

## **Concept Note submitted to Ministry of Housing & Urban Affairs regarding Housing for All Mission**

1. Ministry of Housing and Urban Affairs, Govt. of India has started a number of housing schemes for urban and rural, economically weaker sections of the society. These schemes are under the 'Housing for All' Mission. The initiative by the Government is highly commendable. There are four schemes as per details given below.
  - In-situ slum redevelopment with private sector participation using land as resource,
  - Affordable housing through credit linked subsidy,
  - Affordable housing in partnership with private and public sector and
  - Beneficiary led house construction/enhancement.
  
2. The Ministry has also launched a Technology Sub Mission. Under this sub-mission, following important aspects are worth mentioning.
  - (i) Technical solutions are to be found for Prime Minister Housing Schemes depending on climatic requirements and difficult situations, to ensure economical housing.
  
  - (ii) The aim of this mission is to pursue (a) New technologies in whole country and evaluate these technologies for different climatic conditions and difficult situations. (b) The human resources are to be developed by both at professional level for Engineers and at skill development level for workmen. (c) In order to ensure that economical housing is supported by proper documentation, such documents are to be deployed in the form of Manuals, Standards, Guidelines etc. (d) In order to implement new given technologies, detail support documentation is required and (e) To develop online portals for checking and inspection by GPRS.
  
  - (iii) This submission will work for (a) design and planning, (b) Innovative technologies and materials (c) Green building construction and (d) Disaster resistant design and construction.
  
  - (iv) Implementation by involvement and partnership- In order to develop technical solutions the partnership will be required by State/Central Govt. with willing IITs, NITs and planning and architecture institutes. Specific issues will also be dealt by this mission. For this purpose a technical cell has been established under BMTPC. Besides Hindustan Prefab Limited (HPL) has developed a technology park for this purpose.
  
  - (v) Other organizations like Bureau of Energy Efficiency (BEE) and National Remote Sensing Centre (NRSC) will assist in the mission.
  
  - (vi) New technologies deployed by Govt. organizations- CPWD has drafted Schedule of Rates for these new technologies. These are Aluminum Formwork for the

monolithic concrete construction, Expanded Polystyrene Core Panel System (EPC) core panel technique and Light Gauge Steel Structures. These techniques are to be applied by CPWD, DDA and NBCC particularly for construction work of more than Rs.100.0 Crores.

- (vii) Some of the recently developed technologies are (a) Monolithic Concrete construction technology with aluminum form work (b) Expanded Polystyrene Core (EPC) Core panel system (c) Glass Fiber Reinforced Gypsum panel building system (GFRC) (d) Prefab Construction Technology (e) Factory Built Modular Building Construction technique and (f) Pre-stressed precast Hollow Core Slab, beam, columns, wall system (g) Light gauge Steel Framed System (LGSF), (h) Waffle Crete building system construction technology (i) Prefab Large Concrete Panel System (j) Coffe Structural Stay in Place Formwork technique and (k) Modular tunnel form technique.
3. IBC has a pool of professionals both with experience, exceeding fifty years and also young professionals. They have worked for new techniques and technologies. Therefore IBC Members which include engineers, planners, architects etc. can play an important role at all levels. Some issues related to Housing are brought to kind notice where architects, planners and engineers can play very important role at all levels. Following additional aspects which are beyond general policy statement by the Government to be considered are.
- (i) Suitability of land and water must be carefully examined before proceeding with any housing scheme/project.
  - (ii) Incorporation of group housing in Master Plan of city/town and thereafter preparation of detailed layout plan are very important and should be carefully done.
  - (iii) Planning of services should be integral part of housing development. This include external water supply, sewerage, drainage, electric distribution system etc. as also sources and disposal locations. The layout plan should be comprehensive and special care for avoiding flooding should be taken.
  - (iv) All projects undertaken should be fully self sustainable i.e. all grey water produced should be treated and utilised for secondary purposes like flushing & horticulture. Similarly non conventional solar energy to be utilised for electricity.
  - (v) While considering schemes for slums improvement, it is absolutely necessary to retrofit existing structures, as required. It should be included in schemes for slums.
  - (vi) New technology should be given special consideration. But it shall be used only after it is examined and certified by expert engineering professionals.

- (vii) Model houses using different innovative technologies should be constructed and exhibited (as done by Hindustan Prefab Delhi) at different cities around the country in order to promote adoption of innovative technologies.
  - (viii) Special care is required for safety of structures as per new technologies and experts in the field should be consulted to ensure required safety.
  - (ix) For new technologies, it is necessary to have expert group to draft schedules, specifications etc. for tendering purpose.
  - (x) Housing must be safe against challenges of natural and manmade disasters.
  - (xi) Land acquisition by Govt. is a time taking / cumbersome process. To solve problem of Land availability, Gujarat Model may be advantageously followed under which Authorities can finalise the Master Plans and Builders may procure the land from residents by purchase or implement the project in partnership with original owners.
  - (xii) The representatives of future occupants of house should be participants in planning, designing and drafting of specification of houses to be constructed for them. We must not forget that a number of rural and urban houses under different housing schemes of Government have remain unoccupied and deteriorated.
  - (xiii) All ULB's should be asked to accord approval of proposals within a month. A deadline of 3 months should be fixed under which ULB's themselves should do necessary amendments if required in proposals and approve the same.
  - (xiv) Central and state PWD's, Development Authorities should be actively engaged for undertaking Housing Programmes under PMAY schemes.
  - (xv) It is observed that 74<sup>th</sup> Amendment of the constitution has not been implemented so far. Implementation of 74<sup>th</sup> Amendment will go a long way to enable urban Local Bodies to initiate and complete related infrastructure work before construction of houses under PMAY scheme is actually completed.
4. We must appreciate and understand that mistakes of past are avoided so that the housing developed should be habitable and stakeholders must occupy and get full benefit. IBC has a pool of more than 5000 professionals both with experience of 10-15 years and also young professionals. They have wide experience for new techniques and technologies. IBC Members which include engineers, planners, architects etc. can play an important role at all levels. Professionals of IBC are willing and eager to collaborate with Ministry of Housing and Urban Affairs, Govt. of India for effective implementation of its 'Housing for All' Mission.