HOUSING FOR ALL (URBAN)

1. Analysis Of Housing Needs

The main reasons of irrevocable migration from rural to urban areas are quality of education and health services, lesser discrimination between castes and to some extent the economy (income and expenditure is much less in rural areas).

Most of the rural migrants have a monthly income of less than ₹ 5000/-, which slowly increases after shifting in the cities. After migration most of them can only afford to live in slums and are engaged in jobs with very low potential of growth. Mostly, the male members shift to cities and after a certain period bring their families. This result into smaller average family size requiring more houses in proportion of total migrants. By 2040 about 30 crore citizens from rural areas will migrate into urban areas. Already, about 24% of the citizens are living in slums in urban areas. In three decades this percentage will increase to 60% (example of Sao Paulo) with the present level of our efforts in this direction. Naturally, by then it will be too late to solve the problem and hence certain additions in our policy is urgently required.

As per my estimate, by 2040, about 8 crore new houses for migrants will be needed in urban areas but 6 crore houses in rural areas will be left unused to reach a state of dilapidation. There is no wisdom in constructing such a large amount of wealth discarding the wealth in hand. The issue is to be addressed urgently after admitting that the migrations are irrevocable and it is time consuming, expensive and not in the national interest to slow down the speed of migrations.

The long distance migrations have been increasing at a fast pace in last 20 years. They are the result of intermittent or sporadic development at concentrated fewer places and in corridors. It is resulting into widening the gap in emoluments for similar work in different urban areas. This imbalance has created new problems in several fields. The net effect on the housing sector is that, it has now become almost impossible to draw a pattern and assess the correct number of houses for migrants in different urban areas. The final result will be shortage of housing at certain urban centres and vacant unoccupied dwelling units at other centres.

The government has done well to increase minimum dwelling unit size to 30 sq. m. carpet area. While it still needs upgradation as norms are inferior by a distance in minimum built space per citizen from Chinese norms (The minimum size of dwelling units in china is 50 sqm and Chinese average family size is less than half of the average Indian family size). Increase in minimum area of dwelling units is a revolutionary step as it will give relief to many Indian families where often three or four generations live in a single room tenement resulting into many of their kids growing to turn into criminals/practice criminal activities. But still a 30 sqm dwelling unit can not have workplace for young mothers or other house wives and for kids under seven to interact and play within themselves in the safety of supervision of their elders.

Here, we must consider that a large portion of our citizens are children (Kids are not rich or poor, their parents are) and in a democratic society they must have equality of opportunity at least in the quantity and quality of built space for them to grow. And, yes, there are ways for us to do it.

We have about 9.0 crore urban homes including individual houses, multi family dwelling units, vacant houses and houses in slum areas. Of those, about 24%of the families live in slums. It is easy to calculate the present demand as 2.0 crore approx., but we have to formulate and execute solutions for growing demand added to the present demand. The present demand can be correctly calculated in each city but it is difficult to calculate the growing demand for every city /urban settlement.

Now it is time for us to shift from low-cost to economical housing for these migrants and citizens living in slums, evolve methods to construct sturdy housing (with at least 80 years of life expectancy) with better specifications, lower cost of maintenance and eco-friendly. Minimum standards for landscaping, water re-cycling, sewage treatment plant etc., shall also be provided. They shall be good enough to motivate citizens to live in them even after their financial progress in the coming decades.

The urban population is expected to be double by 2050 from 41 crore in 2011. It does not mean that the housing demand in urban areas will rise in proportion and 9.0 crore additional houses will be required to be built by then. In fact, we will have to build another 7.0 crore houses because of the reduction in average urban family size (from 4.8 the average family size in urban areas will go down to 3.5 very quickly). Apart from socioeconomical reasons our control oriented policies are the major reason for this reducing average urban family size.

The life expectancy of Indian city houses is 30 to 80 years (infact many low cost constructions came in a dilapidated condition within 15 years' time). This also results in increasing demand for new constructions. We have to ensure to raise both minimum and maximum limit of life of buildings by upgrading our technical skills.

With new innovations in medical engineering life expectancy is growing up. Housing for senior citizens is of utmost importance. Planning isolated homes for senior citizens shall be banned. Housing schemes shall provide accommodation to them on same floors with other citizens where senior citizens can interact regularly with kids and other age groups. We have to come out of the mental frame of classifying housing as two room, three room, 2 BHK, 3 BHK or 4BHK houses. A small upper middle class family may like (for reasons of security, trouble of maintenance etc.) to shift in a much smaller luxurious flat (only if it can find one to suit its status). Here we must understand that it is improper to link the size of house with financial status.

Our thoughts shall also go into finding solutions for housing of students and citizens frequently moving from one city to another or going back to rural areas in the cropping season.

2. Building economics

The construction cost of two architectural plans with similar building programming, area and specifications may vary upto 40%. At present we make first stage estimates on area basis. This is vague as the volume of the building matters and we pay for the volume of material consumed in the construction.

Workshops and training programmes shall be held on the subject frequently to achieve goals of economical building construction, especially when we can foresee such a large future demand.

Richer specifications requiring much less maintenance cost shall be preferred as they workout much cheaper in the long run.

Cost of staffing is one of the major part of building economics (this is largely neglected at present). Cost of staffing in certain buildings (e.g. educational building) overtakes the cost of real estate in less than a decade.

Accurate and speedy execution with good management also cuts down the cost of construction. The type of contract also effects it. Our system of tendering has not been able to give desired results. Different systems are being followed in different countries. They shall be studied and a suitable system shall be worked out (instead of blindly copping them) for good practices. Good contractors shall be given due respect and shall be encouraged to pass on their skills to youngsters willing to join the profession.

Structural economy changes with variation in soil conditions, seismic zones, wind load, proportion of cost of steel andcement etc. Proper positioning of structural members also creates opportunities for economical structure. A national level technical exercise is needed to calculate structural economy for various variations to be used as ready reckoner.

Note: Please also go through the chapter on housing in the book "Rethinking Urbanism- A step towards golden era".

3. National Building Code

To complete the big task in hand our national building code needs revision. The chapter on lighting and ventilation is very poorly written and reflects no understanding of the subject. The earthquake code has made the building expensive than before and yet it does not permit buildings like the Imperial hotel, Tokyo, one of the very few survivors of the earthquake in the early 1920's. Fire safety norms also need revision.

A five member committee shall be made to examine & incorporate suggestions from concerned Architects & Engineers. If the committee is not convinced then an opportunity shall be given to prove their point of view on basis of lab experiments or practical testing. This flexibility is very important as the wisdom of a handful of gentlemen involved in preparation of the NBC cannot be superior to millions of citizens involved in the industry and in no case shall be binding to all in absence of direct interaction opportunities.

4. Finances

In India the concept of fixing EMI against housing loan is not very old. At present the principal amount increases and interest decreases every month. It is time now to evaluate the system. Telescopic repayment schedule is most suitable for housing loans. The system is borrower friendly by a mile as it increases borrowing capacity and ease out repayment of instalments. A properly worked out system will be beneficial to banks also as it will increase total collection of interest amount and reduce bank's NPA's.

5. Lifestyle and space requirement

The space requirement of a family increases when it adopts European lifestyle giving away the Asian lifestyle. Asian lifestyle is also superior in personal health and hygiene. Educating general public about it will reduce overall requirement of built spaces at the country level.

To provide every urban citizen with housing is very complex. The housing needed by the citizens has a very wide range .It will change with time as requirements of family needed by different age groups $(30^{+},40^{+},50^{+},60^{+},70^{+})$ are different.

In the country like ours, where (in last 64 years) our investment on boundary walls is more than that on basic amenities of sewage disposal or water management, rethinking is required on every subject. In addition to above points our thinking on following points will have impact on end results on the subject matter-

- Regular yearly feedbacks from end users for at least five years.
- Incremental house and their provision in multi-storeyed buildings.
- Alternate to provision of additional bedrooms kept underutilized and used for small number of days every year.
- Housing as commodity or basic right.
- Subsidised housing or creating opportunities for citizen to earn it.
- The person getting a house is a beneficiary or citizen with fundamental rights.
- Alternatives for terminology of EWS, LIG etc. which are giving complexes and bad postal address to the end user.
- Building bye-laws.
- Relation between FAR, density and infrastructure.
- Ratio of social responsibility between society and government.
- Housing and infrastructure is facility or development.
- Shall kids be classified as rich or poor?
- Special training institute for skilled workers in building industry.
- Fast completion of transition phase of building industry.
- Building industry to be given benefits of SEZ.