Chapter VI
SUMMARY AND CONCLUSIONS

The process of urbanization denotes not only the growth of urban population but also consequent changes in the nature of population concentrations including socio-economic characteristics and their interaction, resulting in changes in the quality of life. The problems attendant on the process will, therefore, have region-specific characteristics, though urbanization as a concomitant process to industrialization is universal in character. Obviously, policy approaches to handle the problems in a given region have to be designed keeping in view region-specific features and patterns of urbanization.

The attempt made in the foregoing chapters to analyse urbanization process in Gujarat could identify some region-specific patterns and characteristics of the process. In particular, it highlighted size-structure relation, functional specialisation, size-structure-growth correlates of cities, and public expenditure on urban services. In concluding the study the main findings may be summarised and these sum up some implications on approaches to urbanisation strategy and planning.
In the brick and mortar sense urbanisation involves the growth in size of individual towns and or their multiplicity. The analysis of long-term trends in urban growth over the last eight decades in Gujarat revealed three phases. The current phase beginning with 1961 census date was marked, inter alia by (a) high growth rate of urban population, (b) fast movement of urban centres into higher order size-classes, and (c) high progression in concentration of urban growth as compared to earlier phases. The decadal growth rates in urban population recorded 41 per centage points during the sixties and the seventies -- the highest record in the century. The growth was accounted more by the increasing size of existing towns than by the "birth" of new towns. Either the existing towns continued to remain in the same size-classes or moved into the next higher size classes. In particular, transition matrices indicated upward movement of five towns from Class II to Class I between 1971 and 1981 as against two towns from Class II to Class I between 1961 and 1971. In striking contrast, the earlier phases witnessed only slow graduation of cities and that too confined to smaller size-classes.

The measurement of growth trends of individual towns revealed a tendency for variance in growth rates...
to fall with increasing size-classes. The systematic growth behaviour of individual towns in higher size-classes suggested the tendency for concentration of urban population in large cities. Measured by the percentage share of population in the top ten per cent of towns urban concentration was found increasing over time. Today, 65 per cent of the total urban population in Gujarat is concentrated in top 10 per cent of towns. Overall, the temporal analysis placed Gujarat in a phase of fast urbanization with the increasing role of large-sized cities.

Inter-state comparison of the urbanization process during the last two decades however did not depict Gujarat's situation as apprehensive as in some other fast urbanising states in the country. Urbanisation in Gujarat is progressing at a decreasing rate relative to all-India though the state still retains the third position in the level of urbanization in the country. It may look rather disturbing that the index of urbanization measured by the share of urban population in the top five cities substantially increased in the seventies over the sixties in Gujarat whereas, the same index remained constant in Maharashtra and West Bengal in the corresponding periods. However, the primary ratio did not indicate the domination by the
single largest town, as was the case in Maharashtra, West Bengal, Tamil Nadu and other urbanised states in the country.

Indeed, one quarter of the total urban population in Gujarat is concentrated in the largest single city (Ahmedabad) but the momentum in its growth rate has slackened. The phenomenon of million plus cities dominating urbanisation in Gujarat is not growing in importance though, the urbanisation process is progressing fast. This was because the overall pattern in Gujarat was one of concentrated dispersal of urban growth. In other words, the significance of city size to the urbanisation process in Gujarat appeared relatively less as compared to other urbanised states in the country.

The spatial pattern of urban growth depicted concentration in selected pockets with those experiencing high growth rates clustered along Bombay-Ahmedabad corridor region. Those urban centres were not, however, necessarily large-sized towns; the largest proportion of high-growth towns was clustered in middle order size-classes. It appeared that size alone would not be enough but functional specialization would also be of importance to the growth of cities and their clustering
over the given space and thus contributing to the process of urbanization.

A close look at Gujarat data for the sixties and the seventies revealed that a positive association between size of towns and their growth rates as is generally made out in the literature suffered from the biasness of the particular method (the 'instantaneous' method) used by the Census for measuring the urban growth. The growth pattern of towns by size-classes measured by the 'continuous method' did not lend support to the positive association between size and growth of towns. The correlation coefficient was found to be insignificant in the sixties ($r = 0.298$), and the seventies ($r = 0.280$). Thus size per se did not consistently explain the growth of cities in Gujarat.

On the other hand, classification of cities based on their dominant function (functional specialization) revealed that the urban growth took place in a particular matrix identified through the function represented by the economic structures of towns. The differential growth rates of towns could be explained largely in terms of their functional specialization. In both monofunctional and dual functional categories industrial towns recorded relatively higher growth rates.
Non-industrial towns rendered higher growth rates only in multifunctional category. Further, there was a tendency for towns to shift in functional specialization and those towns diversified towards industrial activities also recorded relatively higher growth rates.

The study also brought to light that a city's specialisation in industries was more a function of the type of industries that constituted its economic base. The shift and share analysis though indicated a weak industry-mix effect in growth, the competitive effect was still weaker, which tended to testify attributes of large cities in Gujarat to attract industries.

Overall, the data did not come up with consistent and conclusive evidence in support of positive association between size and growth of cities. On the other hand the alternative hypothesis based on functional specialization and in particular, a positive relationship between industry specialisation and growth of cities appeared to be a satisfactory framework to explain the urbanization process. That however did not mean that size was irrelevant to city's growth in Gujarat. For, the agglomeration economies was a force for attracting industries and thus to its growth. What clearly emerged from the analysis was that size *per se* would not make
A city to grow; at best it could stand as a surrogate
for other variables in the analysis of urban growth.
A more realistic approach to understand the process of
urbanization was the size-structure-growth paradigm.

A quick review of urban migration process
also highlighted the significance of structural character-
estics of cities in shaping the process and contrib-
buting to the expansion of the size of cities and thus
the urban growth. Estimates of net migration in five
large cities indicated increasingly important role of
migration in the urbanization process. It was observed
that the larger cities exerted considerable influence
in drawing migrants from farther places.

The distribution of immigrant workers in terms
of their types of activity(sectoral distribution)
presented the five cities into a typology consisting of

(1) monofunctional cities with industrial
specialization where more than 50 per cent-
age of immigrant workers were employed in
the secondary sector, and

(2) dual-functional cities with industrial
and service specialization where a propor-
tionately large number migrant workers were
employed in the tertiary sector.
It was also revealed that the migrants by and large settled down in the periphery of the core of the large industrial cities.

Migrants' demographic and socio-economic characteristics depicted patterns somewhat different from the urban natives. They were relatively younger in age and better educated than the general population. A higher rate of workers' participation in the migrant population was also observed. These characteristics tended to suggest the dominance of pull factors of the cities causing migration rather than the push out from the rural areas. It could also be inferred that structural attributes of cities influenced the type of in-migration.

The analysis attested two phenomena at work in city ward migration. First, a significant proportion of migrants into large cities originated from other urban areas which indicated the importance of "step migration" in the urbanization process. Second, the phenomenon of "circular migration" meaning thereby, the movement of migrants from one place to another without being able to settle down at a definite point in space raised doubts about the labour absorptive capacity of large cities. In a sense, therefore,
migration acted as a contributing factor to the ubiquitous phenomenon of urban surplus labour and a force which contributed to exacerbate the already serious urban unemployment problem caused by the widening structural imbalance between regions.

The analysis of trends in municipal expenditure on providing urban infrastructure and services over time and across size classes revealed some interesting patterns. There was no significant correlation between the urban size and the levels of municipal expenditure. The costs of providing urban services varied across different size classes and between cities in the same size-class. There was no empirical support to advance any consistent relationship of the cost of urban services with the city-size.

The test for economies of scale carried out through regression models for two successive points in time - 1971 and 1980 - showed that per capita aggregate cost of providing urban services did not move consistently along the usually assumed U-shaped curve. The cost curve in 1971 moved along an inverted U-shaped one while it was horizontal in 1980. The lack of consistency in the behaviour implied that (1) economies of scale operated either at a low or a high level of urban population size, and (2) economies of scale did
not exist at all. The regression results on the data of per capita expenditure for selected services did not alter the above results. It appeared, the concept of an optimum city size is only a theoretical abstraction.

When cities were arranged on the basis of functional specialization and levels of per capita expenditure, a strong association of per capita cost of urban services with industrial specialization of cities was observed. The difference in per capita cost across cities was explained by the variations in the degree of industrialization of cities. The per capita cost of providing urban services was also found to be an increasing function of the degree of industrial concentration. The analysis yielded adequate evidence to suggest that the structure rather than the size is the major determinant of the cost of providing urban services.

Therefore, the practice of fixing norms of per capita expenditure of Local Self Government for providing minimum level of urban services on the basis of size of cities was found questionable. Further, the finding that the actual average per capita expenditure on minimum level of urban services in class I cities
was below the norm prescribed by the expert committee of the government, indicated the resource constraints for improving the living condition of urban dwellers. In that context an expenditure allocation higher than the norm by the Ahmedabad, a large city with industrial specialization was encouraging. The analysis thus reiterated the rationale of viewing the process of urbanization in size-structure-growth paradigm.

In short, the central thesis of the study is that the process of urbanization, meaning thereby the growth of population concentrations (towns) in size and/or number and consequent changes in their socio-economic characteristics, has to be seen not merely in the context of size-growth correlates but essentially in the size-structure-growth paradigm. The city size, by virtue of agglomeration economies and spatial efficiency, does facilitate urban growth, but the more direct influence on urban growth is exerted by the functional specialization represented in the economic structure of cities. In particular, industry-specialization - the types of industries that get established, their sectoral and spatial linkages and concentration - gives fillip to rapid urban growth by attracting immigrants with specific demographic, educational, and economic characteristics. The functional nature of the
city rather than its size also determines the demand for urban infrastructure and amenities. An optimal city-size disregarding its economic structure is only a theoretical abstraction; it has very limited policy relevance.

The significance of functional specialization of the city rather than its size *per se* in the process of urbanization brought out by the study has implications on the analytical constructs of the urbanization process and approaches to urbanization policy. The theoretical constructs that hang on the positive relation of size and growth of cities lack empirical support. The role of large cities *per se* in economic development is dubious. Those who believe that large urban centres are 'carriers' of economic growth and favour the policy of uninhibited growth of large cities in a developing region lack the appreciation of actual behaviour of urban growth process. The policy approach emerging from the size-growth correlate supports the large-town strategy but it would be based on the assumption that a fairly large minimum mass is needed for the town to operate as an efficient and largely self-contained unit. The strategy would seek solutions to the problems attendant on the urbanization process by providing urban amenities and services.
through public expenditure. This study however does not find empirical support to these assumptions.

It does not follow that the study lends support to the ideological approach of rural-oriented economic development. The viability of industrial development through the strategy of dispersal and rural-industrialisation by providing fiscal incentives and physical infrastructure has been seriously questioned in the literature. The importance of the urbanization process in accelerating economic development through industrialisation cannot be undermined. City is a place where externalities and agglomeration economies are generated from proximity to economic sectors and their interdependencies. What is underlined in terms of the implication of the size-structure-growth paradigm is the rationale of an approach towards concentrated dispersal of urban growth to take advantage of agglomeration economies without at the same time encouraging the cancerous growth of large urban centers.

The study underlines the importance of regulation and monitoring the types of activities in each urban centre in order to ensure a desirable rate of urbanization. The structure of city has an influence on the expansion of its size (and hence the urban growth)
and in particular, when the economic base of the city is characterised by industrial specialization. An unchecked growth of the size of urban centers triggered off by the types of functional specialization may have the danger of jeopardising the quality of urban life. A short-sighted policy approach ignoring the size-structure-growth paradigm and relying merely on size-growth correlates will seek to tackle the problems through public expenditure for improving the living conditions. This may however prove costly for, the scarce resources have alternative uses for capital formation and modernisation elsewhere in the region. A long-run approach, therefore, would plan the desired type of structures and the sizes of urban centres spread out in the region in an urban hierarchy.

To conclude, urbanization is an essential condition for economic development, especially through industrialisation. When the urban growth is more a function of functional specialization than mere size of cities, the process also leads to serious socio-economic problems. There is thus a policy dilemma. The planning approach offers possibilities for the region-wide distribution of population and for community structures by integrating the possible tendencies of concentration with dispersal, and specialization with
diversification. To the extent that urbanization is an integral part of the process of overall economic development, the urbanization policy also has to deal with the planning problems at different levels. *Prima facie,* two levels are distinctly clear: (a) the city level and (b) regional/national level.

At the city level the primary concern would be on curbing the growth rate in urban population by the regulation of the type of industrial sectors and providing more equitable urban services through progressive fiscal policies and programmes. At the regional level the concern may be with the planned development of a sufficiently large number of medium-sized towns in an urban hierarchy. Medium-sized towns with the right type of functional specialisation would equally render the urban growth as large-sized towns but, the former approach would ensure urbanization with concentrated dispersal of urban centers. The feasibility of the approach is all the more greater in a region where scale economies in providing urban services are insignificant.

A point must be emphasized. At each level of planning it is only through the integration of sectoral planning with spatial planning of human settlement that
the "urbanization dilemma" can be resolved. When the urban growth in a region is seen as a direct adjunct of the type of functional specialization represented in the economic structure rather than mere size structure of cities, the type of approach to urbanization that easily suggests itself is urban planning in a framework of comprehensive regional planning.