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# **Population and Regional Planning in India : A Synoptic View**

## **Introduction**

THOUGH India started its national planning programme in 1951, attempts to understand the population characteristics to integrate them in casting a regional frame for planning have been the outcome of recent awareness on the part of the planners to give planning a spatial dimension to make it more operational and effective. The characteristics of population which are generally identified in their spatial, economic, social, bio-social and cultural parameters may relate to an individual or a group/groups of individuals. When the population characteristics of a group/groups of individuals are identified in a unit area, planning tends to have spatial dimension.

Population is an important subset of the whole planning system, as the other sectors of economy. But in the past planning exercises, stress had been only on the sectoral planning under the impulse that once the various sectors of economy are regulated, the population would take care of itself. (However, there were some stray attempts to regulate certain population characteristics like fertility). By and large, in the absence of any direct planning for several facets of population, the planning programmes could not achieve their desired goals. In many cases, they were rather upset by some unforeseen human impacts such as the deterioration in the levels of amenities in the urban areas through migration, degeneration of urban environment through creation of slums, acceleration of crimes in the over-congested localities, frustration and chaos among the educated youths, fall in the standard of life and living. Such repercussions of the

national plans have caused anxiety among the planners to concentrate on population parameters in addition to sectoral parameters while framing a plan.

### Plans, **their** Objectives and Modus Operand!

The final objective of all plans has been Human Welfare. In the first two plans (1951-1956, 1956-1961) [6] the entire effort was geared towards development of the economy and the infrastructural facilities. The concept of area planning was not conceived of until the beginning of the Third Plan. A brief resume of the nature of plans indicated that in the first two plans, the national sectoral plans were passed on to the States and the States adjusted themselves to the national priorities, instead of taking into account the regional and local requirements and potentialities.

The idea of spatial planning was formulated by Gadgil in 1959, [12] who advocated the cause of the development of several centres in different parts of the country which could assist the attainment of 'balanced regional development' during the Third Plan (1961-1966).

In the Fourth Plan (1969-74), the concept of spatial planning was extended to lay emphasis on some homogeneous regions for development programmes. District planning, backward area planning, hill area planning and comprehensive area development programmes were the innovations. Further, in its emphasis on the need to prevent the unrestricted growth of cities, the Fourth plan recommended a regional approach to urban development and other areas at local levels. Here too, the priorities of the national plan were kept in view while allocating resources at the district level and not the district potentials. In the Fifth plan (1974-79) [4], micro-level planning was conceived at the block level with district presumed to be a link between the state on the one hand and block on the other. District level authorities have been given some degree of autonomy in the allocation of resources according to the local requirements and potentials. Apart from the decentralized decision making facilities at the district level, the plan also has laid down certain strategies for integrated area development, advanced facilities for the assessment of resource potentials of a district and has attempted to involve the local people in the decision making process.

The draft of the sixth five year plan (1978-83) [5] lays stress on integrated rural development, requires the preparation of detailed plans at the block level and their integration with state level plans. It also ensures the picking up of blocks. At the first instance, on the basis of the degree of their backwardness, the most backward getting the first priority. Accordingly, blocks with more than 20%

of Scheduled caste population will be taken up as first priority. Besides, tribal sub-plans are to be prepared to cover contiguous areas of more than 10,000 persons which have more than 50% of the population as tribal. The stress on micro-level planning, backward area planning and tribal area planning is well laid in the proposal 6th plan.

On the concern for population in national plans, efforts were centred on changing the pattern of the working forces by bringing structural changes in the economy, i.e. by developing the industrial and tertiary sector to which the excess labour force engaged in agriculture could be diverted. The other areas of emphasis in population had been an effort towards a decline in the birth rate through efficient family planning programmes, reducing unemployment, improving the level of professional skill by providing facilities for technical education and building up of inter-relation between population and economic change. The overall effect of the earlier national plans had been an increase in inter-regional and intra-regional disparities. It resulted from the investment of resources at a few places in centres of large population or in a few pockets, the areas to which the private investment also flowed. Such centres of economic development with vast hinterland of scarcity of capital resources and investment became large suction points for the region and large centres of immigration for the rural poor. However, the growth of economy of such centres could not keep pace with the continuous migration and led to the lowering of the standards of facilities provided in these centres, besides the creating of large slum. The emphasis of the fourth and fifth plans on balanced regional development and integrated rural development envisages the development of numerous small order centres at the lower level so that these centres could generate economic opportunities and provide infrastructural facilities to the regions nearby and thus act as a deterrent to migration to the larger urban centres. This process would result in the investment of capital resources and distribution of population in a more equitable form.

### **Choice of Areal Planning Units and Population Parameters**

The limit of area for planning could range from a large cultural subcontinent where international cooperation would be necessary to implement any programmes to a micro-level block, a town or a village. The choice of areal unit depends on the extent of details at which the plans are to be formulated or implemented. Selection of such an area calls for some type of homogeneity either in form or in function to ensure the application of common planning strategies to all parts of such region. In geographical studies formal and func,-

tional regions are identified in addition to compages. While the formal regions are either physically or administratively homogeneous entities, the functional regions have certain functional linkages to make themselves homogeneous.

The planners have mostly confined themselves to the hierarchy of administrative areal units for the convenience of procuring and processing data and for implementation of the plans. The unit area has been the state in the first three plans and came down to the level of districts in the subsequent plans. It may be convenient to work on formal administrative regions because of the relatively fixed nature of their boundaries, convenience of data procurement, administration and plan implementation. But the experiments carried out on formal regions specially at macro-level, where state had been the planning units have fallen much short of expectations. Therefore, while there had been an attempt to break the format units to district-level in the states and further to block-level in the districts, there have been simultaneous attempts to identify certain functional regions, specially in the dynamic regions of the country, for their planned spatial and economic development. The identification of metropolitan areas, urban areas of common linkages industrial regions, agricultural regions are some of the examples of functional regions. As far back as in 1961, an attempt was made by P. Sen Gupta and Galina Sadasyuk to identify the economic regions based upon the resource potentials of the regions [13] where the two aspects of self-sufficiency and specialisation could be dovetailed. Besides, several studies have been conducted to identify the functional regions of certain cities of which Manzoor Alam and W. Khan's study on Hyderabad [1], R. L. Singh's on Banaras, V. L. S. Prakasa Rao's [14] on Bangalore, Sudhir Wanmali's on Nagpur, Nangia's on Delhi, and Sunil Munshi's on Calcutta are worth mentioning. However, such studies have remained only academic exercises and have barely given any incentive to the planners.

The characteristics of population are several and they need different stress in different planning regions [17]. Some common demographic indicators need to be understood in every type of regional setting, such as population-concentration, growth, density, sex-composition, literacy and educational-level, participation-rate, labour-force economic composition etc. Their importance lies in understanding the population behaviour in terms of fertility, mortality, migration, circular mobility, commutation and response to innovations in economy, education, health and other fields which bring about a change in the quality of life [8]. Structurally, the population indices may be divided into urban, semi-urban and rural depending upon the nomenclature of the place from where they originate. Formally too, the problems and requirements of the people living under different natural environments may be different. For instance, the needs of the

people living in the hill areas or tribal areas may be different from those living in the coastal areas or industrial areas. It becomes essential then to identify, first, the population parameters which need to be taken into account in such areas and second their problems and requirements to formulate any strategy for area planning.

### **Identification of Areal Units and Population Parameters for Planning through Case-studies**

In the Centre for the Study of Regional Development, of Jawahar Lal Nehru University, several studies have been conducted to identify a suitable areal planning unit, the population characteristics of such units and the specific problems for planning.

One of the series relates to the understanding of regional structure of metropolitan and semi-metropolitan cities in India in terms of their socio-economic and demographic characteristics and correlates [11].

The cities considered are Ahmedabad, Bangalore, Bombay, Calcutta, Delhi [9], Jaipur and Madras. The analysis is based on the hypothesis that demographic indicators vary in a logical sequence with distance from the metropolitan city. The trend of such a sequence and its spatial extent in the cities, situated in different physio-economic environments, may help in building some generalisation about the character of Indian cities, needed to evolve a planning strategy. In the first instance, an area within a radius of hundred miles from the city-centre was selected and the variables were worked out at tehsil level. This exercise gave a limit of forty-miles around Calcutta, Madras, and Bombay, twenty-five miles around Delhi and twenty miles around other cities within which demographic indicators behaved in a more regular manner. A further analysis of the same indicators at village/town level for the thus identified inner zone placed different areal limit for the metropolitan regions along the radial corridors and in the interstitial areas as is revealed by Table 1.

It is such an identified region which becomes a functional region to be considered for planning purposes as it shares the demographic pressures of the central city. In order that this area does not remain only a dormitory suburb for the city, the region is also to be integrated with the city for any type of economic and infrastructural planning.

The Second series of studies have been conducted in a few inaccessible valley-regions of Kashmir-Himalayas like the river-valley-regions of Liddar, Rambhara, Vishav, Dhudhganga, Lolab and Kishanganga [10]. These studies which have been carried through extensive fieldwork, have been conducted not only to

TABLE I—AREAL EXTENT OF CITY-HINTERLAND BELT

<i>Name of the city</i>	<i>Radial corridors (in miles)</i>	<i>Interstitial Area (in miles)</i>
1. Calcutta	30	16
2. Bombay	30	16
3. Madras	30	16
4. Delhi	20	10
5. Hyderabad	20	9
6. Ahmedabad	15	8
7. Bangalore	16	8
8. Jaipur	15	8

understand the ecological adjustments of people in terms of economy and settlements in certain hydro-geomorphic and floral environments, but also to identify specific problems they encounter in such difficult terrains which could be selected for planning programmes. Some of the observations are highlighted here. The area of higher reaches in these river valley-regions is traversed by the transhumance population of Bakarwalas, who move along with their cattle and sheep to the higher pasture-lands during summer and return to the lower reaches in the valley during the winter season. Despite the caravans of people moving to the higher altitudes along with their livestock year after year, following the same beaten tracks, no facilities of education, medicine, lodging or shopping are provided by the state or any philanthropic organization. Up to certain points, the private traders move along with such caravans and carry on lucrative barter trade but by and large other facilities are non-existent. There are lodging facilities for the tourists in certain areas but not for such regular travellers. With the result, during the period of its stay in the higher reaches, the population is devoid of any facility. The children go without education and the sick without medicine.

The problems of the permanent dwellers of Gurez valley (Kishanganga) are different. The valley remains disconnected from the rest of the country. It is about forty km deep into the interior of the mountains from the road where the civilians reach after crossing through the rendezvous mountain tracks and passes. The villages located in the valley have educational facilities just in name. There is an acute shortage of space, books and teachers in the schools. There are negligible or no medical facilities. Because of the common living apartments for men and animals more than two-third of the population suffers from tubercu-

losis. Beside these difficulties the exploitation of labour by the contractors (forest/construction contractors) coming from outside, the exploitation of the fruit-growers by the middlemen, the discrepancy of participation in household and economic activities between men and women, have kept these regions economically and socially backward. Such regions thus, need to be planned on a different framework from, the metropolitan areas, discussed above.

The third type of study which has been conducted with respect to problems and prospects of district-level planning, takes into account both sectoral and spatial parameters of integrated development. Apart from identifying the General areas of stress, certain village case-studies have also been undertaken and micro-level demographic and socio-economic problems identified. Among these, the caste and class segregations in the villages, the response of various castes, classes and of the people with different level of education and socio-economic background to government policies regarding population and technological innovations in farming and non-farming activities and other infrastructural facilities have been studied at length which need to be taken into account while framing the development policies for any region. These studies have been conducted in the Green revolution area (Khandewala village in district Gurgaon in Haryana, Shulda village in district Meerut, in U.P.) and in Metropolitan area (Ber Sarai in Delhi). The studies further revealed that the problems of rural villages are different from the urban villages. The Ber Sarai village, being in the shadow zone of the Metropolitan city of Delhi, poses problems like high density of population, lack of proper housing units, lack of space for domestic animals, insufficient facilities of water, underground sewerage and toilets. Any planning strategies here need to be aimed at the improvement of such facilities upto the standards of the nearly urban localities.

Besides, two significant exercises have been done in the field of micro-level planning, taking tehsil as a planning unit, one by the National Institute of Community Development on Miryalaguda [16] taluk and the other by the Indian Statistical Institute on Karnal taluk [2]. Both these works laydown important guidelines for micro-level planning. If such studies are conducted under different physical micro-environmental conditions, the exact nature of the planning with respect to population and areal units can be worked out.

The Census of India toyed with the idea of standard urban areas during 1971. It identified nearly 302 towns of the country with population above 50,000, projected the spatial growth of such towns cities as it would be in 1991, took into account all the settlements likely to fall in the urban limits of such centres and nomenclatured such as standard zones urban areas which were to be considered statistical reporting units and the units for formulation and

implementation of plans.

Such experimental studies, conducted at different levels of analysis suggest the need for the selection of different criteria for the identification of areal planning units in different regions and a thorough research of planning problems to the micro-level areal units. Though village may sound to be an odd unit of planning, It cannot be ignored since the final planning, whether talked of at district-level, block-level [15] or at the level of a functional-region, has to be implemented from village above.

The idea of percolating the benefits of planning to the grass-root-level i.e., the village, leads one to think of some minimum population size for a village where the planning programmes could be carried on efficiently. Statistics indicate that in India 24% of the villages (numbering 1,50,072) have population size less than 200, and 31% of the villages (numbering 1,68,561) have population size between 200 to 499. However, population-wise, only 3.47% of the country's population is living in villages having a population size less than 200 and 12.90% in villages with 200-499 population. The problem of living in small sized settlements becomes significant when such settlements are bereft of any planning programmes under the plea that they are too small to be viable units of planning or introduction of any public facilities/social amenities. The problem becomes more acute in the mountainous regions like Meghalaya, Arunachal Pradesh and Himachal Pradesh where 93 to 95% of the villages have population size less than 500 and 65 to 75% of the population of these states lives in the villages of the sama population size-group. A careful study of the individual villages, their integration or their clustering then becomes important to make the micro level planning a success.

At a given point of time, it becomes important to know the purpose of such planning i.e., whether the quantity of population is to be controlled through a check on its natural growth or through a check on migration; or the quality is to be improved through higher educational standards or betterment of standards of living, or a change in occupational structure is to be obtained through a proper channelization of the technical education, etc., are to be kept in mind while planning for the region. If the developing areas are not to be hampered with the rush of increasing migrants, it is also essential to simultaneously develop both the urban and the rural centres so that the distribution pattern of population does not work to the disadvantage of both the growing areas (where overcrowding, congestion, deterioration in infrastructural facilities and unemployment may be caused due to heavy migration) and the outmigrating areas (where the depletion of young and energetic labour force may cause further retardation in the economy).

## **Broad Issues Emerging for Consideration in Population and Area Planning**

1. The problems of population vary from one region to another widely. Hence, an understanding of the problems of the regions selected for planning becomes essential to formulate a strategy for area-planning.
2. The requirements of the population living in the urban, semi-urban and rural areas are different from each other which need to be kept in mind.
3. Since there are micro-level variations in the problems and the needs of population, a micro-level area planning then becomes a viable proposal. The district can be further split up into blocks, tehsils or subdivisions for detailed planning for introducing functional linkages in to the formal regions.
4. For the urban areas, a functional region could be devised for planning programmes as the economic development of any urban centre is likely to affect the population characteristics of the region. The functional regions could be envisaged specially for class I cities. Here, the formal regions could be integrated to form functional regions.
5. For the other areas, instead of districts, the Economic regions could be identified based upon an extensive study of the resource-potentials, in the region. Such regions could further be split up at the block-level for action-orientation.

Within these broad issues some questions can still be raised :

- (i) Could there be an ideal population size for area planning?
- (ii) Could there be an ideal areal size for population planning?
- (iii) Should the region be on open-ended or closed-ended system? Should it have any type of interaction with the other regions or not?
- (iv) Should the regions be open to migration at all? If yes, what should be the quantum or type of migration ?
- (v) What should be the ideal number of settlements in such regions and what should be the pattern of population distribution in such settlements ?
- (vi) Should the very small sized settlements say, settlements with less than 200 people which are unviable units for implementation of any planning programmes be allowed to continue or should they be merged with the large sized settlements in the neighbourhood. If, they are allowed to stay, how to percolate the benefits of development programmes carried on in the region into such settlements ? If they are allowed to merge, how should they spatially be integrated.
- (vii) How to spatially allocate the resources for public amenities, social facilities and provide industrial activities in the settlements so that the benefits of investment are reaped by the entire community and all the settle-

ments of the region rather than being availed of by a part of the community or by a few settlements.

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