

STEPPING BEYOND TYPIFIED HOUSING TOWARDS A SUSTAINABLE HOUSING DEVELOPMENT

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Due to the industrial drive towards global uniformity, housing has become to mean just another commodity in the market or to mean the process of producing that commodity to the market. It is expected that this commodity, like any other good having a commercial value, behaves according to the supply and demand conditions prevailing in the market. As a result, the present day versions of houses in mass housing schemes are mostly typified and are usually catering the utilitarian needs of people such as habitable space and shelter.

However, it is widely believed that housing could also facilitate the realisation of other human needs which are of a qualitative nature. As Angel (1986) outlines, housing from a more complex point of view is seen as a product as well as a process of inter-related aspects having physical, psychological, cultural, ecological and economic dimensions. These could be elaborated as follows:

1. As a process, housing is more than the provision of shelter. It encompasses all the auxiliary services and community facilities which are necessary for human well-being (UN, 1976:1).
2. From a psychological point of view, it is important to realise that people expect to encode their humane qualities such as identity and personality in the physical forms of the houses they live in. Privacy, security, territoriality and exhibition of social status are some other related qualities of identity consciousness and personalisation (Cooper, 1974).
3. Housing in relation to social process associates with the aspects like human settlements, social groupings, community living and some symbolic meanings pertaining to the social organisation.

4. Housing as a manifestation of cultural process relates to specific values, attitudes, customs and beliefs of the society and its individuals.
5. Housing from an ecological point of view deals with people and their relationship with the surrounding built-environment. It considers people, their dwellings and rest of the built-environment as components of one eco-system.
6. Housing from an economic perspective refers not only to a commodity or an investment but also to a built-environment which facilitates livelihoods of inhabitants.

However, it is apparent that housing today has somewhat deviated from these multi-dimensions towards selected aspects or just the provision of physical entities. Housing is being stereotyped and industrialised towards a uniform commodity. This paper attempts to outline a holistic framework of housing within the current global concern on 'Sustainable Development' and present some contemporary examples of mass housing to emphasise how several architects in Asia have more positively used the tool 'type' to build thousands of typified units while satisfying higher needs of housing.

Sustainable Housing Development

The problem of reconciling the imperatives of economic growth on one hand and safeguarding the eco-system and socio-cultural systems on the other is one of the greatest issues in the present era. This global concern has led to the coining of the concept 'sustainable development' (Barbier, 1989). As a goal, the sustainable approach is a concept of enormous persuasiveness as well as of increasingly recognised validity. It seeks to merge and thus to resolve the

apparently competing goals of economic growth, socio-cultural continuance and ecological balance (UNCHS, 1990:V).

The implications of sustainable development paradigm on housing development add more concerns to the existing housing policies. In other words, the term sustainable development brings together three strands of thought about housing which are conspicuous by their absence in policy formulation today, i.e., the broader concerns on environment, economic structure and social system (see Figure 1).

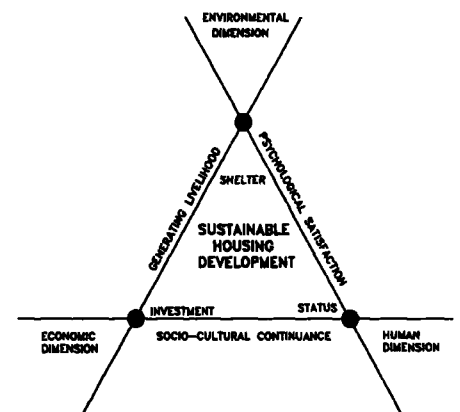


Fig. 1
Concept of Sustainable Housing Development

It is true that housing strategies sometimes take environmental concerns such as neighbourhood conditions, infrastructure facilities, environmental services, standards of living, quality of the built-environment etc., into account. But very rarely the age-old housing traditions are pursued and houses are seen as nuclei if not places for earning a livelihood. The concerns on vernacular traditions, cultural continuity and psychological satisfaction are almost absent in present day mass housing due to typifying housing towards uniformity and industrialisation as any other commodity in the market. These non-quantifiable

aspects are often treated as luxuries and consequently considered unimportant and forgotten (Balasuriya, 1995).

Within these concerns, sustainable housing development requires holistic policies incorporating continuance of socio-cultural traditions, generating livelihoods, psychological satisfaction and overall harmony with the eco-system. This would mean the reconsideration of the key issues which are absent in housing policy formulation today.

Under the enabling housing strategies advocated by international development agencies over the last decade all three goals of sustainable development were somewhat addressed. Under those strategies the institutional interventions were minimum while maximum support was provided for the beneficiary households to find a design solution to the housing problem within their affordability limits. Through the utilisation of socio-cultural practices and traditional technologies prevailing in the respective regions, maximum psychological satisfaction of beneficiaries was also ensured. Shelters, people, their livelihoods and residential neighbourhoods were considered as components of one and the same eco-system. Above all, the enabling policy disregarded typified housing to a greater extent and encouraged people to achieve their personal housing needs by taking design initiatives by themselves. Therefore, it was an approach heading towards the overall goals of sustainable development.

In contrast, the present utilitarian and consumer-oriented approach advocated under global privatisation trends is a large deviation from the previous approach. In other words, due to the promotion of the private sector's involvement in housing development, the design solutions are leaning towards typologies again which have been criticised since the early twentieth century when the master architects Le Corbusier and Walter Gropius promoted the idea of mass production by industrialisation of housing with typified designs (Taylor, 1990:4).

The present approach may achieve some goals, that is, producing the specified number of housing units speedily and economically. However, when implemented under political and market pressures, it may induce more and more substandard and overcrowded housing to emerge because of the alterations, additions and adaptations carried out by the residents due to their dissatisfaction with the typified physical entities. In other words more environmental problems, dissatisfaction and deviation from socio-cultural practices will be resulted if housing is seen only from a utilitarian perspective. Instead of solving the housing problem, the private sector and also the public sector may indirectly sponsor haphazardness and creation of slums in this way. It does not take much effort to see the polluted residential neighbourhoods, overcrowded public housing, degraded human settlements, overburdened infrastructure, cultural deterioration, public dissatisfaction and social inequalities through the holistic perspective of sustainable housing development.

Isolated and deceptively 'curative' policy actions directed towards specific repercussions may be even counter-productive. Therefore, it is always better to take 'preventive' policy actions, which are more difficult to adapt but holistic wherein housing is a potential tool for attaining sustainable development (Cuncha, 1988: 16). This would mean the consideration of the key imperatives that are conspicuous by their not so strong presence in policy formulation today. In other words, the sustainable housing development process requires a transformation of the house from a typified physical entity to a total entity which satisfies:

1. The physical need for shelter: Protection from the natural elements
2. The economic need for investment: Resources utilisation within the activity cycle and facilitating a livelihood
3. The psychological need for personalisation: psychological

satisfaction in a personalised territory.

4. The social need for cultural continuity: passing on traditions with vital indigenous additions.
5. the spiritual need for consonance: harmony and peace with the eco-system.

Satisfying these needs are a prerequisite for a long term sustainable solution to the housing problem that meet the housing needs of the present without compromising the ability of future generations to meet their own housing needs. In other words, satisfying these needs in totality has a long-term dimension unlike the short-term dimension in schemes such as public built housing or developer built housing. Moreover, such a process enables to make a home out of a house and a residential community out of a group of people living in a group of dwellings.

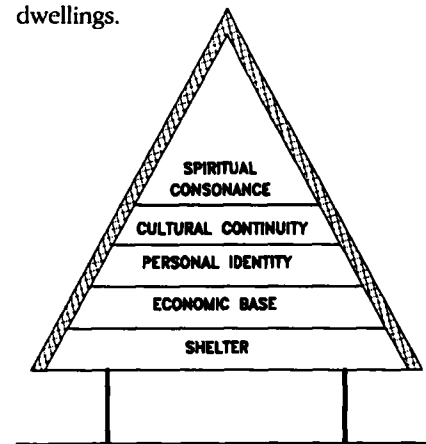


Fig. 2

Holistic Framework of Housing

Most often, the housing programmes have consistently left unsatisfied one or more of the latter four needs outlined above (see Figure 2). The consequences are serious. It is non-sustainability. The reason for leaving these needs partially unsatisfied is the lack of understanding of their complexities and mutually supportive nature. Today it is hard to find a housing development which is sustainable from the above holistic perspective. This is because housing policies that are instituted, knowingly or unknowingly, have the opposite development effect.

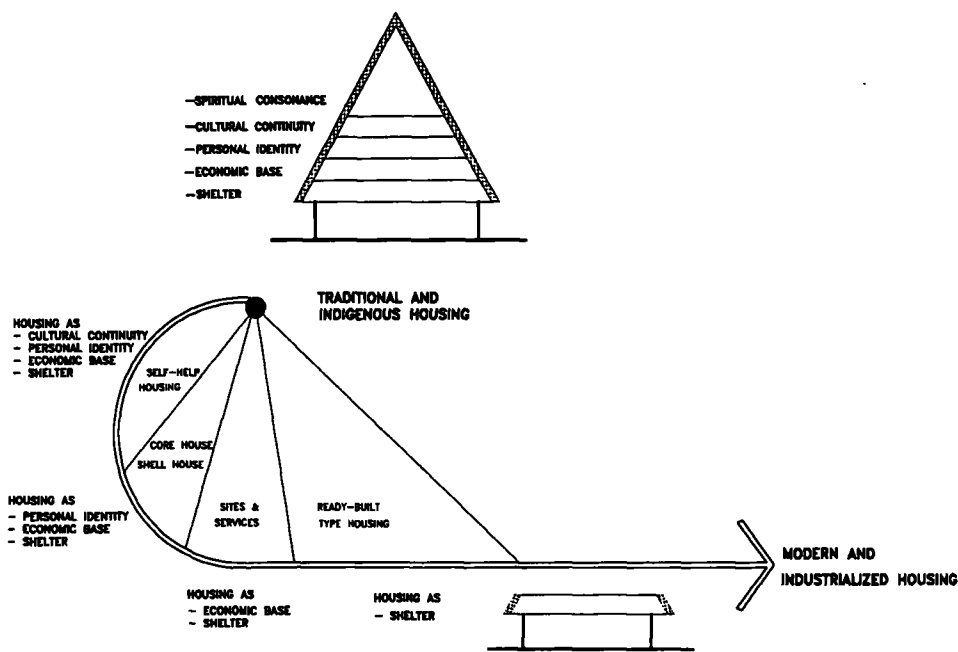


Fig. 3

Evolution of Typified Housing

Figure 3 displays diagrammatically the effect on the transformation of housing from a total entity with spiritual, cultural, psychological, economic and physical dimensions to a physical entity alone. It reflects the direction of development that the contemporary housing policies encourage. It also shows that the housing policies today encourage a gradual movement away from the vernacular traditions to global uniformity in parallel with the forces of modern development goals. The cause of this phenomenon is the perception of development as being global uniformity in living standards and technological achievements that want to subvert and 'control' nature. This global uniformity expands the housing trends beyond its limits of mutual trust between actions in the housing process resulting in mystification and dependency. In an increasingly dependent situation, fewer and fewer households are satisfied with all the needs that the traditional and indigenous housing process satisfies in this way.

In contrast, the holistic approach by its integrated dimensions allow it to attack the root of the problem through the use of an exogenous variable that has evolved over years. The solution that it provides is holistic and unique to each indigenous region. Its effect on housing is not to draw away from the traditional and indigeneous core, but to redirect national housing development strategies towards indigenous solutions. Housing would then return to being a total entity with spiritual, cultural,

psychological, economic and physical dimensions.

Some Deviations from Typified Housing

Although personalised housing is the ideal solution within the holistic framework, it is not practically possible and perhaps unwanted to design housing for each and every household. On the other hand, due to the increasing scarcity of land it is inevitable to opt for densed vertical housing developments which are inherently less flexible for personalised designs. Yet conventional housing typologies should not be the architectural solution in mass housing. Several architects from Raj Rewal and Charles Corea in India to Tao Ho in Hongkong have taken up this challenge and adopted rationalised approach to resolve the dilemma between personalised housing and mass housing. Understandably, their sources of inspiration have come from research on traditional vernacular housing prevailing in their respective housing regions.

For example, Raj Rewal, the renowned Indian architect has designed an urban fabric made up of courtyard houses called 'haveli' type. He has rediscovered that the 'haveli' housing in the dessert cities of Rajasthan, particularly in Jaisalmer are so well adapted to the diverse Indian culture and climate, hence much of the new housing he built in New Delhi have been inspired by the 'haveli type'

which comprise of low-rise but high-density houses (100 units per hectare) offering good natural ventilation, privacy and certain individuality for inhabitants (Taylor, 1990:5). In New Bombay, Charles Corea has built experimental courtyard housing called Belapur Type. There, the courtyards of individual houses provide the space for incremental expansion as needed with the socio-economic mobility of the inhabitants. Some space is always preserved as community space yet the design facilitates inhabitants to create their own personalised territories (Das, 1991:79). Small housing clusters arranged around highly interactive spaces such as squares, streets or passages as in traditional Indian settlements is a special feature in the designs of both these architects compared to the monolithic residential blocks or row housing of their European counterpart. This concept has been extensively used by the Housing and Urban Development Corporation (HUDCO) of India in subsequent mass housing projects (Das, 1991:56). The revival and adaptation of similar housing traditions are seen in some early house designs of Geoffrey Bawa too. However, they are rarely used in the context of mass housing in Sri Lanka.

A second type of house that has inspired some architects of South-East Asia is the traditional archetypical hut of Thai, Malay and Filipino cultures. For example, the 'nipa hut' constructed with bamboo has been the starting point for a number of housing schemes

designed by the well-known Filipino architect Bobby Manosa. In the Tolosa pilot project and in his own residence, both inspired by the traditional 'nipa hut', the architect has demonstrated what local traditions and resources could produce. Architect Jimmy Lim of Malaysia has carried out similarly inventive experiments based upon the traditional Malay house. More recently, a group of architects in Bangkok called Plan Architects has adapted the concept of traditional Thai house on stilts in a village like condominium project in the old part of the city. Here the houses are arranged tightly together around an open wooden deck and a 'sela' (a pavilion). The project is a trail-blazer since it has used a vernacular style without trying to slavishly imitate the original and also not falling into the error of pastiche or the stereotype.

A third example of a revived house type which is indigenous to Asia is the shop house with its workshop or commercial space on the ground floor and living quarters on the upper floors. This kind of houses have greatly shaped the urban morphology in South-East Asian cities from ancient to modern times which include the cities in China to modern-day Bangkok. This house type is ideally suitable to meet the shelter needs, investment needs and cultural needs. Curiously very few attempts to adapt this concept in housing schemes are seen in South-Asian cities where urban livelihoods, particularly home-operated economic activities is a significant phenomenon in low and middle-income settlements (Perera, 1994:128).

The purpose of raising the whole issue of housing typologies with contemporary examples is to emphasise the way architects in Asia have more positively used the tool 'type' for designing and building thousands of housing units industrially and economically while satisfying the

higher needs of housing. The examples illustrate how architects have rejected the notion of mass housing as a monolithic apartment block, as popularised by Le Corbusier, and derived inspirations from traditional architecture to meet higher needs of housing and the demands of a modern-day industry.

In the present housing industry most architects have often taken upon themselves less of a role as form makers and creators of conducive built environments but more of a technical adviser's role concerned with the economic and industrial mechanisms of providing shelter. It is time to redefine the architects' role in mass housing, since the really effective mechanisms seem to involve satisfying intangible needs such as economic need for investment, psychological need for personalisation, social need for cultural continuity and spiritual need for consonance. This role will be particularly challenging in the years to come when housing needs to be high density vertical developments as against the low density horizontal developments of the present era. At the same time architects should be able to face the challenge of stepping beyond typified housing towards a more sustainable housing development.

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