

Enhancing Affordability / Accessibility of Economically Weaker Sections (EWS) / Low Income Groups (LIG) to Housing



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1 Shelter Situation Analysis

1.1 Basic General Data

India is the seventh largest country in the world by geographical area & the second most populous (home to 1.127 billion people). On one hand, it is fourth largest economy in the world and one of the fastest growing economies. On the other hand, despite these gains, India battles endemic poverty & uneven development with 26% of population below poverty line. With about one in every sixth person in the world living in India, housing assumes significant importance. Need for a systematic effort towards housing emerges from the growing requirements of shelter and related infrastructure. As per the urban growth projections carried out by UN, the position of urban landscape in India is as under:

- 11% of world's urban population is in India;
- 27.7% of India's population was in urban areas in 2000. This is expected to increase to 41.40% by the year 2030;
- Urban population of India is likely to grow from 281.25 million in 2000 to 355 million in 2010, 402 million in 2015, 456 million in 2020 and 586 million in 2030;
- 3 of the 10 largest cities in the world are located in India;
- 35 cities have population of more than one million each;

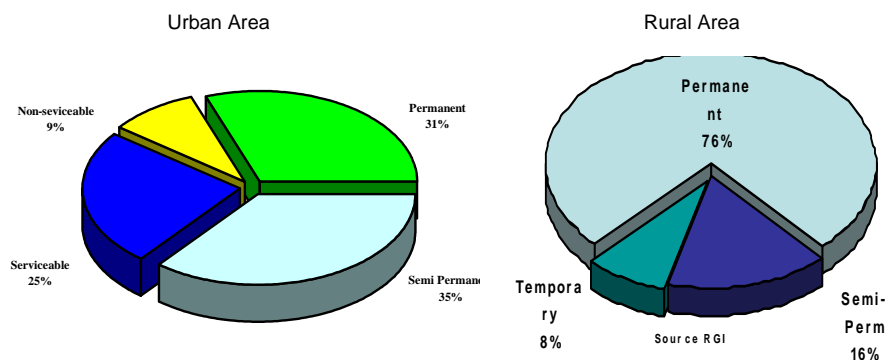
Housing, besides being a very basic requirement, holds the key to accelerate the pace of development. Investments in housing like any other industry have a multiplier effect on income and employment. It is estimated that overall employment generation in the economy due to additional investment in the housing/construction is eight times the direct employment. It is further estimated that for one Indian Rupee (Rs.) invested in housing; Rs. 0.78 gets added to the Gross domestic product of the country. After agriculture, the housing and real estate industry is the second largest employment generator. It is estimated that the construction sector provides direct employment to 16 percent of the workforce.

1.2 Shelter Related Fact and Figures

As per the Census of India, 2001, Housing conditions in India is as under:

- Total number of Census houses in 2001 were 249 million, out of which, 177.5 million houses are in rural areas (71.3%), while the balance 71.5 million houses are in Urban areas (28.7%).
- Total occupied census houses were 233.2 million, out of which, houses used for Residential purposes were 179.2 (76.8%), Residence-cum-other use – 7.8 million, Non-residential uses like shops, office, etc were 46.2 million.
- Total number of Households (HH) were 191.9 million (72% of which were in Rural areas), which meant with average HH size of 5.35 per family, the average number of HH per dwelling unit was 1.03
- While 76% of the housing stock in Urban areas (which account for 29% of the total housing stock in the country) were permanent structures, the percentage was only 31% in Rural areas (which account for 71% of the total housing stock in the country).
- Almost 34% of the Housing stock in rural area were temporary in nature.
- The percentage of un-servicable temporary structure in rural areas was as high as 9% as against around 2% in urban areas.

Figure 1: Percentage of Urban and Rural Area



As per Census of India,2001 and Planning Commission, the magnitude of poverty in India is reflected by the following:

- 26.7% of urban population lives below poverty line
- 17% of total households have no access to safe drinking water
- 64% of total households have no access to basic sanitation facilities
- 54% of total households have no access to proper drainage facilities
- 44% of total households have no access to electricity
- 23% households are living in slums

Housing Shortages In India & Requirement Of Funds:

As brought out in the table below, 99% of the total housing shortage is for EWS (*Economically weaker sections*) and LIG (*Low-income groups*) categories. The fiscal incentives for housing have mainly benefited the higher income groups.

Table 1: Housing Shortage .

Category	Housing Shortage (Million Units)
EWS (INR 0 – 3300, upto US\$ 73.50)	21.78 (88.14%)
LIG (INR 3301- 7300, upto US\$ 162.25)	2.89 (11.70)%
Total (EWS/LIG) - %age	99.84%
MIG (INR 7301- 14500, upto US\$ 322)	0.04
HIG (INR 14501 and above)	
Total (at the beginning of 2007)	24.71

The total investment requirement would be in the order of Rs. 361318.1 crores (around 79,000 Million US\$) consisting of Rs. 147195.0 crores required for mitigating housing shortage at the beginning of the XI plan (i.e. 24.71 Million units) and Rs. 214123.1 crores for new additions during the XI Plan period (i.e 2007-2012).

1.3 Housing Policy

Housing situation in the country can improve only if both the Central and State Governments follow a coordinated approach towards its amelioration. All public agencies put together are not creating more than 20% of housing stock in the country and the major housing additions of 80% of housing stock is through private efforts. Recognizing the importance of and problems in housing sector, the government of India has come out with National Housing & Habitat Policy (2007), which envisages as under:

- Within the overarching goal of ‘Affordable Housing for All,’ emphasis has been laid on urban planning, increase supply of land, use of spatial incentives like additional

floor area ratio (FAR), Transferable Development Rights, increased flow of funds, healthy environment, effective solid waste management and use of renewal sources of energy.

- Encouraging integrated townships and special economic zones (SEZs), the policy called for reservation of 10-15 per cent land in every new public and private housing projects or 20-25 per cent FAR whichever is greater to for EWS and LIG housing through appropriate spatial incentives.
- The private sector would be permitted land assembly within the purview of master plans. Also, the policy sets action plans for urban slum dwellers and special package would be prepared for cooperative housing, labour housing and employees housing.
- States are advised to develop 10 years perspective plan for housing of EWS and LIG.
- Provision of shelter to urban poor at their present location or near their work place. Approach will be in-situ slum rehabilitation and relocation will be considered only in specific cases.
- Promote micro finance institutions at state level to expedite flow of finances to urban poor.
- develop innovative financial instruments (mortgage backed securitisation market, Secondary mortgage market) and Foreign Direct Investment (FDI).
- Central government to prepare model municipal laws and to prepare detailed city maps based on GIS, aerial survey and ground verification.
- Encourage the use of proven cost effective technology and building materials. It also envisaged the development of mass rapid transit system at sub-regional level.

Many emerging issues with respect to housing finance and policy need to be tackled in order to provide adequate and affordable housing for all. The recently approved National Urban Housing & Habitat Policy (NUHHP) 2007 addresses most of the pertinent issues, especially its emphasis on earmarking land and built-space for economically weaker sections and lower income groups in new housing projects. The policy also lays emphasis on government retaining its role in social housing so that affordable housing is made available to the urban poor.

1.4 Actors in Shelter Delivery and their Roles

The aims and objectives of the Policy would be carried out through action-oriented initiatives at all levels of Government. For itself, besides planning, the **Central Government** is involved in institutional, regulatory & legislative reforms, research and development on technology, macro-economic measures to increase flow of finance in housing while protecting ecological and environmental standards.

The **State Governments** are encouraged to prepare the State Urban Housing & Habitat Policy (SUHHP) and long term programmes and short term strategies in line with NUHHP to tackle problems in housing and related basic services. They are persuaded to liberalise the regulatory regime, promote private sector and cooperative housing initiatives, implementing land reforms, empower the local bodies in regulatory & development functions, etc.

The **Urban Local Bodies** are encouraged to identify specific housing shortages and prepare local level Urban Housing Action Plans, promote planning of housing and industrial estates together with related infrastructure services, ensure that Development Plans/Master Plans/zoning Plans are made and updated in time and have a provision for the service providers/poor, implement central and state sector schemes and programmes pertaining to housing and infrastructure sector and enforce effectively regulatory measures for planned development.

Banks and Housing Finance Institutions have been advised to reassess and re-define their role, adopt more flexible approaches and to earmark part of their resources for EWS & LIG housing projects, slum improvement and upgradation and urban infrastructure projects.

The **role of Private and Cooperative sector agencies** has been defined to be the leaders for land assembly, land development, construction of houses and allied infrastructure. They have been coaxed to form partnerships whenever required with other stakeholders and create housing stock on ownership and rental basis including for the urban poor (EWS/LIG).

2 Organisation

Housing & Urban Development Corporation Limited (i.e. HUDCO) is entirely owned by Government of India (GoI), and the institution's strategic importance to Government of India arises from its role in financing and developing India's housing and urban

infrastructure sectors. It is one of the front-runners in providing housing facilities in India with a special emphasis on EWS and LIG categories. HUDCO plays nodal and catalytic role in implementing Government policy in the high-priority housing and urban development sectors. HUDCO has supported 14.57 million dwelling units spread across the country, 92% of which are benefiting EWS & low-income groups. Housing loans approved / sanctioned by HUDCO amounted to Rs. 25,676 crores (US\$ 6100 Million) & Rs. 22,051 crores (US\$ 5250 Million) respectively.

HUDCO's contribution in eradication of poverty could be gauged by the following:

- A differential interest rate policy operates for various categories of household with over-riding emphasis on concessional rate of lending for EWS and LIG families.
- The lower the household income, the lower is the interest rate and vice versa. Such a differential interest rate policy provides incentive for executing agencies to promote housing for the less privileged and help reducing the loan repayment burden on the families, to bring it within their affordable limits.
- Every one in sixteen houses (in India) have been funded by HUDCO
- HUDCO's role in the promotion of Building centres for sustainable & cost effective building material technology towards making houses affordable has been recognized as one of the 100 Global best practices by the UN-HABITAT.

Since, HUDCO is a financial institution, the role of an individual with Finance background is primarily to assess the credit worthiness of the borrower, analyze project viability & associated risks, suggest risk mitigation mechanisms, etc. Moreover, as a finance professional, one is also required to ensure that resources are raised at highly competitive rates (to cross subsidize in order to provide affordable finance for social housing). Adopting a prudent resource raising policy, one is further expected to ensure that the organization has a diversified resource base.

3 Shelter Problem

As is apparent from the Shelter analysis, 99% of the total housing shortage is for EWS and LIG categories. The critical components of the shelter problem associated with this segment are as under:

- **Access to affordable finance** - Over the last one decade, supply of housing finance has increased considerably and major contributors in this regard are banks and housing finance institutions. The rising contribution of housing finance has given a

very big boost to the growth of construction activities all over the country. The national accounts statistics indicate the contribution of housing, real estate services and construction to gross domestic product has risen to nearly 10%, which is further likely to grow in the near future. It is important to add here that **growing housing finance has, by and large, benefited to the upper half of the population while the lower segment (i.e. EWS/LIG) is yet to come in the orbit of formal housing finance system.** The constraints faced by urban poor with regard to access of affordable finance are as under:

- a) Banks doesn't find it lucrative to directly finance slum housing projects;
- b) Most of finance is directly through Government sponsored schemes;
- c) Can access only informal sources (money lenders) at exorbitant rate;
- d) Urban poor lack access to housing finance due to poor credit profiles, lack of documented income proof, lack of clear titles to the land, lack of permanent residence / locations, requirement of loans for longer period in view of their low income levels & insufficient domestic savings, etc.;
- e) Incapacity of private and public sector to provide low price housing for majority of population has led to a housing crisis.

In order to strike balance and meet out the requirements of the urban poor as mentioned in the Housing policy (i.e NUHHP-2007), the banks and housing finance institutions are required to make special efforts to reach the urban poor by developing new products of housing finance and dovetailing them with Government schemes of gainful employment to enhance the repayment capacity for servicing the debt.

Vast majority of urban population are poor and vulnerable. They are hardly able to meet their basic necessities of food and clothing. They have shown little financial capacity to contribute towards their own housing as their immediate consumption needs are overbearing. As a measure to enhance affordability, both indirect as well as direct subsidies have been extensively adopted in the name of social housing programmes, generally implemented by the public housing agencies. Subsidization as an instrument for tackling the problem of un-affordability was deployed with precision and selectivity. However, the limited availability of such funds in recent years has had considerable bearing on the identification of target groups as well as the quantum of assistance. The institutional coverage of the

sector being limited, interventions on both demand and supply sides, have been far too modest. This underscores the need for a more extensive and wide spread institutional networking with accent on the housing finance system. Institutional building in the housing sector has now assumed critical importance not only in the context of ‘affordability’, but also for a better integration of the housing finance system with the macro financing system. For providing affordable shelter low cost funds from various sources need to be tapped appropriately.

To illustrate, the factors which enable a AA+ rated (i.e. credit rating symbol assigned by credit rating agencies based on overall objective assessment / performance) financial institutions to determine its lending rates are as under:

Table 2: Factors Determining Lending Rates of the Financial Institution .

Determining Factors	Illustrative Cost
Weighted average incremental cost of borrowing	9.40%
Administrative cost (Staff & other misc. expenses)	0.35%
Incremental NPA Cost (cost on account of non performing loans or loans which have turned bad)	1.25%
Break even cost	11.00%
Assumed Spread (profit margin)	0.50%
All inclusive lending rate	11.50%

Now looking at the figures tabulated / illustrated above, it may be difficult to provide affordable finance to EWS / LIG categories at the above rates given the constraints they have at their end. Hence, it is essential that **an affordable financing mechanism is developed** to meet the immense requirement of housing shortage.

Access to cost effective and affordable technologies - The rapidly increasing gap between demand and supply of housing has led to a sharp rise in the prices of traditional building materials, raw land, and provision of no-site and off-site infrastructure which has pushed up the cost of construction to such an extent that is out of the affordability reach of EWS and LIG households. Further, the increase in the building cost Index has outweigh the increase in the Consumer Price Index and increase in the income level of the EWS and LIG category of people. Given this scenario, the pertinent question is: How do we cope with this- more so for the EWS & LIG? Scarcity of traditional building material like cement, brick, and steel and also high energy intensity of producing these building materials highlight the need for an approach which will concentrate on providing access to cost effective and sustainable housing and building materials & technologies. These technologies should also be environment friendly, ecologically

appropriate, energy saving and economical in cost so that affordable housing can be provided for the EWS & LIG.

The major factors responsible for promotion of cost effective housing are - building Materials which account for the major component (about 2/3rd) of the total cost of housing; construction technology; and cost of development of basic infrastructure and services.

- **Availability of developed/assembled land** - The housing finance provided by HUDCO/NHB (National Housing Bank, a subsidiary of Reserve Bank of India, which acts as regulator for Housing finance companies in India) is based on the principle of cost-recovery. It is therefore important that cost of housing is affordable. HUDCO specifies ceiling cost for each income category. Most of the public housing agencies find it difficult to build houses within the ceiling cost. The 'solutions' devised by a number of these agencies have succeeded in 'building' houses within the prescribed cost **but failed in providing shelter to the poor.**

The solutions include inferior locations (thus cutting on cost of land) and/or amenities or providing skeleton houses without doors and windows. It has been recognized for long that the 'best' locations for the poor are near their jobs since they can neither afford the time nor the money to commute from residence to workplaces. In most Indian cities, jobs are concentrated near the city centres. The 'solution' of locating the poor away from cities has found no takers for such houses. Similar has been the fate of houses 'without doors/windows'. If the ceiling cost and price payable by the poor 'defined' their affordability level, it is unlikely that they will have money to spend on doors and windows. The houses remain unoccupied. The story in case of cash-loans is slightly different. The loan has been found to be quite inadequate to build a proper house. In order to complete the house, this loan has been supplemented by loan from the moneylender at exorbitant rates of interest. The result - the borrower has a house, he renegades on repayment to the public housing agency, and can just manage to pay only interest on the amount borrowed from the moneylenders. **The housing program has led to indebtedness of the beneficiary.**

- **Community organization/participation** - There is a need for evolving an alternative, effective informal banking system at the community level itself for

providing composite credit and establishing an appropriate recovery mechanism eliminating organizational complexities which will be critical for a good delivery system. This is provided by the composite credit mechanism. Composite credit implies various types of credit needs for shelter, employment and so on and all these needs are equally important and are interrelated. **Composite credit mechanism (CCM) can gradually be transferred into a housing credit mechanism with improving income levels and affordability.** The NGOs and CBOs can be the major players in the delivery system for the CCM.

An integrated approach to these **four components** would provide the key to the promotion of affordable and cost-effective housing and improving the delivery of houses.

4 Proposal for Change and Improvement

Housing Finance holds the key to achieve overall objectives of affordable housing, with focus on EWS/LIG category (having 99% housing shortage). There are two main focus areas which need to be addressed, covering (i) further liquidity in the housing finance system; and (ii) increasing access to housing finance for weaker sections living below poverty line and low income households

If the Goal of “Housing For All” is to be achieved in not-too-distant a future, it is imperative that the Government (both at the Central and State level) play a more active role in providing housing for the poorer sections of population. It may be noted that despite all the housing friendly policies of the Government, rate of growth of housing stock slowed down in the decade 1991-2001 compared to that in 1981-91. The mechanism that may lead to improvement in shelter situation are as under:

- **Access to affordable finance** - For providing affordable shelter, low cost funds from various sources need to be tapped and channelized appropriately. Some of the sources are described below:

- a) **Routing interest subsidy on housing loans through Banks / Public**

Financial Institutions - Provision of finances for construction of houses can be done by institutions, both in the public sector or private sector. However, the public sector institutions, faced with reducing governmental budgetary support and directed assistance and rising cost of funds from independent

sources are finding it difficult to raise resources at a cheaper rate for constructing housing for poorer segments of the society at an affordable price. These are compounded by unsustainable policies directing them to finance projects where recovery of funds is doubtful and interest rates are abysmally low in relation to the cost of funds, affecting the long-term viability of the financial institutions. **Government should leverage the public sector through appropriate subsidies and budgetary allocations,** particularly for EWS/LIG housing. Role of the Central Government housing finance institutions like HUDCO assumes considerable significance for financing low cost housing.

In the above background, there is a need to provide interest subsidy to EWS/LIG borrowers, who are “First time Home buyers”, as a measure to improve demand for housing through affordability and accessibility of institutional finance. It is abundantly clear that these people are unable to afford a house of their own in view of the existing market volatility which has witnessed continuous & significant increase in housing prices and interest rates over the last few years. In line with the existing interest rate scenario, an interest subsidy in the range of 5-6% could be provided to EWS/LIG segments for availing housing loans from lending institutions for construction of their houses. This facility is likely to stimulate demand for affordable housing and thereby reduce housing shortages, as can be illustrated below:

Table 3: Affordable Housing by Access of Affordable Finance (INR – denotes Indian Rupees)

Assumed Cost ceiling for EWS Housing (INR 1,75,000/-)	US\$ 3889
Likely financial assistance (70% of the cost i.e. INR 1,22,500/-)	US\$ 2723
Normal lending rate (details as tabulated above)	11.50%
Less : Interest subsidy to be passed on by Government	5.00%
Effective subsidized rate for EWS Segment	6.50%
Equated monthly installment (EMI) assuming loan @ 6.5% with repayment period of 15 years (INR 1068/- per month)	US\$ 23.75
Income criteria for EWS (INR 0 – 3300 per month)	Upto US\$ 73.50
Loan to Income ratio (based on 15 year loan)	32.31%
EMI assuming loan period of 20 yrs (INR 913/- pm)	US\$ 20.30
Loan to Income ratio (based on 20 year loan @ 6.50%)	27.60%
EMI assuming loan @ 11.50% period of 20 yrs (INR 1306/- pm)	US\$ 29.03
Loan to Income ratio (based on 20 year loan @ 11.50%)	40%

It is now recognized that financial affordability has two aspects, cost reduction and income upgradation. Affordability is essentially a measure of an individual's capacity to pay the delivery price. Household income is

normally taken as the primary factor to assess housing affordability, relating it to housing cost. In India, generally, affordability is taken as EMI/Rent not exceeding 30% of household's gross annual income, depending upon the income group. As would be observed, with the interest subsidy of 5%, the loan to income ratio falls down to the level of 27.60% (as against 40% based on loan @ market driven rates of 11.50%). Further, as per the Industry standards, the cost of house comprises of mainly two components – Building material (70% of total cost) & labour cost (30% of total cost). By devising a model wherein the beneficiary of the houses are actually involved in construction (thereby saving 30% of construction cost) of the dwelling unit and introducing interest subsidy as detailed above, houses could be made affordable for lowest segment of the society as well.

- b) **Plan fund allocation for repayment of loan** – As has already been explained in the foregoing paragraphs, Credit risk / NPA Cost (i.e. cost associated with delinquent loans) is an important constituent (almost 1.25% as tabulated above) for any financial institution (FIs) / Bank in India to determine its lending rate. It is hence essential that in order to enable FIs to cross subsidise & provide affordable finance for low income category, Government should consider establishing a suitable mechanism for recovery of the overdues (of HFCs) backed by the Government guarantees and / or the commitment of budgetary support, **by way of adjustment in the plan funds to be provided by the Central Government to the State Governments.** Further, Asset quality of a Financial Institution is one of major factor which is taken into account by the Credit rating agencies (viz. Moddy's, S&P, Fitch) while assessing / assigning credit rating. The above mechanism would lead to improvement in asset quality & financials / profitability of a financial institution, thereby resulting in better credit rating score assigned to them by the credit rating agencies. This would translate into assured recovery of the advances granted by FIs against these projects, enabling them to cross subsidize & provide affordable finance for low income category.

It would be important to note that recently Comptroller & Audit General of India (C&AG of India, a govt body) in its Report No.22 of 2007 regarding review of Housing activities, has endorsed a similar view wherein it has been suggested that HFCs and their Administrative ministries need to work in

tandem to establish a suitable mechanism to monitor and ensure early recovery of the outstanding amounts guaranteed by State Governments.

- c) **Tapping International funds / Capital** - Appropriate linkages could be established between international community (including multilateral and bilateral agencies) and the informal sector activities and credit mechanisms, so that this growing segment of the economy gets access to the global pool of resources for supporting shelter related activities in the developing countries. In this endeavour, the participating efforts of the NGOs, CBOs and the community must be developed. Moreover, with the inflation figures touching all time high, the Central Bank has been taking fiscal measures such as increase in interest rates, removing excess liquidity in the financial system, to curb inflation. This would mean, higher interest rates in the domestic markets, making it all the more difficult for the domestic financial institutions to cross subsidise in order to finance a social housing project at affordable lending rates. It is hence pertinent that alike private housing finance companies (HFCs), who can raise international funds through ECB (External Commercial Borrowings) route by issuance of FCCBs (foreign currency convertible bonds)), Government HFCs (such as HUDCO who are predominant players in the area of providing finance for social housing) are also permitted to tap funds from International sources viz. Commercial / Syndicated loans from Multilateral agencies (viz. ADB, World Bank, JBIC, Kfw, etc) subject to the loan having an end use restriction for Social housing.
- d) **Increase liquidity in Housing finance system by promoting foreign direct investment** - The National Urban Housing & Habitat Policy 2007 also seeks to attract Foreign Direct Investment (FDI) in areas like integrated development of housing and new township development. FDI is expected to boost this sector and help in overcoming the shortage of housing and related infrastructure in the country. FDI in real estate sector could help to overcome the paucity of domestic funds and bring in easy access to finance at more reasonable interest rates for the developers. It would also provide better technologies and management systems. Foreign Direct Investments in the real estate sector would also contribute towards making the sector more organized besides increasing professionalism in the sector. It would also bring in advanced technology and help in the creation of healthy and

competitive market environment for both domestic and foreign investors. In this context there is a considerable interest shown by foreign companies and investors to invest in housing and real estate in India to tap the potential emerging in this sector.

- e) **Enhancing accessibility through Micro Finance** - expansion of micro finance has enormous potential; (i) to mobilize additional resources and (ii) to facilitate weaker sections and low-income households for increasing access to housing finance. Financial Institutions engaged in Micro-finance and lending to the poor employed in the informal sector must be allowed to not only issue credit but also accept deposits. Offering full scale banking services to the poor is a critical component of increasing access to financial products for the poor. Offering savings products to the poor is important because (i) poor needs to save lump sum amount required for down payment and (ii) assessing the customer's savings capacity. It has also been proved that the only financial institutions which can serve the lower income group are SHGs or Saving Societies. This is a financial cooperative organized by a group of people having a common interest. It is based upon the principle of '**develop oneself and let others develop simultaneously**'. It is the responsibility of the government to explore how SHGs could be integrated as actors and agents in the wider social process and how they could be better and more directly involved in the delivery of government housing programmes.

The above are some of the sources from where cheaper funds with better terms and conditions can be mobilized to meet financial aspect of affordability.

While the above are the focus areas for enhancing affordability of EWS/LIG segments, following alternatives would also need to be explored to address shelter related issues in larger perspective:

- **Enhancing affordability by promoting cost effective & affordable technologies** - The traditional approach to make housing solutions affordable is focused on reducing costs, through subsidized land and capital and in some cases building materials and operational overheads of public sector housing delivery systems. This approach has

not been effective. Affordable housing has both (i) financial and (ii) technical aspects. While the focus of financial aspect is cheap and affordable institutional finance through institutional networking and income upgradation, the promotion of low cost housing using cost-effective building material and innovative construction technology is the focus of the later. It is hence essential that alternative building materials / technologies viz. use of FAL-G (Fly ash, Lime & gypsum) bricks as against conventional red clay bricks, Stone slabs for floors / roofs, fibre / bamboo boards / rice husk for doors & windows, etc could be promoted / disseminated (depending upon availability of material & technologies locally) in order to reduce cost of construction (without sacrificing on quality / strength), thereby enhancing affordability of economically weaker sections of the society. Further, hurdles in adopting low cost technologies such as lack of awareness should be eradicated by disseminating information about the product, optimum utilization of local natural resources educating / training local people, for vast acceptance.

- As an alternative, the Government needs to promote **Social (rental) housing** since the poor cannot afford adequate housing in the formal sector through market processes. Social rental housing schemes have been an important instrument for provision of housing services at affordable prices to general public in many countries of the World. Further given the magnitude of the problem, **private sector will have to be roped in and low cost housing options explored**. The low rate of profitability on such housing makes it an unattractive proposition. In order to make providing for the poor worthwhile for the private sector, Government may have to provide subsidy in various forms namely subsidized land, low-interest loans, tax benefits etc. The Government may also have to relax building byelaws and permit higher densities (FAR) in these projects. Housing for the poor can become an affordable proposition for the poor and a viable one for the supplier if cost of housing could be lowered. EWS housing could be treated on the same lines as investment in industrially backward areas. A private developer can deliver lower income shelter solutions with PPP (Public private partnerships) and still make a reasonable return on investments. Changes in related legislation could make the proposition more attractive. Further more, when 99% of the housing shortages are in the EWS & LIG category, affordable housing for all, becomes a feasible target only if **land is made available at pre-determined prices or free of charge for housing**.

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*Note: Exchange rate of US Dollar (US\$) vis-à-vis Indian Rupee (INR) assumed as
1US\$ = 46 INR.*