Total Project Cost (Rs. In Lakhs)
	1899	384	780	768	412.5	1272	1116	1056	Gol Grant (Rs. In Lakhs)
3075.00	759.6	153.6	312	307.2	165	508.8	446.4	422.4	Installment @40% (Rs. In _Lakhs)
	3.00	3.00	3,00	3.00	3.00	3.00	3.00	3.00	Sale Price of Dwelling Units (Rs. In Lakhs)

						nedemerill 10	20 Nizamabad	19 Nizamabad	18 Mahboobnagar		16 Mahboobnagar	15 Bhaisa	14 Bhaisa	13 Bhaisa	12 Miryalaguda	11 Suryapet	10 Suryapet	9 Suryapet	8 Adilabad	7 Adilabad	6 Khammam	5 Khammam	4 Siddipet	3 Siddipet	2 Siddipet	1 Siddipet	S. No. City	
Housing for All-Ambedkar Nagar	Housing for All-Ambedkar Nagar		Housing for All-Mirsahab Nagar		am Housing For All -Chandra babu Naidu Colony Slum	Housing For All -DS Colony Down adjacent to Bakery Nagaram	Housing For All -Painters Slum					Housing For All -Sidhartha Nagar	Housing For All -Maisamma Gutta		a Housing For All (Urban) Hydulapuram	Housing For All-Gulla Bazar	Housing For All-Indrama Colony Phase III	Housing For All-Sundraiah Nagar	Providing housing and infrastrucure to Anukunta	Providing housing and infrastrucure to Nishan Ghat	Providing housing and infrastrucure to YSR Colony	Providing housing and infrastrucure to Raparthy Nagar	Construction of 369 units of 2 BHK housing at Narsapur site	Construction of 561 units of 2 BHK housing at Narsapur site	Construction of 138 units of 2 BHK housing at Narsapur site	Construction of 829 units of 2 BHK housing at Punnala site	Project Name	THE RESIDENCE AND ASSOCIATION OF THE PROPERTY
3/0	3/0	26.3	300	408	286	900	212	321	1536	234	530	503	478	341	160	150	200	150	100	300	204	204	369	561	138	829	Total Houses Proposed	
OUE	0.0	576	300	408	286	900	212	321	1536	234	530	503	478	341	160	150	200	150	100	300	204	204	369	561	138	829	EWS Houses Proposed	
1815 00		3484.80	1815.00	2468.40	1685,86	5445.00	1282.60	1942.05	9292.80	1415.70	3206.50	3043.15	2891.90	2063.05	968.00	907.50	1210.00	907.50	605.00	1815.00	1234.20	1234.20	2232.45	3394.05	834.90	5015.45	Total Project Cost (Rs. In Lakhs)	
250	1	864.00	450.00	612.00	429.00	1350.00	318.00	481.50	2304.00	351.00	795.00	754.50	717.00	511.50	240.00	225.00	300.00	225.00	150.00	450.00	306.00	306.00	553.50	841.50	207.00	1243.50	Gol Grant (Rs. In Lakhs)	
	100.00	345.60	180.00	244.80	171.60		127.20	192.60	921.60	140.40	318.00	301.80	286.80	204.60	96.00	90.00	120.00	90.00	60.00	180.00	122.40	122.40	221.40	336.60	82.80	497.40	1st Gol Grant Installment (Rs. in Lakhs) @40% (Rs. in Lakhs)	
PER OF COST	Eron of Cort	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Free of Cost	Sale Price of Dwelling Units (Rs. In Lakhs)	

# Tamilnadu Affordable Housing in Partnership Projects

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Tot	o	u	4	ω	2	ь	No.
Total (6 Projects)	Vellore II	Vellore	Salem	Tiruppur	Erode	Coimbatore	City
	Construction of 224 storied tenaments (G+3) with Infrastructures in Dhobikhanna, ward-59, Zone IV	Construction of 192 storied tenaments (G+3) with Infrastructures in Kulavaimedu, ward 44, Zone-III	Construction of 292 storled tenaments (G+3) with Infrastructures in Kottagoundampatti	Construction of 1280 storied tenaments (G+3) with Infrastructures in Veerapandi, Ward-52, Zone=IV	Construction of 256 storied tenaments (G+3) with Infrastructures in Muthamapalayam Bharathi Nagar in Ward 34, Zone-III	Construction of 672 storied tenaments (G+3) with Infrastructures in Kovaipudur	Project Name
2916	224	192	292	1280	256	672	Total Houses EWS Houses Proposed Proposed
2916	224	192	292	1280	256	672	EWS Houses Proposed
23331.43	1867.22	1590.23	2494.47	9611.42	2127.07	5641.02	Total Project Cost (Rs. In Lakhs)
4374.00	336.00	288.00	438.00	1920.00	384.00	1008.00	Gol Grant (Rs. In Lakhs)
1749.60	134.40	115.20	175.20	768.00	153.60	403.20	Installment @40% (Rs. In Lakhs)
THE RESERVE THE PARTY OF THE PA	1.84	1.78	2.04	1.01	1.81	1.89	Sale Price of Dwelling Units (Rs. In Lakhs)

# Rajasthan Affordable Housing in Partnership Projects

	-		-	-	9 Kota	8 Kota	7 Kota	6 Kota	5 Falna	4 Balotra	3 Balotra	2 Udaipur	1 Jodhpur	S. No. City
Total	ara Affordable Housing Project in Nathdwara	ar Affordable Housing Project in Pushkar	arh Affordable Housing Project in Kishangarh	garh Affordable Housing Project in Chittorgarh	Affordable Housing Project in Ranpur Scheme Kota	Affordable Housing Project in Mohan Lal Sukhadiya Scheme Kota	Affordable Housing Project in Bhadana Scheme Kota	Affordable Housing Project in plot No. 4 & 12 large Industrial Area Kota	Affordable Housing Project in Khasra no. 2012, Behind Police Thana BSNL Nagar Palika, Falna	ra Affordable Housing Project in Khasra no. 698 & 699, Ashoka Road, Near Housing Board, Balotra Phase-II	ra Affordable Housing Project in Khasra no. 698 & 699, Ashoka Road, Near Housing Board, Balotra Phase-I		Affordable Housing Project in Village Aanganva, Sunder Singh Bhandari Nagar, Nagaur byepass, Jodhpur	
11757	578	592	1455	512	576	464	540	912	992	1152	1216	1696	1072	Total Houses Proposed
6255	Pushkar         Affordable Housing Project in Pushkar         592         296         3930.00         444.00           Nathdwara         Affordable Housing Project in Nathdwara         578         289         3924.37         433.50	714	304	320	368	252	640	480	592	809	848	544	Proposed	
73314.98	Chittorgarh         Affordable Housing Project in Chittorgarh         512         304         2940.60         456.00         182.40           Kishangarh         Affordable Housing Project in Kishangarh         1455         714         9704.25         1071.00         428.40           Pushkar         Affordable Housing Project in Pushkar         592         296         3930.00         444.00         177.60           Nathdwara         Affordable Housing Project in Nathdwara         578         289         3924.37         433.50         173.40	2842.00	2141.24	2787.51	5140.51	6660.00	7487.10	6885.00	11662.20	7210.20	Cost (Rs. In Lakhs)			
9382.50	KishangarhAffordable Housing Project in Kishangarh14557149704.251071.00428.40PushkarAffordable Housing Project in Pushkar5922963930.00444.00177.60NathdwaraAffordable Housing Project in Nathdwara5782893924.37433.50173.40	456.00	480.00	552.00	378.00	960.00	720.00	888.00	912.00	1272.00	816.00	Gol Grant (Rs. In Lakhs)		
3753.00	173.40	177.60	428.40	182.40	192.00	220.80	151.20	384.00	288.00	355.20	364.80	508.80	326.40	Installment @40% (Rs. In Lakhs)
	2.4	2.4	2.4	2.4	1.2	1.2	1.2	2.68	1.75	1.75	1.75	1.75	1.75	Sale Price of Units (Rs. In Lakhs)

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Annexure 10

15		Total Control									
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