

CHAPTER 8

Suggested Approach for Setting and Evaluating Standards

As the foregoing chapters demonstrate, standards are the intermediaries between what is and what ought to be; between the real and the ideal. When applied to shelter, they are meant to reconcile *basic* needs, determined by natural and biological requirements, and *cultural* needs determined by social values, the level of economic development and technological capacity. Their role, in short, is to enhance the quality of life within human settlements.

Between the basic needs and culturally desirable needs, there is what might be termed *minimum* needs. The locus of this point of minimum needs on the basic-desirable continuum is determined by a variety of factors. Important among these are the level of economic development, the class structure of society, the capacity to build of individuals belonging to each class, government policy with regard to housing, and natural environmental constraints and resources.

In a well developed economy with an almost egalitarian social structure, the minimum-need point would be approximately midway between the basic and the desirable need. In a heterogeneous social structure, the minimum needs of the upper classes would be closer to (or beyond!) desirable needs, those of the weaker sections closer to the basic needs. In a developing country characterised by accentuated class differences, a large group of population will be near or even below basic needs, and a small minority (2 to 5 per cent) will be close to or above the desirable needs. Between these two extremes are the middle class, who might constitute 10–20 per cent of the population.

CONDITIONS FOR STANDARD-SETTING FOR SHELTER PROVISION

Since economic, social and other conditions differ from country to country and within each country from region to region, it is obvious that there can be no universal standards for shelter. Shelter is essentially a cultural phenomenon and standards for shelter have to be related to people and their culture. The criteria used to define standards are however universal, for the needs and aspirations of the people are universal and so are the forces that influence individual and group decisions. The differences among standards are not to be found in criteria, but in the relative weights assigned to them.

Standards, if they are to be effective, must be enforceable, and they must not deter or delay the public or the private sector from providing shelter to meet real needs. This is possible only if standards are compatible with the overall social objectives of governments and are used as tools in the implementation of

development programmes. Standards must be backed by appropriate methods to utilise and enforce them, otherwise the whole process of standard-setting becomes an academic exercise.

Standard setting, therefore, must be seen as a dynamic process. Each standard must be established in terms of its capacity to meet a particular objective. Problems must be expected to arise as standards are used, in regard to both definition and implementation. To make standards realistic, therefore, a continuous evaluation of their performance is required. They should be tools, kept in constant repair, not works of art that must not be touched. Furthermore, to ensure that they are acceptable and enforceable, they must themselves satisfy six conditions:

- (1) Cultural compatibility;
- (2) Social responsiveness;
- (3) Economic feasibility;
- (4) Technological suitability;
- (5) Physical and biological harmony;
- (6) Temporal relevance.

1. Cultural Compatibility

Standards for shelter must recognise prevailing cultural norms if they are to avoid being ignored. Some cultures emphasize outdoor living, for example; certain others put priority on indoor living. Some cultures give prominence to trees and plants, others to open spaces. Cultures that place a premium on close community life, with houses clustered together, are in contrast to those which emphasize the privacy of individuals and households. All these traits, rational or irrational, have obvious and important implications for shelter provision. Similarly the size of dwellings, their internal distribution of space, and their external appearance are influenced to varying extents by cultural values and traits.

Cultural norms often find ready acceptance by people not so much because they are closely integrated with the economy and technology, but because they are in fact major expressions of the society's culture. Sometimes cultural norms are place-specific: a household moving from a rural to an urban area may quickly forsake the rural norms. People also respond differently to cultural norms at different stages in life.

Cultural norms need not, however, necessarily be static. Some change, or can be changed, faster than others. This is fortunate, since by no means all cultural norms are desirable in environmental terms. So long as a particular cultural norm affects only the individuals who adhere to it, it has limited nuisance value. If, however, it adversely affects others, it cannot be integrated into official standards without modification.

Cultural norms may exist in all three categories of norms that affect the

environment: man-space relationships, metabolic processes, and interpersonal and group relationships. Official standards for shelter must be responsive to all these categories of norms. Shelter is provided for man, or should be: man should not have to alter his way of life to meet unnecessary constraints imposed by shelter. But wherever the cultural norms clearly conflict with basic principles of sanitation and hygiene, or lead to a deterioration in the overall environment of the human settlement, official standards must avoid such weaknesses and must take priority over cultural norms. For example, many cultural practices of rural migrants to cities are village-specific. In rural areas these habits may be compatible with sanitary or environmental health, but they become very inappropriate in urban areas. The general principle, therefore, is that *official standards must be compatible with the culturally accepted norms of the people, except in cases where cultural practices adversely affect the well-being of the community as a whole.*

2. Social Responsiveness

One of the prime drawbacks of official standards is their frequent lack of social responsiveness. It is a well-known fact that developing societies are typified by dualism and highly stratified social systems. The majority of people remain on the periphery or outside the productive sectors. Class monopoly of social services and infrastructure works to the detriment of the weaker sections of society.

The whole social system is built to preserve the interests of the upper classes, including their exclusive rights to property and their conspicuous consumption. Unfortunately the government, bureaucracy, technocracy and planners usually come from these classes or identify with them. More often than not their vision is blurred by upper or middle class values that are antagonistic or indifferent to the interests of the weaker majority of the population.

When standards are set by this elite class, therefore, its values and image of the world inevitably get embedded in them. The concept of the world as they experience it directly enters their decisions. Standards for shelter and related environment matters thus reflect upper and upper-middle class values and styles of life. Consequently, all that such standards succeed in doing is to ensure that a few can acquire or build shelter which is 'standard' or superstandard, while the great majority are only able to build substandard houses or are shelterless.

If standards are to be responsive to social realities, therefore, they must be used as tools that help to provide at least minimum housing for all. This is possible only if we think not only in terms of *minimum* standards but also of *maximum* standards.

In the area of shelter provision, the problems of dualistic societies are twofold. On the one hand is the problem of production; on the other, that of distribution. With given resources a community may build ten palatial houses for a few, or a thousand houses to meet minimum needs for a larger group of people. What happens today is increasing restriction on people who build shelter to meet real basic needs. By contrast, those who build well above minimum standards and indulge in conspicuous consumption and an ostentatious life style are congratulated for adding to the so-called 'beauty' of the city.

Social unrest and dissatisfaction are not dependent on poverty so much as on an awareness of the disparities between the poor and the rich. Huts and shacks side by

side with palaces generate social tension because the poor feel deprived of resources which ought to have gone to improve their living conditions. Standards can play a major role in bringing about a more egalitarian life style provided that they are responsive to the social situation.

3. Economic Feasibility

Shelter represents an investment by either individuals or society. Standards must, therefore, reflect the capacity of individuals, societies and their institutions to meet the housing shortage and to enhance the quality of life. In a stratified social system, where a large proportion of the population is below the poverty line, the economic aspects of housing acquire a different meaning and importance. Although standards should obviously help to create a desirable living environment, they must be realistic in distinguishing between what is essential and what is merely highly desirable, if for no other reason than economic feasibility.

It has been well demonstrated that even to eliminate the backlog of housing shortage, countries like India need resources that are beyond their capacity. 'Minimum needs', however, are usually not those defined by the people but are those seen by élite experts who are often more concerned with how a city or village would look to foreigners than with what can best be done for the people.

If vast differences between the haves and have nots are inevitable for years to come, there is no reason why we should have common standards for housing the poor and the rich alike. Two separate sets of standards would be more realistic, more acceptable and more easily enforceable. If there is to be a single set of standards, it must be related to the capacity of people or public institutions to invest in housing. The resultant architecture and external appearance of the structures may be ugly, but so long as the houses are kept clean and hygienic and can meet the housing needs of the poor, they should be recognised as acceptable by the standard-setters. The emphasis in developing countries should be on housing the poor and curbing conspicuous investment in housing by the rich. *The setting of standards should take into consideration what people and nations can achieve within their financial and other resource constraints.*

4. Technological Suitability

Standards for shelter are closely linked with building technology. If this technology happens to be alien or unrelated to the needs of the people for whom the standards are intended, then such standards are unlikely to be followed and are unlikely to solve housing problems. The vast majority of housing and house types in all societies, in the present and future as in the past, will be based on locally available building materials and talent.

Studies in the three developing continents, however, come to a common and depressing conclusion: official building technology is largely borrowed and is linked neither to the natural environment nor to the social setting. The 'prescribed' technology is not within the reach of a large majority of the people; if these standards ruled, then a large number of people would have no shelter. The reason why relatively few people are really shelterless is because of the impunity with which such standards are violated, both in urban and rural areas.

When standards are closely linked to the social and technological characteristics

of the population, more and more people can participate in shelter construction, since they use locally available building materials and not high-cost scarce technology. *Standards which are inappropriate to local technology are unlikely to be effective.*

5. Physical and Biological Harmony

Standards for shelter must be in harmony with man's biological and physical environment. Man needs fresh air, calm and quiet, privacy, safe and drinkable water, and various other natural resources and opportunities. All these can be satisfied differently in different environmental settings. Unfortunately, modern design and technology of building have become ubiquitous; they are found everywhere no matter what the physical and biological setting. Cases of direct transplantation to former colonies of Western standards designed for the climatic conditions of European countries have been mentioned extensively in the three continental reports. Such indiscriminate importation of alien standards has many negative side-effects for developing countries. Among these are the frequent shortage of industrial building materials, the wanton destruction of forest and other natural resources, and increased disparities in living conditions among social groups. Desirable standards are those which can ensure the least pollution of water, air and other environmental elements, and which protect environmental quality.

6. Temporal Relevance

Standards for shelter, as for anything else, must be related to the needs, desires, tastes and social situation of the time. They must change as times change. In other words they must be dynamic and must reflect changes in the socio-economic level and aspirations of the people for whom they are designed. There is consequently a need to recognize the variable character of different elements of shelter. Some elements are likely to be extremely durable, while others may well be liable to change within a few years. The minimum size of a house and the definition of internal facilities, for instance, are likely to change relatively quickly as the economic capacity of households and communities changes. For such elements, standards should be variable and even waived temporarily to enable people to build their own homes. But the size of plot, the road network and the water supply lines may not change so rapidly. The standards for these elements should be established so as to ensure that they do not become constraints on the future.

The present craze for building substantial or permanent houses which may last for many decades does not appear to suit the needs of the developing countries. If new shelter is to be built in response to changes in taste or need, the old has to be demolished. In the developing countries, where changes in style of life are likely to occur relatively quickly, it seems, therefore, preferable to build houses which may last for 10 to 20 years using local technology and locally available building materials, at modest cost.

APPROACHES TO STANDARD-SETTING

In the light of the preceding considerations and principles, one approach to standard-setting may be based on a recognition of the areal or spatial dimension.

Policies and standards for shelter, in other words, will vary in different areas and communities in order to accommodate regional variations in the natural environment, the prevalent cultural practices and social values. Standards may vary between different locations within a settlement, between rural and urban areas, between different settlements and between different regions. At the national or regional level, standards may take the form of policy objectives; at local levels, they may establish specific requirements that are compatible with both these objectives and local conditions.

Similarly, it is necessary to distinguish among standards on the basis of their relative impacts on the environment and the economy. For example, standards and norms concerning the use of building materials or the density of housing tend to have major impact at the individual settlement level as well as at regional and national levels. They are likely to affect the environment as well as the national economy. Standards of this type should therefore be set within a framework of national policy and strategy. Specifications with regard to most permanent structural elements of shelter must be treated as 'strategic' standards which government must actively oversee from time to time. These strategic standards must be 'robust' but not too rigid since they are likely to be set at regional or national levels. There must be sufficient flexibility to accommodate local variations, and they must be capable of revision when the need arises.

By contrast, standards that make less impact on the economy or the environment are 'tactical' in nature and should be short-term and less comprehensive in scope. Such standards include those governing sizes of rooms, accommodation densities, ventilation, thermal comfort and per capita water supply. A new approach to standard-setting in developing countries would emphasize the need for government to make this distinction among the various standards governing shelter provision. Government should then take strong and determined action with respect to strategic standards whilst allowing greater flexibility in matters of tactical standards. This distinction between strategic and tactical standards may relate to areas as well as topics. Vulnerable areas such as city centres, major towns and resource regions could be brought under strategic norms, while less vulnerable areas could mainly employ tactical norms.

One important aspect of this new approach, in which government makes strategic policies and sets strategic standards with respect to certain components of shelter, concerns the issue of maximum and minimum standards. At present, most standards on shelter provision are designated in the form of *minimum* requirements. They represent the minimum level of performance that the authorities expect. While this minimum may be difficult or impossible to achieve for the majority of the population, the minority proceeds to provide shelter for itself at a level far above anything that can be regarded as desirable in the contemporary situation of the country concerned. The result, of course, is that this minority consumes a highly disproportionate share of the total resources available for the provision of shelter in the country.

In these circumstances, a successful approach to standard-setting in developing countries must involve the adoption of the concept of *maximum* standards. This requires that a maximum limit be set to the amount of land and material that any individual can consume in the process of providing his own shelter.

The concept of maximum standards may appear revolutionary until (and

perhaps even after) its rationale is understood. However, setting maximum limits to space or material use in the provision of shelter will ensure that more resources are available to the majority. It also increases the probability that a larger number can attain minimum standards in their shelter provision. The implementation of maximum standards is sure to reduce the wasteful use of scarce resources, whilst at the same time considerably improving the environmental conditions and efficiency of human settlements. From the point of view of the construction industries, the operation of a maximum standard should stimulate the construction of many more housing units, rather than concentration on producing expensive and relatively luxurious dwellings for the few. Such opportunities can, however, only be seized if the problems of appropriate technology are first resolved.

THE DIFFICULTIES INVOLVED IN IMPLEMENTING AND REVISING STANDARDS

The normal method of devising and revising standards, whether planning standards, housing standards or building codes, is through the creation of an expert panel. This invariably compares existing practice, conditions or standards with the standards of other countries or authorities and arrives at a consensus (see pp. 71-72).

This method is both unscientific and undemocratic. Frequently a particular aspect, such as reduction of cost or public health or structural safety, is allowed to outweigh other factors. This, of course, usually reflects the composition of the expert panel, the disciplines represented and the mandate given it by government. More often than not, the panel does not have full freedom; it may even be given specific instructions, e.g., reduce the cost of construction.

Another important handicap in setting and enforcing standards is that the two functions are usually carried out by different agencies. For example, the Indian Ministry of Housing formulates standards, while the Housing Boards and Slum Clearance Boards administer them. The Indian Standards Institution prepares building codes and local authorities are supposed to enforce them. Feed-back of the difficulties involved in implementation seldom influences the process of standard-setting in such a situation.

Enforcement of many standards, especially in regard to private construction, is effected by municipal authorities through the issue of building licences or permits after the proposed plans have been scrutinized. In general, however, this enforcement is neither adequate nor effective and it concentrates largely on unnecessary details. In most rural areas and small towns, even this degree of enforcement authority does not exist, and shelter is produced, by and large, according to group norms and individual fancies.

Most enforcement agencies, such as municipal governments and planning authorities, are aware of the difficulties of administering standards and norms. Lack of adequate power, lengthy legal procedures, political interference and corrupt local officials are usually cited as reasons for the ineffectiveness, but it is seldom appreciated that the unrealistic bases on which many standards have been set are among the main reasons for their failure.

It is clear, therefore, that unless standards have cultural bases and are adopted by the mass of people they are of little value. It is also obvious that unless the

standard-setting and implementing mechanisms are changed, no new approach can make a real impact. Standard-setting, evaluation and revision have to be treated as a single dynamic process that is constantly evolving and operating at different territorial levels. Involvement of the people and their representatives is crucial for success: a two-way channel for dialogue and consensus must be evolved.

Important prerequisites for such consensus are appropriate housing policies, so that standard-setting becomes easier and takes place within a meaningful framework. Standards that lack this overall policy context ultimately become aimless additions to the red tapes of bureaucracy. Another, equally important, prerequisite is environmental and social education. The problem of shelter provision in developing countries will not be solved by increased official intervention but through increased participation by the people; not by the greater use of sophisticated imported technology, but by the wider use of adapted and improved indigenous technology. It is certainly feasible in most developing countries to develop indigenous technology and vernacular architectural systems, perpetuated through craftsmanship that can easily be diffused even into rural areas.

CONCLUSION

Any new approach to standard-setting must accept the need to integrate shelter provision into the overall development programme of a country. Such an integrated approach to shelter provision recognises that housing is only one element of human needs and of man's endeavours to improve the quality of his life. Other elements – food, income, clothing, cultural advancement, general satisfaction and aspirations – are closely linked with shelter. Together, they make life an integrated whole.

Each individual or household builds a shelter that expresses a particular living pattern. Similarly each society should think of shelter in terms that are compatible with the life style of its communities. If the objective of a society is to evolve an equitable social system, then shelter provision must be one of several means by which this is achieved. Shelter is not only an end-product; it is also a means to other ends. Unless the standards are introspective – able to look back as well as forward – they cannot be realistic. Unless they are designed for the majority, they cannot be relevant for the society. Thus, unless standard-setting is related to the overall development objectives, constraints and programmes, standards create more problems than they solve. They deter many from constructing adequate shelter, and the result may be a built environment that restricts the poor from sharing in the gradual improvement of the economy and society.

Within an adequate policy framework an institutional machinery must be provided, containing a feed-back mechanism for formulating, administering and evaluating standards on a continuing basis. The need to maintain policy vigilance in the area of standards is long overdue. *Clear policy guidance and directions constitute a vital prerequisite for new standards and criteria that can greatly enhance environmental conditions in settlements in developing countries.*