

TYPES OF PLANNING

It may neither be advisable nor possible to classify the planning activity into various unrealistic water-tight compartments. However, quite often numerous pre-fixes have been attached to differentiate between various types of planning activities, for instance, utilitarian or functional planning, sectoral planning, comprehensive planning, short-term or long range planning, public sector or private planning, spatial planning – town planning, country planning, area planning, regional planning etc. All these are attempts to restrict the spheres of a specific planning activity.

The following paragraphs in no way are intended to present a classification of the planning activity into the above mentioned types but are simply directed to make the readers familiar with the implicit connotations of these popularly used terminologies.

Utilitarian planning or functional planning strives to achieve a supreme single specific goal. It relates to the planning of a particular element/function, of course, in coordination with the physical, social, economic, political factors. For instance, it may be carried out for any of such services as water supply, health services, education, slum clearance, flood control, transportation, telecommunications etc. Such a planning, however, may encounter administrative problems especially when the function involved spreads beyond the territorial jurisdiction of any single administrative unit boundary. For example, hydro-power development and utilization or sharing of river waters for irrigation development or development of telecommunications systems, all spread their net beyond the territorial jurisdictions of any single administrative unit. Nothing could be more illustrative of the problems being encountered by such functional or utilitarian planning than the inter-state disputes hanging fire over the sharing of water resources of various river systems of India *e.g.*, Kaveri river, Punjab rivers etc.

Conceptualisation of sectoral planning is also similar to the one discussed in the foregoing paragraph with a lot of overlapping. Sectoral Planning refers to the planning activity concentrating only on one of the sectors of economy say agriculture, industry, transportation, communication etc. It means planning for

each such sector independent of other sectors of economy. Hence, it is not a coordinated planning in the real sense.

The term comprehensive planning has also been used with implicit connotation of integrated planning of all elements of a single activity, for example, energy supply planning or global air transportation planning. In case of planning for global air transportation the sphere of planning exercise may begin with designing of aircrafts, their manufacturing, maintenance, replacement, operations, designing airports, their construction and management, system of world-wide communications relating to flight operations and controls, reservation and ticketing, safety and security regulations, crisis management and management of accidents etc. Similarly, the facets of energy supply planning may include its generation, production availability at competitive price, its distribution, both present and projected supply position etc.

Conceptualisation of short-term and long-range planning refers to the temporal life span of the planning process. If the planning is done under some exigencies, it may have only short-term objectives to achieve and hence may be termed as such and if the planning is futuristic, it may have long range objectives to achieve and may be termed as long-term planning.

Similarly, distinction has often been made between public sector planning and private sector planning on the basis of organisational background. In public sector planning, it is the public sector that takes up the responsibility, while the role of private sectors remains limited. In public sector planning general welfare of society becomes the guiding principle. In this case the principle of social justice and of spatial justice is usually adhered to. It implies that the development of depressed segments of society and of depressed areas becomes supreme. Such public sector planning has been practised more frequently in former socialist countries and a few less developed countries. By comparison, in private sector planning the responsibility lies mainly with the private enterprise where economic reconsiderations may become the guiding principle. For example, energy generation if given to private sector though may ensure uninterrupted supply, yet its cost may be much higher than that in the public sector.

Quite often the term spatial planning has been used to convey that the planning activity is concerned with reorganisation of space. Town planning, country planning, area planning and regional planning are all various expressions of spatial planning each restricting its sphere of action to a specific spatial expression. Town planning is concerned mainly with the planning urban systems while the country planning has the entire countryside at its core. Area planning refers to the planning of the entire area, which may consist of both towns and countryside. However, area planning is distinguished from regional planning on the basis of certain qualities of regional or areal unit being planned.

The planning unit in case of area planning can be any area, which may or may not necessarily be a region. A region has some unifying characteristics of its own, which unite the area into an organic whole. It is such a regional unit that becomes the basis of regional planning. All regions are areas but all areas are not necessarily regions because these lack in unifying forces that bind parts of the area together into a region. The conceptualisation of regional planning is being taken up in detail in the following pages.

Thus, it may neither be advisable nor possible to classify the planning activity into various water-tight compartments. However, keeping in view the subject of a specific planning activity in mind, the terms like utilitarian planning, sectoral planning, comprehensive planning, spatial planning, town planning, country planning, area planning and regional planning etc. have been used quite often.

Principles

In the foregoing pages, principles of regional planning have been referred to quite frequently. The discipline of regional planning, in its methodology and operation, is guided by certain basic principles. Habitability in regions of human occupancy can be achieved only when the regional planning adheres to the following basic principles:

1. The principle of vertical unity of phenomena
2. The principle of horizontal spatial unity
3. The principle of space-time continuum
4. The principle of comprehensive development
5. The principle of community development
6. The principle of equilibrium between social desirability and economic viability
7. The principle of ecological equilibrium

The principle of vertical unity means that all the phenomena that operate in a regional space are fully integrated with each other. No phenomenon exists in space in isolation from other phenomena operating in the same regional space. No change can be brought in any single phenomenon independent of or without influencing the other phenomena operating in the same regional space. **Fig. 1** gives the pictorial description or the synoptic view of the vertical integration of all kinds of phenomena operating in space. It depicts that at the base of the regional space lies the Real Physical Space, which consists of innumerable physical phenomena relating to lithosphere, hydrosphere, atmosphere, etc., both known as well as unknown. On this base of the real physical space lies the perceived physical space that is as perceived by us or for that matter by the regional planner. It may consist of all known physical phenomena pertaining to lithosphere, hydrosphere, and atmosphere within that specific regional space.

Needless to say that both the real as well as perceived physical space provide the base for integration of all kinds of phenomena. Above the perceived physical space lies the human space consisting of all sorts of human phenomena emanating from the demographic structure of the concerned region and covering both the qualitative and quantitative aspects. These are deeply rooted in the physical space as the demographic structure of a region exists only in integration with the physical space and not in isolation from it. It is the interaction between physical space and human space that gives rise to what maybe called as economic space. Thus, the economic space, the human space and the physical space all get integrated with each other (Fig. 1). The first basic principle of regional planning seeks the recognition of this reality of vertical unity of all phenomena and therefore planning for any single phenomenon independent of other phenomena shall not be in the real spirit of regional planning.

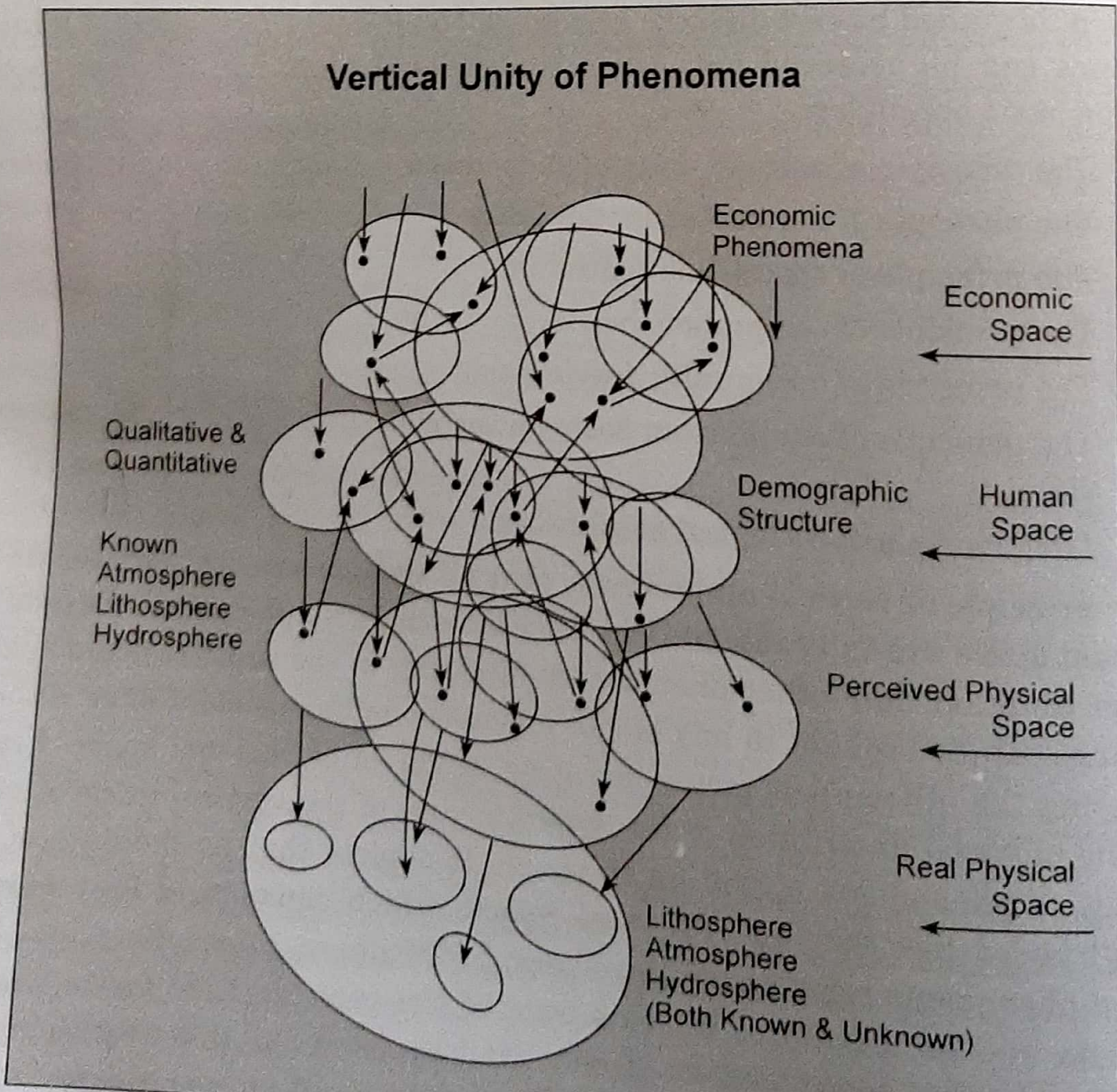


Fig. 1

The principle of horizontal spatial unity implies that each region constitutes a sub-system of the regional system whole. It implies that various regions, constituting regional space for planning purposes do not exist in isolation from each other, instead these exist in integration with each other as part of the regional system as a whole.

The human body provides the best illustration of such an integration between sub-systems and the system. The entire human body as a whole functions as a system, which consists of a number of sub-systems like digestive system, renal system, respiratory system, nervous system etc. Each one of them constitutes a complete system in itself and yet is a sub-system of the body whole. If something goes wrong with any of these sub-systems say the digestive system, it will affect the functioning of the entire human body, as the person may fall sick and may not be able to perform even day to day functions.

In the same way each region may be a complete system in itself and yet may constitute a sub-system in the regional system whole. Nothing can happen in any region independent of the whole. If anything happens to a region, it does affect the health of the whole because all the regional sub-systems are integrated with the regional system whole in the same manner as the sub-systems in the human body are integrated with the body whole. **Fig. 2** presents the pictorial schemata as to how a single regional unit gets integrated with other regional units of a nation-state and how various nation states get integrated with the international space. Thus, the second principle of regional planning seeks to recognise this reality of horizontal unity of space. It implies that the planning for any region cannot be done in isolation from the planning for the adjacent regions within the same nation. Similarly, the planning within the national space cannot be done in isolation from the planning in international space. It implies that regional planning amounts to planning in universalism. Thus, at the core of the planning in universalism lies the basic reality of nature, that is, the regions do not exist in isolation from each other, why then should these be planned in isolation?

The principle of space-time continuum implies that spatial reality is four dimensional consisting of three dimensions of space and one dimension of time and the two, i.e.; space and time, are inseparable. Time is considered as an integral part of space. A region is a living dynamic entity that operates simultaneously in the past, present and future like the human body's DNA's intelligence. From the past it takes the blue print applying it to the present and at the same time reserving its energies for the future. The regional planner must therefore recognise the fact that regional space is a continuously growing organic

Horizontal Unity of Areas

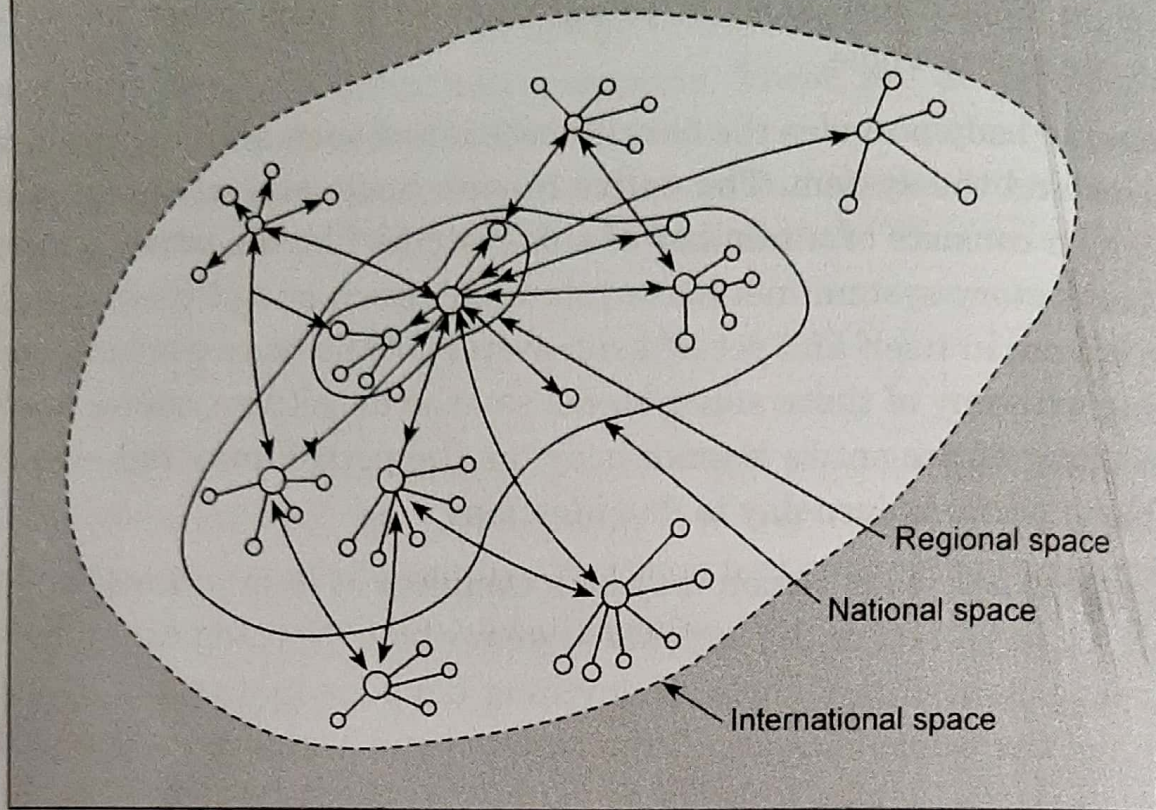


Fig. 2

whole. It means that regions continue to change through time not only in terms of space-content but also in terms of space-relationships. Thus, the regional planner has to be conscious of the fact that while he is planning in space he is also planning in time.

The regional dynamism displayed by the region through rapid changes in social and economic institutions limits the serviceable life-span of a regional plan. However, the regional planner should be able to distinguish between the changes that have an organic and permanent relation to societal well-being and also that are of temporary nature. Moreover, there is always a problem of anticipating the magnitude and direction of change the spatial regions continue to undergo all through their life. It is this continuing regional dynamism which makes regional planning almost a continuous process of revision and adjustment. Thus, the regional plan, like its subject – the region, too has to be equally dynamic undergoing modifications and reformulation to meet the challenges of continuously changing space-content and space-relationships.

The principle of comprehensive development means that the regional planning seeks to achieve the comprehensive development of the entire regional space, the regional system in its entirety. It means that the spirit of regional planning is different from that of sectoral planning, utilitarian planning or

functional planning which are directed to the attainment of a single specific goal. Regional planning instead seeks comprehensive development of all sectors of economy along with advancement of all segments of society. It may be pointed out here that comprehensive development of a region does not necessarily mean self-sufficiency for the region in all respects. Self-sufficiency principle means that the region may have to meet all its requirements from within, while comprehensive development would mean exploiting fully a region's potentialities in all sectors of economy and creating a harmonious society to optimise the habitability in the region.

The next principle of regional planning relates to the community development. Basic to community development is the principle of equal opportunities to all for self development. The entire society is considered as an organic whole, where each individual is a sub-system of this whole. It is only through equal opportunities to each individual that the whole society can be developed into a community with the sense of belonging to each other. The spirit of this principle of regional planning is to create socially harmonious communities with a sense of belonging to each other. Therein lies the habitability of areas.

The principle of equilibrium between social desirability and economic viability implies that while planning for comprehensive development of all regions, the regional planner has to maintain a balance between what is socially desirable and what is economically viable. The regional plans should not only be good intentioned but also should be economically viable. In other words, the regional planner has to bear in mind the potentialities of the regional economy and society while creating habitability in the regions of human occupation.

The last principle of regional planning seeks adherence to the maintenance of ecological balance in general. It means that regional planner has to develop the regional space at his disposal only within the framework of ecological equilibrium. That is to say that all developments in the region should be carried out without disturbing the ecological balance. The basic principle should be that man lives in harmony with nature rather than as a challenge to it. It is a principle that seeks to maximise harmonious relationship between man in a region and the region's environment. This is the only way to cultivate habitability in all regions of human occupation.

To sum up, regional planning can be successful in its operations and practice only when it is guided by seven basic principles of: (i) vertical unity of phenomena; (ii) horizontal spatial unity; (iii) space-time continuum; (iv) comprehensive development; (v) community development; (vi) equilibrium between social desirability and economic viability; and (vii) ecological

equilibrium. A strict adherence to these basic principles is the only way of creating habitability.

Objectives

Cultivating habitability and community building constitute the twin-objective of regional planning. Benton MacKaye (1928) had opined that cultivation of habitability in all regions of human occupation was the chief objective of regional planning. That is how regional planning distinguished itself from all other types of planning such as utilitarian planning, sectoral planning, functional planning etc. Thus, regional planning was much more superior form of planning and ranked high on the philosophical plane in comparison to other types of planning. Carol Arnovinci (1956) highlighted community building as equally significant objective of regional planning. Evolving communities as cohesive organic wholes in their specific regions in integration with the world community was, thus, inter-woven with Benton MacKaye's objective of creating habitability.

Habitability, measured in terms of ideal living conditions, depends largely upon a region's resource potential in both quantitative and qualitative terms, degree of technological advancement and degree of socio-economic awakening. The degree of habitability of any area, thus, in the first instance, was related positively with the totality of natural resource potential of the region. However, it is not meant to convey here that the regions that are not fortunate in natural resource endowment cannot hope to be habitable at all. Instead regional planning believes in creating habitability conditions in all regions endowed and unendowed regions alike. Singapore is the typical example of such a region, which does not possess any worthwhile resources of its own and yet has genuinely succeeded in creating attractive habitability conditions.

Similarly, habitability is positively correlated with the degree of technological advancement. Israel offers the typical example in this regard. The physical conditions in Israel and the Thar Desert of India are immensely similar but the former has emerged as a fruit garden while the latter continues to suffer its desertic sufferings mainly because of the contrast in the stage of technological advancement of the two areas.

Habitability is also positively related to the degree of socio-economic awakening. The higher the degree of socio-economic awakening the higher are the aspirations of the people and greater is the desire for progress. Such a society becomes a self-generating institution, which facilitates cultivation of habitability much more easily.

Closely associated with it is the concept of community building. Such a concept rests more on creating values that are respected and that motivate action. For instance, welfare values are those which are necessary for

maintenance of physical activities of the populace in a specific region. These values relate to well-being (health and safety), wealth (income, services, and goods accruing to individuals), skills (proficiency in practiced art or craft, trade or profession), enlightenment (knowledge insight, information concerning cultural and personal relations), respect (values of status, honour, recognition, prestige), rectitude (virtues, goodness, righteousness), affection (love and friendship) etc. The basic philosophy of community building rests upon guarding the rights of an individual so as to ensure his development and also enlargement of his opportunities. The rights of the individual are enshrined in equality, education, democratic processes, economic growth, technological advancement, good conditions, of health and welfare etc. which together help building an open peaceful world community internationally.

The primary concern in the process of community building, is the status of the individual in the society. All political, social and economic institutions must direct their efforts towards enhancing the dignity of the individual towards promoting maximum development of his capabilities and towards widening the range of choice of opportunities for him. Secondly, in such a process of community building there is no place for discrimination on the basis of race, religion, caste, class, gender etc. All men and women are treated equally with same dignity irrespective of their class, caste, religion, race etc. Thirdly, democratic processes ensure high degree of effective liberty to all inhabitants. Preservation of such democratic processes at national/international levels is of paramount significance for community building.

Fourthly, development of individuals and nations also demands the strengthening and availability of education at every level for all individuals. An investment in education is most vital for the growth of individuals, preservation of democratic processes, growth of economy, and evolution of society with an organic whole. Fifthly, the compatibility of economic system with political system of the concerned region is equally vital. Centres of economic power should be as balanced and as diffused as possible. Along with it the individuals must continue to enjoy the freedom of choice of jobs, goods, services /etc. Sixthly, consistent technological changes to promote right type of economic growth in right direction without any diverse impact upon individuals also help promote community building.

Seventhly, in the field of health and welfare, demand for medical care is increasing enormously. The planning for community building envisages that the planner should keep pace with the growing demand for hospitals, doctors, paramilitary staff, bearing always in mind that effective service in this field shall ultimately reduce its requirement in the long run. Lastly, creating among individuals a sense of belonging to each other and of belonging to the region of

their occupance is the best way to promote the processes of community building at local levels which holds the key to developing an open and peaceful world community.

The foregoing paragraphs establish beyond doubt that regional planning does not aim at realisation of any single specific objective but *it aims at regulating the relationship between human and environmental constituents of all regions of human occupance so as to make them self-generating organic wholes*. Such a realisation could be achieved through following measures.

1. Conservation of Life

This perhaps is the most vital and the most obvious field of action of the regional planning. According to Arnovinci, it includes all those elements that protect the health, safety and convenience in the interest of societal well-being. It implies creating such conditions where health, safety, convenience, and general welfare measures could be provided effectively, efficiently and economically. Just to offer an illustration with regard to health in the context of conservation of life, the protection of human health is basically contingent upon the reproductive health of the concerned society. If a society is engaged in the wasteful process of reproduction as a consequence of high fertility and high mortality, the general health level of such a society would be poor with very low average life expectancy at birth. Thus, cutting down mortality rate alone would not suffice. A simultaneous downsizing of fertility would be equally relevant. Only then human life would be conserved, which is implicit in the design of a regional plan aimed at cultivating habitability and community building.

2. Conservation of Resources

Equally vital is the conservation of resources of the regions of human occupance. Communities are imprinted on regions as inseparable part of the geographical areas. The land quality, the water resources, the forestation, the natural products, the flora and fauna and all that prevails in the region and in its surroundings, therefore, fall within the circumfrance of action space of the regional planner. Although none of these is necessarily included explicitly in the design of the regional plan, yet all these constitute the integral part of the regional plan conceived for accomplishing the twin-objective of cultivating habitability and community development. There is no denying the fact that the growth of communities, the direction of their growth and above all even continuity of life in a region is contingent upon the conservation of the region's resources.

3. Conservation of Human Energy

Conservation of human energy and human efficiency is equally significant

field of action of the regional planner and could be achieved by way of providing pleasant surroundings, good working conditions etc. However, a genuine balance between a scientific rationality and biological and psychological limitations and limitations of human adaptability to the new modes of living has to be maintained by the regional planners while planning for a region. Similarly, a balance between innovations and traditionalistic lag or intellectual lag too has to be maintained by the regional planner while seeking to create habitability in regions of human occupancy. The final test of the planner or of his plans, of course, lies in how much life, pleasure, peace, creative thinking, creative action his planning is able to enhance and conserve by remaining true to the principle of scientific rationality. Therein lies the ultimate test of conservation of human energy, which too is a critical input for the cultivation, and continuation of habitability conditions in a region.

4. Community Education

The nature, location, size and variety of educational institutions, all have an organic relation to a regional plan. It is through education that the quality of life at individual as well as the societal level can be improved. The development of both the individuals and the nations warrants the availability and strengthening of education at every level for all individuals. It is considered as the most vital investment for the growth of communities as well as their regions. It would not be an exaggeration to comment that illiteracy is one form of barbarism or the state of being uncivilised and of being ignorant, which can deprive the community of its civic pride. It is only through education that the man becomes more cultured and intellectually more energetic. The term community education here is being used in its broader connotation. It refers not only to the formal education but also to much wider spectrum whereby people develop a sense of belonging to each other and also to the region or their occupancy. They become conscious about the role of their knowledge in the development of their own region. In such a conceptualisation of community education the guiding principle is "know thy region", "plan thy region" and "develop thy region". Once such an education becomes operative, their sense of belonging to the region shall increase the people's participation in the entire planning and consequently the public acceptability of the process of planning shall also increase immensely. Only this could make the task of cultivating habitability and community development feasible or accomplishable.

5. Sustainable Development

Though the economic system prevalent in a region holds the key to the region's growth, yet the experience during the past 300 years or so shows that the progress in the field of agriculture and industry may have succeeded in

enhancing the supporting capacity of various regions but not without endangering the four major components of the ecosphere, namely, the climatic system, the nutrient cycles, the hydrological cycle and the biodiversity. Does it mean that the world community needs to put a full stop to further development. If so, how is the world going to feed its growing population in future. Herein comes the concept of sustainable development.

Sustainable development is the kind of development, which attempts to meet the needs of the present generation without compromising the ability of the future generations to meet their own needs. Even in the area of economic growth, it seeks to have only such developments, which do not have any deleterious impact upon the environment as well as upon the population. In simple words, sustainable development is the development without any endangerment to the basic resources. There are five basic priorities of the concept of sustainable development. These include: (i) maximising growth without jeopardising the people and the resources; (ii) maintaining the ecological processes; (iii) sustaining the potential in all types of resources; (iv) maintaining the genetic diversity (bio-diversity); and (v) granting equal status to economic quantity and economic quality.

There may be many obstacles in attaining the sustainable development goal. These obstacles are to be taken care of by the regional planner while planning for the region. These obstacles generally are social, institutional and ideological in nature. Therefore, far reaching changes in the present economic, socio-political and technological systems shall have to be brought about, of course, through a thoughtful planning process. Such technologies that help conserve resources, prevent unnecessary pollution and help restore the natural environment wherever feasible shall have to be developed. Similarly, the planner shall have to strive for eliminating the socio-political and all institutional barriers through effective participation of the people in policy/plan formulation and in the decision making process.

6. Rationalisation of Land Use

Needless to say that while seeking to reorganise the regional space, the planner is bound to rationalise the land use pattern in all the regions of human occupancy. It implies that each piece of land must be devoted to its optimal use as far as possible. The regional planner while developing a regional plan for any region must adhere to the three basic principles of land use planning, that is, the principle of optimum use, the principle of multiple use and the principle of no waste land. However, once the principle of optimum use of land is adhered to the other two principles are automatically taken care of. Rationalising the land use pattern in a region holds the key to improving the habitability conditions in the

area. It constitutes the most vital sphere of action of the regional planner, as it is here that his thoughts get translated into the physical reality.

7. Rationalisation of Population Distribution

It is a well recognised fact that even today all regions in the world do not have population concentration in consonance with their resources potentials. However, it may not be possible for the regional planners to strike a perfect balance between population distribution and distribution of resources in every part of the world. A step in this direction would mean that wherever such a balance could be achieved by resource mobilisation or by stimulating and redirecting the redistributive tendencies among population, the regional planners must try to rationalise the population distribution. The experiments in this direction in the form of growth-poles, deconcentration and area development strategies point towards such an instinct among the regional planners of the past. What the future planner has in store for us in this regard, only the time would tell. New concepts to direct population redistribution could be initiated by the future regional planners.

8. Reconstructing the Environment

The nature has provided the man with immense variety of natural wealth. Coupled with it are the man's innovative skills that have helped the man in discovering the multiple use of various natural resources. It would be in the fitness of things to credit the man with his skills for the complete reconstruction of the natural environment with a view to meeting his habitability requirements. He has succeeded in creating a huge infrastructure for various amenities of good living. The regional planner while seeking to cultivate habitability is also engaged in this task of reconstructing the environment. Rational distribution of amenities of good living holds the key to the creation of habitability through the window of environmental reconstruction. It is also vital sphere of action of the regional planner keeping in view its significance for habitability.

9. Creating Neighbourhood Units

Making such settlement in the countryside self-sufficient in the provision of all amenities of good living and in provision of services that are required for day to day living can lead to the creation of neighbourhood units. The planning exercise that seeks to create neighbourhood units is in fact striving for community building and cultivation of habitability conditions. Right location of all settlements of different levels and right location of each function within a settlement permitting highest accessibility at minimal cost is the guiding principle in the creation of neighbourhood units leading to ideal living conditions.

10. Perfect Regional Mobility System

The most critical factor in the creation of ideal living conditions relates to the condition of regional mobility, both at intra-regional scale and at inter-regional scale through the development of efficient transportational infrastructure. Means of transportation and communications constitute the life-sustaining arteries of the regional system. The entire mobility of people, goods, services and ideas is contingent upon the efficiency of the network of transportation and communications. It is becoming all the more crucial due to the increasing globalisation process. Similarly, revolution in the field of information technology has completely changed the scenario. The world has become too small. The innovative ideas generated at one place become instantly available all over the world. The regional planner while seeking to cultivate habitability can hardly afford to neglect this aspect of creating perfect conditions for regional mobility of people, goods, services and ideas. The regional mobility is, thus, an important sphere of action for the regional planner as the degree of regional dynamism of a region depends directly upon the efficiency of this network.

Thus, cultivating habitability and community building constitute the twin-objectives of regional planning. Habitability is measured in terms of ideal living conditions while the concept of community building rests more on creating values that are respected and in turn motivate the community to have a sense of belonging to each other as well as a sense of belonging to the region of their occupancy. Such values may relate to the status of individual, equality of opportunities, individual's freedom, dignity, safety and security, health and welfare, and peaceful coexistence in the community. The measures suggested for the accomplishment of such objectives include: conservation of life, conservation of natural resources, conservation of human energy, community education, sustainable development, rationalisation of land use, reconstruction of environment, rationalisation of population distribution, creation of neighbourhood units, and development of perfect regional mobility system.

To sum up, all planning is partly scientific and partly prophecy. The prophecies inspired by aspirations can yield purely scientific realities. Through our planned effort we can translate the dreams of today into the realities of tomorrow. However, it is not enough for a regional planner only to evolve plausible planning ideologies. Instead these have to be made vital and active so as to become a part of the dynamic forces that make the wheels of civilisation move continuously and shape the ways of our life. Needless to stress that success of a plan depends upon its acceptability by the people for whom it is envisaged. After all, planning is by the people, of the people and for the people.

