STRUCTURE OF URBANISATION

IN THE NATIONAL AND

STATE PRIORITY CITIES : 1981- 91

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CERTIFICATE

This is to certify that this dissertation entitled **"Structure of Urbanization in the National and State Priority Cities : 1981 - 91"** submitted by Ms. Chhabi Sinha in fulfillment of six credits out of the total requirements for the award of the degree of Master of Philosophy is a bonafide work to the best of my knowledge and may be placed before the examiners for evaluation.

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1.1 Introductory Statement

The issue of urbanisation has witnessed a paradigm shift in recent decades. The earlier notion of viewing it as a constraint to development has undergone a drastic change. Urbanisation is now seen as a positive development (NCU 1988) having crucial and important linkages with economic growth (Mohan 1985, Mathur 1997). The focus of the debate on urbanisation has thus shifted to managing and sustaining urbanisation (Mathur 1997).. As Dupont rightfully contends "The debate should focus on the type of urbanisation desirable for a better national development."(Dupont 1995).

The first ever National Commission on Urbanisation (NCU) in its final report recognises 'urbanisation as a catalyst for economic development ' and that these same towns and cities despite there problems are for millions and millions of our people the road to a better future(NCU, 1988).

It is believed that by 2025, more than two thirds of the developing world population will live in cities , seventeen cities of more than 10 million people will be in developing countries (World Bank 1994). Mohan (1994) affirms this fact by stating that the highest growth of cities both in size of individual cities and in number of large cities has occurred in the developing countries. The State of World Population 1996 published by UNFPA reinforces this fact mentioning that nearly all the urban population increase will be in today's developing countries and that "in an already largely urban world the growth of cities will be the single largest influence on development in the first half of the 21st century.".

An important facet of urbanisation is the metropolitan growth in particular and large and intermediate city growth in general (Sivaramakrishnan 1978). He further elaborates that the emergence metropolitan growth is a notable feature in both developed and

developing countries . Thus it is significant to note that the pattern of urban growth in the developing countries is indeed unbalanced . One of the reasons as mentioned by Mathur (1997) is that it is characterised by primacy where a single city commands a demographic and economic weight which is disproportionately large in comparision with the second and third or the fourth city. However he makes a distinction in considering the primary city in relation to different units i.e. national population or state population . He opines that in relation to the national population , there is absence of primacy for India. However, at the state or regional urban hierarchy , there exists dominance of a single city.

High levels of urban primacy are usually associated with a disproportional concentration of major function - political economic and educational in the primate city (UNFPA 1993). It is pertinent to mention that the issue of primacy has not always received negative connotation . Proponents of primacy argue that agglomeration economies in the developing world are still positive. Mera (1973) finds that 'there is a positive correlation between growth of largest cities and economic development. Few scholars have suggested that the positive effect of these cities has its limits. El Shakhs (1972) argues that urban primacy increases initially and then decreases in the process of development.

Oberai (1993) argues that rapid urbanisation and concentration of economic activity in a few locations particularly large cities of developing countries are inevitable outcomes of economic and industrial development. India has also witnessed an unbalanced and lopsided pattern of urbanisation when the judgment is based on the three parameters ; the proportion of the city population to state urban population , the number and population of metropolitan cities. Premi's analysis of India's urban scene provides an empirical justification of the aforesaid parameters. He provides evidence that the number of

metropolises with population of one million or more increased from 12 in 1981 to 23 in 1991. Furthermore these twenty three metropolitan cities of 1991 account for 70.7 million persons forming half the population of class I cities indicating the manner in which India's population particularly urban population as depicted by 1991 census exhibits the concentrated urbanisation pattern.

Mitra (1994) analysis further substantiates the pronounced tendency of Indian population to concentrate in big cities . His contention is bolstered by the fact that million plus cities in 1991 accounted for 50.57 % of population of Class I cities out of which 5 million and above alone accounted for a high 26.64%.

Chakravorty (1996) pointing to the three megacities of Calcutta, Madras and Bombay remarks that "these urban areas are probably all well beyond the point of net agglomeration benefits"

There has been considerable concern amongst Indian scholars and government officials of an excessive increase in the size of the mega cities leading to more unbalanced urban settlement and economic structure . In order to check or reverse the pattern of growth, various interventions/ strategies have been advanced both internationally and nationally towards industrial / spatial decentralization.

Richardson (1993) is a little wary of the policies to promote the growth of intermediate (secondary) cities as practiced in a vast majority of developing countries . He instead supports the development of a planned or spontaneous polycentric spatial structure which he feels avoids the need for secondary cities . He however does not explicitly mention how it might be achieved i.e. whether it might be brought about spontaneously or via planning intervention.

The State of World Population (1996) published by UNFPA expresses the viewpoint that growth in small and medium sized cities can help reduce the growth of the biggest ones although this more often been a natural consequence of stronger links between larger cities and surrounding areas than a result of deliberate policy.

Fears have been expressed by academicians working on India about adopting wrong policies in order to develop new growth centres. Mohan (1993) argues with respect to Indian industrial location policy that it has unduly stressed locating industries away from cities without ensuring a certain substantial size of cities. He felt that it is only cities of such a size that can function effectively as incubators for new industrial investment. His earlier work has also expressed doubts of solving the growth problem of cities by adopting a strategy of developing small and medium towns either a as separate entity (Mohan 1984) or in their urban hinterland.(Mohan and Pant 1982). Mills and Becker (1986) provide a coherent analysis of India's urbanisation and warn us of the great danger ahead in case an industrial policy is pursued by the government where industry is expected to locate where it cannot survive or expand.

Attempts have been made to develop small and medium towns by the Government . However they have not been successful Programmes such a IUDP (Integrated Urban Development Programme) and IDSMT (Integrated Development of Small and Medium Towns) have emerged from time to time and without being allowed to run their course have been abandoned at the end of a particular plan period.NCU gave a fresh impetus to the process of urbanisation . It regarded cities as engines of economic growth and generators of income and wealth. The positive role of urbanisation as envisaged by the commission can materialize only if the cities are economically viable and capable of generating economic growth in a sustained manner.

Two points are worth mentioning about NCU. Firstly it favours an interventionist approach so as to strive for a more equitable distribution of population. Secondly, the commission unequivocally recommends the abandonment of policy of locating new industries in backward areas and its replacement by a policy of developing the towns identified on the basis of a scientific criteria . The criteria will be dealt in detail in subsequent sections. The main criticism of the report about IDSMT has been that the selection of centres for support under IDSMT has been rather adhoc. They have thus strongly recommended selection of cities /towns based on a scientific criteria.

Selection criteria of National Priority Cities (NPC)and State Priority Cities(SPC)

The NCU has identified 329 centres as Generators of Economic Momentum(GEM) that would merit a special attention of resources by the central and state governments.NCU is quite categorical in basing the selection criteria on a purely scientific basis overruling political expediency..The report asserts that the location of economic activities must be based on technical considerations in regard to physical conditions, water and power resources,transport alignments, tele-communication facilities,the socio-economic profile of the population, considerations of environment, national security and related factors.

Within these, some NPC & SPC have been identified based on a scientific criteria which is listed below separately for NPC and SPC.

1. Capitals of all states /UT s.
2. Existing million plus cities
3. Potential million plus cities
4. Other cities with potential for generating economic momentum.

The main emphasis here is on the economic functions of the city. All metropolitan cities or even smaller cities which performs important national functions such as steel towns,port towns and oil towns are listed in this category.As pointed out by Shukla (1988), In reality, the economy is not a featureless plain and some natural advantages of a city (like a good harbour) or an artificially created one (like the concentration of infrastructure investment) might impinge favourably upon the conduct of more than one kind of economic activity there. .

5. Residual list of NPC:

In order to give a rounded picture of NPC s, socio-cultural factors were considered and a number of important cultural and pilgrimage centres were identified as such cities.

Selection criteria for SPC

1. Cities with potential for generating economic momentum

It is based on the consideration that potential for rapid industrialisation would mean larger cities with a substantial share of secondary employment over time (Mitra,94). Manufacturing sector has great potential for expanding the economic base of these centres and is known to possess characteristics like the generation of the local multiplier effect.Mitra opines that non-household manufacturing -cum-construction can be taken as a rough proxy for the industrial sector.The construction activity is included since it is believed to be a high income sector (Mitra and Mukhopadhyay,89). It needs to be

emphasised that there were serious constraints with regard to the economic data as the 1981 census discontinued the tabulation of data on all the nine industrial categories of workers in each town and city which was done in earlier censuses as also for 1991. Thus whereever possible, the fullest use of the 1971 census data on industrial classification of workers for each individual city or town was made by NCU (NCU Vol II 1988)

2. Headquarters of districts with 30% or more urban population

The intention is to support the infrastructural facilities in cities which have a fairly high urban content at the district level in order to encourage migration within the region by a development strategy at the district level.

3. Headquarters of districts with 90% or more rural population

These are the least urbanized and poor districts with a high outmigration potential. Policies for rural development coupled with the development of headquarters of rural districts are expected to contain outmigration to far away metropolitan cities.

This strategy is aimed at strengthening agricultural development which is likely to contribute positively to the process of urbanisation in two ways :

1.If this intervention strategy succeeds in giving them vocational skills thereby augmenting their employment potential , the rural hinterland will be opened up and the unprecendented migration to cities avoided.

2. As a result of agricultural prosperity enabling the rural income levels to go up,there will be a rising demand for consumer goods which will sustain the process of industrialisation and consequently of urbanisation also.

3. Residual list :

This includes priority cities otherwise left out keeping in mind social and environmental considerations,

1.2 Choice of study area

The study consists of cities identified by NCU as National and State Priority cities.The total number of cities in our sample is 115. Out of these there are 14 NPCs and 101 SPCs.Socio-cultural considerations are applicable for 8 out of the 14 NPCs .The economic criterion is applicable for 6 NPCs and 101 SPCs. The narrowing down to 101 SPC and 6 NPC is bolstered by the fact that their selection is based on the statistical exercise done by the commission to assess the economic growth potential of cities . The cities fall in fourteen major state of India. These are AP, Bihar, Gujarat, Haryana, Karnataka, Kerala, MP, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, UP and West Bengal. It is pertinent to mention that the NCU list for SPC lists a few cities from Assam and one from Meghalaya but these have been excluded from the analysis. The decision to exclude them is based on the fact that the time period fro our study is 1981-91 for which comparable data is not available for the excluded list of cities. The list of cities under study is attached.in Appendix 1 .

1.3 Objectives

Main objectives of the present study include:-

1.To analyse the pattern of city growth individually as well as in relation to the state to which they belong for the decade 1981-1991.

2.To study the pattern of city growth in developed and backward states of India.

3. To study the social and demographic characteristics of these cities.

4. to identify various factors responsible for the growth of these cities

5. to study the inmigration pattern to these cities

6. to examine whether the cities selected under SPC and a few under NPC based on selection criterion have retained their dynamic character

7.to critically analyse the selection criteria and to suggest modification with special reference to the role of service sector in generating employment.

1.4 Hypotheses :

We propose the following hypotheses for the NPCs and SPCs:-

1. Larger the city size, higher is the city growth

2. District cities /towns have services as the functional specialisation.

3. City growth is higher in district cities.

4. Cities with service sector employment as the functional specialisation tend to grow faster.

5. Larger the city size,higher is the inmigration rate

6. Inmigration rate is highest for cities with services as the functional specialisation.

7. Level of inmigration is more in cities of less developed states.

8 Larger the city size, higher is the manufacturing employment.

9. Larger the city size , higher is the industrial concentration.

10. Cities grow faster where both industrial and service sector concentration of employment is high

1.5 Database

The study covers 14 major states of India and includes a total of 115 cities . Of which 101 are SPCs and the remaining 14 are NPCs. The data for the entire study has been taken from Census of India pertaining to the year 1981-91. In particular we have tried to assemble data on the demographic , urban and economic characteristics of the cities . The variables on which we have collected data are Population size, Sex Ratio, Literacy , Area, Population Density , Proportion of Industrial and Service Sector Employment. Besides this we have also tried to categorise cities based on there functional classification as per 1991 census data.

1.6 Methodology

We have tried to make use of various types of indices .In chapter 2, growth rate of population is computed at the city level based on compound rate of growth.Compound growth rates have an advantage over simple growth rates.Simple growth rates take into account only the terminal years whereas compound growth rates takes into consideration the subperiods apart from the terminal years.

In chapter 3 , various indices are constructed at the state level. These include level and tempo of urbanisation , Urban rural growth differential and Town Density. Furthermore, inmigration rate is computed at the aggregate level as also separately for males and females.Correlation exercise is undertaken between city size and city growth, city size and inmigration rate separately for males and females,city growth and inmigration rate.

In 4th chapter,two quotients are developed for the NPCs and the SPCs.These are industrial employment quotient(ieq) and service employment quotient(seq).These are correlated with city growth.Furthermore a stepwise regression is also taken out in examining the determinants of city growth. The basic logic advanced to undertake a multiple regression exercise is to examine the independent contribution of variables on city growth.

1.7 An Overview of Literature

At the outset we introduce an outline of a multilevel framework for the structural analysis of urbanisation in both its economic and spatial terms. To Salih and Lo (1985), atleast three levels of analysis must be recognised : the world, the national and the regional level. He opines that urbanisation can only be meaningfully analysed by examining the impact of the interplay of forces at and between the different levels. Jakobson and Prakash(1971) view the study of urbanisation and cities within a macro-micro framework of interrelated phenomena along a continuum. We propose to place our study in a hierarchy where the three levels are Third World, India and the regional level. Needless to say, city is a constituent unit of the regional level.

We have divided the available literature on urbanisation into three levels i.e. Third World , India and the state/regional dimensions.

Literature related to Third World Urbanisation

A recent UN publication on world urbanisation prospects reveals that the urban share of the world has increased from 37% in 1970 to 43% in 1990 (UN 1993). The highest level was attained by Australia and New Zealand with a value of 84-85% followed by Japan (77%), between 72 to 75% for North America, South America, Latin America and Europe, 66% in Central America and USSR and 34% in Africa and Asia (Puri 91)

Salih & Lo (1985) while analysing the trends in Asian Urbanisation for the decade 1960-80 discovered that overall Asian urbanisation levels are low although there exists differentials within Asian countries particularly when the distinction is based on income.

McGee (1971) asserts that with respect to urbanisation process in the Third World, there are marked regional variations in the level and rates of urbanisation. Another issue which is hardly debatable according to him is the rapid growth of the cities of the Third World.

There appear to be divergent views expressed about the structure of urbanisation in developing vis-a-vis developed countries . One set of scholars primarily argue that the rate of urbanisation in these countries has been much higher than what the present day developed countries experienced during their historical growth process (Hoselitz 1955,1957,Bairoch 1975) mainly attributing it to the inflow of population from rural to urban areas . In contrast , the other views asserts that the Third World Urbanisation experience has not been very different by historical standards (Williamson 1988)

Preston (1988) also admits that the rate of change in the proportion urban in developing countries is not exceptionally rapid by historical standards . he provides evidence to suggest that it is the growth rates of urban population that represents an unprecedented phenomenon. He argues that urban growth through most of the developing world results primarily from the natural increase of urban population.

Preston (1988) also examined the growth rate of the 1212 cities in the world that had reached 100,000 in population . He emphasised that while the share of the urban population in the third world has not been exceptional , the rate of growth of city population has been unprecedented . His analysis of the Third World cities establishes a U-shaped relationship between city size and city growth rate. The size class where a decline in the average growth rate has been registered include between 500,00 and 4 million.

He has also examined the factors that influence the growth rate of individual cities. The factors include the size of city and its administrative status, national rate of population growth, national economic level and growth rate in terms of per capita gross domestic product and region. The basic logic advanced to undertake a multiple regression exercise is to examine the independent contribution of variables. According to him, " the basic point to stress here is that the urbanisation process is caused by a multitude of factors operating in each country and each city . Certain of these factors are shared widely enough for them to be identified through the use of global data. "Other factors which fail to be captured through this exercise can only be identified at a lower level of aggregation. His results demonstrate that city growth is most rapid in the countries with the strongest economies. This finding does not underscore the importance of national rates of population growth which stands out as dominant in inter-city comparisons.

Hazel More (1976) study on urbanization and labour force data of 76 countries finds that the relationship between urbanization level and the tertiary share of the labour force among the least developed countries is stronger than the relationship between urbanisation level and the secondary share of labour forces among these same countries.

To Kundu (1983) , third world countries possess colonial heritage , a large proportion of population live in few metro cities. These cities are generally not rooted in the regional economy and consequently their growth depends on factors exogenous to the region.

MIGRATION AND URBAN GROWTH IN DEVELOPING COUNTRIES

It is by far well established that one of the demographic features of the urbanisation process in several newly developing countries in the past few decades is substantial expansion of urban labour force through natural increase of population and rural to urban migration (Gugler 88, Samal 90)

Net migration is one of the three components of urban growth, the other two being natural increase and reclassification. Out of the three components, net migration in developing countries tends to be more important in urban population growth at an early stage of development when urbanisation levels are low with moderately high growth rate of urban and rural population (Oberai 1993, Shinoda 1996). Both of them further elaborate that at an intermediate stage of urbanisation, natural increase predominates. At a late stage, with high urbanisation and low natural increase , the relationship may favour net migration again.

Oberai (1993) argues that the relative contribution of each component to urban growth vary in different parts of the Third World though generally they exhibit the pattern mentioned above. He asserts that there is a need to distinguish between the increased growth of cities and increase in urbanisation since a different impact is generated by both to the development process.

Rural to urban migration on an average contributes to two fifth of the urban growth in most third world countries (Gugler 88)

A substantial body of research on rural -urban migration has been accumulated over the last decades. It suggests that most migrants move to urban areas for economic reasons move mainly in response to better employment and income opportunities (Oberai 1993). To Oberai " the true determinants of urbanisation and spatial concentration in developing countries are therefore to be found in the forces that determine the location of employment opportunities, the nature and pattern of industrialisation, the pace of agricultural development and the growth of transportation and communication network".

According to Gilbert and Gugler(1982), three principal pattern of rural to urban migration in the Third world stand out :-

1.temporary migration of men separated from their families

2. family migration in urban areas is followed by return migration to the community of origin and

3. permanent establishments of urban family households.

To Mazumdar (1987), not all of the differential between urban and rural growth can be attributed to migration from rural areas. He further argued that as a country urbanizes, natural increase within the city becomes an increasingly important cause of urban growth simply because of the sheer size of the urban in relation to the rural population.

Preston (1988) examines carefully the demographic processes that are currently responsible for urban growth in developing countries . He opines that rural to urban migration function as an indicator of regional distortions in the patterns of developemnt. He, however rejects the hypothesis that rural-urban migration rate in developing countries are high , uniform across countries and are responsible for the currently exceptionally rapid urban growth in developing countires. The explanation for the phenomenal growth has to be found in the rapid changes in total population i.e. through natural increase of urban population.He further demonstrated that net out migration rates from rural areas typically have been higher in developed than in developing countries . Within developing countries themselves, the same tendency is evident where countries more advanced economically have experienced a more rapid flow from rural areas.He attributes this tendency to the overall economic performance rather than to absolute deprivation in rural areas associated in part with rapid rural natural increase.

Oberai (1987) supports the contention put forth by Preston. He refutes the proposition that rapid population growth fused with rural poverty caused by excess labor supply is a major cause of rural-urban migration.. He attributes it instead to overall economic growth , changes in agricultural productivity and land tenure systems that promote marked inequalities in land holdings and landlessness

Premi(1985) argues that migration to the primate city and to the other metropolitan and intermediate cities accounts for two-thirds or more of the total urbanward migration in many countries.

Mathur (1997) has listed characteristic features of the process of urbanisation in the Asian countries . The features include primacy,declining population share of small and intermediate sized cities ,persisting high population growth rate of larger cities and persisting inter regional disparities.

He states that Asia is on the threshold of a new wave of urbanisation and urban growth. The UN futuristic estimates reveal that during the period 1995-2015 AD, Asia's urban population would have doubled itself with push emanating on one hand from large Asian economies such as China, India, Pakistan, Bangladesh and Indonesia an don the other hand from countries which are at comparatively low level of urbanization such as Afghanistan, Bhutan, Nepal, Cambodia, Lao and Vietman

It is worthwhile to mention that any comparative discussion on the urbanization patterns of the developing countries has to be dealt with caution as the definition of urban areas in India in much more strict than that of other developing countries (Shinoda 1996)

The next two sections will attempt to capture the evolving scene of the Indian urbanisation. The two sections correspond to two broad components - demographic and economic. Henceforth, the review of literature for India as a whole and for regional variations will be dealt separately for the two components.

DEMOGRAPHIC PERSPECTIVE OF INDIAN URBANISATION

The level of Indian urbanisation denoted by the ratio of the urban population to total population was 25.72 % in 1991 as against 23.34 % in 1981 and 19.91 % in 1971. The urban population of 217.2 million as of 1st March 1991 is just a little over a quarter (25.7%) of the country's population (Premi 1991). 58 million persons have been added to the urban population registered in 1981 at 159 million indicating a decennial growth rate of 36% (Puri,91). The pace of urbanisation in India has been slow and the main reason for this lies in the high pace of rural population growth (NIUA 1988, Shinoda 96)

NIUA (1988) tries to present an overview of the prominent features of Indian urbanisation using census data 1981. They conclude that though relatively less urbanised , the size of India's urban population is one of the largest in the world. Moreover, India's urban growth rate is high in itself but is still significantly lower than several developing countries.

Shinoda (1996) suggests that the 1991 census counted 2996 statutory towns and 1693 non-statutory towns (or census towns). About 85% of total urban population in 1991 resided in statutory terms which are generally in the jurisdiction of departments of local government and/ or panchayats (councils)

The pattern of urbanisation is also observed to exhibit either concentrated or dispersed urbanisation . If the new towns that appear as a part of urban agglomeration of metropolis and class I cities and their population form the bulk of the new towns and their total population, there is concentrated urban growth - In contrast if most of the towns are spread all over the country away from the class I cities, it implies dispersed urbanisation (Premi 91).

Premi's analysis of India's urban scene for 1991 reveals that there seems to be substantial concentration of the new population in the class I cities. The same observation (increase in new towns around big cities) is shared by Jain, Ghosh and Kim who attribute the phenomenon to the spread of industries and other economic activities in the vicinity of larger cities (Census of India 1991). The same conclusion was arrived at by in his earlier work which looked at the pattern of the 1971 census of data. Premi points that the reason behind this concentrated urbanisation suggests that the new towns were dependent for their growth on the economy of the city of which they constitute a part. He is categorical about the necessity of a greater dispersal of basic economic function over wider geographical area in the next 2 to 3 decades to traverse the path of balanced regional development.

There is a pronounced tendency for the urban population to concentrate in the large cities and towns. Almost 65% of the urban population lived in 1991 in 300 cities with population of 1,00,000 lakh and more and only about 35% lived in almost 3400 smaller urban place designated as towns. The corresponding figures in 1981 had been 60% and 40% respectively (V Nath 1991)

The tempo of urbanisation is observed to slow down in the decade 1981-1991 as opposed tot he fast growth rate of urban population in the previous decade (Puri 1991, Kundu 1992). Puri (1991) provides empirical data to substantiate his point of view . The level of our urbanisation denoted by the ratio of the urban population to total population was 25.72 % in 1991 as against 23.34 % in 1981 and 19.91 % in 1971. That is the increase of 2.38 % in the level of urbanisation recorded during last decade was much less than that witnessed during the earlier decade.

The significant acceleration in the urban growth during the seventies mainly because of an increase of about 800 new towns during the seventies as per the 1981 census (Kundu 92). However its slowing down is largely because of the substantial decline in the net rural to urban migration during the 1980's (Premi 1991)

Prima facie, a slowing down of the tempo of urbanization should have resulted in a decrease in the growth rate of our bigger cities (Puri 1991) However Puri's analysis indicate that it is otherwise i.e. urban population is highly concentrated in bigger towns and cities.Different reasons are advanced for this slowdown. Bose (1993) argues that under enumeration of urban population in 1991 particularly in the major cities and other big cities has been the main reason for such a declining growth rate over the last decade.

INTER STATE VARIATION IN THE PATTERN OF URBANIZATION

NIUA(1988) suggests that although interstate level regional disparities in urbanisation are narrowing down , within states these are showing signs of accentuation. NIUA further asserts that urban primacy is declining in India though at a very slow pace. The picture at the level of states in confusing and defied any firm generalization. The study intends that broadly speaking urban primacy is higher in the relatively industrialized and urbanized state . By contrast it is distinctly low in the large , populous and less developed state. V.Nath (1991) opines that the high level of urbanisation of several states is due to location in them of a megacity and /or more million plus cities.

Puri (991) gives an account of inter-state differentials in both level and rate of urbanisation. Among the fifteen mega states of India four states had level above 30% (Maharashtra, Gujarat, Tamil Nadu and Karnataka), four between 25 to 30% (Punjab, W.Bengal, AP and Kerala), four betweeb 20 to 25% (Haryana, MP, Rajasthan and UP) while three states had levels below 15% (Orissa, Bihar, Assam)

There exists a distinct negative relationship between level of urbanisation in 1971 and urban growth during 1971-81 (NIUA 88, Puri 91). However during the decade 1981-1991 Puri remarks that the picture is somewhat confusing. His analysis reveals that while TN, W.Bengal, Karnataka, Punjab, Gujarat and Maharashtra (the major urbanised states) has relatively lesser rate of urban growth, states like Bihar, Orissa, UP and Rajasthan (the less urbanised states) had also lesser growth rate of urban population.

ECONOMIC PERSPECTIVE OF INDIAN URBANISATION

Urbanisation is a natural and inevitable consequence of economic development .(Mohan 85, Mills & Becker 86). Mills and Becker in their study of India's urban development provide an explanation of the relationship between urbanization and economic growth. They suggest that urbanization accompanies economic development because of the sectoral shift of labour and capital from predominantly rural to predominantly urban activities in the course of economic development. They further elaborate that shift of labour from agriculture to industry occurs because demand rises and costs fall in industry relative to agriculture.

There appears to be a general agreement amongst economists that the process of urbanisation is one that is an outcome of a multitude of factors that operate simultaneously . Mohan (1984) delineates three factors which happen simultaneously each reinforcing each other's income growth, technical change or urbanisation.

There exists considerable work documenting the trend of the macro economic scenario to move towards sectoral diversification by way of shifting from agricultural towards non-agricultural activity during the 1970s (Mohan & Pant 82, A.Vaidyanathan 86; Kundu 1992, among others). A significant portion of this shift away from agriculture was an

increase in the labour force engaged in manufacturing activity - both within rural as well as urban areas (Mohan 1989). Furthermore, a significant portion of this shift away from agriculture was due to a shift away from agriculture within rural areas (Vaidyanathan 1986)

It is interesting to examine the impact of urbanisation on labour force participation rates and on the process of industrialisation. Before we delve into these issues, it is important to understand the likely implications of one insightful observation. Visaria & Kothari (1987) assert that next two decades and beyond will witness dramatic changes brought about mainly due to saturation in the rural employment situation by the limited scope for expanding the area under cultivation and the likely acceleration of the growth of the population of working ages.

V.Nath (1991) has examined the relationship between the rate of economic growth and the growth rate of urban population . He argues that India as a whole has experienced a slower growth of the urban population during 1981-91 although the rate of economic growth of 5% per annum or more during the most of the decade was significantly higher than the average growth rates of 3.6 - 3.8 % per annum experienced during the two earlier decades. 1961-71 and 1971-81. Based on this finding, he suggests that efforts to accelerate economic growth need not be inhibited unduly by fear of accelerating growth of the urban population.

NIUA (1988) had attempted to discern the same relationship for the decade 1971-81. The study after careful scrutiny revealed that the urban growth rate and the growth rate of gross national product were almost equal to each other for the decade 1971-81. The same trend was visible in the earlier decade. The study concludes that the process of urbanisation and economic growth have remained intertwined during the last two decades. To quote :

" Rapid urbanisation is typical of those areas which display economic dynamism. These include agriculturally progressive areas, belts along the main transport routes, metropolitan regions and localities of new investment in development. In less developed states showing faster urban growth, rapid urbanisation is confined generally to their more developed parts "

Mohan (1985) exposes a paradox applicable for India. He asserts that both agricultural stagnation and growth in agricultural productivity are likely to promote urbanisation in India in coming years.

Kundu (1994) proposes two viewpoints in explaining the decline in the pace of urbanisation during eighties. Firstly, growth in agriculture has created employment opportunities in rural areas both within and outside agriculture reducing the movements of people to urban areas. On the other hand due to the lesser employment and income opportunities in urban areas, rural urban migration has reduced. Premi (1991) also attributes the decline in the net rural to urban migration as the main factor in the slowing down of urbanisation during this period.

For Chakraborty (1996), slow down in Indian urbanisation is a result of saturation in the mega cities. This trend is discernible inspite of bagging most of the investments of the urban programme.

INTER-STATE VARIATION IN THE PATTERN OF URBANISATION

NIUA (1988) provide insights into the likely association between structural changes in the economy and the urbanisation process at the level of the states . They proclaim that there exists non-linear relationship between the two. They argue that there are anomalous situations on account of the operation of a set of complex factors. However they contend that some generalization emerge. Dominance of the primary sector is invariably associated with persistently low levels of urbanisation. But in case of the two sectors comprising the non-agricultural component, the relationship emerges positive for the secondary sector but not so for the tertiary sector.

Mohan (1985) suggests that industrial employment and state per capita net domestic product emerge as key predictor of urbanisation. There is a strong relationship between level of urbanisation and economic development within the state in India. Furthermore, he suggested that one surprising feature that emerges from the pattern of Indian urbanisation is the relative slowdown of urban growth in the more advanced states. The reason advanced by him is that there has been income increase due to industrial growth but this has not kept pace with matching changes in the agriculture sector. He mentions the states of Maharashtra, Tamil nadu and West Bengal as notable and evincing such characteristics.

VNath (1991) on the basis of his analysis of two indicators viz urbanisation and per capita domestic product for the sixteen major state infers that the more urbanised states generally have higher per capita domestic product than the less urbanised states.

Another dimension which needs to be investigated is the relationship between the urban growth rate and economic development . A correlation exercise conducted by NIUA (1988) using statewise data reveals that urban growth during 1971-81 has a negative relationship with the level of urbanisation, share of urban population in cities as well as per capita net domestic product. The study concludes that these patterns are indicative of the dispersal of the urbanisation process to less developed states.

Kundu (1992,1996) had also arrived at a negative relationship between economic development and urban growth. In particular the less developed states of Bihar, Orissa, Rajasthan, UP and MP have all registered a high urban growth rate. He however rejects the proposition that there is an indication of industrial dispersal in these states. He argues that one can possibly attribute this phenomenon to striking poverty, falling agricultural productivity, increasing population density in the rural areas and some investment in infrastructure and public amenities, particularly at the district and taluka headquarters". However states of Haryana and Karnataka have also registered a high urban growth rate, Kundu (1982) attributes this to their rapid industrial growth which is reflected in the substantial increase in the non-agricultural sectors. NIUA (1988) revealed that most urbanised states such as Maharashtra, West Bengal, Tamil Nadu, Gujarat are on the lower side of the national average in urban growth rate. The study points out that has resulted primarily because of the declining growth rates of the metropolitan cities of Bombay, Calcutta, Madras and Ahmedabad which has moderated their overall urban growth rate. This finding is also corroborated by Crook and Dyson (1982) by arguing that there are limits to the extent to which such cities can grow . They have also provided an explanation to the emerging urbanisation on one hand and Haryana , Punjab on the other.

They argue that the nature of industrialisation that the two sets have witnessed is completely different. Maharashtra and Gujarat have experienced expansion of synthetics and other oil-based industries which are highly capital intensive industries. At the other end of spectrum, Haryana and Punjab have observed a distinct upsurge of new agricultural activity as an aftermath of 'Green Revolution'. The nature of expansion of nonagricultural activity is in small scale engineering manufacture of agricultural equipment. Mehta and Mehta (89) comment that the high rate of urban growth of Punjab and Haryana may reflect rural prosperity induced urbanisation.

The analysis of urban development at the regional level has been broadly consistent with the findings of Mohan and Pant (1982).

They have disaggregated the poor states into sub regions to better analysis the high growth rates observed for the states as a whole . They contend that there are clearly two distinct pattern which are discernible in these regions where urban population is growing most rapidly. In one case, the impact of very heavy public investment in industry and mining is largely responsible and sustained agricultural development in the other. The former category comprises of regions of Southern Bihar (Ranchi, Dhanbad, Bokaro) and eastern MP (Durgapur, Bhilai, Raipur). The latter consists of regions of western UP. They further comment that slower growing regions along eastern UP through northern Bihar are suffering from both low agricultural growth and little industrial growth.

Shinoda (1996) opines that it is necessary to examine urban primacy at the level of states in a country like India where 15 oout of 25 states have population of 10 million or more in 1991. Excluding the hilly states urban primacy is high in the states whose level of industrialisation and urbanisation are relatively high as demonstrated in the case of West Bengal, Karnataka , Maharashtra and Tamil Nadu.

Premi (1991) on examining the 1991 census data observed that while major part of the country had dispersed urban population , southern zone comprising Andhra Pradesh, Kerala, Karnataka and TamilNadu experienced greater concentration in metros and Class I cities. To him, this is a sign of concentrated urbanisation in these states. He suggests it is plausible that there was a spurt in industrialisation in the Southern zone during the decade 1981-91 which is essential in increasing the population's per capita income.

Kundu and Gupta (1996) express the fear of accentuation of inter-state and intrastate disparity in industrial development which is likely to attain more serious magnitude in future years. To quote,

"The growth of manufacturing sector in the 1990's is also likely to be concentrated in a few developed states and large cities as the locational controls and programmes to promote industries in the backward region are being gradually withdrawn. As a consequence, urban growth too may get further polarised around a few big industrial centres and the problem of finding productive employment in the backward districts, would become far more serious in future years."

MIGRATION AND URBAN GROWTH IN INDIA

Migration affects not only the size but also the composition of the population.A migrant according to the Indian census is a person who is numerated at a place other than the place of birth. Since our focus is to study migration as a component of urban growth, we will concentrate on urbanised migration.

NIUA (1988) revealed that the number of urbanward migrants in urban India went up from 42.05 million in 1971 to 59.2 million in 1981 which marks the increase of 41%. Furthermore the study suggests that an increase in urban migration and stability in rural to urban migration are the current features of the Indian urbanisation process.

NIUA study also mentions that rapid rural-urban migration in developing countries presents both obstacles and opportunities to developing world cities. In this regard it is pertinent to discuss the views of National Commission on Urbanisation on rural-urban migration. The NCU (1988) has very rightly suggested that even though the rural -urban migration has generally been viewed negatively by urban elites and planners it may be of vital importance for the development of rural areas.

NIUA (1988) findings puts the rural-urban migrants close to the 20 million mark estimated to be contribution of migration to urban growth during the last intercensal period. It also comments that rural-urban stream outscores over urban-urban stream in urbanward migration but the latter is gaining strength over the passage of time. Furthermore the picture in many states does not conform to the national level pattern. In the populous and the backward states such as UP, Orissa, Bihar and Rajasthan, the volume of rural -urban migration continues to be distinctly higher . The remaining states have registered a higher volume of urban-urban stream than the rural-urban stream.

Bose (1977) provides useful insights into the pattern of migration as it existed for the decade 1961-71. He concludes that in both 1961 and 1971, rural to rural migration stream was by far the most preponderant. Furthermore, he asserts that due to rapid population growth, urban areas already have a surplus labour force. This results in either closing or narrowing down the channels of rural-urban migration precipitating in slowing down the tempo of urbanisaiton.

Premi (1991) analyzes the components of urban growth for the three decades 1961-71, 1971-81 and 1981-91 at the national level. He comments that the share of net rural -to-urban migration during the 1960's and the 1970's was almost the same but there seems to be a substantial decline during the 1980's. He attributes this aspect to be the main factor in the slowing down of urbanisation during the period.

Kundu (1986) affirms that there has been a fall in general mobility rate . Using census data from 1961 to 1981, Kundu and Gupta (1996) reiterate this observation. They find the findings interesting which has occured despite significant improvements in education, transport and communication facilities, growth of industries, diversificaiton of the economy etc. They consider only male migrants in the study as they argue that male migration is likely to respond directly to the changing economic scenario.

Kundu (1986) has also observed that at the national level , interstate migrants as proportions to the urban population have declined over the two census decades. He further comments that this process suggests that the urban centres are drawing larger proportions of the migrants from within the state. This phenomenon is responsible for a high urban growth rate in backward states of Uttar Pradesh, Orissa, Rajasthan and Madhya Pradesh. To quote " It may be noted that each state has identified one or two industrial centres of regions and provided sibsided inputs at these places only. A large part of the state has thus received only a small share of the total investments and labour productivity in agriculture has stagnated or gone down all around excepting a few select pockets. This has sharpened intrastate inequality and encouraged migraiton of people from rural to urban areas within the state. This feature is a clear shift from the colonial pattern wherein people moved from the impoverished hinterland to a few developed

regions or large cities often across the states (Kundu 1986, Kundu & Gupta 1996) Furthermore the decline in interstate migraiton is mainly attributed to the decline in the rural urban streams. Kundu and Gupta 1996 argue that this could perhaps be explained in terms of deceleration of growth in the large cities in the developed states that attracted the rural poor from the backward states.

At the regional level, Kundu and Gupta (1996) found lot of variation. The states reporting percentage of inmigrants were higher than the national average in 1981 for Gujarat, Haryana , Karnataka, Maharashtra, Punjab, Tamil Nadu. The major omission in this list according to the authors is West Bengal which has registered a drastic decline and has acquired a value less than the national average in 1981. Considering rates of net interstate migration , the authors comment that barring Tamil Nadu, all other developed states have observed a positive net inmigration in states like Karnataka, Maharashtra, Tamil Nadu and West Bengal. Among the backward states , MP reports positive values at all the three periods of time while Orissa has acquired net inmigrating status only in 1981.

Kundu (1997) tries to place the process of urbanisation in the context of globalisation of the economy. He contemplates an acceleration of rural-urban migraiton boosting urban growth in the 1990s and the following decade. The author opines that the process of urbanisation will get a boost not only from massive flow of capital but also from a commensurate decline in employment opportunities in rural areas.

At the city level, there have been a few studies examining the pattern of inmigration to cities. At the outset, it needs to be clarified that any analysis of migration at the city level suffers from a major limitation in that it deals only with inmigration to the cities and not with net migration. As Premi (1985) remarks "It is not possible to capture such informaiton in a census since, theoretically , outmigrants froma particular city can go to any rural or urban settlement inside and even outside the country".

Greenwood's analysis of rural to urban migraiton in India showed that migrants to cities from both rural and urban areas tended to come from places nearby but this tendency seemed to be significantly more pronounced for rural-to-urban than for urban-to-urban migraiton (Greenwood, 1971).

Mitra (1980) analysed the pattern of immigration to 101 Indian cities during 1961-71 in relation to the industrial structure of their male work force and the concentraiton of capital investment in those cities during 1971. The results of the analysis indicate that in 66 of the cities a majority of the migrants came from rural areas. Furthermore interstate migration of adult male exceeded intrastate migration in the biggest class I cities whereas , intradistrict migration was prominent in smaller class I cities. The authors found a positive relationship between the number of migrants from urban areas and the magnitude of capital investment in the organised sector.

Premi and Tom(1985) using 1971 census data tried to examine the phenomenon of immigration to Class I Indian cities focussing on the city characteristics of size, growth rate, functional specialisation ,period since city status was attained and regional location. He concludes that service cities attracted more migrants than manufacturing, trade, commerce or transport cities. He is of the opinion that the proportion of inmigrants in the metropolises and larger cities might remain constant or even fall in the future . There reason for this tendency will be due to the dominant role played by natural increase and expansion of municipal boundaries. Further, he expresses this view that the urban-to-urban migration stream is likely to become more dominant than the rural-to-urban stream among migrants to class I cities.

Most of the literature available on urbanisation suggests that urbanisation is an outcome of the interplay of a multitude of factors that operate simultaneously.Some writings advocate that there are two different aspects of urbanisation which need to be studied separately.One deals with the increase in population and the other deals with the increase of cities.Furthermore ,some writings advocate that their are limits to the extent to which cities can grow.However, there is no consensus on the exact size.Some place it in the bracket of 5 lakh to 4 million whereas some place it at around 2lakh.. Literature is also available on the determinants of city growth by the city characteristics like city size, functional specialisation ,regional location etc. .

Our study tries to explain the determinants of city growth of the NPCs and the SPCs from both the demographic and economic indicators like initial city size,area expansion,proportion and concentration of industrial and service employment,inmigration rate and functional specialisation of the city.Furthermore,it tries to identify the dynamic cities from the sample already chosen by NCU.

1.8 Organisation of the study

The first chapter explains the choice of study areas , objectives, methodology ,hypothesis and gives an overview of the related literature.

The second chapter discusses the demographic structure of NPC and SPC. In particular , it discusses the sex ratio and literacy rates at the city level including the level and the growth rate separately for males and females wherever possible.City growth rates are examined separately for SPCs as well . Furthermore, its regional variation is also analyzed.

The third chapter discusses the urban characteristics of the NPC and SPC like city size,area ,density and the civic status. It also examines the level and nature of inmigration to the cities.It also tries to examine the determinants of the city growth from a demographic perspective..

The fourth chapter discusses the economic structure of states under consideraiton. Furthemore, the cities are placed in the regional context using two different forms of employment quotient, industrial and services..Determinants of city growth are analyzed from an overall perspective i.e. both economic and demographic.Lastly the selection criterion of NCU is applied for these cities .An alternative to this criterion is also proposed.

Fifth chapter summarises the results obtained from the study and discusses the policy implicaitons.

Chapter 2 : Demographic structure of National and State Priority Cities

2.1 Introduction

The report of the National Commission on Urbanisation (NCU) (Vol II, August 1988) has identified 329 cities and towns as Generators of Economic Momentum (GEM) to be distributed between the National Priority cities (NPC) and State Priority cities (SPC). However,the criteria for selection is not entirely economic although it has the most overbearing effect.The selection of cities as GEM's is based on the multiple criteria such as economic growth potential,socio-cultural , population size , administrative , highly and least urbanised district headquarters and environmental .considerations.The report strongly contends that the location of economic activities(for both NPC and SPC) must be based on technical considerations in regard to physical considerations, water and power resources,[1] transport alignments, telecommunication facilities,[2]the socio-economic profile of the population ,considerations of environment ,national security and related factors.

With respect to NPC, apart from the economic criteria, the capitals of all the states and union territories were included in order to respect the norms of federalism and national integration,.Furthermore, all cities with a population of one million and over in 1981 and which are heading towards the million plus mark in 2001 have been classified as NPCs in view of their vital role in generating economic growth and the need for a commensurate increase in the magnitude of finances to deal with the problems of strained infrastructure.In addition to these ,there is a residual list for NPCs where socio-cultural reason is the prime consideration.

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[1] Most of the centres are on or near a power grid,it is only the distribution system that would have to be improved.Furthermore, the Commission has taken care to try and select only those places where there is a poss ibility of tapping either surface or ground water resources.

[2] Most of the towns suggested for development are located on existing transportation and communication arteries.

The selection of SPCs is based on economic ,social ,environmental considerations.The report urges that any policy on positive urbanisation must be aimed at generating employment and economic growth at the sub-regional level .This entails encouraging migration from within the region and to curb migration to big cities.The approach adopted is to select district headquaters of districts with either 30 percent and more urban population or with 90 percent and more rural population[3].The intention of declaring cities in the first category hinges on giving an impetus to the growth process by supporting the infrastructure facilities . However,in the second case, the underlying objective is strenghening the agricultural base of the selected cities . As in the case of NPCs, there is a residual list for SPCs where selection is based on grouds of economic,social and environmental considerations.

The discussion of this chapter will be limited to the list as given in the appendix [4]. The list has considered a shortened list of GEM's with mainly the economic and sociocultural criteria for NPC and only the economic criteria for SPC.[5] Accordingly , the chapter will discuss the NPC and SPC separately only for those listed in the appendix.

[3] There are 20 cities/towns listed in the former and 109 in the case of latter.

[4] These cities and towns are also listed in the revised guidelines of a Government of India document on Integrated Development of Small and Medium Towns published in 1995.

[5] The NCU lists the shortlisted NPCs on page 42 under the heading Table D and Table E of Statement I and the SPCs on pages 43-44 under Table A of statement II.

2.2 **Description of the cities under consideration.**

In chapter 1 under area of study, we have already mentioned that our study is going to cover 14 major states.Also the time period of our study will be the decade 1981-1991. As a result,we have excluded cities/towns of Assam and Jammu and Kashmir. Also ,one town of Meghalaya has also been excluded so that the comparision is limited to cities/towns in states of broadly similar geographical conditions.The deleted cities/towns under NPC are Dibrugarh and Leh from Assam and Jammu and Kashmir respectively.Amongst the SPCs, the deleted cities/towns are Digboi from Assam and Tura from Meghalaya.In all, the number of NPCs satisfying the economic and socio-cultural criteria which have included in our study are 6 and 8 respectively.There are 101 SPCs in our study.

The distribution of cities/towns under the NPCs and SPCs which have been included in our study is given in the following table:-

	NPC		SPC
States	**Economic criteria**	**Socio-cultural criteria**	**Economic criteria**
Andhra Pradesh			19
Bihar		1	8
Gujarat	1		3
Haryana		1	6
Karnataka	1	1	8
Kerela			3
Madhya Pradesh		1	15
Maharashtra			8
Orissa	2	1	3
Punjab			6
Rajasthan			3
TamilNadu			5
Uttar Pradesh		1	11
West Bengal	2	2	3

2.3 Objectives :

This chapter tries to examine the following:-

- The population growth rate amongst the NPCs satisfying both the economic criteria as also the socio-cultural criteria.
- SPCs which have shown evidence of Population growth momentum(PGM)
- Analysis of the population growth rate of SPCs vis-a-vis the state population growth rates.
- Sex ratio of the NPCs and SPCs

2.4 Population growth rate of NPCs and SPCs

The cities growth rates are the net result of changes in population over time through natural increase,changes in municipal area and the difference between in and out migration.An analysis of the population growth rate s of these cities during 1981-1991 indicates that some cities grew very fast whereas for some, the growth has been modest and in still some, it has been slow.

To capture the cities in the different growth rates, we have tried to classify them in three categories:-

(1) **High** growth rate defined as the rate higher than that of the growth rate of the state urban(1981-91)

(2) **Medium** growth rate defined as one in between that of the state urban population and that of the state total population during 1981-1991.

(3) **Low** growth rate defined as one below the growth rate of the state total population.

2.4.1 Population growth rate of NPC

NPC/State — Population Growth rate of NPC

1. **Under economic criteria**	**High**	**Medium**	**Low**
Ankleshwar /Gujarat		*	
Mangalore/Karnataka	*		
Durgapur/West Bengal	*		
Haldia/West Bengal	*		
Paradeep/Orissa	*		
Koraput/Orissa			*

It is worthwhile to mention the phenomenal growth rate of Haldia in West Bengal listed under 'High' category of the above table . It has experienced a growth rate of 15.5 percent calculated exponentially.

The NPCs included under the residual category with some socio-cultural considerations are listed below against the corresponding growth rate category to which they belong. A closer examination of the table shows that out of 8 which figure in this category, 4 are listed in the 'High' category, 3 in ' Medium' and only 1 in the Low category. The only inclusion under the Low category is that of Mysore in Karnataka.

NPC/State Population Growth rate of NPC

Under socio-cultural criteria	**High**	**Medium**	**Low**
BodhGaya/Bihar	*		
Thanesar/Haryana	*		
Mysore/Karnataka			*
Jagdalpur/Madhya Pradesh		*	
Puri/Orissa		*	
Aligarh/Uttar Pradesh	*		
Darjiling/West Bengal		*	
Bolpur-Shantiniketan/West Bengal	*		

2.4.2 Population growth rate of SPC

Under this section ,two aspects will be captured. First will compare with the national growth rate and second will limit to the state population growth rate .Applying the first one will identify cities/towns where there is evidence of population growth momentum(PGM) for the decade 1981-91. The second one will classify SPCs in the three categories as has been done in the case of NPC.

PGM is mentioned in the NCU as present if rate of population growth is above the national urban growth rate.This is observed only in the SPCs.

The selection of cities by NCU has given preference to cities which have demonstrated PGM both in 1961-71 and 1971-81.NCU has tried to present the arguments both in favour and against this selection. According to NCU, the high rate of population growth in any city does reflect migration to these cities and a response to the creation of employment oppurtunities in the

organised and unorganised sectors.However, it also presents the counterargument that mere population growth is not necessarily a reflection of economic growth and expanding economic oppurtunities.

The exponential growth rate of national urban population for the decade 1981-91 comes out to be 3.08 percent. Keeping this as the benchmark, cities which have retained their PGM number only 44 of the total of 101 SPCs.

None of the SPCs from Bihar,Gujarat and Kerela[6] have shown any evidence of PGM.There are five cities from Andhra Pradesh,three from Haryana,two from Karnataka,nine from Madhya Pradesh,seven from Maharashtra,one from Orissa,two from Punjab,all the three from Rajasthan,two from TamilNadu,seven from Uttar Pradesh and all the three from West Bengal.

Table 1 lists the cities under the three categories of 'High', ' Medium' and 'Low'.The results of the Table are summarised in the Table below

	High	**Medium**	**Low**
Andhra Pradesh	5	9	5
Bihar	2	1	5
Gujarat		2	1
Haryana	2	4	
Karnataka	3	3	2
Kerela			3
Madhya Pradesh	6	5	
Maharashtra	7	1	
Orissa	1	1	1
Punjab	3	1	2
Rajasthan	3		
TamilNadu	2		3
Uttar Pradesh	7		4
West Bengal	3		1

[6] In Kerela, one of the SPC's viz. Trichur has experienced a negative growth rate.Similarly,Bermo in Bihar has also recorded a negative growth rate of population.

2.5 Sex Ratio of NPC and SPC

This section will try to examine the cities with respect to their sexratio.Sex ratios are computed as females per 1000 males .Sex ratio as a variable is observed to be affected either due to natural increase or due to migration . The former is often influenced by cultural factors.However,this section is not intended to quantify the contribution of migration on the sex ratios for the cities under consideration.

Table 2 gives the details of the NPC and SPCs along with their sex ratios.Amongst the 6 NPCs which need to satisfy the economic criteria,only Mangalore has a sex ratio greater than 1000. It has also registered an increase in sexratio from a value of 1003 in 1981 to 1011 in 1991.The only other NPC s which has recorded an increase in sexratio are Haldia from West Bengal(from 782 to 841.) and Paradeep from Orissa(554 to 721).The remaining have registered a decline in its sexratio. The decline has been particularly steep in the case of Koraput from 914 in 1981 to 891 in 1991.

All the 8 NPCs featuring on account of socio-cultural reasons have registered an increase barring Bodhgaya in Bihar and Aligarh in Uttar Pradesh.The decline in both have been modest.Darjeeling in West Bengal has exhibited a phenomenal increase in its sex ratio from 862 in 1981 to 934 in 1991.

Amongst the SPCs,only cities from Kerela have shown a value higher than 1000 for both the years.More precisely,Trichur,Cannanore and Shornur have also registered an increase in its value of sexratio from 1981-1991.Most of the other cities have also registered an increase in sexratio barring Begusarai and Giridih from Bihar,Jind from Haryana,Tumkur and Bidar from Karnataka,Bilaspur and Guna and Pithampur from Madhya Pradesh,Chandrapur, Bid and Nashik from Maharashtra, Cuttack and Berhampur from Orissa,Bhilwara from Rajasthan,Tiruppur and Hosur from TamilNadu.

2.6 Literacy levels of NPCs and SPCs

Cities identified as of national or state priority should ideally have a reasonably high levels of literacy.This is felt in order to facilitate an overall development and percolation of the economic benefits to the larger mass of the population. This section endeavours to examine the emerging regional pattern . The following table summarises the results of literacy rate.

Mean literacy rate of 1991

	Number of observations	Total	Male	Female
All cities	113	61.38	68.77	52.75
Regions				
North	44	58.94	66.52	50.13
East	21	60.46	68.52	51.03
West	12	65.16	72.45	56.91
South	36	63.64	70.44	55.56

The cities from the Western and the Southern region have recorded a value higher than the mean literacy rate. However,the same is not true for the regions of North and the East.The male mean literacy rates of the cities of the eastern region is observed to be close to the corresponding mean for the overall male literacy rate.However, for females,the mean levels are lower for the two regions i.e. East and North.

Amongst the NPCs, the cities which fail to record their overall literacy levels in 1991 above the mean include Paradeep and Koraput from Orissa ,Bodh Gaya from Bihar and Aligarh from Uttar Pradesh.Amongst the SPCs, there are 46 cities out of 99 [7]which fail to meet this standard.This is nearly 47 percent.

[7] For two SPCs, Hazaribagh in Bihar and Sivakasi in TamilNadu,the data for 1991 is not available .

2.6.1 Levels and Trends of Literacy rates for the SPCs with PGM.

Table 1 lists the name of SPCs which have demonstrated PGM.It is pertinent to examine these cities for their levels and growth rate of literacy at the aggregate level as also by gender. Of particular interest is to examine their levels of literacy rates in comparision with the mean levels of literacy rates.It is shown earlier that the mean literacy levels is observed to be 61.3 percent for a sample of 113 cities for the year 1991 .The male mean literacy rate for our sample of cities comes out to 68.7 percent and for females it is observed to be 52.7 percent.

The benchmark will be the literacy rate for the entire population for the year 1991. This is justified on the ground since the selection of these cities has already been made based on the 1981 census data . One is therefore interested in scrutinizing the same for the year 1991 to study the progress (or the absence of it)over the time period encompassing the decade 1981-91.This will enable us to arrive at the exact number of these cities with a reasonably high levels of literacy.

There are 23 cities out of the 44 SPCs which have overall levels of literacy in 1991 lower than the mean literacy levels of 1991 for a sample of 113 cities.This is nearly 53 percent. Thus more than half of these cities which have experienced PGM have not shown an adequate level of literacy.

Cities which do not meet this criteria include Rajamundry (60.0),Adilabad(51.2),Dharmavaram (44.8)from **Andhra Pradesh,**Panipat(59.8) from **Haryana,**Gulbarga(57.87) from **Karnataka,** Satna (57.3), Rajnandgaon(60.2), Dewas(58.4), Bhind(57.0), Morena(50.1),Guna (53.6),Chhatrapur(59.5) from **Madhya Pradesh,** Nanded(59.1),Parbhani (54.6) and Bid (60.6) from **Maharashtra,**

Bhilwara(53.3) and Bharatpur (55.6)from **Rajasthan,** Barielly(45.3), Ghaziabad(53.8), Gorakhpur(57.6),Muzaffarnagar(54.7),Unnao (54.8)and Mathura (49.3)from **Uttar Pradesh**. Both the male and female literacy rates in these cities are also below the corresponding mean literacy rate.

Conclusion

Our analysis shows that the mean city growth for the 115 NPCs and SPCs comes out to be 3.07 which is lower than the national urban population growth rate for the time period 1981-1991. Furthermore , if the analysis is limited to only the SPCs , the mean drops to 2.98 . There exists considerable variations at the regional level for the city growth of SPCs. SPCs from the western region have shown the highest city growth followed by the SPCs from the north . However , the factors responsible for the growth of cities in the two regions may be quite different . It could be predominantly due to the demographic forces in the north .A more detailed microlevel analysis is needed to arrive at any firm conclusion.

Against this backdrop , it needs to be ascertained whether the population growth rate can be taken as a proxy for the economic growth of these cities . In other words , it is worthwhile investigating that the cities which have shown PGM have actually demonstrated economic dynamism in terms of the economic criterion . This will be attempted in subsequent chapters .

Table 1 : SPC showing Population growth momentum

City	District	Gr rate	sexratio		Literacy rate 1981			Literacy rate 1991		
		1981-91	1981	1991	Total	Male	Female	Total	Male	Female
RAJAMUNDRY	EAST GODAVARI	4.04	977	987	57.34	67.1	47.82	60.04	65.3	54.71
TIRUPATI	CHITTOOR	4.14	910	918	62.58	79.91	46.82	67.37	75.08	58.97
KARIMNAGAR	KARIMNAGAR	5.45	894	936	61.88	80.87	44.88	64.67	73.61	55.05
ADILABAD	ADILABAD	4.55	922	934	45.29	61.79	30.08	51.22	61.61	40.1
DHARMAVARAM	ANANTPUR	4.38	945	939	44.26	61.64	27.82	44.89	56.49	32.54
PANIPAT	KARNAL	3.27	868	869	56.87	73.21	42.68	59.8	65.18	53.61
FARIDABAD	FARIDABAD	6.24	740	803	57	88.63	33.6	61.1	68.93	51.36
JIND	JIND	4.08	857	855	56.61	76.51	39.56	62.09	70.2	52.61
BIDAR	BIDAR	3.15	892	887	58	76.79	41.26	64.53	72.14	55.95
GULBARGA	GULBARGA	3.18	902	902	52.39	70.53	36.04	57.87	66.21	48.62
SATNA	SATNA	5.49	816	851	55.15	8.09	34.89	57.39	66.27	46.95
RAJNANDGAON	RAJNANDGAON	3.73	929	960	56.69	73.73	40.74	60.25	70.59	49.48
DEWAS	DEWAS	6.78	886	890	55.92	75.19	38.86	58.47	68.67	47.01
BHIND	BHIND	3.87	820	837	46.63	79.66	34.2	57.04	66.42	45.81
MORENA	MORENA	7.45	808	808	52.67	78.62	31.71	50.17	61.94	35.61
VIDISHA	VIDISHA	3.49	850	871	58.39	79.85	40.14	62.83	70.77	53.72
GUNA	GUNA	5.11	884	882	52.97	73.24	35.04	53.66	63.06	43
CHHATRAPUR	CHHATRAPUR	3.38	848	851	51.98	72.14	34.88	59.56	67.77	49.91
BETUL	BETUL	3.17	887	906	60.61	76.09	46.88	67.61	74.67	59.83
AURANGABAD	AURANGABAD	6.51	869	780	58.94	79.14	41.39	72.16	81.28	60.47
NANDED	NANDED	3.63	906	912	53.89	71.88	37.58	59.14	68.03	49.4
ICHALKARANJE	KOLHAPUR	4.74	851	891	56.47	78.54	37.68	62.28	70.99	52.5
CHANDRAPUR	CHANDRAPUR	6.69	906	893	64.5	81.48	49.13	64.2	71.34	56.2
PARBHANI	PARBHANI	5.54	908	915	50.62	68.25	34.62	54.69	63.5	45.06
BID	BID	3.37	909	888	49.57	75.88	39.92	60.64	69.91	50.21
NASHIK	NASIK	9.18	912	890	67.1	82.13	53.41	67.95	74.35	60.75
CUTTACK	CUTTACK	3.12	801	797	63.15	88.4	42.92	69.19	75.27	61.57
HOSHIARPUR	HOSHIARPUR	3.6	861	876	62.45	80.36	47.03	68.29	72.8	63.16
RUPNAGAR	RUPNAGAR	4.12	870	879	60.6	76.35	46.89	67.1	71.9	61.66
ALWAR	ALWAR	3.41	822	856	58.14	84.88	36.14	62.1	71.41	51.04
BHILWARA	BHILWARA	4.06	888	874	48.03	68.31	30.01	53.39	63.67	41.64
BHARATPUR	BHARATPUR	3.44	834	852	51.14	74.19	31.91	55.61	65.13	44.44
TIRUPPUR	COIMBATOR	3.55	927	925	55.69	78.53	46.18	66.06	75.01	56.38
HOSUR	DHARMAPUR	4.31	875	867	55.36	74.75	38.39	62.91	69.63	55.16
BARIELLY	BARIELLY	3.97	879	881	44.36	57.03	33.23	45.36	51.81	38.05
GHAZIABAD	GHAZIABAD	4.99	792	819	51.18	76.56	31.08	53.83	60.4	45.82

City	District	Gr rate	sexratio		Literacy rate 1981			Literacy rate 1991		
		1981-91	1981	1991	Total	Male	Female	Total	Male	Female
GORAKHPUR	GORAKHPUR	5.53	831	850	58.8	81.37	40.04	57.68	66.23	47.63
MUZAFFARNAGA	MUZAFFARNAGA	3.37	875	891	52.19	67.71	38.63	54.73	61.05	47.64
UNNAO	UNNAO	3.46	855	875	49.19	67.53	33.5	54.82	61.22	47.49
RISHIKESH	DEHRADUN	4.23	762	782	64.49	94.59	41.56	64.37	70.73	56.24
MATHURA	MATHURA	4.3	870	878	49.4	66.97	34.11	49.32	57.09	40.49
ASANSOL	BARDHAMAN	3.38	802	831	62.41	83.44	45.57	65.24	70.17	59.32
SILIGURI	DARJEELING	3.4	794	824	62.15	83.91	44.87	64.8	69.36	59.27

Table 2 : Distribution of SPCs according to population growth rates					
Town/city	District	Population size		Population	growth rate
		1981	1991	1981-91	
Andhra Pradesh					
High					
KARIMNAGAR	KARIMNAGAR	86125	148583	5.45	
ADILABAD	ADILABAD	53482	84255	4.55	
DHARMAVARAM	ANANTPUR	50969	78961	4.38	
TIRUPATI	CHITTOOR	115292	174369	4.14	
RAJAMUNDRY	EAST GODAVARI	216851	324851	4.04	
Medium					
NALGONDA	NALGONDA	62458	84910	3.07	
MADANAPALLE	CHITTOOR	54938	73820	2.95	
NELLORE	NELLORE	237065	316606	2.89	
MAHBUBNAGAR	MAHBUBNAGAR	87503	116833	2.89	
NARASAROEPET	GUNTUR	67032	88726	2.80	
NIZAMABAD	NIZAMABAD	183061	241034	2.75	
KHAMMAM	KHAMMAM	98757	127992	2.59	
GUNTUR	GUNTUR	367699	471051	2.48	
WARANGAL	WARANGAL	355150	447657	2.31	
Low					
BHEEMAVARAM	WEST GODAVAR	101894	121314	1.74	
ONGOLE	PRAKASAM	85302	100836	1.67	
CUDDAPAH	CUDDAPAH	103125	121463	1.64	
KURNOOL	KURNOOL	203662	236800	1.51	
SIDDEPET	MEDAK	47755	54091	1.25	
Bihar					
High					
BIHAR SHARIF	NALANDA	151337	200976	2.84	
NARLATIAGANJ	PAS. CHAMPARA	23701	30977	2.68	
Medium					
BEGUSARAI	BEGUSARAI	56633	71424	2.32	
Low					
HAZARIBAGH	HAZARIBAGH	80155	97712	1.98	
GIRIDIH	GIRIDIH	65444	78097	1.77	
PATRATU	HAZARIBAGH	29210	33131	1.26	
DEHRI	ROHTAS	90409	93594	0.35	
BERMO	GIRIDIH	18901	17113	-0.99	
Gujarat					
Medium					
ANAND	KHEDA	83936	110266	2.73	
HIMATNAGAR	SABARKANTHA	39959	51461	2.53	
Low					
NAVSARI	VALSAD	106793	126089	1.66	
Haryana					
High					

FARIDABAD	FARIDABAD	330864	617717	6.24	
JIND	JIND	56748	85315	4.08	
Medium					
PANIPAT	KARNAL	137927	191212	3.27	
SONIPAT	SONIPAT	109369	143922	2.75	
HISSAR	HISSAR	131309	172677	2.74	
SIRSA	SIRSA	89068	112841	2.37	
Karnataka					
High					
GULBARGA	GULBARGA	221325	304099	3.18	
BIDAR	BIDAR	78856	108016	3.15	
DAVANGERE	CHITRADURGA	196621	266082	3.03	
Medium					
TUMKUR	TUMKUR	108670	138903	2.45	
HARIHAR	CHITRADURGA	52334	66647	2.42	
RAICHUR	RAICHUR	124762	157551	2.33	
Low					
SHIMOGA	SHIMOGA	151783	179258	1.66	
KARWAR	U. KANNAD	47210	51022	0.78	
Kerela					
Low					
SHORNUR	PALGHAT	35120	39550	1.19	
CANNANORE	CANNANORE	60904	65238	0.69	
TRICHUR	TRICHUR	79886	73849	-0.79	
Madhya Pradesh					
High					
MORENA	MORENA	69864	147124	7.45	
DEWAS	DEWAS	83465	164364	6.78	
SATNA	SATNA	90476	156630	5.49	
GUNA	GUNA	60255	100490	5.11	
BHIND	BHIND	74515	109755	3.87	
RAJNANDGAON	RAJNANDGAON	86367	125371	3.73	
Medium					
VIDISHA	VIDISHA	65521	92922	3.49	
CHHATRAPUR	CHHATRAPUR	51959	72824	3.38	
BETUL	BETUL	46293	63534	3.17	
UJJAIN	UJJAIN	278454	362266	2.63	
RAIPUR	RAIPUR	338245	438639	2.60	
Low					
SHAHDOL	SHAHDOL	44342	55508	2.25	
ITARSI	HOSHANGABAD	63541	77334	1.96	
BILASPUR	BILASPUR	179791	179833	0.00	
PITHAMPUR	DHAR		11996		
Maharashtra					
High					
NASHIK	NASHIK	262428	656925	9.18	
CHANDRAPUR	CHANDRAPUR	115777	226105	6.69	

AURANGABAD	AURANGABAD	298937	573272	6.51	
PARBHANI	PARBHANI	109364	190255	5.54	
ICHALKARANJE	KOLHAPUR	133751	214950	4.74	
NANDED	NANDED	191269	275083	3.63	
BID	BID	80287	112434	3.37	
Medium					
DHULE	DHULE	210759	278317	2.78	
Orissa					
High					
CUTTACK	CUTTACK	295268	403418	3.12	
Medium					
BERHAMPUR	BERHAMPUR	162550	210418	2.58	
Low					
SAMBALPUR	SAMBALPUR	112631	131138	1.52	
Punjab					
High					
RUPNAGAR	RUPNAGAR	25165	37996	4.12	
HOSHIARPUR	HOSHIARPUR	85648	122705	3.60	
GOBINDGARH	PATIALA	29937	40175	2.94	
Medium					
BATHINDA	BATHINDA	124453	159042	2.45	
Low					
PHAGWARA	KAPURTHALA	72499	83163	1.37	
BATALA	GURDASPUR	87135	88896	0.20	
Rajasthan					
High					
BHILWARA	BHILWARA	122625	183965	4.06	
BHARATPUR	BHARATPUR	105274	148519	3.44	
ALWAR	ALWAR	145795	205086	3.41	
TamilNadu					
High					
HOSUR	DHARMAPUR	27129	41739	4.31	
TIRUPPUR	COIMBATOR	165223	235661	3.55	
Low					
ERODE	PERIYAR	142252	159232	1.13	
SIVAKASI	RAMNATHAPURA	59827	65556	0.91	
TUTICORIN	TIRUNELVELI	192949	199854	0.35	
UttarPradesh					
High					
GORAKHPUR	GORAKHPUR	290814	505566	5.53	
GHAZIABAD	GHAZIABAD	275815	454156	4.99	
MATHURA	MATHURA	147493	226691	4.30	
RISHIKESH	DEHRADUN	29145	44487	4.23	
BARIELLY	BARIELLY	394938	587211	3.97	
UNNAO	UNNAO	75983	107425	3.46	
MUZAFFARNAGA	MUZAFFARNAGA	171816	240609	3.37	
Low					

HALDWANI	NAINITAL	77300	104195	2.99	
HARDWAR	SAHARANPUR	115513	147305	2.43	
MORADABAD	MORADABAD	345350	429214	2.17	—
BULANSHAHAR	BULANSHAHAR	103436	127201	2.07	
West Bengal					
High					
SILIGURI	DARJEELING	154378	216950	3.40	
ASANSOL	BARDHAMAN	187039	262188	3.38	
DURGAPUR	BARDHAMAN	311798	425836	3.12	
Low					
KRISHNANAGAR	NADIA	98141	121110	2.10	

Chapter 3 : Urban structure of National Priority Cities and State Priority cities

3.1 Introduction

The 1991 census reported 53 cities with population of over half a million each and 296 cities with a population of 1 lakh each.The urban scenario which emerges from the 1991 census data has led to different interpretations by experts. Kundu (1993) speculates that the slowing down of the growth of cities including the metropolises could be an indication in the top heavy structure of urbanisation in the country and a balanced urban development.He further elaborates that the number of new towns in the 1991 census being as large as 890 can be taken as yet another evidence of this structural change. Premi(1991) suggests that there has been evidence of slowing down in the growth rate of population for all categories of towns during the eighties barring the category with population between 5 lakhs and 10 lakhs.Bose(1993) attributes the slowing down in the growth rate of population of the metropolises to the lack of economic dynamism,inability to attract enough investment and generate employment and an inadequate infrastructure.

Even with modest rates of urban population growth,these numbers will continue to increase in foreseeable future. (Mohan 1996). The addition of such colossal numbers to these cities nevertheless exerts enormous pressure on their already overstrained physical and social infrastructure.

There is a pronounced tendency for the urban population to concentrate in the large cities and towns. Almost 65% of the urban population lived in1991 in 300 cities with population of 1 lakh and . The corresponding figures in 1981 had been 60% (V Nath 1991).

Oberai (1993) asserts that there is a need to distinguish between the increased growth of cities and increase in urbanisation since a varied impact is generated by both to the development process.

Perhaps no other census in the world has as rigid a definition of an urban place as India (Ramachandran 89). It may be useful to mention the definition of urban area as given in census. In the 1991 census of India the definition of urban area adopted it as follows :

a) All statutory towns, i.e. all places with a municipality , corporation cantonment board or notified town area committee etc.

b) All other places which satisfy the following criteria
   2) a minimum population of 5000;
   3) atleast 75% of male working population engaged in non-agricultural pursuits and allied activities ,
   4) a density of population of at least 400 persons per square kilometre.

Besides, the Directors of Census Operations in States/Union territories were allowed to include in consultation with the concerned State Governments /Union Territory Administrations and the Census Commissioner of India,some places having distinct urban characteristics urban even if such places did not strictly satisfy all the criteria mentioned under category (b) above.Such marginal cases include major project colonies, areas of intensive industrial development ,railway colonies,important tourist centres,etc.

The level of Indian urbanisation denoted by the ratio of the urban population to total population was 25.72 % in 1991 as against 23.34 % in 1981 and 19.91 % in 1971. The urban population of 217.2 million as of 1st March 1991 is just a little over a quarter (25.7%) of the country's population (Premi 1991). During 1981-91,58 million persons have been added to the urban population indicating a

decennial growth rate of 36% (Puri,91). The pace of urbanisation in India has been slow and the main reason for this lies in the high pace of rural population growth (NIUA 1988, Shinoda 1996)

The tempo of urbanisation is observed to slow down in the decade 1981-1991 as opposed to the fast growth rate of urban population in the previous decade (Puri 1991, Kundu 1992). Puri (1991) provides empirical data to substantiate his point of view . The increase of 2.38 % in te level of urbanisation during 1981-91 has been lower than that witnessed during the earlier decade.

The significant acceleration in the urban growth during the seventies mainly because of an increase of about 800 new towns during the seventies as per the 1981 census (Kundu 1992). However its slowing down largely because of the substantial decline in the net rural to urban migration during the 1980's (Premi 1991).However , Bose (1991) refutes the view that the decline in the net rural to urban migration has resulted in the slowing down of urbanisation during this period. He argues that under enumeration of urban population in 1991 particularly in the major cities and other big cities has been the main reason for such a declining growth rate over the last decade.

The pattern of urbanisation is also observed to exhibit either concentrated or dispersed urbanisation . If the new towns that appear as a part of urban agglomeration of metropolis and class I cities and their population form the bulk of the new towns and their total population, there is concentrated urban growth - In contrast if most of the towns are spread all over the country away from the class I cities, it implies dispersed urbanisation (Premi 91).

Prima facie, a slowing down of the tempo of urbanisation should have resulted in a decrease in the growth rate of our bigger cities (Puri 1991) However Puri's analysis indicate that it is otherwise i.e. urban population is highly concentrated in bigger towns and cities.

It is pertinent to mention that our study deals with city as the unit of analysis. The cities under consideration are the National Priority Cities(NPC) and the State Priority Cities(SPC) as identified by National Commission of Urbanisation(NCU)on the basis of 1981 census data other than the capital ,metropolitan and million plus cities.[1] .

3.2 Objectives:

This chapter tries to attempt the following:-

a) To spell out the urban characteristics of the NPC and SPC for both 1981 and 1991.

b) To examine the level of inmigration to these cities for 1991

c) To probe further into the nature of cityward inmigration i.e. from rural and urban areas to the cities

.d) To examine the interrelationship between inmigration and some of the city characteristics.

It is important to mention that only for first part of the objectives, the civic status of the core city is considered. In the remaining parts, wherever possible,analysis is based on the UA .

[1] All SPC considered for our analysis have to satisfy the NCU criteria for selection as dynamic cities. However out of the NPC's selected , some have been included because of other considerations like sauce-cultural etc. .

3.3 Indices of Urbanisation

Urbanisation can be measured in a number of different ways. The following methods have been used for measuring urbanisation.

a) Degree of urbanisation: It is generally measured in terms of absolute or relative number of people living in urban areas. One index of the degree of urbanisation is the percent of urban population to total population(Census Monograph No. 1, Census of India,1981).

b) Tempo of Urbanisation : It refers to the growth rate of urban population measured in terms of simple and exponential rate of growth. Simple growth rate shows the percentage change in urban population in relation to the base level population(Census of India Monograph No. 1)

c) Urban-Rural Growth Differential (URGD) : It is the difference between the rates of annual population growth between urban and rural areas (Mohan and Pant 1982). In general, the urban -rural growth differential is mostly due to migration from rural areas.Migration reduces the growth rate of the population of rural areas and increases the population growth rate of urban areas thus increasing the growth differential though natural increase also plays an important role.(Census of India,Paper 2 of 1991).

d) Town Density: It is defined as the number of cities/towns per thousand square kilometers.It incorporates the area of the respective state . However, it does not communicate anything about the distribution of towns in space.

3.3.1 INTER STATE VARIATON IN THE PATTERN OF URBANIZATION

Mohan(1996) is of the opinion that Indian urban growth is best analysed by disaggregating it by regions or states rather than by looking at the experience of different size groups of towns and cities.He further elaborates that during 1971-81 , all the poorer states experienced accelerated rate of urban growth whereas all the richer states had relatively slow growth.

Table 1 gives the values of various indices of urbanisation.Amongst these ,the first two give the level and rate of urbanisation.Puri (1991) gives an account of inter-state differentials in both level and rate of urbanisation. Among the fifteen mega states of India four states had level above 30% (Maharashtra, Gujarat, Tamil Nadu and Karnataka), four between 25 to 30% (Punjab, W.Bengal, AP and Kerala), four between 20 to 25% (Haryana, MP, Rajasthan and UP) while three states had levels below 15% (Orissa, Bihar, Assam)

There exists a distinct negative relationship between level of urbanisation in 1971 and urban growth during 1971-81 (NIUA 88, Puri 91). However during the decade 1981-1991 Puri remarks that the picture is somewhat confusing. His analysis reveals that while TN, W.Bengal, Karnataka, Punjab, Gujarat and Maharashtra (the major urbanised states) has relatively lesser rate of urban growth, states like Bihar, Orissa, UP and Rajasthan (the less urbanised states) had also lesser growth rate of urban population.

Town Density for the country as a whole works out to be one.It has registered an increase to 1.42 in 1991 .Kerela has shown a remarkable increase in the value of town density during the decade 1981-91 from 0.27 to the highest value amongst the fourteen major states at 5.1.In 1981 ,barring

Kerela,there were four more states with a value less than the national average . These included Orissa(0.69), Rajasthan(0.58), Madhya Pradesh(0.73)and Andhra Pradesh(0.91).In these states, vast tracts of rural areas are not served by any urban centre and within these states ,there are zones of urban concentration. (Kundu 1992). Out of these states, only Madhya Pradesh appears to have improved its position from 0.73 in 1981 to 1.04 in 1991 although it is still much below the national average.

3.3.2 Urban structure of NPC and SPC

In this section , we have first looked at some of the city characteristics like population base,area and density of NPC and SPC by taking all the cities together. Further on this ,we have tried to present a regional dimension by classifying the cities of the states in their respective regions. The classification of the states is undertaken as follows:-

Northern Region : Uttar Pradesh, Madhya Pradesh, Rajasthan,Punjab, Haryana
Eastern Region: Bihar, Orissa,West Bengal
Western Region : Gujarat, Maharashtra
Southern Region : Karnataka, Kerela, Andhra Pradesh, TamilNadu

Table : Summary Table for the NPC and SPC(Regional Dimension)

	1981			1991		
Means	**Population**	**Area**	**Density**	**Population**	**Area**	**Density**
Entire population	126358	28.10	5993	175995	36.78	7242
North	132445	31.63	5823	184932	44.12	7412
East	84825	31.39	3659	117072	34.93	4612
West	139518	26.09	6571	238908	55.52	7051
South	137468	22.39	7375	178407	23.03	8595

It is clearly demonstrated from the above table that the mean city size for all the cities together comes out to be 1.2 lakhs in 1981 which increased to 1.7 lakhs in 1991..The cities of the Western Region appear to have grown fastest managing the highest mean value in 1991 at 2.3 lakhs.For both the years, the cities of the eastern region have shown the lowest mean value. Their value in 1981 was less than 1 lakh . The mean values for the area of the cities in the Northern and Western Region are also broadly consistent with that of the population.The cities classified in these regions have recorded a substantial increase in its mean area value. The values for the other two regions have been modest. Table 2 presents the city characteristics including the civic administrative status of the individual cities listed under NPC and SPC

Table : Distribution of NPC and SPC among different size classes

Different size classes

States	20000-49999	50000-99999	100000-190000	200000-500000	Above 500000
Andhra Pradesh		6	7	6	
Bihar	4	3		1	
Gujarat		2	2		
Haryana		2	4		1
Karnataka		2	4	4	
Kerela	1	2			
Madhya Pradesh	1	6	7	2	
Maharashtra			2	4	2
Orissa	2		2	2	
Punjab	2	2	2		
Rajasthan			2	1	
TamilNadu	1	1	2	1	
UttarPradesh	1		4	5	2
WestBengal		2	2	3	
Total	12	26	40	29	5

In order to understand the size class of the NPC and SPC of the different states, the city population of 1991 was divided in five size classes. The first and second columns of the table denote the size class III and II respectively.For Class I cities , the population base was further desegregated into three categories corresponding to M1,M2 and M3 .

The distribution of NPC and SPC for all the fourteen states combined shows that 40 of the cities are in the range 1 lakh to 1.9 lakh . The distribution of cities in the next size class i.e. 2lakh to 5lakh number 29 followed ver closely by category 50000 to less than 1lakh with a count of 26.There are 12 cities with a population less than 50000 which have been included. This is surprising since the objective of NCU was to concentrate on cities with a population of atleast 50000.Out of these 12 cities , 9 belong to the relatively backward states.

NCU has adopted a different classification of cities and towns . According to the report,the classes and the range of population is given below:-

C1 : I lakh to 5 lakh
C2 :5 lakh to 10 lakh
C3 :10 lakh to 20 lakh
C4 :20 lakh to 50 lakh
C5 :50 lakh to 100 lakh
C6 :100 lakh and above

Towns
T1 : 20,000 to 50,000
T2 : 50,000 to 1 lakh

In our sample of cities, the maximum city size is attained by Aurangabad with a population of 573252. This enables us to restrict our analysis to only C1 and C2 cities.Furthermore for cities/towns with a population less than 1 lakh, both T1 and T2 are applicable and are attempted in frequency distribution and crosstabulation.[2]

[2] For 2 SPCs, Bermo in Bihar and Pithampur in Madhya Pradesh,the population in 1991 was less than 20,000 . These have been therefore excluded from our analysis.

The frequency distribution of the 113 out of the 115 NPC and SPC in our sample as per the NCU classification of cities and towns demonstrates that the maximum number of cities fall in the category of C1 class amongst the four classes. The number of cities in this category count to 69.The next category in order is the class T2 in which the cities number 29.It is surprising that inspite of the thrust of the NCU to select cities of size atleast 50,000, there still exists 10 cities in which the population is less than 50,000.Lastly, there are 5 cities with population more than 5 lakhs but less than 10 lakhs.

It is also worth investigating the regional pattern of distribution of these cities.The crosstabulation of cities with the NCU classification and different regions is given below :

Size class/ region	**T1**	**T2**	**C1**	**C2**	**Row total/ Col pct**
North	3	10	27	3	43
	(7.0)	(23.3)	(62.8)	(7.0)	(38.1)
East	5	6	10		21
	(23.8)	(28.6)	(47.6)		(18.6)
West		2	8	2	12
		(16.7)	(66.7)	(16.7)	(10.6)
South	2	11	24		37
	(5.4)	(29.7)	(64.9)		(32.7)
Column total.	10	29	69	5	113
					100

Note : Figures in brackets are row percentages.

Out of the total number of 113 cities, the percentage from Northern ,Eastern,Western and Southern region are 38.1, 18.6,10.6 and 32.7 respectively.It is thus clear that Northern region is more prominently represented followed by the Southern region.The Western region has only 10.6 percent representation. However,none of the cities in this region is less than 50,000 unlike the other three regions.

In India, urban areas are given different administrative status by different state governments. The conferring of this status depends on the state level Municipal and Local Bodies Act (Ramachandran 89).As per the 1991 census, there were 38 different types of civic status of urban units.Local Bodies in urban areas can be placed in five distinct categories. These are Municipal Corporations (MCorp), Municipal Councils(MC),Notified area committees(NAC),town area committees(TAC) and cantonment boards. Municipal corporations are constituted for cities and bigger towns and they enjoy a high level of autonomy as compared to the lower level urban local bodies.. The municipalities enjoy more or less the same tax powers as the corporations except the degree of state control here is relatively more.The notified area committees are constituted for rapidly growing towns which do not meet the specifications of municipality while the town area committees are created for small townships having pronounced rural characteristics.It may be noted that the state control over local bodies increases inversely down the hierarchy.[3]

The discussion here will be limited only to the civic administration status of the cities under consideration. [4] As per the 1981 status, out of the NPC, only Mysore has M Corp status .Eight of them belong to the second category of classification with civic status either M. Cl or MC or M of MB. Four are to be included in the third category viz. NAC. The NPC with NAC are from Bihar(BodhGaya) and Orissa(Paradeep and Koraput).Only Durgapur has the status of NA in this

[3] Gupta Shalini (1995) , unpublished P.hd. Dissertation ,Centre for the Study of Regional Development, JNU, New Delhi.

[4] Also for some cities, the data for 1981 is not available. It is possible that the town has been added to the list of towns for the first time in 1991 census and was rural in 1981 census.

category.The last of the NPC i.e. Haldia from West Bengal qualifies for inclusion tin the last category of others with the status as N.M.The status of these 14 NPC has remained unchanged for

most of them in 1991 barring a few. In particular ,BodhGaya has changed from NAC to NA,Mysore from M Corp to MC,Mangalore from M Cl to MC,and Haldia from NM to NA.

The picture which is discernible for the SPC in 1981 and 1991 is tabulated below :-

	1981 [5]	1991
I category : M Corp	2	2
II category : M Cl,MC,M, MB, CMC	91	87
III category : NAC, NA	2	6
IV category : TAC,TMC		1
V category: Others		
NP	2	
CT	2	2
FCA	1	1
TP		1
NM		1

It is worthwhile to mention that some cities have changed their civic status from 1981 to 1991.Infact, the two cities which had recorded the civic status as M Corp in 1981 changed and two other cities recorded this status retaining the same number of cities with this status.The SPC which have lost the M Corp status are Raipur and Ujjain from Madhya Pradesh.Both have the status of MC in 1991 . On the other hand, the cities which have acquired M Corp status in 1991 are Nashik and Aurangabad , both from Maharashtra.

[5] Civic status for Pithampur in Madhya Pradesh is not known.

The names and the respective civic status of SPC (other than those listed above)to have undergone changes are Bodhgaya from NAC to NA,Narkatiaganj from NAC to NA,Himatnagar from NP to M, Harihar from M Cl to TMC , Mangalore from M Cl to MC, Davengere , Shimoga,Raichur,Tumkur,Bidar and Karwar from M Cl to CMC , Gulbarga from M Cl to MC ,Bilaspur, Satna,Rajnandgaon and Dewas from M to MC,Dhule, Nanded,Ichalkaranje,Chandrapur, Parbhani, Bid from M Cl to M,Hosur from NP to TP,Bareilly from MB to MC,and Haldia from NM to NA.

Surprisingly,the density of some of the cities have also shown a decline . Since density is a ratio of population and area, the decline could be on account of either both or only population as very few cities have recorded an increase in their area.In particular the cities which fall in the category of a decline in density are Mahbubnagar, Karimnagar,Ongole from Andhra Pradesh, Bodh Gaya and Bermo in Bihar,Faridabad and Sonipat in Haryana, Trichur in Kerela, Satna , Rajnandgaon ,Dewas, Morena and Guna in Madhya Pradesh,Aurangabad,Nanded, Chandrapur and Nashik in Maharashtra, Cuttack in Orissa, Batala and Gobindgarh in Punjab,Bhilwara in Rajasthan, and Bulandshahr in Uttar Pradesh.

3.4 Levels and Trends in Inter and Intra State Migration

There is empirical evidence of an increase in inter-state disparity if this dimension is captured by coefficient of variation. Increasing disparities in economic development should have ceteris paribus encouraged inter-state migration towards the developed states. But parodoxically inter-state migration has gone down from 1971 to 1981.

The buoyancy of the erstwhile dominant inter-state migration stream is especially diminishing in the developed states.Barring Punjab and Gujarat,inter-state migration has declined drastically in the developed states of Karnataka,Maharashtra,TamilNadu and West Bengal. However, of late one notices a trend towards polarisation of urban growth in the backward states also as the number of new towns and fast growing towns clustered around the big urban centre is gradually is gradually increasing in these states also. This phenomenon indicates towards intra-state disparity in development in the backward states and also explains increasing incidence of intra-state migration and declining inter-state migration across the states.

3.4.1 MIGRATION AND URBAN GROWTH TO CITIES

Net migration is one of the three components of urban growth, the other two being natural increase and reclassification. An analysis of the specific contribution of different components of urban growth in India is rendered difficult by lack of precise and complete data on all the three counts. (NIUA 1988).

The main source of migration data for India remains the census. However, any analysis of migration at the city level using census data suffers from a serious limitation in that it can deal with inmigration to the cities but not with net migration.Premi and Tom(1985) comment that it would have been very useful to have information about outmigration also but it is not possible to capture such infornmation in a census since theoretically outmigrants from a particular city can go to any rural or urban settlements inside or even outside the country.

Literature review

Greenwood's (1971) analysis of rural to urban migration in India showed that economic factors such as transportation costs, income and job opportunities dominated individual decisions to migrate to a city. Migrants to cities from both rural and urban areas tended to come from places nearby but this tendency seemed to be significantly more pronounced for rural to urban than for urban to urban migration. Furthermore, rural and urban persons alike were found to migrate to rapidly growing cities perhaps because of the rapidly growing markets there.

Mahmood (1975) using 1961 census data and principal component analysis analysed the characteristics of inmigrants to class I cities and found that long distance industrial pull,youthfulness of the migrants,rural push with weak industrial pull ,short distance industrial pull ,old migration and service pull explained 81.2 percent of the variance in migration to the various cities.

Bose (1977) observed that the process of urbanisation has essentially been one of migration to the city. The largest cities have attracted the largest numbers of migrants from the rural areas because unlike the small towns, they offer a wide range of employment opportunities which require various degrees of skill and what is more important the big cities can provide employment to rural migrants who are largely unskilled and illiterate.

Mitra et al (1980) analysed the pattern of inmigration to 101 Indian cities during 1961-71 in relation to the industrial structure of their male work force and the concentration of capital investment in those cities during 1971.The results of the analysis indicate that in 66 of the cities ,majority of the migrants came from rural areas . About 40 to 50 percent migrants were illiterate or semi literate. The researchers found a positive relationship between the number of migrants from urban areas and the magnitude of capital investment in the organized sector.

Premi and Tom (1985) using 1971 census data tried to examine the phenomenon of migration to Indian cities focusing on the city characteristics of size,growth rate,functional specialization ,period since city status was obtained and regional location.

3.4. 2 Inmigration to NPC and SPC

This section attempts to analyze the inmigration to the NPC's and SPC's using 1991 census migration data[6].In the absence of any comparable data, this section restricts itself only to 1991 and not to 1981 although the time period of our study is the decade 1981-91.Furthermore, the analysis will be limited to only internal migration. As such,the migrants unclassifiable and the International migration are excluded from computations.

In the Indian context of Indian Census, a person is considered as a migrant either by `place of birth' or `place of last residence criteria'.The analysis is based on the D-10 migration tables which are tabulated with respect to the latter.[7] D-10 tables also provide data for cityward migration (From both rural and urban areas).These are tabulated from within the state of enumeration and from state in India beyond the state of enumeration. The former is termed 'intra-state' while the latter is known as 'inter-state'.The category of intrastate is further desegregated as intra-district and inter-district.While the former deals with the movement of population within a district, the latter is concerned with the movement from one district to another district of the same state.

At the time of writing this section,1991 census data was not available for all the Class I cities in our sample.More precisely, there are only 60 cities(Both NPC and SPC) out of a total of 74 Class I cities i.e. 81 percent of the Class I cities. This amounts to 56 percent of the total cities under consideration.The data that was made available pertained to the D-10 tables.

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[6] For the first time, Census of India ,1991 has provided migration data at the city level.

[7] Under the criteria ' place of last residence', a person is considered as a migrant if the place in which he is enumerated during the census is other than his place of last residence.

The analysis would have enriched a great deal with the information on inmigrant workers to these cities. However, the information tabulated in D-11 tables was provided for a very small proportion of cities which rendered it unsuitable for further analysis . Therefore we have dropped the analysis of inmigrant workers from our analysis.

Out of the 62 cities (both NPC and SPC) there are 5 NPC's. These are Mysore, Mangalore ,Puri,Aligarh and Haldia.There are 57 SPC's for which inmigration data is available.

Inmigration rate of the cities is computed as the proportion of inmigrants to total population of the city expressed as a percentage. [8].These are computed separately for males and females.

Table 2 of Appendix II gives the inmigration rate of the 62 cities.The values of inmigration rate has been summarized by the four regions : North , East, West and South as also by the levels of the inmigration rate itself. The mean value arrived at through our analysis is 35.95 and the standard deviation is 10.97.An attempt is also made to classify the cities taking the percentage values of the total inmigrant rate[9] as the criteria.The procedure adopted is as follows:-

If the inmigration rate is greater than mean plus standard deviation, cities qualify in the 'high' category.If the value lies in between mean and mean plus standard deviation, the cities are included in 'medium'. Otherwise , they are clubbed in the 'low' category.

The results of the inmigration values for the cities are classified according to the three categories viz. 'Low', 'Medium' and 'High' as also according to the four regions.

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[8] Whereever, inmigration data for the city is available for the UA, the inmigration rate is computed using the UA population of the respective city.

[9] Alternatively, one could have considered the inmigration rate of male workers. However, this approach would have been more appropriate if the data was for inmigrant workers.

The results of the summary table are as follows :-

Mean Inmigration rate

	Number of observations	Total	Male	Female
All cities	62	35.77	31.24	40.89
Inmigration rate				
Low	30	27.38	23.12	32.22
Medium	23	39.91	35.05	45.38
High	9	52.22	47.66	57.33
Region				
North	22	34.35	27.63	42.13
East	8	34.98	31.00	39.08
West	10	39.80	36.40	43.90
South	22	36.68	33.86	39.69

The percentage mean value of inmigration rate for all the cities together attains a value 35.77.Further the same for males is 31.2 as against 40.8 for females.It is thus clear that the inmigration rate of females is higher with the difference of nearly 10 percentage points.

Undoubtledly,the mean values of inmigration rate vary considerably for the three categories with a steep increase from 27.5 in Low to 39.5 in Middle and to a still higher 52.2 in the High category i.e. nearly double from Low to High.Furthermore,the increase as one moves from low to high is around 12 percentage points for both males and females as cities moves up the hierarchy from medium to high.The mean inmigration rate is however higher for females than for males for all the three categories.

An analysis of the inmigration rate across the four regions brings out the inter-regional differences.Western Region comprising the states of Gujarat and Maharashtra emerge as the region with the highest value of inmigration for the entire population as also for males and females combined.Our study indicates that the next to follow is the Southern region with a percentage mean value of 36.68 for the entire population. However, the rates desegregated by sex does not conform to the same pattern . The values of Males are observed to traverse the same path as for the entire population but not for females. Our analysis indicates that Southern region occupies the the next position after the Western region . The values for the other two regions i.e. Eastern and Northern are quite close for males.However, the females seem to display a pronounced tendency to inmigrate in the Northern region with a value of 42.1 percent which is very close to what is observed in case of the Western Region.Surprisingly, for females the values of Eastern and Southern region are quite similar discarding the North South divide which is generally observed with respect to most of the indicators.

To get some insights in the nature of inmigration rate, we have considered cities which form part either for 'high' or 'medium category. Table 3 provides a list odf such cities which number 30.Most of the cities under 'high' and 'Medium ' category have services as the leading function.

In the absence of data on the actual distance travelled by the migrants ,it is interesting to examine the place of last residence of inmigrants to the city . The approach adopted in our study is to analyze cities with respect to place of last residence whether rural or urban.Cities with a share of rural inmigrants as a percentage of total inmigrants is 65 percent or more have been examined for intra-state inmigration.This is expected to denote the number of immigrants who have travelled the least distance. On the other hand, in cities where inmigration from urban areas is 35 percent or more have been examined for inter-state inmigration. This is undertaken to give a dimension of the number of inmigrants who have travelled the maximum distance.

Table 4 provides the names of cities where cityward inmigration from rural areas is greater than 65 percent. These are 8 in number.[10] Out of these,Ongole and Khammam are from **Andhra Pradesh**,Anand from **Gujarat**,Bid from **Maharashtra**,Sambalpur and Cuttack from **Orissa** , Bhilwara from **Rajasthan** and Haldia from **WestBengal.** For all these cities, the proportion of both males and females is also greater than 65 percent.However, the values of males is higher than females for only Ongole,Khammam,Bid and Cuttack.The proportion of intrastate inmigration as a percentage of total inmigrants from rural areas) is 90 percent or more for all the 8 cities barring Sambalpur with a value of 86 percent.

Table 5 shows the cities where inmigration rate as a proportion of total inmigrants from urban areas is greater than 35 percent number 9.[11] These are Cuddapah ,Tirupati and Rajamundry and Kurnool from **Andhra Pradesh**, Navsari from **Gujarat**, Hissar from **Haryana**, Shimoga, Davengere and Raichur from **Karnataka.**The values of males and females are also greater than 35 percent for all the cities .However, the values of males is greater than females only for Kurnool in Andhra Pradesh and Raichur in Karnataka.

3.5 Determinants of growth of NPC and SPC - a demographic perspective

A few hypotheses are advanced in this section to gain insights into the underlying forces responsible for city growth.The focus of this section will be on the demographic factors . This implies that city growth will be screened from the point of view of the urban structure of cities, its size . Furthermore, inferences will also be drawn from the type of functional specialisation in which inmigration is more predominant.

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[10] The values however range from a minimum of 67.31 in Sambalpur to 73.62 in Cuttack.

[11] The range haere is of the order of nearly 15 percentage points with the maximum by Shimoga(49.5) in Karnataka and minimum by Cuddapah (35.1) in Andhra Pradesh.

Hypothesis 1 : Larger the city size, higher is the city growth

City growth is observed to be positively correlated to city size of 1991 for a sample of 115 cities which includes both the NPC and SPC. The value of the coefficient is .292 and is significant at 1 percent level of significance.The association even though positive and significant is not very strong as determined by the rather low value of the coefficient.

An attempt is also made to examine the association across the city size classes as given by NCU. For a sample of 113 cities, the results reveal that mean city growth declines from 2.86 to 2.32 as city size graduates from T1 to the next in the hierarchy T2.However, for cities in the size class C1 and C2,there is a phenomenal jump from 3.3 to 6.28. The results suggest that mean city growth is higher for Class I cities and is particularly high for the cities in the population range 5 lakh to 10 lakh.The results are given in the table below:-

	No. of observations	Mean city growth
All cities	113	3.14
T1	10	2.86
T2	29	2.32
C1	69	3.30
C2	5	6.28

Hypothesis 2 : District Cities/towns [12] have services as the functional specialisation.

Crosstabulation of district cities /towns with functional specialisation

Cities	District towns	Non district towns	Row total/ Percentage
Primary	2	3	5
	(40)	(60)	(4.3)
Manufacturing	21	22	43
	(48.8)	(51.2)	(37.4)
Trade &	3	6	9
Transport	(33.3)	(66.7)	(7.8)
Services	40	18	58
	(69.0)	(31.0)	(50.4)
total	66	49	115
			100

Note : Figures in brackets are row percentages.

In our sample, 69 percent of cities with services as the functional specialisation are district cities.Hence this hypothesis is tested positive.Presumably, the predominantly higher percentage can be attributed to the generation of various forms of tertiary employment associated with district administration.However, with regard to Trade and Transport , the sample in our study is too small to warrant any generalisation.As regards manufacturing, 51.2 percent of cities with this specialisation are non-district cities.

[12] District cities/towns are the cities(towns) which are district headquarters.

Hypothesis 3 : City growth is higher in cities which are district headquarters.

	No. of observations	Mean city growth rate
All cities	115	3.07
District Cities	66	3.35
Non-District Cities	49	2.70

This hypothesis is tested positive from the aforementioned values of the the mean city growth separately for the district and the non-district cities.The difference in the mean city growth rate is clearly striking between the district vis-a-vis the non district cities with the values at 3.35 and 2.70 percent respectively.

Hypothesis 4 : Cities with service sector employment as the functional specialisation tend to grow faster.

Testing of this hypothesis is attempted at two levels. The first level looks at the aggregate picture of all the 115 NPCs and SPCs .The results of these are given below :-

	No.of observations	**Mean city growth**
All cities	115	3.07
Cities with functional specialisation		
Primary	5	2.87
Manufacturing	43	3.15
Trade & Transport	9	2.67
Services	58	3.16

It is clear that the in our sample, the highest mean city growth is recorded by cities with other services as the functional specialisationfollowed very closely by manufacturing.The other two categories record a value lower than the sample mean.

The second level of analysis is limited only to the SPCs. The mean city growth values for the 100 SPCs are given below:-

For SPC

	N	Mean city growth
All cities	100	3.02
Cities with functional specialisation		
Primary	4	2.78
Manufacturing	38	3.20
Trade & Transport	8	2.54
Services	50	2.98

The mean values of city growth for manufacturing improves its position and occupies the top position attaining a mean value of 3.20. The mean values of the above three categories are lower than the sample mean of 3.02.

Thus on the basis of the above analysis, we submit that for the entire sample, the hypothesis is tested positive but not when the sample is restricted to only SPCs.

Hypothesis 5 : Larger the city size, higher is the inmigration rate.

The interrelationship between the demographic features of the city and inmigration is complex.An attempt is made here to examine the nature of association between the city size of 1991 and the city growth with the level of inmigration of the cities for 1991.

The results from the correlation exercise are given below :-

Correlation matrix

Inmigration rate

	Total	**Male**	**Female**
City size 1981	-0.345	-0.3041	-0.356
	(.006)	(.016)	(.004)
City growth	NS	NS	NS

NS - Not Significant

It is clear that the inmigration rate of the entire population as also separately for males and females is negatively correlated with city size of 1991 for 62 number of observations . All the three coefficients are statistically significant as well .The implications that can be drawn is that inmigration is taking place largely to smaller cities.However, the relationship between the same three variables with city growth is statistically insignificant.

Hypothesis 6 : Inmigration rate for the entire population is highest for cities with predominantly service sector as the functional specialisation

It is of interest to investigate the nature of functional specialisation of city where maximum inmigration is taking place.The hypothesis will be tested based on the findings of the table given below :-

		Mean Inmigration rate		
	No.of observations	Total	Male	Female
All cities	62	35.95	31.48	41.00
Functional Specialisation				
Primary	2	34.82	30.36	40.56
Manufacturing	27	34.32	30.21	39.11
Trade & Transport	3	39.26	32.68	47.24
Services	30	37.16	32.58	42.11

The above table provides the mean inmigration rate of 62 cities for which the data is available amongst the 115 NPC and SPCs.Functional specialisation of cities is arrived at by considering the leading function in the functional classification of cities available for 1991.

The results reveal that inmigration is highest in the cities with Trade and Transport as the functional specialisation.The mean value comes out to be 39.2 percent.It is followed very closely by cities where the predominant activity is other services like administrative,banking etc.Thus the hypothesis is tested positive as the cities with service sector employment has the most pronounced effect.It is important to mention that inmigration rate is the lowest amongst the four categories where the

functional specialisation of cities is manufacturing.Similar trend is discernible with respect to both male and female inmigration rate.

Hypothesis 7 : Level of inmigration rate is more in cities of less developed states.

Fourteen major states that have been considered in our analysis have been classified as per their levels of economic development. Four variables have been considered to arrive at a composite ranking. The time period of the variables is 1991.[13]

Mean inmigration rate

	No.of observations	Total	Male	Female
All cities	62	35.95	31.48	41.00
Level of Economic Development				
Developed	19	38.35	34.49	42.84
Developing	19	30.25	25.85	35.19
Less developed	24	38.56	33.55	44.14

There is no distinct pattern discernible for the mean values of the inmigration rate.It is observed to be highest in the cities of less developed states followed very closely by cities of developed states. The same tendency is evident for mean values of female inmigration rate. However, with respect to males,the highest value is observed in case of cities of developed states followed by those of less developed states.

[13] A more detailed analysis of this classification is attempted in the next chapter.

Conclusion

From our analysis, we can submit that the selection of cities using 1981 census data as the basis had a mean city size of 1.2 lakhs at the aggregate level.The three regions of West,South and North had 1.3 lakhs as the mean city size in 1981 .However, the selection of cities is independent of the level of economic development of the state as there are no distinct pattern emerging.

It is well known that the administrative status of the city plays an important role in promoting economic activities.Our results have shown that amongst the NPCs and SPCs ,the growth is faster in district cities with other services as the functional specialisation. Among the SPCs alone,city growth is fastest amongst the cities with manufacturing as the functional specialisation.

The civic administration status has been found to be mostly of the type in the second category i.e. Municipal Councils.However,it would be of interest to select the dynamic cities in 1991 within this list as per the economic criterion suggested by the National Commission of Urbanisation(NCU) and juxtapose these cities with their corresponding civic status. . Only then can one say whether there is any compatibility with respect to its civic status.This analysis is intended to serve as a way of checking whether the dynamic cities have a sound municipal base and an efficient administrative status in the mobilisation and financial backing of municipal taxes. .Furthermore, this chapter has also looked at the cityward inmigration to some of the cities for which data is available.. Our analysis of the 62 cities reveals that inmigration is lower in the cities with a strong economic base.The same conclusion is valid even for male inmigration rate.Furthermore inmigration rate is higher amongst the smaller cities .Most of these cities specialise either in Trade and Transport or in other services in that order.

Though there could be city specific reasons for the same ,it will be still be worthwhile to exàmine whether cities exhibit a dualistic pattern of development whereby the educated work force migrates out to work and the city attracts labour from the neighbouring places. In such a case, can it be speculated that most of the employment available in these cities will be of an informal type?. In any case ,understanding the functional classification of the cities can throw up some clues.It is plausible that administrative and service city employers generally require people with higher education levels who generally come from urban areas and may be willing to move long distances if a secure job is available especially if the job leads to a higher social status(Premi and Tom,1985).

Table1 : Various indices of urbanisation

	Level of urbanisation		growth rate	Urban growth	Ruralgr rate	URGD	Town density	
							(Towns per 1000 sq. km.)	
	1981	1991	1981-91	1981-91	1981-91	1981-91	1981	1991
India	23.34	25.71	36.19	3.09	1.8	1.29	1	1.42
AP	23.32	26.89	43.24	3.55	1.67	1.88	0.91	0.96
Bihar	12.47	13.11	30.21	2.65	2.03	0.62	1.27	1.56
Gujarat	31.1	34.49	34.38	2.9	1.39	1.51	1.3	1.34
Haryana	21.88	24.63	43.41	3.58	1.85	1.73	1.84	2.13
Karnataka	28.89	30.92	29.62	2.55	1.58	0.97	1.47	1.6
Kerela	18.74	26.39	60.97	4.76	0.32	4.44	0.27	5.1
MP	20.29	23.18	44.89	3.71	2	1.71	0.73	1.04
Maharashtra	35.03	38.69	38.87	3.27	1.68	1.59	1	1.09
Orissa	11.71	13.38	36.16	3.08	1.59	1.49	0.69	0.8
Punjab	27.68	29.55	28.95	2.56	1.56	1	2.68	2.4
Rajasthan	21.05	22.88	39.62	3.31	2.24	1.07	0.58	0.64
TamilNadu	32.95	34.15	19.59	1.76	1.2	0.56	3.33	3.6
UP	17.95	19.84	38.73	3.29	2.02	1.27	2.39	2.56
WB	26.47	27.48	29.43	2.54	2.07	0.47	3.3	4.34

table2: Spatial distribution of NPC and SPC

			1981				1991		
		civic admn status	population	area	density	civic admn status	population	area	density
GUNTUR	GUNTUR	M	367699	30.01	12253	M	471051	30.01	15696
WARANGAL	WARANGAL	M	355150	54.98	6460	M	447657	54.98	8142
RAJAMUNDRY	EAST GODAVARI	M	216851	19.48	11132	M	324851	19.48	16676
NELLORE	NELLORE	M	237065	48.39	4899	M	316606	48.38	6544
KURNOOL	KURNOOL	M	203662	15.02	13559	M	236800	15.01	15776
NIZAMABAD	NIZAMABAD	M	183061	38.86	4711	M	241034	36.86	6539
TIRUPATI	CHITTOOR	M	115292	16.21	7112	M	174369	16.07	10851
CUDDAPAH	CUDDAPAH	M	103125	6.84	15077	M	121463	6.84	17758
BHEEMAVARAM	WEST GODAVARI	M	101894	25.64	3974	M	121314	26.14	4641
KHAMMAM	KHAMMAM	M	98757	18.53	5330	M	127992	18.53	6907
MAHBUBNAGAR	MAHBUBNAGAR	M	87503	9.91	8830	M	116833	13.7	8528
KARIMNAGAR	KARIMNAGAR	M	86125	10.62	8110	M	148583	23.82	6238
ONGOLE	PRAKASAM	M	85302	8.1	10531	M	100836	19.77	5100
NARASAROEPET	GUNTUR	M	67032	7.48	8961	M	88726	7.48	11862
NALGONDA	NALGONDA	M	62458	12.77	4891	M	84910	14.14	6005
MADANAPALLE	CHITTOOR	M	54938	7.71	7126	M	73820	7.74	9537
ADILABAD	ADILABAD	M	53482	20.01	2673	M	84255	23.45	3593
DHARMAVARAM	ANANTPUR	M	50969	36.42	1399	M	78961	40.45	1952
SIDDEPET	MEDAK	M	47755	13.34	3580	M	54091	13.34	4055
BODHGAYA	GAYA	NAC	15724	11.58	1358	NA	21692	19.58	1108
BIHAR SHARIF	NALANDA	M	152343	19.34	7825	M	201323	23.5	8567
BERMO	GIRIDIH	C.T.	18901	11.18	1691	CT	17113	11.18	1531
PATRATU	HAZARIBAGH	C.T.	29210	20.98	1392	CT	33131	20.98	1579
DEHRI	ROHTAS	M	90409	21.32	4241	M	93594	21.32	4390
HAZARIBAGH	HAZARIBAGH	M	80155	28.35	2827		97712	28.35	3447
BEGUSARAI	BEGUSARAI	M	56633	7.72	7336	M	71424	8.99	7945
GIRIDIH	GIRIDIH	M	65444	9.75	6712	M	78097	9.75	8010
NARLATIAGANJ	PAS. CHAMPARAN	N.A.C.	23701	9.77	2426	NA	30977	10.96	2826
NAVSARI	VALSAD	M	106793	8.52	12534	M	126089	8.52	14799
ANAND	KHEDA	M	83936	21.13	3972	M	110266	21.13	5218
HIMATNAGAR	SABARKANTHA	N.P.	39959	8.82	4530	M	51461	8.82	5835
ANKLESHWAR	BHARUCH	M	40960	11.05	3707	M	51739	11.05	4682
THANESAR	KURUKSHETRA	MC	49052	20	2453	MC	81253	30.71	2646
PANIPAT	KARNAL	M.C.	137927	20.82	6625	MC	191212	20.82	9184
FARIDABAD	FARIDABAD	FCA	330864	178.24	1856	FCA	617717	356.5	1733

HISSAR	HISSAR	M.C.	131309	37.38	3513	MC	172677	45.43	3801
SONIPAT	SONIPAT	M.C.	109369	21.37	5118	MC	143922	28.32	5082
SIRSA	SIRSA	M.C.	89068	19.33	4608	MC	112841	19.33	5838
JIND	JIND	M.C.	56748	15.3	3709	MC	85315	15.3	5576
MYSORE	MYSORE	M.Corp	441754	40.05	11030	MC	480692	36.69	13101
MANGALORE	D. KANNAD	M.CL.	193699	73.71	2628	MC	273304	73.71	3708
DAVANGERE	CHITRADURGA	M.CL.	196621	20.51	9587	CMC	266082	20.51	12973
SHIMOGA	SHIMOGA	M.CL.	151783	16.26	9335	CMC	179258	16.26	11024
RAICHUR	RAICHUR	M.CL.	124762	28.43	4388	CMC	157551	28.43	5542
TUMKUR	TUMKUR	M.CL.	108670	15.32	7093	CMC	138903	15.32	9067
BIDAR	BIDAR	M.CL.	78856	11.12	7091	CMC	108016	11.17	9670
HARIHAR	CHITRADURGA	M.CL.	52334	7.77	6735	TMC	66647	7.77	8577
KARWAR	U. KANNAD	M.CL.	47210	14.35	3290	CMC	51022	14.35	3556
GULBARGA	GULBARGA	M.CL.	221325	28.31	7818	MC	304099	32.14	9462
TRICHUR	TRICHUR	M	79886	12.65	6315	M	73849	12.65	5838
CANNANORE	CANNANORE	M	60904	11.03	5522	M	65238	11.03	5915
SHORNUR	PALGHAT	M	35120	32.28	1088	M	39550	32.28	1225
JAGDALPUR	BASTAR	M	51286	7.77	6601	M	66145	8.5	7782
RAIPUR	RAIPUR	M.CORP	338245	55.03	6147	MC	438639	55.03	7971
BILASPUR	BILASPUR	M	179791	39.65	4534	MC	179833	26.35	6825
SATNA	SATNA	M	90476	21.09	4290	MC	156630	86.77	1805
RAJNANDGAON	RAJNANDGAON	M	86367	34	2540	MC	125371	93.34	1343
DEWAS	DEWAS	M	83465	17.36	4808	MC	164364	100.2	1640
BHIND	BHIND	M	74515	17.18	4337	M	109755	17.18	6389
MORENA	MORENA	M	69864	12	5822	M	147124	96	1533
ITARSI	HOSHANGABAD	M	63541	16.36	3884	M	77334	14.07	5496
VIDISHA	VIDISHA	M	65521	5.83	11239	M	92922	5.83	15939
GUNA	GUNA	M	60255	22.76	2647	M	100490	45.75	2197
CHHATRAPUR	CHHATRAPUR	M	51959	14.17	3667	M	72824	14.17	5139
SHAHDOL	SHAHDOL	M	44342	19.92	2226	M	55508	19.92	2787
BETUL	BETUL	M	46293	15.7	2949	M	63534	15.7	4047
UJJAIN	UJJAIN	M.CORP	278454	71.33	3904	MC	362266	92.69	3908
PITHAMPUR	DHAR					NM	11996	11.3	1062
AURANGABAD	AURANGABAD	M.Cl	298937	40.79	7329	MCorp	573272	138.5	4139
DHULE	DHULE	M.Cl	210759	46.46	4536	M	278317	46.46	5990
NANDED	NANDED	M.Cl	191269	12.17	15716	M	275083	20.62	13341
ICHALKARANJE	KOLHAPUR	M.Cl	133751	22.53	5937	M	214950	29.89	7191
CHANDRAPUR	CHANDRAPUR	M.Cl	115777	28.54	4057	M	226105	56.28	4018
PARBHANI	PARBHANI	M.Cl	109364	46.57	2348	M	190255	57.6	3303
BID	BID	M.Cl	80287	8.29	9685	M	112434	8.29	13563

NASHIK	NASHIK	M.Cl	262428	58.28	4503	MCorp	656925	259.1	2535
PURI	PURI	M	100942	16.84	5994	M	125199	16.84	7435
CUTTACK	CUTTACK	M	295268	78.87	3744	M	403418	121.9	3309
BERHAMPUR	BERHAMPUR	M	162550	76.15	2135	M	210418	79.8	2637
SAMBALPUR	SAMBALPUR	M	112631	49.75	2264	M	131138	46.48	2821
PARADEEP	CUTTACK	N.A.C.	33042	23.35	1415	NAC	48104	23.35	2060
KORAPUT	KORAPUT	NAC	31665	97.12	326	NAC	34924	61.07	572
BATHINDA	BATHINDA	M.C.	124453	82.88	1502	MC	159042	97	1640
BATALA	GURDASPUR	M.C.	87135	8.75	9958	MC	86006	8.75	9829
HOSHIARPUR	HOSHIARPUR	M.C.	85648	21.46	3991	MC	122705	28.21	4350
PHAGWARA	KAPURTHALA	M.C.	72499	16	4531	MC	83163	16	5198
GOBINDGARH	PATIALA	M.C.	29937	9	3326	MC	40175	32	1255
RUPNAGAR	RUPNAGAR	M.C.	25165	25	1007	MC	37996	25	1520
ALWAR	ALWAR	M.Cl	145795	80	1822	M Cl	205086	48.4	4237
BHILWARA	BHILWARA	M.Cl	122625	69.93	1754	M Cl	183965	118.5	1553
BHARATPUR	BHARATPUR	M.Cl	105274	34.83	3023	M Cl	148519	39.4	3770
TUTICORIN	TIRUNELVELI	M	192949	13.38	14421	M	199854	13.47	14837
TIRUPPUR	COIMBATOR	M	165223	43.52	3796	M	235661	43.52	5415
SIVAKASI	RAMNATHAPURAM	M	59827	6.82	8772	M	65556	6.89	9515
HOSUR	DHARMAPUR	N.P.	27129	12.62	2150	TP	41739	12.5	3339
ERODE	PERIYAR	M	142252	8.35	17036	M	159232	8.44	18866
ALIGARH	ALIGARH	MB	320861	34.05	9423	MB	480520	32.37	14845
BARIELLY	BARIELLY	MB	394938	27.34	14445	MC	587211	27.34	21478
GHAZIABAD	GHAZIABAD	MB	275815	65.23	4228	MB	454156	63.79	7120
MORADABAD	MORADABAD	MB	345350	39.19	8812	MB	429214	34.17	12561
GORAKHPUR	GORAKHPUR	MB	290814	38.85	7486	MC	505566	38.85	13013
MUZAFFARNAGA	MUZAFFARNAGAR	MB	171816	12.04	14270	MB	240609	12.04	19984
HARDWAR	SAHARANPUR	MB	115513	15.07	7665	MB	147305	15.07	9775
BULANSHAHAR	BULANSHAHAR	MB	103436	9.39	11016	MB	127201	12.33	10316
HALDWANI	NAINITAL	MB	77300	10.62	7279	MB	104195	10.62	9811
UNNAO	UNNAO	MB	75983	15.54	4890	MB	107425	15.54	6913
RISHIKESH	DEHRADUN	MB	29145	2.59	11253	MB	44487	2.59	17176
MATHURA	MATHURA	MB	147493	9.37	15741	MB	226691	5.82	38950
DURGAPUR	BARDHAMAN	NA	311798	154.2	2022	NA	425836	154.2	2762
HALDIA	MEDINIPUR	N.M.	21122	21.59	978	NA	100347	69.1	1452
DARJEELING	DARJEELING	M	57603	10.57	5450	M	73062	10.57	6912
BOLPUR-SHANTI	BIRBHUM	M	38436	13.13	2927	M	52760	13.13	4018
ASANSOL	BARDHAMAN	M	187039	22.49	8317	M	262188	25.02	10479
SILIGURI	DARJEELING	M	154378	15.54	9934	M	216950	15.54	13961
KRISHNANAGAR	NADIA	M	98141	15.8	6211	M	121110	15.96	7588

Table3 : Cities under 'high' and 'medium' category with respect to inmigration

									Cityward migration(As a percentage of total inmigrants)					
Andhra Pradesh				Inmigration rate (%)			From rural areas			From urban areas		
High				P	M	F	P	M	F	P	M	F
CUDDAPAH	CUDDAPAH	ua	services-cum-tr.&com-cum-ind	60%	55%	65%	64.90%	65.22%	64.62%	35.10%	34.78%	35.38%
TIRUPATI	CHITTOOR	ua	services-cum-tr.&com	54%	51%	57%	55.23%	56.03%	54.45%	44.77%	43.97%	45.55%
RAJAMUNDRY	EAST GODAVA	ua	services-cum-tr.&com-cum-ind	52%	48%	57%	61.72%	62.05%	61.43%	38.28%	37.95%	38.57%
Medium												
ONGOLE	PRAKASAM	ua	services-cum-tr.&com--cum-ind	43%	41%	46%	70.39%	70.73%	70.08%	29.61%	29.27%	29.92%
KHAMMAM	KHAMMAM	ua	services-cum-tr.&com-cum-ind	38%	35%	40%	72.51%	73.92%	71.21%	27.49%	26.08%	28.79%
KURNOOL	KURNOOL	ua	Ind-cum--services-cum-tr.& com	37%	35%	40%	63.03%	62.89%	63.16%	36.97%	37.11%	36.84%
Gujarat												
High												
NAVSARI	VALSAD	ua	ind	58%	55%	61%	57.74%	60.50%	54.98%	42.26%	39.50%	45.02%
ANAND	KHEDA	ua	Ind-cum--services-cum-tr.& com	56%	50%	63%	73.55%	73.18%	73.87%	26.45%	26.82%	26.13%
Haryana												
Medium												
HISSAR	HISSAR	u.a	services-cum-tr.&com--cum-ind	45%	38%	53%	57.58%	61.89%	53.92%	42.42%	38.11%	46.08%
Karnataka												
Medium												
SHIMOGA	SHIMOGA	ua	Ind-cum--tr.& comcum services	43%	41%	45%	50.44%	51.97%	48.95%	49.56%	48.03%	51.05%
DAVANGERE	CHITRADURGA	ua	IND-CUM-TR.&.COM	37%	35%	39%	62.18%	63.62%	60.75%	37.82%	36.38%	39.25%
RAICHUR	RAICHUR	ua	services	17%	14%	19%	61.58%	60.99%	62.05%	38.42%	39.01%	37.95%
Madhya Pradesh												
High												
RAIPUR	RAIPUR	u.a	services-cum-tr.&com--cum-ind	47%	44%	50%	58.64%	59.19%	58.11%	41.36%	40.81%	41.89%
Medium												
DEWAS	DEWAS	m.c	ind	44%	38%	50%	56.79%	58.30%	55.52%	43.21%	41.70%	44.48%
BILASPUR	BILASPUR	u.a	services-cum-tr.&com--cum-ind	42%	37%	47%	53.65%	55.23%	52.26%	46.35%	44.77%	47.74%
RAJNANDGAO	RAJNANDGAO	m.c	Ind-cum--pract-cum-services	40%	32%	50%	59.99%	57.05%	61.92%	40.01%	42.95%	38.08%
Maharashtra												
High												
PARBHANI	PARBHANI	m	services-cum-ind-cum-tr&com	48%	45%	52%	62.04%	65.31%	58.97%	37.96%	34.69%	41.03%
Medium												
DHULE	DHULE	m	ind-cum-services	40%	36%	46%	61.51%	64.43%	59.01%	38.49%	35.57%	40.99%
BID	BID	m	services-cum-tr.&com-cum-ind	37%	33%	41%	68.92%	72.94%	65.20%	31.08%	27.06%	34.80%
NANDED	NANDED	ua	ind-cum-services -cum-tr.&com	36%	34%	39%	63.06%	64.71%	61.47%	36.94%	35.29%	38.53%
Orissa												
High												
SAMBALPUR	SAMBALPUR	u.a	services-cum-ind-cum -cum-tr.&c	44%	40%	47%	67.31%	66.80%	67.78%	32.69%	33.20%	32.22%
Medium												
CUTTACK	CUTTACK	u.a	services-cum-tr.&com	36%	34%	37%	73.62%	75.07%	71.96%	26.38%	24.93%	28.04%

Punjab														
High														
BATHINDA	BATHINDA	m.c	services-cum -Tr.&com-CUM-IN			48%	42%	56%	51.04%	54.07%	48.43%	48.96%	45.93%	51.57%
HOSHIARPUR	HOSHIARPUR	m.c	services-cum-tr.&com-cum-ind			47%	39%	55%	56.53%	59.04%	54.56%	43.47%	40.96%	45.44%
Medium														
BATALA	GURDASPUR	UA	TR&COM-CUM-ind-cum-services			36%	24%	50%	57.72%	60.06%	56.59%	42.28%	39.94%	43.41%
Rajasthan														
Medium														
BHILWARA	BHILWARA	mcl	ind-cum-tr&com-cum-services			40%	33%	48%	69.07%	68.68%	71.22%	30.93%	31.32%	28.78%
ALWAR	ALWAR	u.a	services-cum-ind			36%	29%	44%	58.48%	60.58%	56.89%	41.52%	39.42%	43.11%
Uttar Pradesh														
Medium														
HARDWAR	SAHARANPUR	ua	ind-cum-services			44%	40%	48%	45.11%	47.23%	43.06%	54.89%	52.77%	56.94%
West Bengal														
High														
SILIGURI	DARJEELING	m	tr&com-cum-services			47%	46%	48%	51.74%	53.83%	49.20%	48.26%	46.17%	50.80%
Medium														
HALDIA	MEDINIPUR	na	services-cum-pr act			39%	34%	44%	69.31%	66.97%	71.47%	30.69%	33.03%	28.53%

Table 5

Cities where cityward migratic from urban areas is greater than 35%

High	Total	Male	Female	Total	Male	Female
Cuddapah	35.10	34.78	35.38	10.49	10.67	10.32
Tirupati	44.77	43.97	45.55	26.9	25.9	27.84
Rajamundry	38.28	37.95	38.57	8.50	9.97	7.25
Medium						
Kurnool	36.97	37.11	36.84	10.52	9.67	11.31
Guj						
High						
Navari	42.26	39.50	45.02	29.17	30.21	29.27
Haryana						
Medium						
Hissar US	42.42	38.11	46.08	41.72	44.72	39.61
Karnataka						
Medium						
Shimoge UA	49.56	48.03	51.05	12.96	14.06	11.95
Davangere UA	37.82	36.38	39.25	14.16	17.41	11.91
Raichur UA	38.42	39.01	37.95	39.49	33.47	44.10

Tabel 4

Cities where cityward migration from rural area is greater than 65%

AP	% as proportion of total immigrants) Intra State					
Medium	Total	Male	Female	Total	Male	Female
Ongole	70.39	70.73	70.08	99.13	99.32	98.95
Khamman	72.51	73.92	71.21	98.77	98.59	98.94
Gujarat						
Anand	73.55	73.18	73.87	94.06	93.59	94.46
Maharastra						
Medium						
Big	68.92	72.94	65.20	98.74	98.34	99.14
Orissa						
High						
Sambalpur	67.31	66.80	67.78	86.91	86.26	87.51
Medium						
Cuttack	73.62	75.07	71.96	92.73	92.08	93.50
Rajasthan						
Bhilwara	69.07	68.68	71.22	90.46	89.16	97.26
West Bengal						
Medium						
Haldia	9.31	66.97	71.47	95.21	94.22	96.06

Chapter 4 : Urban Economy of National and State Priority Cities

4.1 Introduction

Urbanisation is an outcome of a multitude of factors that operate concurrently.Significant amongst these which happen simultaneously and reinforce each other include income growth, technical change or urbanisation.(Mohan 1984).Thus urbanization is a natural and inevitable consequence of economic development (Mohan 1985, Mills and Becker 1986).Mills and Becker (1986) provided an explanation for the occurrence of this relationship.They suggest that urbanization accompanies economic development because of the sectoral shift of labour and capital from predominantly rural to urban activities in the course of economic development.The same message is echoed by the Report of the National Commission on Urbanisation(NCU) (1988) by identifying the need to view urbanisation as a positive feature and in a total developmental context.

Richarson(1977) had identified several reasons which encourage policymakers in developing countries to promote cities in different size classes.Prominent amongst these are mainly two: to decelerate metropolitan growth or to improve metropolitan regional structure via decentralization.The Indian scene is characterized by the policy initiatives included in the NCU. The report has taken a serious note of the present metro-dominated urban system and has suggested measures to check the imbalances in the present urban system.

The underpinning of the approach adopted by NCU hinges on industrial decentralisation in their pursuit of accomplishing a more balanced urban system. This intervention is aimed at reducing the disparities in the levels of industrial development.Kundu and Gupta (1996) express the fear of accentuation of inter-state and intrastate disparity in industrial development which is likely to attain more serious magnitude in future years. To quote,

"The growth of manufacturing sector in the 1990's is also likely to be concentrated in a few developed states and large cities as the locational controls and programmes to promote industries in the backward region are being gradually withdrawn. As a consequence, urban growth too may get further polarised around a few big industrial centres and the problem of finding productive employment in the backward districts, would become far more serious in future years."

Indeed, the relationship between urbanisation and economic development is fairly well established. It is therefore necessary to elaborate further by examining the relationship between structure of the workforce and levels of urbanisation.

NIUA (1988) provide insights into the likely association between structural changes in the economy and the urbanisation process at the level of the states . They proclaim that there exists non-linear relationship between the two. They argue that there are anomalous situations on account of the operation of a set of complex factors. However they contend that some generalisation emerge. Dominance of the primary sector is invariably associated with persistently low levels of urbanisation. But in case of the two sectors comprising the non-agricultural component, the relationship emerges positive for the secondary sector but not so for the tertiary sector.

Mera(1975) suggested a " layer" theory of urbanisation which tries to relate the magnitude of the urban population to categories of basic employment

i.e. $U1 = d1P + d2S + d3T$

where U1 = urban population and P,S,T represent basic employment in the primary, secondary and tertiary sectors respectively..The term 'basic' here refers to employment which is exogenous or which is not derived as a result of interactions amongst each sector. In the above formulation ,d1,d2 and d3 are the population multipliers resulting from basic employment.

Mera opines that there is merit in inclusion of the component of 'basic' employment in the tertiary sector.He offers explanation that its role in the generation of urban employment can be understood more explicitly by such a separate formulation . The earlier work have mostly focused employment in this sector as a derived demand of agricultural and manufacturing activities.

The secondary sector of the economy comprises of manufacturing and construction. There is a considerable range of industries covered under this sector. These include agro-based,mineral based, machine based industries, textiles, construction,etc.

It is an axiom of economic history that the tertiary sector becomes distinctly visible as an economy progresses(Kumar 1991). Yet, its contribution is grossly undervalued as judged by the complete absence of a standardised definition of a service. Infact, a universally accepted definition of services has remained elusive. (Cowell 1980).Tertiary sector of the economy is concerned with transport, trade, communication , administration and other services..

It is imperative to mention that this sector encompasses activities which are heterogeneous in nature.Infact , tertiary sector is more heterogeneous than the two other sectors.(Kumar 1991). Kumar further elaborates that services sector can also be looked at from two components-Traditional and modern.Traditional tertiary sector engages domestic servants,artisans. Expansion of this sector signifies stagnating economy.On the other hand, there exists the modern tertiary sector which is more conducive to development and includes for instance growth of banking ,information technology..

Kumar and Mathur (1996) does not support the assertion viewed by many scholars that service industries are dumping grounds for unutilised workers. He opines that this perspective fails to appreciate sizeable employment in service industries which assists in the economic development According to him," Service industries have allowed for the expansion of labour market,the growth of small businesses and introduced flexible production processes,as well as growth of new markets". .It has also played a positive role in the absorption of labour of women amongst other categories.

The heterogeneous nature of this sector has led to regard this sector as residual.Kumar (1991) suggests that classifying tertiary sector as `residual ' can only result from an isolated view of the sector where interlinkages with other sectors of the economy are ignored.

It is pertinent to mention that there are various forms of industrial output like due to the contribution of manufacturing,construction and due to the service sector.Economic base theory propounded by Alexander(1954) makes an attempt to consider the whole range of urban economic activities,while operating a distinction between basic and nonbasic economic functions. He contends that one of the strongest ties between city and region is the economic bond, for the economic life of a city is inextricably interwoven with the economic life of its region.Basic functions consist of the export of manufactured goods and services for populations living outside the local boundaries.; nonbasic functions consist mainly of services for the local population and enterprises.The basic functions constitute the economic foundation of the town and they ensure economic exchanges with other regions. They also generate multiplying effects,especially on employment .

Industrial output can be classified as intermediate,capital and consumer goods. The theory asserts that industrial output is for the most part sold outside the urban area in which it is produced. However in case of India,although significant part of the industrial output (e.g. construction) is consumed in the urban area, part of the service production is consumed outside the urban area as witnessed in the case of trade or commerce or transport and communications.

4.1 : State Economic Base

An attempt is made in this section to assemble relevant data on employment and economic development at the state level for 1991 .Economic development is represented by the sectoral share to SDP as also of urban employment for the secondary as well as tertiary sectors[1].

In order to balance out the effect of any one variable,these four indicators are taken and their values are used to rank them in descending order.Subsequently,a composite ranking is then arrived using a simple average of the ranking of the four indicators.

Table 1 : Ranking of states based on different indicators

States	Sectoral share to SDP(%)		Sectoral share of Urban Employment (%)		Composite value a
	Secondary	Tertiary	Secondary	Tertiary	ranking
Andhra Pradesh	17.5(14)	45.0(4)	25.3(12)	55.6(7)	9.25(12)
Bihar	25.0(5)	32.7(10.5)	16.9(14)	55.2(8)	9.37(13)
Gujarat	30.2(2)	45.4(3)	37.4(1)	52.1(11)	4.25(2)
Haryana	21.7(8)	34.7(10)	28.8(7)	59.5(1)	6.5(5)
Karnataka	23.3(6)	42.5(6)	32.4(5)	51.0(14)	7.75(7)
Kerela	21.5(9)	43.7(5)	26.9(9)	51.8(12)	8.75(10)
Madhya Pradesh	21.1(10)	32.7(10.5)	26.5(10)	53.2(10)	10.1(14)
Maharashtra	34.0(1)	45.9(2)	36.5(2)	53.7(9)	3.5 (1)
Orissa	18.3(11)	39.1(7)	21.2(13)	58.7(2)	8.25(8)
Punjab	22.2(7)	29.0(12)	30.0(6)	57.4(3.5)	7.12(6)
Rajasthan	17.7(13)	34.9(9)	28.5(8)	56.0(5)	8.75(11)
TamilNadu	29.3(3)	48.0(1)	34.0(4)	51.6(13)	5.25(4)
Uttar Pradesh	18.1(12)	38.8(7.5)	25.9(11)	57.4(3.5)	8.5(9)
West Bengal	28.9(4)	38.8(7.5)	34.7(3)	57.0(5)	4.87(3)

Source : CSO,1991

Census of India,1991

Note : Figure in brackets are ranks.

[1] In the absence of desegregated information of State Domestic Product by rural and urban areas, the combined value is considered.

Based on the value of the composite ranking, states have been ranked in three categories:-

Developed : Rank 1 to Rank 6

Developing : Rank 7 to Rank 10

Less developed : Rank 11 to Rank 14

Using the above criteria, the classification of the states in the three categories is given below along with the regions to which they belong as per our study.

More developed :

States	Region
Maharashtra	West
Gujarat	West
West Bengal	East
TamilNadu	South
Haryana	North
Punjab	North

Developing

Karnataka	South
Orissa	East
Uttar Pradesh	North
Kerela	South

Less Developed

Rajasthan	North
Andhra Pradesh	South
Bihar	East
Madhya Pradesh	North

Mohan (1985) suggests that industrial employment and state per capita net domestic product emerge as key predictor of urbanisation. Thus as would be predicted there is a strong relationship between level of urbanisation and economic development within the state in India. Furthermore, he suggests that one surprising feature that emerges from the pattern of Indian urbanisation is the relative slowdown of urban growth in the more advanced states. The reason advanced bu him is that there has been income increase due to industrial growth but this has not kept pace with matching changes in the agriculture sector. He mentions the states of Maharashtra, Tamil Nadu and West Bengal as notable and evincing such characteristics.

Another dimension which needs to be investigated is the relationship between the urban growth rate and economic development . A correlation exercise conducted by NIUA (1988) using statewise data reveals that urban growth during 1971-81 has a negative relationship with the level of urbanisation, share of urban population in cities as well as per capita net domestic product. The study concludes that these pattern are indicative of the dispersal of the urbanisation process to less developed states.

Kundu (1992,1996) has also arrived at a negative relationship between economic development and urban growth. In particular the less developed states of Bihar, Orissa, Rajasthan, UP and MP have all registered a high growth rate.of urban population. He however rejects the proposition that there is an indication of industrial dispersal in these states. He argues that one can possibly attribute this phenomenon to striking poverty, falling agricultural productivity, increasing population density in the rural areas and some investment in infrastructure and public amenities, particularly at the district and taluka headquarters". However states of Haryana and Karnataka have also registered a high urban growth rate, Kundu (1982) attributes this to their rapid industrial growth which is reflected in the substantial increase in the non-agricultural sectors. NIUA (1988) reveals that most urbanised states such as Maharashtra, West Bengal, Tamil Nadu, Gujarat are on the lower side of the national average in urban growth rate. The study points out that has resulted primarily because of the declining growth rates of the

metropolitan cities of Bombay, Calcutta, Madras and Ahmedabad which has moderated their overall urban growth rate. This finding is also corroborated by Crook and Dysen (1982) by arguing that there are limits tot the extent to which such cities can grow . They have also provided an explanation to the emerging urbanisation on one hand and Haryana , Punjab on the other. They argue that the nature of industrialisation that the two sets have witnessed is completely different. Maharashtra and Gujarat have experienced expansion of synthetics and other oil-based industries which are highly capital intensive industries. At the other end of spectrum, Haryana and Punjab have observed a distinct upsurge of new agricultural activity as an aftermath of 'Green Revolution'. The nature of expansion of non-agricultural activity is in small scale engineering manufacture of agricultural equipment. Mehta and Mehta (1989) comment that the high rate of urban growth of Punjab and Haryana may reflect rural prosperity induced urbanisation.

The growth rate of NDP for different sectors for the time period 1981-91 reveals that the growth has been fastest in Trade and Commerce at 10.7 percent followed by Transport,storage and Communications (7.43%), manufacturing(7.00%) , Other services(6.35%) and lastly construction(3.51%).

In a large economy like India, it is expected that there would be a wide interstate variation in composition of State Domestic Output(SDP) amongst the secondary and tertiary sectors. In case of manufacturing sector,the fourteen major states have registered an increase in this share for the period 1981-91 barring the states of TamilNadu and WestBengal.The construction sector has behaved differently where it has registered a decline in its share of output for eight of the fourteen states under consideration. These states are ; Haryana,Karnataka,Kerela, Madhya Pradesh, Maharashtra, Punjab ,UP and West Bengal.Out of these,only Madhya Pradesh is placed under less developed state while the remaining are classified as developed or developing. Kerela has managed to retain its lead amongst all the states for both the years with a percentage of 8.34 percent in 1981-82 and a corresponding figure of 7.61 for the year 1991-92.In Kerela, Bihar, Gujarat, Rajasthan and TamilNadu the share of output generated due to construction to total state domestic product is above 6 percent .

Thus, the picture which emerges from the above discussion is that there exists variation in the level and rate of urbanisation . Even the contributory factors responsible for influencing urbanisation are different among the fourteen major states under consideration.The process of industrialisation is observed to be either influenced by rural prosperity or capital intensive nature in some.It will be of interest to examine how the NPCs and SPCs behave in terms of their share of industrial employment in States which are in different levels of economic development. Furthermore, it will be of particular interest to examine the way in which the service sector has responded to the changes in the proportion of industrial employment.

4.3 Objectives

The objectives of this chapter are listed below :-

(I) To develop an employment quotient for the NPCs and SPCs separately for industrial ansd service employment .

(ii) To examine the interrelationship of the two quotients as also variation across the regions and the level of economic development of the states.

(iii) To adopt the NCU criteria on both NPC and SPC for which the economic criterion is applicable.

(iv)To identify cities which are dynamic.

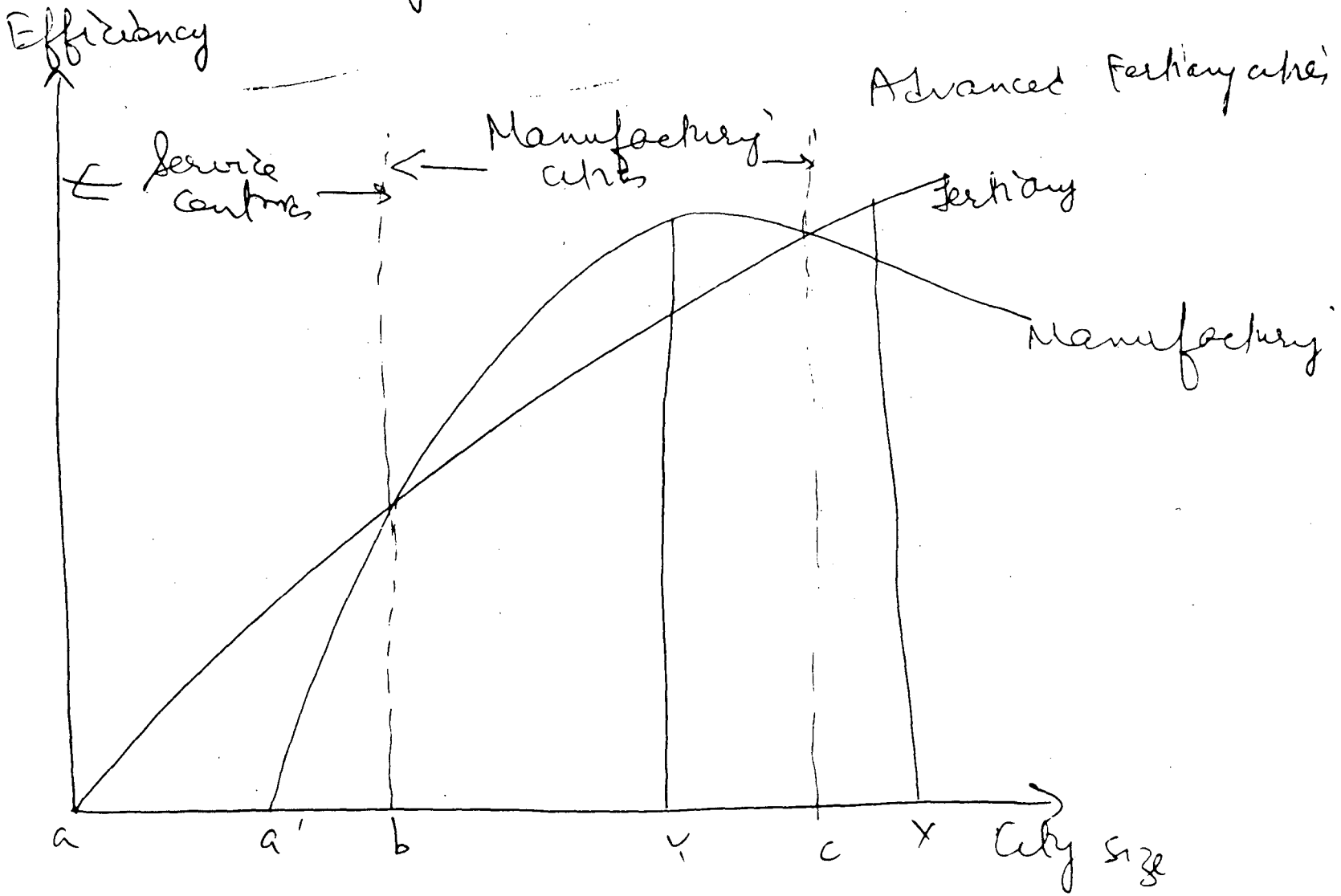
(v) To suggest an alternative approach for selection of cities.

4.4: City /Town Economic Function

The functional classification of cities reveals the leading function of the city as also the extent to which it is diversified .However , there exists no clear cut relationship between city size and the function .Lo and Salih (1976) have argued that the curve relating manufacturing efficiency to city size is an inverted -U with a minimum threshold while tertiary efficiency increases with city size(though ultimately at decreasing rate). These hypotheses are illustrated in figure 1 .They point to three basic types of size-function relationships. Towns in the range(a-b) are central places serving rural areas though the larger ones may have some manufacturing activity.Cities in the (b-c) range are the potential growth centres with dominant manufacturing and a substantial tertiary sector.

There have been few studies relating to interdependence of secondary and tertiary sector. 'Manufacturing matters' by Cohen and Zysman analyses relationship between manufacturing and services. " Services are compliment to manufacturing not potential substitute or successor(Cohen and Zysman,1987).Even if trade,banking,transport etc. are treated as conducive to economic development ,there is an optimum relationship between growth of these activities and commodity producing sectors.(Bhattacharya and Mitra,1990).Finally ,in cities larger than c, manufacturing efficiency is on the wane and such cities will specialise in services,especially high -order services though the dualistic "informal" service sector may also be large.

Figure 1



Source: Richardson (1977) World Bank Staff Working Paper No. 252

4.4.1 Description of selected National and State Priority cities (other than state Capitals and metropolitan cities) which have to meet the criteria of selection of dynamic cities

The criteria adopted by NCU on NPC and SPC for identification under GEM focuses on the economic functions of the city. It is based on the consideration that potential for rapid industrialisation would mean larger cities with a substantial share of secondary employment over time(Mitra,94). It considers the share of industrial employment of the cities. This includes nonhousehold manufacturing and construction. as a rough proxy for the industrial sector. The following table illustrates the state wise break up of NPC and SPC.

Table 2 : Statewise break up of NPC and SPC.

State	NPC	SPC
Andhra Pradesh	-	19
Bihar	-	8
Gujarat	1	3
Haryana	-	6
Karnataka	1	8
Kerela	-	3
Madhya Pradesh	-	15
Maharashtra	-	8
Orissa	2	3
Punjab	-	6
Rajasthan	-	3
TamilNadu	-	5
Uttar Pradesh	-	11
West Bengal	2	3

Thus the cities included in this section for analysis are essentially those which have already been selected by NCU based on the statistical exercise undertaken by them(which has been mentioned in chapter 1) to assess the economic growth potential of the cities.

However, there are a few notable omissions.[2]As a result of this,the sample size for our analysis reduces to 6 NPC and 102 SPC cities (excluding the cities of Assam & Jammu and Kashmir)A detailed list of the names of NPC and SPC is given in Appendix 1.

There has been considerable work done documenting the limits to which big cities can exploit the favourable impact of the existence of the economies of scale and agglomeration effects notwithstanding the absence of consensus on the exact size of population of cities at which these effects are discernible.Mills and Becker(1986) are of the opinion that atleast half a million inhabitants is the optimal limit for any city to contribute to productivity through agglomeration economies .It is also interesting to examine the list of the NPC and SPC with respect to their population size.NCU has embarked on a strategy of favouring medium range cities with size 50,000 and above.The basic argument put forward for this strategy is that only cities above the size of 50,000 show "marked tendencies to diversify and grow at an accelerating rate".This is suggested as an indicator of its economic vitality .The following table lists the number of NPC and SPC falling in respective size class category using 1991 census data.

2

Since the time period of our study is 1981-1991,therefore states of Assam and Jammu and Kashmir have been excluded from our analysis . This step is necessary as no census operation was conducted in the state of Assam in 1981 and Jammu and Kashmir in 1991.The state of Meghalaya has also been excluded from the analysis.

Table 3 : Breakup of NPC and SPC into different sizeclasses

	Class I	Class II	Class III	Class IV
NPC	3	1	2	-
SPC	67	24	8	2

Another important point of consideration is the fact that there is no income data available at the city level. In the absence of this, the only way to examine the growth potential of cities is to depend on the employment data made available by the Census of India . The data is organised in nine industrial categories. Out of these , we have considered the categories forming the non-agricultural component i.e.

Manufacturing	
Household	V A
Non-household	V B
Construction	VI
Trade and commerce	VII
Transport & communications	VIII
Other services	IX

Any analysis which endeavours to compare the detailed ninefold census classification for 1981 and 1991 will have to consider only the Class I cities of 1981. [3] This limitation truncated our list of SPC cities to 58 . Furthermore in order to facilitate data comparability amongst the Class I cities of 1981 and 1991 ,three different types approaches are followed:-

1. Cities which were UA in both 1981 and 1991 have been retained as such
2. Cities which are not UA's have been compared on the basis of their municipal status which has remained unchanged
3. Cities which have lost their UA status from 1981 to 1991 have been handled differently.In them ,the data of the core city has been included as that would explain the significant share of the variables selected.

4.4.2 Functional Classification of cities

Bose (1983) strongly recommends the knowledge of the functional type of cities based on economic activity of the working population for getting an insight into the process of urbanisation.Cities can be classified on the basis of their predominant function .At the outset,it is pertinent to distinguish between the terms economic *structure and functions* of any spatial entity be it the state or the city as the unit of analysis. The economic structure of the spatial entity under consideration is its distribution of output among economic sectors (manufacturing and services)whereas its functions are the roles it plays and the services it supplies to itself,its hinterland and the rest of the urban system(Richardson 1977).Since the data on distribution of output amongst economic sectors is not available at the city level,our analysis will deal with the economic function at the city level.

[3] The census data of 1981 have compiled information about the nine categories only for Class I cities.

The enormous 1991 Census data available at the town/city level on classification of workers into nine industrial categories makes it feasible to classify all the urban places in terms of their functional character.The methodology adopted for this classification is similar to that adopted at the 1971 Census and is as follows:-

(1) To begin with, the nine industrial categories of workers adopted for the presentation of 1991 Primary Census Abstract data were grouped into the following five sectors :-

Sector	**Industrial category**
Primary Activity	I Cultivators
	II Agricultural labourers
	III Livestock,forestry,fishing,hunting plantations,orchards and allied activities
	IV Mining and quarryingIndustry
	V Manufacturing,processing ,servicing and repairs
	(a) Household Industry
	(b) Other than household industry
	VI Construction
Trade	VII Trade and Commerce
Transport	VIII Transport,storage and communication
Services	IX Other services

(2) For each UA/town ,the percentage of total main workers in each of the five sectors was worked out.

(3) The functional category ofthe UA/town was then determined as follows :-

(i) If workers in one sector constituted 40 percent,or more ,the UA/town was classified in the relevant *mono-functional category*;

(ii) If the percentage in one sector was less than 40 percent,two sectors having the largest percentages were combined to see if they together constituted 60 percent or more. If so, the UA/town was classified in the relevant *Bi-functional category*

(iii) If no two sectors added upto 60 percent or more,three sectors having the largest percentage were combined and the UA/town was classified in the relevant *Multi-functional category.*

4.4.3 Functional Classification of NPC and SPC

The classification of NPC and SPC into three categories shows that out of six, four are monofunctional whereas 54 out of the SPC's are multifunctional.

Table 4 : Categories of NPC and SPC

	Monofunctional	Bifunctional	Multifunctional
NPC	4	1	1
SPC	21	26	54

There exists 24 different types of functional classification of cities . A frequency distribution of the functional classification denotes that the highest number (20) of cities fall in the category serv-cum-tr&com-cum-ind very closely followed by monofunctional category with industry as the sole function which number 18. If the discussion is limited to only cities with industry as the leading function, then there exists 43 such cities out of which 18 are monofunctional,9 are bifunctional and 16 are multifunctional.

However,it is also of interest to examine cities based on broad industrial category. This is attempted for the cities by only considering the leading function in the functional classification of cities/towns for 1991. Broadly, four categories have been identified namely Primary,Industrial,Trade and Transport and Services.

The distribution of these four categories amongst the 101 SPCs reveals that there are 5 SPCs with Primary as the broad industrial category, 38 with Industrial , 8 with Trade and Commerce or Transport and Communications and 50 with services.

The table below gives the picture of the way the functional specialisation of the SPCs behave across regions.

	Primary	Industry	Trade and Transport	Other Services	Total
North	1	13	4	23	41
East	1	2	1	9	13
West		7		4	11
South	2	16	3	14	35

The above table clearly demonstrates that out of a total of 100 SPCs, the number of cities in the Northern, Eastern, Western and Southern region are 41,13,11 and 35 respectively.Cities in the Western (63.6) and Southern (45.7) region have manufacturing as the dominant functional specialisation with the percentage of 63.6 percent and 45.7 percent respectively.Other services appears to be the dominant activity in the cities of the Northern and Eastern region with a percentage share of 31.7 and 15.4 percent respectively.

4.5 Employment quotient

It is pertinent to analyse the location of the city in terms of its various occupational structure vis-a-vis the state.The importance of this step is to examine the relative position of the different cities selected under NPC and SPC in relation to a common denomination in so far as the city is treated as a microcosm of the state to which it belongs.

Employment quotients (Eq) give a reasonable idea of the degree of concentration of any measure that needs to be probed i.e. the urban population of the city or workers in different occupational categories.We have tried to construct eq for industrial and services sector. Careful examination of different occupational categories reveals that workers may get concentrated in only one activity in a city whereas in others they may get concentrated in more than one activity.Further, the working population varies in each of these cities.Small number of workers in each of these aforementioned categories in a city having smaller working population will constitute a large proportion while the same number of workers in a city having large working population will form a smaller proportion. As such ,mere percentages or proportions in an activity will not give an adequate idea . To eliminate these variations and for the purpose of comparison a common denomination is required.

Industrial Employment quotient(ieq) =

$$\frac{\text{Proportion of city working population in category VB + VI}}{\text{Proportion of state urban working population in category VB + VI}}$$

This measure can give a fair idea of the extent of concentration of industrial employment in the city vis-a-vis the state urban area.Similar quotient is also developed for services.The employment quotients are similar to location quotients in essence.Furthermore location quotients are ratio of ratios and hence dimensionless (Mahmood, 1993)

If the values of ieq is 1, it implies that the proportion of city working population in industrial category matches with that of the state urban.However, a higher(lower) value indicates that the industrial concentration is more(less) than that of the state urban value.The same logic applies for interpreting values of seq.

4.5.1 Regional variations of ieq and seq values

This section tries to decipher the values of ieq and seq separately for the NPCs and SPCs (those which need to satisfy the economic criterion) endeavouring to understand their regional pattern as also the interrelationship between the two.

	ieq			seq		
NPC	Total	Male	Female	Total	Male	Female
Ankleshwar ua	1.23	1.22	1.35	.75	.73	.87
Mangalore ua	1.51	1.1	2.49	.92	1.08	0.65
Durgapur na	1.52	1.5	1.36	0 .72	0.73	0.89
Haldia na	0.41	0.41	0.3	.9	.91	.93
Paradeep nac	0.58	0.54	1.66	1.21	1.21	1.22
Koraput nac	0.36	0.38	0.2	1.2	1.23	1.02

It is observed from the above table that out of the NPC, 3 have the ieq greater than 1.These include Ankleshwar UA (1.23) in Gujarat , Durgapur NA (1.52) in West Bengal and Mangalore UA (1.51) in Karnataka.Services employment quotient(seq) is greater than one for Paradeep and Koraput. Thus out of the above six NPCs, five have either the industrial or the service concentration greater than the corresponding state urban average. However, Haldia is singled out as the NPC where the values of both ieq and seq is less than 1 .

The values of ieq and seq for both males and females is broadly consistent with that ieq and seq for the entire population.The only exception is Paradeep where female ieq is 1.66 which implies 66 percent higher than the state urban average whereas the value of ieq for the entire population is only .58.In Mangalore, there is also a considerably high value for female ieq at 2.49.

The results for the 101 SPCs[4] is summarised below

	Number of observations	Mean ieq		
		Total	Male	Female
Entire population	99	1.02	1.01	1.00
Region				
North	41	1.16	1.16	1.04
East	13	.87	.86	.88
West	11	.93	.92	.92
South	34	.94	.92	1.03
Level of development of the state				
Developed	30	1.03	1.02	1.04
Developing	25	1.05	1.07	.80
Underdeveloped	44	1.00	.97	1.10

Certain interesting observations can be made about the mean values of ieq by regions and levels of economic development of the state. The mean value of ieq for the entire population is 1.02 .The males acquire a value 1.01 and females 1.00 .Based on this , one can infer that for the entire population and for males , the selection of SPCs records a value higher than the state urban average,whereas for females,it matches with that of state urban.However, the regional picture which emerges places only Northern region in the category where w mean value is greater than one.This implies than only in case of the cities of the Northern region, the mean values of ieq are higher than the corresponding state urban average .[5]The only other category where the mean is higher than 1.00 is that of females in the southern region.

[4] For two SPCs viz. Hazaribagh in Bihar and Sivakasi in TamilNadu, the detailed ninefold classification is not available.This reduces the number of observations to 99.

[5] It is possible that the picture changes when the states are reclassified in different regions.For instance, in our study, Rajasthan is placed in the Northern region whereas in most of the studies, it is part of the western region.

The mean values of ieq cross classified according to the economic development of the state does not reveal any clear cut relationship.Its value for the entire population registers an increase from developed to developing and then falls sharply to 1. it implies that the industrial concentration is higher in developing than developed states for the selected cities.The same trend is discernible in case of both males and females as well.

It is of interest to also examine the mean values of the seq for the SPCs .The results of the mean seq are summarised below:-

	Number of observations	Mean seq		
		Total	**Male**	**Female**
Entire population	99	1.07	1.06	1.17
Region				
North	41	1.06	1.04	1.23
East	13	1.08	1.08	1.18
West	11	1.02	1.02	1.03
South	34	1.08	1.07	1.14
Level of development of the state				
Developed	30	1.01	1.01	1.02
Developing	25	1.13	1.12	1.29
Underdeveloped	44	1.07	1.05	1.21

The mean value of seq for the entire population comes out to be 1.07 . This implies that the concentration of the service sector employment is 7 percent higher than the corresponding state urban average for the SPCs .However, the value for females is higher at 1.17 than males at 1.06.

The regional picture shows a value of mean seq higher than 1 for all the four regions and for both males and females.However, as in the case of ieq,the mean values of seq do not reveal any clear cut association with the levels of economic development of the state.For the entire population, the mean value of seq first increases from 1.01 to 1.13 as the state moves from developed to developing. Afterwhich , the values again declines. The same trend is observed for both males and females although the decline in the case of males
is sharper (1.12 to 1.05) than for females(1.29 to 1.21) as the state moves from developing to less developed states.

4.6 Determinants of city size and city growth for the NPCs and SPCs - an overall perspective

It is of interest to examine the interrelationship between the various attributes of the cities under consideration.Of particular interest is to study the relationship between city size and city growth rate across cities with broad industrial category as also with the degree of concentration of industrial and service category. Also, it will be useful to examine how the two quotients behave.This is attempted in the next section.

Interrelationship between ieq and seq

A simple correlation exercise between industrial employment quotient (ieq) and services employment quotient (seq) reveals that the coefficient is negative and significant. The value of the coefficient is 0.613 for 103 number of observations.The negative relationship is also made clear when a crosstabulation is done for both ieq and seq.There are 49 cities which showed value of seq higher than one and value of ieq less than one.The number of cities which emerged when the position of the two was interchanged counted to 22.There were only 25 out of 103 cities which were placed in the category of cities where both ieq and seq levels demonstrated a value greater than one.

A few hypotheses are advanced to provide insights into the complex phenomena of identifying determinants of growth of the NPCs and SPCs.

Hypothesis 1 : Larger the city size, higher is the proportion of manufacturing employment

The strength of the correlation between manufacturing employment and city size is to some extent a test of economic base theory.(Mills and Becker ,1986). This is founded on the basic notion that cities grow to the extent that their ability to provide employment grows.

The results of the correlation exercise on our sample of data on only the SPCs suggests that there is a positive and statistically significant correlation between the initial size of the SPCs and the proportion of manufacturing employment in 1991. However, the value of the coefficient is not quite high.

The results are summarised below:-

For only the SPCs

	Manu emp 91	**Serv emp 91**
Pop 81	**.228**	**Not Significant**
	(.025)	
Number of observations =	**97**	

Hypothesis 2 : Larger the city size of NPCs and SPCs , higher is the industrial concentration.

Amongst the NPCs, two of the cities viz. Durgapur and Mangalore have the ieq value greater than 1 and belong to the C1 category where the population ranges from 1 lakh to 5 lakh.Ankleshwar has graduated from T1 to T2 over the time period 1981-1991 which implies it has moved from 20,000 - 50,000 to the present 50,000 to a lakh category. Its ieq value is also greater than 1. The NPCs in the lowest size class category as per NCU are Paradeep and Koraput . The population in these two cities ranges between 20,000 to 50,000 for both the years 1981 and 1991.Their ieq values are considerably less than 1.The only exception is Haldia which has experienced a phenomenal growth in its population resulting in its qualifying in the C1 category from T1.However, its ieq value is only 0.41 .

For NPC	Population size class (as per NCU)		ieq		
	1981	1991	Total	Male	Female
NPC					
Ankleshwar ua	T1	T2	1.23	1.22	1.35
Mangalore ua	C1	C1	1.51	1.1	2.49
Durgapur na	C1	C1	1.52	1.5	1.36
Haldia na	T1	C1	0.41	0.41	0.3
Paradeep nac	T1	T1	.58	.54	1.66
Koraput nac	T1	T1	0.36	0.38	0.2

However, it will be interesting to examine the same relationship for the SPCs.City size is observed to be positively correlated to ieq for 101 SPCs.The coefficient is statistically significant at 1 percent level of significance. Furthermore, it will also be useful to examine the mean values of ieq across the size classes as developed by NCU.These are summarised below:-

	Number of observations	Mean ieq		
		Total	Male	Female
Entire population	97	1.00	.99	.97
City size categories as per NCU				
T1	7	1.11	1.13	.77
T2	22	.91	.90	.87
C1	63	1.00	.99	1.02
C2	5	1.15	1.15	1.11

There appears to be no clear cut relationship when mean ieq is cross classified according to the different size classes.for both males and females as also for males.Only in the case of females ,there is a clear association between the population size and ieq.The mean value of ieq is considerably high at 1.11 for the towns with population ranging from 20000 to 50000.The same finding is also observed for males. This implies that selection of cities in this population range has demonstrated a mean value of ieq higher by 11 percent than its corresponding state urban average.However, the value declines in the next category viz. T2.It registers an increase again and shows a
consistent increase with a mean value of 1.00 in C1 and 1.15 in C2.

Hypothesis 2 :Cities grow faster where both industrial and service sector concentration of employment is high

City growth rates were divided in three categories viz. 'Low', 'Medium' and 'High' depending on whether the values were less than the mean, in between the mean and mean plus standard deviation or above the mean plus standard deviation respectively.Here , both NPCs and SPCs were considered for which the economic criterion is applicable . The number of such cities are 107 of which there are 101 SPCs[6] and 6 NPCsThe results of the mean values of both ieq and seq for these three city growth categories presented some interesting results.The results are summarised below :-

[6] For two SPCs viz. Hazaribagh in Bihar and Sivakasi in TamilNadu, the detailed ninefold classification is not available.This reduces the number of observations to 105 instead of 107.

	Number of observations	Mean values	
City growth		**ieq**	**seq**
All cities	105	1.01	1.06
Low	58	1.00	1.07
Medium	35	1.03	1.07
High	12	1.05	.96

The above table clearly demonstrates that as cities move from lower to higher category of city growth, the mean values of ieq register an increase from 1.00 to 1.03 and to still higher at 1.05.This substantiates the findings of Kundu and Thorat (1988) that large towns have a higher proportion of manufacturing and construction component that slow growing counterparts, the gap being wide for manufacturing.However, the direction of change is negative in case of seq values.The sharp decline is noticed from the medium to high category from 1.07 to 0.96.

However, the above results contradicts the nature of association as witnessed from the correlation results if the analysis confined only to SPCs. The correlation coefficient between city growth and both ieq and seq is observed to be statistically insignificant for a sample of 101 SPCs.

Multiple Regression analysis:

In this section, an attempt is made to move further from a bivariate to a multivariate context in arriving at the determinants of city growth for the NPCs and SPCs.We have tried to use the procedure of stepwise regression

In a stepwise regression,the first variable considered for entry into the equation is the one with the largest positive or negative correlation with the dependent variable.There is an entry and removal criterion in this type of regression. After the first variable is selected , it is examined to see whether it should be removed according to the removal criterion.If it passes this criterion,the second variable is selected amongst the variables not in the equation based on the highest partial correlation.Variable selection terminates when no more variables meet entry and removal criteria..It needs to be reiterated that none of the variable selection procedures is "best" in any absolute sense,they merely identify subset of variables that for the sample,are good predictors of the dependent variable.

City growth from 1981 to 1991 is taken as the dependent variable. Amongst the independent variables considered for analysis are city size in 1981(in '00000),area growth from 1981 to 1991[7](in sq km.), industrial and service employment quotient in1991.

The model specification is as under:-

[7] For few cities, area figures are available for either 1981 or 1991. In such a case, the area figures are assumed to be the same in both the years.

City growth = f (initial city size, area growth ,proportion of manufacturing employment , proportion of sevice employment)

A stepwise linear regression run for only the SPCs results in the following results :-

city growth = .386 city size + .009 area growth + 2.22

(.014) (.000)

F= 28.5 Sig F = .000 , N=96

Adj R square = 0.366

The regression results reveal that city size in 1991 and area growth together explain 36 percent of variation in city growth.F value is also significant at 1 % level.A single unit increase(in '00000) in city size leads to a 0.38 percent increase in city growth.The B coefficient is significant at 5 percent level .Furthermore , a unit increase in area growth results in .01 percent increase in city growth. which is statistically significant at 1 percent level of significance. Both the variables, proportion of manufacturing and service employment in 1991 do not enter the equation as they are unable to meet the entry criterion

The same procedure was repeated to account for the impact of the industrial and service concentration on city growth. The results are given below :-

City growth = f (initial city size, area growth ,ieq,seq)

A stepwise linear regression run for only the SPCs results in the following results :-

city growth = .389 city size + .009 area growth + 2.21

(.013) (.000)

F= 29.02 Sig F = .000 , N=97

Adj R square = 0.366

The regression results reveal that city size in 1991 and area growth together explain 36 percent of variation in city growth.F value is also significant at 1 % level.A single unit increase(in '00000) in city size leads to a 0.38 percent increase in city growth.The B coefficient is significant at 5 percent level .Furthermore , a unit increase in area growth results in .01 percent increase in city growth. which is statistically significant at 1 percent level of significance. Both the variables, ieq and seq do not enter the equation as they are unable to meet the entry criterion.

Our results reveal that demographic factors like city size and area growth emerge as statistically significant in positively influencing city growth.Area growth coulbd be on account of extension of city boundaries and the impact of reclassification of villages and towns. Furthermore, it could also be on account of emergence of new towns.However, a more detailed investigation is needed at the individual city level as there could be different city specific reasons .

However, one disturbing finding is the statistically insignificant association between city growth and the concentration of industrial employment of all the NPCs and SPCs as also for SPCs with need to satisfy only the economic criterion.Does it reflect on the lack of economic dynamism of these cities? These cities may be unable to attract enough investment and generate employment . Or is it an indication of an inadequate infrastructure?

This calls for examining the economic criterion as developed by NCU using 1981 census data on the individual cities to identify the cities which have emerged '*dynamic* '.This is attempted in the next section.

4.7 NCU Criteria for selection of dynamic cities

The progress in the industrial component of employment of cities is essentially characterized by the inclusion VB and VI census categories.in accordance with the NCU criteria. Table 4 of Appendix II clearly reveals that out of a total of 107 cities under consideration(6 NPC and 101 SPC),29 cities had to be dropped from our analysis because of non availability of detailed nine fold classification of 1981. An attempt has also been made in this table to compute the industrial component of the some of the non Class I cities of 1981 . The cities which qualify in this category are the cities which share the same name as the district to which they belong.The commonality of the two names make a case for use of NIC 1981 data .The NIC divisions considered include `2' and `3' (manufacturing)& division `5' (construction).The data pertains to district urban .Furthermore, in order to calculate the proportion of the industrial workforce, the denominator is taken as the value of the total workers provided by the census for the respective district urban.[8]

Table 4 of Appendix II demonstrates that there exists considerable variation in the initial levels of the share of industrial employment in 1981 ..The only NPC viz. Mangalore UA in Karnataka registers an increase from 37 to 45 percent .One surprising finding is that in Mangalore UA, the increase in the male share of industrial employment has declined albeit marginally although the corresponding female share has recorded a significant increase from 42.6 percent to 66.2 percent.Amongst the SPC's, two cities with already considerably high values in 1981 (viz. Ichalkarangi UA in Maharashtra with 62.6 percent and Tiruppur UA in TamilNadu with 52.5 percent)have registered a further increase in their industrial share . The increase is of the order of 14.7 percentage points in case of Tiruppur UA.Furthermore, in case of Tiruppur UA, there has been a twenty two percentage point increase in the female share of industrial employment whereas for the males ,it is thirteen .The increase in case of Ichalkarangi UA has been modest. Both the cities are monofunctional with industry as the sole function.On the other side of the spectrum,SPC cities with extremely low values of industrial employment in 1981 include Patratu and Bermo UA in Bihar. The corresponding values in the share of industrial employment in 1981 are 5.99

[8] Total workers category under NIC excludes agricultural cultivators and labourers. Using this value is tantamount to inflating the proportion of industrial employment considerably.

and 6.7 percent respectively.The share of industrial employment of female workers showed a value less than two percent for both these cities.Dehri in Bihar deserves a special mention as a city with a substantial (and maximun amongst all the SPC considered in our sample)decline in the share of industrial employment from 47.1 to 16.6 percent over the time period 1981-1991.

Table 3 highlights the cities which have registered an increase in their share of industrial employment.There exists thirteen such cities which are rendered `dynamic' as per the criteria.Out of these, the only NPC is Mangalore UA in Karnataka. The increase in the percentage share of Mangalore UA was from 37.53 in 1981 to 45.18 in 1991. The remaining thirteen cities are SPC. Out of these,three cities are from Bihar, one for Kerela,,one for MP,one from Rajasthan,two from UP,one from TamilNadu and four from Maharashtra.Amongst the SPC's, cities/UA's like Dewas in MP & Tiruppur UA in TamilNadu have registered a considerable increase (higher than 14%) from 1981 to 1991.

It is worth exploring the distribution of these 'dynamic'cities with respect to the level of economicvdevelopment of the state.Out of these, 5 are from developed states, 5 are from developing and only 3 are from less developed states.The cities from less developed states deserve a special mention.The sole representative from Madhya Pradesh i.e. Dewas appears to be truly dynamic as revealed by the increase in the proportion of industrial employment from 31 to 45 percent.The proportion of male employment in the industrial sector is almost 50 percent..Hence Dewas appears to be the appropriate choice amongst the backward states.[9] However, both the other two cities are from Bihar.Even though they have registered an increase in their proportion of industrial employment but both their level in 1991 as also the absolute increase in the percentage is not substantial enough to warrant their selection as dynamic cities.[10].Their inclusion under the category of 'dynamic' cities leads us to look for an alternative method so that the selection is appropriate. This is attempted in the next section where we have tried to develop an alternative approach.

[9] Dewas has also shown PGM and its civic status has changed from M to MC from 1981 to 1991.
[10] Both these towns are also census towns as per the 1981 and 1991 data.

4.7.1 Dynamic cities:Alternative approach

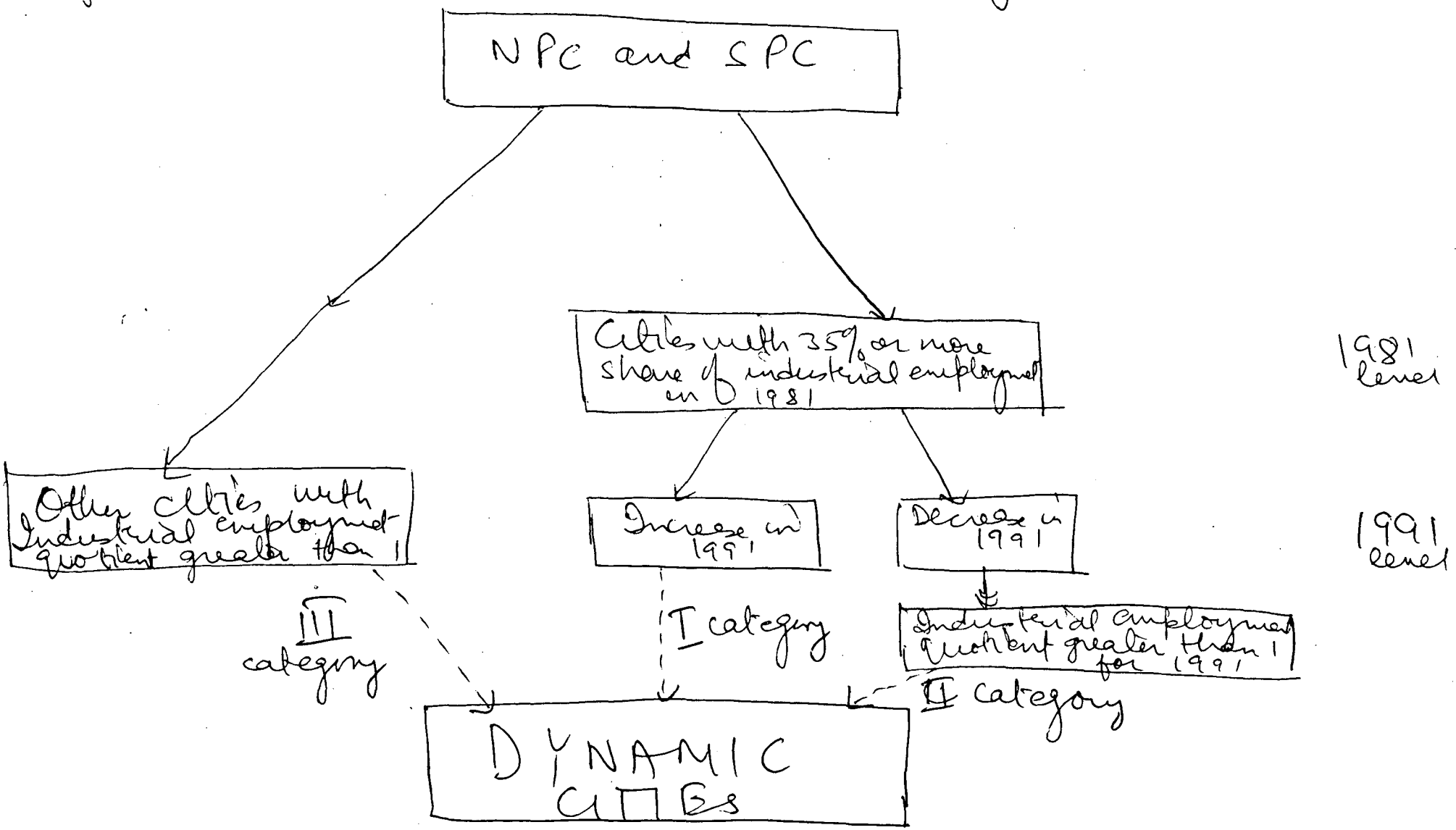
A major drawback of the report is that there is no specific prioritisation from within the GEMs (Mehta and Mehta, 1989).This is important as with a detailed list of 7 NPC and 103 SPC's,a selective discrimination will facilitate effective planning through adequate disbursement of investment funds.The problem gets further compounded as the adoption of the criteria suggested in NCU report for the 1991 census reveals that only 13 out of a list of 107 emerge as dynamic cities .

Furthermore ,the rather detailed ' statistical ' exercise of identifying GEM proposed by NCU is not supported anywhere in the report by the minimum cutoff to make the selection.This has led some to label the approach as adhoc (Mehta and Mehta, 1989). It will therefore be interesting to examine the range for both the years.Since NCU has based its calculation on 1981 census data, it will be instructive to carefully examine 1981 values . The minimum value of 1981 attained is 5.99 by Patratu in Bihar and the maximum 62.66 by Ichalkarange in Maharashtra.It is difficult to accept an extremely low value of 5.99 percent as the minimum cutoff proposed by NCU..

We have devised an alternative strategy to circumvent the vagueness in the methodology and to contribute in prioritising the SPC 's under GEM.In undertaking this exercise, we have retained the criteria of identifying `dynamic ' cities as revealed by the proportion of their industrial employment. Instead, we have made a conscious effort to account for the level of their industrial employment as prevalent in 1981.This was felt important by us as just by an increase in their share of industrial employment without incorporating the levels of this employment may not be the most appropriate exercise. It is quite likely that some of the SPC cities may have qualified as dynamic purely on the basis

of this logic . Notable among these are the two cities from Bihar viz Bermo UA and Patratu with the proportion of industrial employment in 1981 being 6.7 and 5.9 percent respectively.

Figure Diagram to show the three categories



Under the new strategy, three categories for cities are identified :-

Category 1

1. Cities with 35 percent or more proportion of industrial employment in 1981 were first identified. Out of these , if they have registered an increase in the industrial share from 1981 to 1991, the cities automatically qualify for selection as dynamic cities.

In the above case, the levels of industrial employment of 1981 are considered to make the selection.The choice of using 35 percent or more is meant to serve as a benchmark for identifying whether cities have the potential for further industrial expansion or one of consolidation .This draws from the work of Jean Fourastie[11]. Fourastie(1971)[12] had proposed a scheme of three stages of urbanisation based on the state of industrial employment and its job generation capacity.He had proposed that there is an increase in the share of secondary sector from less than 10 percent to about 35 percent during the expansion stage .Subsequently, the share remains relatively constant between 35 to 40 percent. In the Indian context, some scholars have highlighted the capital intensity of manufacturing which failed to generate much employment in urban sector. Bhattacharya and Mitra (1993) argued on the basis of empirical data at the all India level that employment elasticity of all components of the tertiary sector are well above that of the manufacturing sector . The reason attributable for this tendency according to the authors is because of the sharp fall in the employment elasticity of the manufacturing sectors in the 80's . The authors express their apprehension that this decline in the manufacturing sector inspite of an accelerated income growth in this sector entails its serious implications on employment in the 90's. Kumar (1991) in his study also finds that capital intensity is more in manufacturing sector than the service sector.

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[11] Fourastie quoted in Leo Jakobson and Ved Prakash(1971),Urbanization and National Development,Sage,Beverly Hills ,p.25.

[12] The three stages proposed by Fourastie include takeoff,industrial expansion and industrial consolidation.According to him, the decline in the job generating capacity of secondary sector is attributed to technological progress .Furthermore, the stage of industrial consolidation is characterized by decline in the sector's role as a generator of employment and a dominance of the tertiary sector.

Under this category, only three cities qualify . These are listed below:-

Category 1

Table 4 : Dynamic cities under Category 1

Cities	State	Proportion of industrial employment		Population Size	
		1981	1991	1981	1991
NPC					
Mangalore UA	Karnataka	37.53	45.18	193699	273304
SPC					
Ichalkarangi UA	Maharashtra	62.66	65.49	133751	214950
Tiruppur UA	TamilNadu	52.50	67.26	165223	235661

Both the SPCs are from developed states whereas the NPC listed above is from the developing state as per our classification.

Category 2

Under this category,selection was first made amongst the sample of cities with 35 percent or more proportion of industrial employment in 1981 with a declining share of industrial employment from 1981 to 1991.Out of these cities only those were considered for which the industrial employment quotient was greater than one.As discussed earlier, industrial employment quotient normalises the value of the city vis-a-vis the state.Therefore this approach tries to select the potential growth centres amongst the states.Understandably ,all the cities under this category have industry as the leading function irrespective of the fact whether the cities are monofunctional,bifunctional or multifunctional.

Under this category 11 cities qualify. Out of these, Durgapur UA is the only NPC while the remaining 10 are SPC's.These are Aurangabad,Nashik, Tuticorin, Erode, Panipat, Faridabad, Davengere, Moradabad, Satna and Ujjain.As per our classification, 6 are from developed, 2 are from developing and the remaining two are from less developed state i.e. Madhya Pradesh.Table 5 provides information on the employment share of service sector[13] of the cities from 1981 to 1991.All the cities listed under category 2 have registered an increase in the percentage share of service sector from 1981 to 1991 barring Nashik and Faridabad.It is plausible that for all these 9 cities,the linkages are established from industry to services.The precise nature of these linkages need indepth investigation.

Category 3 :

Cities included in this category are those (other than those listed above)for which the industrial employment quotient is greater than one. The reasoning advanced by us for this step is based on the fact that a higher than state concentration of industrial employment for these cities will imply inherent dynamism.

Perhaps, one may put forth an argument that if any state has a highly decentralised industrial structure,the value of this quotient can be less than one even when the city has the requisite dynamism. However, the Indian experience has established that in some cases,there has been limited industrial dispersal confined to the class I cities and their peripheries in the developed states(Kundu 1992). Our sample includes 22 Class I cities from developed states.Thus, there exists a remote possibility of any influence of industrial dispersal on the values of the industrial quotient .for the other cities.Furthermore, even for these 22 Class I cities from developed states, a detailed analysis is required to probe into the whole gamut of issues dealing with industrial dispersal.

[13] Percentage share of employment in the services sector is considered for all the three categories combined i.e. trade and commerce ,transport and communications and other services.This is justified on the ground as in the absence of disaggregated information at 2 digit or 3 digit level,it is difficult to classify the cities on the basis of their performance in any of these service categories.

Table 7 shows that cities placed under category three number 31 of which Ankleswar UA in Gujarat is the only NPC and the remaining 30 are SPC's.

These are Navsari, Hosur, Phagwara, Gobindgarh, Harihar,Trichur , Cuttack, Sambalpur, Muzzaffnagar, Hardwar, Bulandshahr, Haldwani, Unnao, Rishikesh, Mathura,Ghaziabad,Alwar, Bharatpur, Guntur, Warangal, Rajamundry, Nellore, Kurnool, Adilabad, Siddepet, Dehri, Giridih, Rajnandgaon ,Itarsi and Pithampur.

The table is characterized by higher number of SPC 's from the less developed states than from the developed states.One interesting finding which emerges from Table 9 is that as one moves from developed to less developed states, `dynamic' cities under categort III seem to display a more diversified economic base(all cities in less developed states are either bi or multifunctional) as observed from the functional classification of these cities.

Thus in all we have identified 45 dynamic cities from our sample. The cross classification of these cities in different categories along with the level of economic development of the states to which they belong is presented in the form of a table given below :-

	NPC			**SPC**		
Level of development	**1**	**2**	**3**	**1**	**2**	**3**
Developed		1	1	2	6	4
Developing	1				2	12
Less Developed					2	14

The above table summarises the number of cities in each of the three categories developed by us.Out of the 6 NPCs which need to satisfy the economic criterion,3 qualify as dynamic as per our methodology.Two of these are from developed and one is from developing state. The two NPC from Orissa fail to qualify as dynamic.All the fouteen states contains atleast one dynamic SPC.

As far as SPCs are concerned, in all 42 SPC qualify out of the 101 in our sample. The distribution of these SPCs across the three categories is quite uniform although the highest number i.e. 16 are from the less developed states.The corresponding values for developed and developing are 12 and 14 respectively.

Dynamic cities in a regional context

It is reasonably clear from the Indian experience of the metropolitan cities that these cities cannot remain efficient as a monocentric city. The diseconomies of agglomeration slowly starts setting in resulting in progressively more severe congestion costs. Richardson (1993) is a little wary of the policies to promote the growth of the secondary centres as an isolated entity. He instead supports the development of a *planned* or *spontaneous polycentric spatial structure*.He however, does not explicitly mention whether it will be achieved spontaneously or through planned intervention.

In this section, we try to place the dynamic cities selected by us in a broader spatial structure.. More precisely, it is pertinent considering the locational aspects of these cities in terms of their proximity to the metropolitan or capital cities or their nearness to a million plus city.NCU has already identified 49 Spatial Priority Urbanisation Regions (SPURs).[14] The cities and towns listed in all these regions as nodal points are not necessarily NPCs and SPCs.The distribution of the NPCs and SPCs in the four catrgories are shown below. The three categories are the regions with the presence of a metropolitan city,capital city or a million plus city.The last category contains the names of dynamic NPCs or SPCs and the ensuing region which does not satisfy any of the other three conditions.

[14] These are listed on page 49-50 of the Report of the National Commission on Urbanisation, August 1988, Volume II.

1. Regions containing a Metropolitan city

Name of the city	Name of the dynamic NPC/ SPC	SPUR to which it belongs
1. Calcutta	Durgapur(NPC)	Calcutta-Burdwan-Durgapur- Bolpur- Dhanbad
2. Bombay	Nashik(SPC)	Bombay-Thane-Panvel- Nashik-Dhule
3. New Delhi	Ghaziabad(SPC)	National Capital Region

Thus out of the four metropolitan cities, three figure in this list. as Madras does not qualify in this list .The three dynamic cities whether NPC or SPC is also shown along with the names of the metropolitan city.Durgapur is the only dynamic NPC in this list.belonging to West Bengal. The remaining viz. Nashik and Ghaziabad are the SPCs identified by us as dynamic.part of Maharashtra and Uttar Pradesh respectively.

2. Regions containing a capital city		
Name of the city	**Name of the dynamic NPC/ SPC**	**SPUR to which it belongs**
1. Bangalore	Hosur(SPC)	Tumkur-Bangalore-Hosur-Mysore-Mandhya
2. Jaipur	Alwar (SPC)	Ajmer-Jaipur-Alwar

The above table shows that two of the dynamic SPCs are part of a region which contains the capital city of the state to which they belong.Hosur is included in the SPUR which has Bangalore as the capital city of Karnataka. Again, Jaipur is the capital city of Rajasthan encompassing Alwar as the dynamic SPC in the corresponding SPUR.Both these regions are in the developing states as per our classification.

There are 10 dynamic cities identified by us which have a million plus city in its proximate region. Out of these, Ankleshwar is the NPC and the remaining 9 are SPCs.Another point worth mentioning is that out of the 7 million plus cities , Ahmedabad is a million plus city as of 1981 whereas the remaining 6 are heading for a million plus mark in 2001.The following table gives details of the names of the dynamic cities,the names of the million plus city and the nodal points of the regions to which they belong.Two of the regions are from the developed states of Gujarat and Tamilnadu. One is from Karnataka-developing as per our classification.The remaining are from less developed states of Andhra Pradesh,Orissa and Madhya Pradesh. There are two regions from the state of Madhya Pradesh.

Million plus cities (in 1981 as also potential million plus cities in 2001)

Name of the city	**Name of the dynamic NPC/ SPC**	**SPUR to which it belongs**
1 Ahmedabad.	Ankleshwar(NPC)	Ahmedabad-Baroda- Ankleshwar-Surat-Valsad
2. Coimbatore	Erode(SPC)	Coimbatore-Erode-Salem
3. Hubli-Dharwad	Davengere(SPC) Harihar(SPC)	Belgaum-Hubli-Dharwad-Davengere-Harihar
4. Indore	Ujjain(SPC)	Ratlam-Ujjain-Dewas-Indore-Dhar
5. Rourkela	Sambalpur(SPC) Cuttack(SPC)	Rourkela-Sambalpur-Cuttack-Puri-Paradeep
6. Vishakapatnam	Rajamundry(SPC) Guntur(SPC)	Vishakapatnam-Rajamundry-Vijaywada-Guntur
7. Durg-Bhilainagar	Rajnandgaon(SPC)	Rajnandgaon-Durg-Bhilainagar-Raipur- Bilaspur-Raigarh

Besides,there are 7 NPC/SPC which form part of the last group.There are two regions which are characterized by inclusion of two dynamic SPCs in it. Out of these, one is from Maharashtra,one from Karnataka,two from Uttar Pradesh and one from Andhra Pradesh.These are listed on the next page:-

Others

	Name of the dynamic NPC/SPC	SPUR
1.	Mangalore(NPC)	Ratnagiri-Goa-Karwar-Mangalore
2.	Aurangabad (SPC)	Ahmadnagar-Aurangabad-Nanded-Bid
3	Hardwar(SPC) Rishikesh(SPC)	Hardwar-Rishikesh-Dehradun- Uttarkashi
4.	Haldwani(SPC)	Almora-Nainital-Haldwani-Pilibhit
5.	Adilabad(SPC) Warangal(SPC)	Adilabad-Nizamabad- Karimnagar-Warangal

Conclusion

This chapter has tried to address the issue of appropriate selection of both NPC and SPCs for which the economic criterion is applicable.It has relied on industrial employment quotient(ieq) for drawing inferences about the economic base of the cities.

Our results show that there are 3 NPC out of a total of 6 which have emerged dynamic. Out of these two viz. Mangalore and Durgapur are Class I cities both in 1981 as also in 1991. However, Ankleswar is the only dynamic NPC with a population of a little over 50,000 in 1991 and below this level in 1981.

The three dynamic NPCs which emerge include Mangalore, Durgapur and Anklehwar in Karnataka,West Bengal and Gujarat respectively.Amongst the SPCs, 42 out of a total of 101 qualify as dynamic.. These are :

Ichalkarangi,Tiruppur,Aurangabad,Nashik,Tuticorin,Erode,Panipat,Faridabad,Davengere,Moradabad,Satna ,Ujjain,Navsari, Hosur, Phagwara, Gobindgarh, Harihar,Trichur , Cuttack, Sambalpur, Muzzaffnagar, Hardwar, Bulandshahr, Haldwani, Unnao, Rishikesh, Mathura,Ghaziabad,Alwar, Bharatpur, Guntur, Warangal, Rajamundry, Nellore, Kurnool, Adilabad, Siddepet, Dehri, Giridih, Rajnandgaon ,Itarsi and Pithampur.

The mean city size of the dynamic SPCs comes out to be 1.5 lakhs in 1981 and 2.2 lakhs in 1991.Another distinct feature which is clearly discernible is that there is not much of a difference in the population size of the SPCs as listed in category 2.However,in category 3 ,by and large the SPCs belonging to the underdeveloped states have a higher population size than in the developing or the developed states (with a few exceptions).The implications which can be drawn from this finding is that selection of cities for future investment particularly in the backward states should be of atleast a

considerable size although other factors like infrastructure development (both social and economic) are of equal importance.

We have tried to capture the way in which the demographic variables of the city interact with the economic status. Our correlation results on the city size of 1981 and proportion of manufacturing employment in 1991 appear to be positive and significant although the strength of the correlation coefficient is not very high.Our regression results on the determinants of city size for the SPCs suggests that only

Furthermore, our regression results try to capture the determinants of city growth of the SPCs from an overall perspective including both the demographic and economic variables. The economic variables considered are the proportion of industrial and service employment in 1991 and the industrial and service concentration denoted by industrial employment quotient(ieq) and service employment quotient(seq). None of the economic variables appear to be statistically significant .Only the two demographic variables ,city size and area growth appear as significant.

Our conclusion from the regression results is that the economic momentum is not among the major forces driving the growth of the all the 101 SPCs as only 42 qualify as dynamic cities.. These findings raise the fundamental question of considering a regional structure of cities rather than considering them as separate entities.Cities can be viewed as a microcosm in the region sharing a strong economic bond.In such a case, developing the entire SPUR region in which the dynamic cities form a component could be a more appropriate strategy. This chapter has tried to identify such SPURs.Of course, the onus of selection of the regions which need to be developed rests with the individual states.

Table3 : Dynamic Cities Within NPC & SPC

Cities	SPC/NPC	State	Proportion of Industrial Employment		Absolute % difference	Proportion of Male Industrial employment		Proportion of female Industrial employment	
			1981	1991		1981	1991	1981	1991
Mangalore UA	NPC	Karnataka	37.53	45.18	7.65	34.71	33.65	42.61	66.24
Patratu	SPC	Bihar	5.99	14.26	8.27	6.19	14.23	1.93	14.95
Bermo UA	SPC	Bihar	6.70	10.10	3.40	7.30	10.30	1.43	8.08
Trichur UA	SPC	Kerala	23.43	24.83	1.40	26.20	27.50	15.11	15.78
Dewas	SPC	MP	31.10	45.37	14.27	34.08	49.38	13.65	16.94
Ichalkarangi UA	SPC	Maharashtra	62.66	65.49	2.83	64.76	67.64	35.24	36.02
Chandrapur	SPC	Maharashtra	19.40	21.64	2.24	20.20	22.03	13.72	19.20
Parbhani	SPC	Maharashtra	18.33	20.01	1.68	18.73	21.50	16.19	11.34
Bid	SPC	Maharashtra	18.65	19.76	1.11	19.50	20.47	13.90	14.88
Bilwara	SPC	Rajasthan	30.85	37.20	6.35	31.62	40.11	22.47	15.12
Tiruppur UA	SPC	Tamil Nadu	52.50	67.26	14.76	52.40	65.40	52.89	74.54
Ghaziabad UA	SPC	UP	29.65	36.20	6.55	30.47	37.12	13.55	21.80
Gorakhpur UA	SPC	UP	10.43	17.78	7.35	10.67	18.60	4.81	7.41

Note : Absolute percentage difference less than 1 is not included in this list

Table 5: NPC and SPC with 35% and more industrial employment share in 1981 and a decline in 1991 (Dynamic as per category 2)

Town/City	State	FUnctional Classification	Population 1981	Population 1991	Employment quotients as per the functional classification								
NPC					P	M	F	P	M	F	P	M	F
Durgapur UA	WB	ind	311798	425836	1.5	1.5	1.36						
SPC													
Developed States													
Aurangabad U	Maharashtra	ind -cum-services	298937	573272	1	1	1.02	0.81	0.83	0.64			
Nashik UA	Maharashtra	-do-	262428	656925	1	1	0.77	1.21	1.29	0.94			
Tuticorin UA	Tamil Nadu	ind-cum-trd com-cum-services	192949	199854	1.1	1.1	1.51	0.95	0.93	0.93	0.9	0.9	1.13
Erode UA	Tamil Nadu	ind	142252	159232	1.2	1.1	1.55						
Panipat	Haryana	ind	137927	191212	1.4	1.3	2.81						
Faridabad	Haryana	ind	330864	617717	2	2	2.38						
Developing States													
Davangere	Karnataka	ind-cum-Trd com	196621	266082	1.1	1.1	1.25	1.35	1.34	1.24			
Moradabad UA	UP	ind	345350	429214	1.7	1.7	0.55						
Less Developed States													
Satna	MP	ind-cum-trd com-cum-services	90476	156630	1.2	1.2	0.99	1.24	1.23	0.96	0.8	0.8	0.91
Ujjain UA	MP	ind-cum-services	278454	362266	1.4	1.4	1.67	1.15	1.09	1.46			

Note : Data of Durgapur city is for UA in 1981 and NA in 1991

Table 6 NPC and SPC with 35% and more industrial employment share in 1981 and a decline in 1991

Town/City	State	FUnctional Classification	Total % share in services	
			1981	1991
NPC				
Durgapur UA	WB	ind	36.30	41.34
SPC				
Developed States				
Aurangabad U	Maharashtr	ind -cum-services	55.70	56.26
Dhule	Maharashtr	-do-	52.99	60.93
Nashik UA	Maharashtr	-do-	53.17	50.48
Tuticorin UA	Tamil Nadu	ind-cum-trd com-cum-service	49.22	54.27
Erode UA	Tamil Nadu	ind	55.75	55.86
Panipat	Haryana	ind	47.07	51.88
Faridabad	Haryana	ind	49.29	40.03
Developing States				
Davangere	Karnataka	ind-cum-Trd com	51.19	57.43
Moradabad UA	UP	ind	50.05	55.49
Less Developed States				
Satna	MP	ind-cum-trd com-cum-services		
Ujjain UA	MP	ind-cum-services	53.31	58.91
Note : Data of Durgapur city is for UA in 1981 and NA in 1991				

Table 7:NPC and SPC (Dynamic as per category III)

Town/City	State FUnctional classification			Ind. Employment Quotient			Share of Industrial Employed	
			P	M	F	P	M	F
NPC								
Ankleswar va	Gujarat	ind	1.23	1.22	1.35	44.62	46.87	22.2
SPC								
Developed States								
Navsari Va	Gujarat	ind	1.46	1.49	1.1	52.92	57.09	16.57
Hisar tp Hosur	Tamilnadu	ind	1.61	1.61	1.14	47.17	49.4	26.6
Phagwara va	Punjab	ind	1.53	1.53	1.1	43.5	45.6	8.5
Gobindgarh va	Punjab	ind	1.72	1.68	0.63	48.8	50	5.3
Developing States								
Trichur	Kerala	ind cum services cum tr and com	1·03	1·09	0·78	24·8	27·5	15·8
Harihar tmc	Karnataka	ind	1.34	1.42	0.81	39.9	43.3	21.5
Cuttack va	Orissa	serv-cum-trdeon	1.12	1.12	0.62	20.9	22.2	5.7
Sambalpur va	Orissa	serv-cum-ind-uni trd com	1.09	1.6	1.77	20.4	21.4	16.3
Muzaffarnagar va	Uttar Pradesh	trdcom-cum serv	1.08	1.9	0.52	22.2	23.1	5.9
Hardwar va	Uttar Pradesh	ind-cum-serv	1.84	1.87	1.18	38.1	39.7	13.6
Bulandshahr mb	Uttar Pradesh	serv-cum-trd com	1.01	1.2	0.44	20.8	21.6	5.1
Haldwani mb	Uttar Pradesh	srv-cum-trd com	1.1	1.12	0.56	22.7	23.8	6.5
Unno mb	Uttar Pradesh	serv-cum-trd-cum-ind	1.05	1.6	0.84	21.6	22.5	9.6
Rishikesh va	Uttar Pradesh	serv-cum-trd-cum-ind	1.93	1.94	2.12	39.8	41.1	24.4
Mathura va	Uttar Pradesh	ind	1.8	1.9	0.91	22.4	23.1	10.5
Ghaziabad	Uttar Pradesh	ind-cum-services	1·8	1·8	1·9	36·2	37·1	21·8
Less developed States								
Alwar va	Rajasthan	serv-cum-ind	1.01	1.02	0.72	25.5	26.7	11.1
Bharatpur va	Rajasthan	serv-cum-ind	1.05	1.06	0.66	26.5	27.7	10.1
Guntur va	Andhra Pradesh	serv-cum-ind-cum-trdcom	1.07	1.02	1.49	22.9	23.6	20.2
Warangal va	Andhra Pradesh	ind-cum-serv-cum-trdcom	1.07	0.95	1.95	22.8	21.8	26.3
Rajamundry va	Andhra Pradesh	serv-cum-trdcom-am ind	1.13	1.12	1	24.1	25.8	13.6
Nellore m	Andhra Pradesh	ind-cum-serv-cum-trd com	1.06	1.07	0.75	22.7	24.6	12.9
Kurnool va	Andhra Pradesh	ind-cum-serv-cum-trd com	1.13	1.01	1.48	24.1	25.3	20
Adilabad m	Andhra Pradesh	serv-cum-ind-cum-trd com	1.17	1.05	2.14	25.1	24.3	28.9
Siddipet m	Andhra Pradesh	ind-cum-trdcom-serv	1.01	0.82	2.19	21.5	18.9	29.6
Dehri m	Bihar	serv-cum-trd com	1.21	1.02	0.48	16.6	17.2	3.2
Gridh m	Bihar	serv-cum-trd com	1.13	1.11	1.19	15.4	15.8	7.9
Rajnandgaon mc	Madhya Pradesh	ind-cum-pract-cum-serv	1.07	1.09	1.31	24.2	26.4	17.6
Itarsi va	Madhya Pradesh	serv-cum-ind	1.11	1.09	0.86	25	26.3	11.6
Pithampur	Madhya Pradesh	serv-cum-tr & comm-cum-ind.	3·41	3·29	3·88	76·58	74·19	52·17

Share of Industrial Employment(%) in 1991

Chapter 5 : Summary and Conclusion

Cities can grow either due to natural increase ,net migration or due to expansion of municipal boundaries as a result of reclassification. There exists considerable variations at the regional level for the city growth of SPCs. SPCs from the Western region have shown the highest city growth followed by the SPCs from the North. However, the factors responsible for the growth of cities in the two regions may be quite different.It could be in response to the economic dynamism in the West and could be predominantly due to the demographic forces in the North.A more detailed microlevel analysis is needed to arrive at any firm conclusion.

From our analysis, we can submit that the selection of cities for the SPCs using 1981 census data as the basis had a mean city size of 1.2 lakhs.The three regions of West,South and North had 1.3 lakhs has the mean city size in 1981 .However, the selection of cities is independent of the level of economic development of the state as there are no distinct pattern emerging.

Our results reveal that demographic factors like initial city size and area growth during 1981-91 emerge as statistically significant in positively influencing city growth whereas the economic variables do not appear to be statistically significant.
.However, a more detailed investigation is needed at the individual city level as there could be different city specific reasons .

Our results have shown that there are in all 45 dynamic cities from a total sample of 107 cities which are expected to satisfy the economic criterion.Amongst the 6 NPCs which need to satisfy the economic criterion,3 qualify as dynamic as per our methodology.Two of these are from developed and one is from developing state. The two NPC from Orissa fail to qualify as dynamic.All the fourteen states contains atleast one dynamic SPC. As far as SPCs are concerned, in all 42 SPC qualify out of the 101 in our sample. The distribution of these SPCs across the three categories is quite uniform although the

highest number i.e. 16 are from the less developed states.The corresponding values for developed and developing are 12 and 14 respectively.

The three dynamic NPCs which emerge include Mangalore, Durgapur and Anklehwar and belong to Karnataka,West Bengal and Gujarat respectively.Amongst the SPCs, 42 out of a total of 101 qualify as dynamic.. These are :

Ichalkarangi,Tiruppur,Aurangabad,Nashik,Tuticorin,Erode,Panipat,Faridabad,Davengere, Moradabad,Satna ,Ujjain,Navsari, Hosur, Phagwara, Gobindgarh, Harihar,Trichur , Cuttack, Sambalpur, Muzzaffnagar, Hardwar, Bulandshahr, Haldwani, Unnao, Rishikesh, Mathura,Ghaziabad,Alwar, Bharatpur, Guntur, Warangal, Rajamundry, Nellore, Kurnool, Adilabad, Siddepet, Dehri, Giridih, Rajnandgaon ,Itarsi and Pithampur.There is atleast dynamic SPC from each of the 14 states.

It needs to be ascertained whether the dynamic cities identified by us have the adequate backing of the administration as is well known that the administrative status of the city plays an important role in promoting economic activities in terms of the mobilisation and financial backing of municipal taxes. .

Furthermore whether these cities have demonstrated population growth momentum as well. Only then can we submit that the city growth is in response to the employment opportunities.We also wish to examine the general literacy levels of these cities . This we feel is important to sustain the economic dynamism generated. The level of immigration is also examined for these cities to the extent data permitted .

On the basis of our findings we wish to submit that out of a list of 101 SPCs and 6 NPCs, we have selected 3 NPCs and 42 SPCs as dynamic.All the three NPCs are from the relatively developed states of West Bengal,Gujarat and Karnataka.More precisely , Mangalore and Ankleshwar have a civic status of Municpal Council whereas it is

Notified Area for Durgapur.Ankleshwar has a population size of a little above 50000 in 1991 .The other two are Class I cities as per the 1991 census.The population of Mangalore and Durgapur was 2.7 and 4.2 lakh respectively in 1991 .They have also shown a reasonably high levels of general literacy.

As far as the SPCs are concerned ,all the 42 of them have a civic status of a Municipal Council. barring Hosur which had a status of NP in 1981 and TP in 1991and Pithampur which had a status of NM in 1991..Thus one can conclude that all these cities have a sound administrative status.Out of these , 18 have shown population growth momentum. These are Ichalkarangi ,Tiruppur,Aurangabad,Nashik,Panipat,Faridabad,Satna,Cuttack, Muzzaffarnagar, Unnao, Rishikesh, Mathura, Ghaziabad, Alwar, Bharatpur, Rajamundry, Adilabad, and Rajnandgaon., Thus it can be concluded that only in these cities , economic growth has been commensurate with increase in their population size.

Data for calculating inmigration rate is available only for 62 cities.In the dynamic NPC/SPC , this rate is significantly high(greater than or equal to 35 percent for a few cities.Theseare Nashik, Cuttack, Muzaffarnagar, Unnao, Alwar, Bharatpur, Rajamundry, Rajnandgaon,. It is sufficiently high in Rajamundry and Rajnandgaon.We have also examined the nature of cityward migration i.e. from rural or urban areas.Our findings show that in Cuttack, inmigration from rural areas is greater than 65 percent out of the total number of inmigrants.In Rajamundry, the same from urban areas is greater than 35 percent.The percentage in these two cities is sufficiently high .

Another point which comes out clearly from our analysis is that the SPC that have selected as dynamic have a population size of around 2 lakhs in 1991. SPCs from the backward states have either shown a population size similar or higher to the SPCs from the developed states.The implications that can be drawn from this finding is that the selection of cities for future investment particularly in the backward states should be

atleast of a considerable size although other factors like infrastructure development (both social and physical) are of equal importance.This includes availability of power and water resources,strong transport and communication network. However, for these dynamic cities,the nature and pattern of industrialisation will have to take into account the natural advantages of a city and therefore there cannot be any single prescription..Furthermore, care needs to be taken to provide public amenities like proper housing,sanitation etc. so that these cities do not generate into slums replicating the experience of the metropolitan cities.

It is also of vital significance to examine the overall literacy levels of these NPCs and SPCs which have emerged dynamic from our analysis to sustain the process of economic development.Our analysis has shown that some of the SPCs from the backward states have not recorded adequate levels of literacy. These are Sambalpur, Muzzafarnagar, Bulandshahr, Haldwani,Unnao, Mathura, Ghaziabad, Bharatpur, Guntur, Warangal, Rajamundry, Nellore, Kurnool, Adilabad, Siddepet, Dehri, Giridih ,Rajnandgaon.and Pithampur.

All of these are from the backward states. Therefore our contention is to improve the literacy levels in these cities along with the requisite infrastructure development so that these cities can not only improve their economic development but can also sustain them .

.Our study supports the contention put forth by NCU that an interventionist approach is needed in order to achieve a more decentralized urban structure.The need is felt all the more since the literature reviewed suggests that the metropolitan cities have reached a saturation point.

However, as our regression results in Chapter 4 have shown that for the SPCs amongst the sample of our cities, the economic variables do not appear strong in determining the city growth.These findings raise the fundamental question of considering a regional

structure of cities rather than considering them as separate entities.Cities can be viewed as a microcosm in the region sharing a strong economic bond.In such a case, developing the entire SPUR region in which the dynamic cities form a component could be a more appropriate strategy. This chapter has tried to identify 16 such SPURs.None of the SPURs are from Bihar, Haryana, Kerela and Punjab.

There are 22 dynamic cities which form part of these SPURs. Of which there are 3 NPCs and 19 SPCs.We propose to give priority to these regions which will entail investing not only in the dynamic cities selected by us but also in the nodal points.We feel that topmost priority needs to be given to a more efficient administration in the dynamic cities identified as also in the nodal points of the ensuing region so as to establish a strong regional bond.

We therefore propose to prioritize investment first in those SPURs in which the dynamic cities selected by us form part of the network and are of considerable size.Next those dynamic cities should be considered which are one of the components of SPUR but are not very big.There size could be lower than the mean city size arrived at by our study.Lastly, investment should be diverted to those cities which are dynamic as per our methodology but do not form part of any network under SPURs.

Of course, the onus of selection of the regions which need to be developed rests with the individual states.Needless to say, development of these cities is not intended to hamper the development of the metropolitan,capital or other million plus cities but is suggested to develop simultaneously.

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appendix 1

Table 1: The NPCs & SPCs

Town/City	District	State
GUNTUR	GUNTUR	ANDHRA PRADESH
WARANGAL	WARANGAL	ANDHRA PRADESH
RAJAMUNDRY	EAST GODAVARI	ANDHRA PRADESH
NELLORE	NELLORE	ANDHRA PRADESH
KURNOOL	KURNOOL	ANDHRA PRADESH
NIZAMABAD	NIZAMABAD	ANDHRA PRADESH
TIRUPATI	CHITTOOR	ANDHRA PRADESH
CUDDAPAH	CUDDAPAH	ANDHRA PRADESH
BHEEMAVARAM	WEST GODAWARI	ANDHRA PRADESH
KHAMMAM	KHAMMAM	ANDHRA PRADESH
MAHBUBNAGAR	MAHBUBNAGAR	ANDHRA PRADESH
KARIMNAGAR	KARIMNAGAR	ANDHRA PRADESH
ONGOLE	PRAKASAM	ANDHRA PRADESH
NARASAROEPET	GUNTUR	ANDHRA PRADESH
NALGONDA	NALGONDA	ANDHRA PRADESH
MADANAPALLE	CHITTOOR	ANDHRA PRADESH
ADILABAD	ADILABAD	ANDHRA PRADESH
DHARMAVARAM	ANANTPUR	ANDHRA PRADESH
SIDDEPET	MEDAK	ANDHRA PRADESH
BODHGAYA	GAYA	BIHAR
BIHAR SHARIF	NALANDA	BIHAR
BERMO	GIRIDIH	BIHAR
PATRATU	HAZARIBAGH	BIHAR
DEHRI	ROHTAS	BIHAR
HAZARIBAGH	HAZARIBAGH	BIHAR
BEGUSARAI	BEGUSARAI	BIHAR
GIRIDIH	GIRIDIH	BIHAR
NARLATIAGANJ	PAS. CHAMPARAN	BIHAR
NAVSARI	VALSAD	GUJARAT
ANAND	KHEDA	GUJARAT
HIMATNAGAR	SABARKANTHA	GUJARAT
ANKLESHWAR	BHARUCH	GUJARAT
THANESAR	KURUKSHETRA	HARYANA
PANIPAT	KARNAL	HARYANA
FARIDABAD	FARIDABAD	HARYANA
HISSAR	HISSAR	HARYANA
SONIPAT	SONIPAT	HARYANA
SIRSA	SIRSA	HARYANA
JIND	JIND	HARYANA

Contd---

MYSORE	MYSORE	KARNATAKA
MANGALORE	D.KANNAD	KARNATAKA
DAVANGERE	CHITRADURGA	KARNATAKA
SHIMOGA	SHIMOGA	KARNATAKA
RAICHUR	RAICHUR	KARNATAKA
TUMKUR	TUMKUR	KARNATAKA
BIDAR	BIDAR	KARNATAKA
HARIHAR	CHITRADURGA	KARNATAKA
KARWAR	U.KANNAD	KARNATAKA
GULBARGA	GULBARGA	KARNATAKA
TRICHUR	TRICHUR	KERALA
CANNANORE	CANNANORE	KERALA
SHORNUR	PALGHAT	KERALA
JAGDALPUR	BASTAR	MADHYA PRADESH
RAIPUR	RAIPUR	MADHYA PRADESH
BILASPUR	BILASPUR	MADHYA PRADESH
SATNA	SATNA	MADHYA PRADESH
RAJNANDGAON	RAJNANDGAON	MADHYA PRADESH
DEWAS	DEWAS	MADHYA PRADESH
BHIND	BHIND	MADHYA PRADESH
MORENA	MORENA	MADHYA PRADESH
ITARSI	HOSHANGABAD	MADHYA PRADESH
VIDISHA	VIDISHA	MADHYA PRADESH
GUNA	GUNA	MADHYA PRADESH
CHHATRAPUR	CHHATRAPUR	MADHYA PRADESH
SHAHDOL	SHAHDOL	MADHYA PRADESH
BETUL	BETUL	MADHYA PRADESH
UJJAIN	UJJAIN	MADHYA PRADESH
PITHAMPUR	DHAR	MADHYA PRADESH
AURANGABAD	AURANGABAD	MAHARASHTRA
DHUEL	DHULE	MAHARASHTRA
NANDED	NANDED	MAHARASHTRA
ICHALKARANJE	KOLHAPUR	MAHARASHTRA
CHANDRAPUR	CHANDRAPUR	MAHARASHTRA
PARBHANI	PARBHANI	MAHARASHTRA
BID	BID	MAHARASHTRA
NASHIK	NASHIK	MAHARASHTRA
PURI	PURI	ORISSA
CUTTACK	CUTTACK	ORISSA
BERHAMPUR	BERHAMPUR	ORISSA
SAMBALPUR	SAMBALPUR	ORISSA
PARADEEP	CUTTACK	ORISSA
KORAPUR	KORAPUR	ORISSA

Contd.

BATHINDA	BATHINDA	PUNJAB
BATALA	GURDASPUR	PUNJAB
HOSHIARPUR	HOSHIARPUR	PUNJAB
PHAGWARA	KAPURTHALA	PUNJAB
GOBINDGARH	PATIALA	PUNJAB
RUPNANGAR	RUPNANGAR	PUNJAB
ALWAR	ALWAR	RAJASTHAN
BHILWARA	BHILWARA	RAJASTHAN
BHARATPUR	BHARATPUR	RAJASTHAN
TUTICORIN	TIRUNELVELI	TAMIL NADU
TIRUPPUR	COIMBATOR	TAMIL NADU
SIVAKASI	RAMANATHAPURAM	TAMIL NADU
HOSUR	DHARMAPUR	TAMIL NADU
ERODE	PERIYAR	TAMIL NADU
ALIGARH	ALIGARH	UTTAR PRADESH
BAREILLY	BAREILLY	UTTAR PRADESH
GHAZIABAD	GHAZIABAD	UTTAR PRADESH
MORADABAD	MORADABAD	UTTAR PRADESH
GORAKHPUR	GORAKHPUR	UTTAR PRADESH
MUZAFFARNAGA	MUZAFFARNAGAR	UTTAR PRADESH
HARDWAR	SAHARANPUR	UTTAR PRADESH
BULANSHAHAR	BULANSHAHAR	UTTAR PRADESH
HALDWANI	NAINITAL	UTTAR PRADESH
UNNAO	UNNAO	UTTAR PRADESH
RISHIKESH	DEHRADUN	UTTAR PRADESH
MATHURA	MATHURA	UTTAR PRADESH
DURGAPUR	BARDHAMAN	WEST BENGAL
HALDIA	MEDINIPUR	WEST BENGAL
DARJEELING	DARJEELING	WEST BENGAL
BOLPUR-SHANTI	BIRBHUM	WEST BENGAL
ASANSOL	BARDHAMAN	WEST BENGAL
SILIGURI	DARJEELING	WEST BENGAL
KRISHNANAGAR	NADIA	WEST BENGAL

Contd.

Appendix 2

Table 1: Demographic Structure of National and State Priority Cities.									
		1981	1991		1981			1991	
city	district	sexratio	sexratio	totlit	mlit	flit	totlit	mlit	flit
NPC(Cities which need to satisfy the economic criteria)									
ANKLESHWAR	BHARUCH	906	891	58.67	77.29	46.31	65.93	71.37	59.84
MANGALORE	D. KANNAD	1003	1011	75.56	80.53	70.58	77.94	82.07	73.85
DURGAPUR	BARDHAMAN	837	824	67.76	3.64	1.67	70.07	76.07	62.81
HALDIA	MEDINIPUR	782	841	64.04	93.92	40.67	63.56	72.17	53.31
PARADEEP	CUTTACK	554	721	52.56	114.89	18.02	55.35	63.87	43.54
KORAPUT	KORAPUT	914	891	46.06	61.44	32	58.58	69.89	45.9
NPC(REsidual list)									
BODHGAYA	GAYA	902	898	30.49	48.32	14.4	37.4	49.5	24.01
THANESAR	KURUKSHETR	805	840	59.38	82.81	40.51	63.98	70.13	56.66
MYSORE	MYSORE	935	938	61.99	72.89	51.81	68.99	73.77	63.97
JAGDALPUR	BASTAR	895	941	58.13	74.43	43.43	61.54	69.09	53.52
PURI	PURI	877	882	59.49	76.86	44.26	66.36	72.22	59.71
ALIGARH	ALIGARH	867	866	46.07	62.74	31.62	48.28	55.11	40.4
DARJEELING	DARJEELING	862	934	66.13	83.33	51.3	74.99	79.78	69.87
BOLPUR-SHAN	BIRBHUM	934	945	53.15	65.24	41.86	60.33	67.83	52.41
SPC									
GUNTUR	GUNTUR	976	977	49.96	60.15	40.02	54.17	61.71	46.44
WARANGAL	WARANGAL	935	954	48.78	68.99	31.84	59.48	69.8	48.66
RAJAMUNDRY	EAST GODAV	977	987	57.34	67.1	47.82	60.04	65.3	54.71
NELLORE	NELLORE	956	975	57.15	68.28	46.51	59.65	66.13	53.01
KURNOOL	KURNOOL	931	949	50.04	63.33	37.35	53.73	61.48	45.58
NIZAMABAD	NIZAMABAD	944	971	43.28	57.08	30.27	49.31	58.56	39.8
TIRUPATI	CHITTOOR	910	918	62.58	79.91	46.82	67.37	75.08	58.97
CUDDAPAH	CUDDAPAH	929	958	54.24	68.89	40.64	60.41	68.71	51.76
BHEEMAVARA	WEST GODAV	933	966	44.56	55.13	34.7	58.36	64.19	52.34
KHAMMAM	KHAMMAM	932	956	57.22	71.82	43.62	62.01	70.4	53.24
MAHBUBNAGA	MAHBUBNAG	913	940	57.52	43.68	120.62	62	71.5	52.66
KARIMNAGAR	KARIMNAGAR	894	936	61.88	80.87	44.88	64.67	73.61	55.05
ONGOLE	PRAKASAM	924	947	58.52	74	44.22	62.43	70.11	54.29
NARASAROEPE	GUNTUR	954	971	51.82	65.71	38.57	64.08	63.09	44.82
NALGONDA	NALGONDA	880	910	57.83	75.97	41.87	65.97	75.06	56.04
MADANAPALLE	CHITTOOR	905	945	38.39	72.35	42.17	56.85	65	48.23
ADILABAD	ADILABAD	922	934	45.29	61.79	30.08	51.22	61.61	40.1
DHARMAVARA	ANANTPUR	945	939	44.26	61.64	27.82	44.89	56.49	32.54
SIDDEPET	MEDAK	939	970	45.05	68.64	27	54.45	66.55	41.97
BIHAR SHARIF	NALANDA		883				54.21	63	44.26
BERMO	GIRIDIH	822	858	36.21	57.99	18.3	45.81	57.62	32.03
PATRATU	HAZARIBAGH	727	772	56.26	92.13	30.2	65.37	75.25	52.59
DEHRI	ROHTAS	791	847	53.34	82.71	30.13	57.49	67.6	45.56
HAZARIBAGH	HAZARIBAGH	862		62.25	81.58	45.59			
BEGUSARAI	BEGUSARAI	857	836	49.55	70.07	31.98	54.81	63.75	44.11
GIRIDIH	GIRIDIH	869	867	60.88	79.91	44.34	59.55	67.23	50.7
NARLATIAGANJ	PAS. CHAMPA	783	829	47.43	72.13	28.08	50.58	61.71	37.15
NAVSARI	VALSAD	851	870	63.58	28.9	17.06	68.55	73.43	62.93
ANAND	KHEDA	878	915	65.89	72.43	62	70.86	76.8	64.39
HIMATNAGAR	SABARKANTH	894	904	62.56	73.93	106.65	69.5	75.43	62.95
PANIPAT	KARNAL	868	869	56.87	73.21	42.68	59.8	65.18	53.61
FARIDABAD	FARIDABAD	740	803	57	88.63	33.6	61.1	68.93	51.36
HISSAR	HISSAR	802	848	56.69	80.99	37.21	61.97	68.98	53.71
SONIPAT	SONIPAT	844	871	61.19	82.15	43.5	63.16	70.34	54.92
SIRSA	SIRSA	817	862	54.25	75.66	36.75	58.3	64.67	50.91
JIND	JIND	857	855	56.61	76.51	39.56	62.09	70.2	52.61
DAVANGERE	CHITRADURG	904	907	55.08	69.91	41.67	67.78	68.32	54.57
SHIMOGA	SHIMOGA	911	919	63.25	75.62	51.98	69.44	73.99	64.5
RAICHUR	RAICHUR	933	939	45.27	60.3	31.25	51.29	60.6	41.39

Contd..

TUMKUR	TUMKUR	888	876	63.36	78.31	50.09	68.3	73.24	62.66
BIDAR	BIDAR	892	887	58	76.79	41.26	64.53	72.14	55.95
HARIHAR	CHITRADURG	900	928	55.61	71.38	41.42	62	67.91	55.63
KARWAR	U. KANNAD	901	929	70.03	85.92	55.7	74.69	80.76	68.16
GULBARGA	GULBARGA	902	902	52.39	70.53	36.04	57.87	66.21	48.62
TRICHUR	TRICHUR	1074	1086	83.74	79.87	87.9	85.72	86.66	84.84
CANNANORE	CANNANORE	1034	1035	74.9	76.53	73.25	80.49	82.35	78.69
SHORNUR	PALGHAT	1054	1079	74.05	74.2	73.89	79.25	81.68	77.38
RAIPUR	RAIPUR	916	923	56.84	73.01	42.03	61.95	70.06	53.16
BILASPUR	BILASPUR	921	914	60.98	77.24	46	66.7	74.41	58.27
SATNA	SATNA	816	851	55.15	8.09	34.89	57.39	66.27	46.95
RAJNANDGAON	RAJNANDGA	929	960	56.69	73.73	40.74	60.25	70.59	49.48
DEWAS	DEWAS	886	890	55.92	75.19	38.86	58.47	68.67	47.01
BHIND	BHIND	820	837	46.63	79.66	34.2	57.04	66.42	45.81
MORENA	MORENA	808	808	52.67	78.62	31.71	50.17	61.94	35.61
ITARSI	HOSHANGAB	879	906	62.8	82.75	45.27	66.93	74.99	58.04
VIDISHA	VIDISHA	850	871	58.39	79.85	40.14	62.83	70.77	53.72
GUNA	GUNA	884	882	52.97	73.24	35.04	53.66	63.06	43
CHHATRAPUR	CHHATRAPUR	848	851	51.98	72.14	34.88	59.56	67.77	49.91
SHAHDOL	SHAHDOL	816	854	60.21	87.5	37.94	66.49	75.36	56.11
BETUL	BETUL	887	906	60.61	76.09	46.88	67.61	74.67	59.83
UJJAIN	UJJAIN	906	920	57.69	73.93	42.98	62.93	70.78	54.4
PITHAMPUR	DHAR	873	584	29.34	44.67	15.19	52.74	66.81	28.64
AURANGABAD	AURANGABA	869	780	58.94	79.14	41.39	72.16	81.28	60.47
DHULE	DHULE	901	908	60.69	77.35	45.69	66.02	73.04	58.3
NANDED	NANDED	906	912	53.89	71.88	37.58	59.14	68.03	49.4
ICHALKARANJE	KOLHAPUR	851	891	56.47	78.54	37.68	62.28	70.99	52.5
CHANDRAPUR	CHANDRAPU	906	893	64.5	81.48	49.13	64.2	71.34	56.2
PARBHANI	PARBHANI	908	915	50.62	68.25	34.62	54.69	63.5	45.06
BID	BID	909	888	49.57	75.88	39.92	60.64	69.91	50.21
NASHIK	NASIK	912	890	67.1	82.13	53.41	67.95	74.35	60.75
CUTTACK	CUTTACK	801	797	63.15	88.4	42.92	69.19	75.27	61.57
BERHAMPUR	BERHAMPUR	924	922	57.97	73.62	43.5	63.97	72.02	55.25
SAMBALPUR	SAMBALPUR	892	893	52.65	70.45	36.78	59.64	67.84	50.42
BATHINDA	BATHINDA	819	864	51.7	71.7	35.33	60.04	65.74	53.45
BATALA	GURDASPUR	894	892	55.73	68.58	44.25	57.79	62.43	52.6
HOSHIARPUR	HOSHIARPUR	861	876	62.45	80.36	47.03	68.29	72.8	63.16
PHAGWARA	KAPURTHALA	804	845	58.75	76.79	44.25	65.99	70.4	60.76
GOBINDGARH	PATIALA	675	832	43.5	75.59	25.56	61.13	64.59	56.97
RUPNAGAR	RUPNAGAR	870	879	60.6	76.35	46.89	67.1	71.9	61.66
ALWAR	ALWAR	822	856	58.14	84.88	36.14	62.1	71.41	51.04
BHILWARA	BHILWARA	888	874	48.03	68.31	30.01	53.39	63.67	41.64
BHARATPUR	BHARATPUR	834	852	51.14	74.19	31.91	55.61	65.13	44.44
TUTICORIN	TIRUNELVELI	966	983	68.47	77.56	59.68	71.87	79.05	64.58
TIRUPPUR	COIMBATOR	927	925	55.69	78.53	46.18	66.06	75.01	56.38
SIVAKASI	RAMNATHAP	971		61.39	72.9	50.21			
HOSUR	DHARMAPUR	875	867	55.36	74.75	38.39	62.91	69.63	55.16
ERODE	PERIYAR	928	945	65.65	80.03	52.31	71.08	78.07	63.68
BARIELLY	BARIELLY	879	881	44.36	57.03	33.23	45.36	51.81	38.05
GHAZIABAD	GHAZIABAD	792	819	51.18	76.56	31.08	53.83	60.4	45.82
MORADABAD	MORADABAD	858	872	38.17	46.14	26.08	45.87	50.61	40.43
GORAKHPUR	GORAKHPUR	831	850	58.8	81.37	40.04	57.68	66.23	47.63
MUZAFFARNAG	MUZAFFARNA	875	891	52.19	67.71	38.63	54.73	61.05	47.64
HARDWAR	SAHARANPUR	809	836	53.47	76.77	34.62	61.51	67.18	54.72
BULANSHAHAR	BULANSHAHA	869	886	48.05	65.41	32.97	52.67	60.74	43.57
HALDWANI	NAINITAL	820	842	55.07	74.58	39.07	57.01	66.66	50.31
UNNAO	UNNAO	855	875	49.19	67.53	33.5	54.82	61.22	47.49
RISHIKESH	DEHRADUN	762	782	64.49	94.59	41.56	64.37	70.73	56.24
MATHURA	MATHURA	870	878	49.4	66.97	34.11	49.32	57.09	40.49
ASANSOL	BARDHAMAN	802	831	62.41	83.44	45.57	65.24	70.17	59.32
SILIGURI	DARJEELING	794	824	62.15	83.91	44.87	64.8	69.36	59.27
KRISHNANAGA	NADIA	962	972	69.42	77.61	61.54	72.52	76.9	68.02

Contd...

TABLE 2 LEVEL OF INMIGRATION TO THE NPCs & SPCs

City	district			Percentage of inmigrants to total population		
AP			Functional Classification	Total	Male	female
GUNTUR	GUNTUR	m	Services-cum-ind-cum-tr.&com	35%	31%	38%
WARANGAL	WARANGAL	ua	Ind-cum--services-cum-tr.& com	32%	28%	36%
RAJAMUNDRY	EAST GODAVARI	ua	services-cum-tr.&com-cum-ind	52%	48%	57%
NELLORE	NELLORE	m	Ind-cum--services-cum-tr.& com	34%	32%	36%
KURNOOL	KURNOOL	ua	Ind-cum--services-cum-tr.& com	37%	35%	40%
NIZAMABAD	NIZAMABAD	m	Ind-cum--services-cum-tr.& com	29%	27%	32%
TIRUPATI	CHITTOOR	ua	services-cum-tr.&com	54%	51%	57%
CUDDAPAH	CUDDAPAH	ua	services-cum-tr.&com-cum-ind	60%	55%	65%
BHEEMAVARAM	WEST GODAVAR	M	pract-cum-tr&com-cum-service	32%	35%	30%
KHAMMAM	KHAMMAM	ua	services-cum-tr.&com-cum-ind	38%	35%	40%
MAHBUBNAGAR	MAHBUBNAGAR	m	services-cum-tr.&com--cum-ind	25%	23%	28%
KARIMNAGAR	KARIMNAGAR	m	services-cum-tr.&com--cum-ind	35%	33%	37%
ONGOLE	PRAKASAM	ua	services-cum-tr.&com--cum-ind	43%	41%	46%
NARASAROEPET	GUNTUR	m	tr.&com.cum pr act cum services			
NALGONDA	NALGONDA	m	services			
MADANAPALLE	CHITTOOR	m	tr.&com.-cum-servicescum ind			
ADILABAD	ADILABAD	m	Services-cum-ind-cum-tr.&com			
DHARMAVARAM	ANANTPUR	m	ind			
SIDDEPET	MEDAK	m	ind-cum-Tr&com-cum-services			
BODHGAYA	GAYA	ua	pr act			
BIHAR SHARIF	NALANDA	m	ind-cum-pr act-cum services	23%	7%	40%
BERMO	GIRIDIH					
PATRATU	HAZARIBAGH	ua	pr.act			
DEHRI	ROHTAS	m	services-cum-tr&com			
HAZARIBAGH	HAZARIBAGH	m	services-cum-tr&com			
BEGUSARAI	BEGUSARAI	ua	services-cum-pr act-cum-tr&com			
GIRIDIH	GIRIDIH	m	services-cum-tr&com			
NARLATIAGANJ	PAS. CHAMPARA	na	services-cum-pr act-cum-tr&com			
NAVSARI	VALSAD	ua	ind	58%	55%	61%
ANAND	KHEDA	ua	Ind-cum--services-cum-tr.& com	56%	50%	63%
HIMATNAGAR	SABARKANTHA	m	services-cum-tr.&com			
ANKLESHWAR	BHARUCH	ua	ind			
THANESAR	KURUKSHETRA	m.c	services			
PANIPAT	KARNAL	u.a	ind			
FARIDABAD	FARIDABAD	adm	ind			
HISSAR	HISSAR	u.a	services-cum-tr.&com--cum-ind	45%	38%	53%
SONIPAT	SONIPAT	m.c	services-cum-ind			
SIRSA	SIRSA	m.c-iii	tr.&com.-cum-services			
JIND	JIND	m.c-iii	tr.&com.-cum-services			
MYSORE	MYSORE	ua	ind-cum-services	34%	32%	36%
MANGALORE	D. KANNAD	ua	ind	31%	28%	34%
DAVANGERE	CHITRADURGA	ua	IND-CUM-TR.&.COM	37%	35%	39%
SHIMOGA	SHIMOGA	ua	Ind-cum--tr.& comcum services	43%	41%	45%
RAICHUR	RAICHUR	ua	services	17%	14%	19%
TUMKUR	TUMKUR	ua	ind-cum-services-cum-tr&com	45%	45%	46%
BIDAR	BIDAR	ua	services-cum-tr&com	37%	32%	42%
HARIHAR	CHITRADURGA	tmc	ind			
KARWAR	U. KANNAD	cmc	services-cum-ind-cum-tr&com			
GULBARGA	GULBARGA	ua	services-cum-tr&com-cum-ind			
TRICHUR	TRICHUR	ua	ind-cum-services-cum-tr&com			
CANNANORE	CANNANORE	m	pract-cum-ind-cum-services			
SHORNUR	PALGHAT	ua	tr&com-cum-services-cum-ind			
JAGDALPUR	BASTAR	u.a	services-cum-tr.&com--cum-ind			
RAIPUR	RAIPUR	u.a	services-cum-tr.&com--cum-ind	47%	44%	50%
BILASPUR	BILASPUR	u.a	services-cum-tr.&com--cum-ind	42%	37%	47%
SATNA	SATNA	u.a	Ind-cum-tr.& com-cum-services			
RAJNANDGAON	RAJNANDGAON	m.c	Ind-cum--pract-cum-services	40%	32%	50%
DEWAS	DEWAS	m.c	ind	44%	38%	50%
BHIND	BHIND	m	services-cum-tr.&com--cum-pr ac	42%	35%	50%
MORENA	MORENA	m	pr.act-cum-services-cum-tr.&com	37%	26%	52%
ITARSI	HOSHANGABAD	u.a	services-cum-ind			
VIDISHA	VIDISHA	m	services-cum-tr&com-cum-ind			

GUNA	GUNA	m	services			
CHHATRAPUR	CHHATRAPUR	u.a	services-cum-tr.&com--cum-ind			
SHAHDOL	SHAHDOL	u.a	services			
BETUL	BETUL	u.a	services-cum-ind-cum-tr&com			
UJJAIN	UJJAIN	u.a	ind-cum-services	33%	26%	40%
PRITURPUR	TIKAMGARH	m	services-cum-tr&com-cum-ind			
AURANGABAD	AURANGABAD	u.a	ind-cum-services	25%	23%	27%
DHULE	DHULE	m	ind-cum-services	40%	36%	46%
NANDED	NANDED	ua	ind-cum-services -cum-tr.&com	36%	34%	39%
ICHALKARANJE	KOLHAPUR	u.a	ind	30%	28%	33%
CHANDRAPUR	CHANDRAPUR	m	services-cum-ind-cum-pract	33%	28%	39%
PARBHANI	PARBHANI	m	services-cum-ind-cum-tr&com	48%	45%	52%
BID	BID	m	services-cum-tr.&com-cum-ind	37%	33%	41%
NASHIK	NASIK	u.a	ind-cum-services	35%	32%	38%
PURI	PURI	m	services-cum-tr.&com	25%	21%	30%
CUTTACK	CUTTACK	u.a	services-cum-tr.&com	36%	34%	37%
BERHAMPUR	BERHAMPUR	m	services-cum-tr.&com			
SAMBALPUR	SAMBALPUR	u.a	services-cum-ind-cum -cum-tr.&c	44%	40%	47%
PARADEEP	CUTTACK	nac	trs&comm-cum-services-cum-TR&CO			
KORAPUT	KORAPUT	NAC	SERVICES			
BATHINDA	BATHINDA	m.c	services-cum -Tr.&com-CUM-IN	48%	42%	56%
BATALA	GURDASPUR	UA	TR&COM-CUM-ind-cum-services	36%	24%	50%
HOSHIARPUR	HOSHIARPUR	m.c	services-cum-tr.&com-cum-ind	47%	39%	55%
PHAGWARA	KAPURTHALA	u.a	ind			
GOBINDGARH	PATIALA	ua	ind			
RUPNAGAR	RUPNAGAR	mc	services			
ALWAR	ALWAR	u.a	services-cum-ind	36%	29%	44%
BHILWARA	BHILWARA	mcl	ind-cum-tr&com-cum-services	40%	33%	48%
BHARATPUR	BHARATPUR	u.a	services-cum-ind	35%	25%	47%
TUTICORIN	TIRUNELVELI	u.a	ind-cum-tr&com-cum-services	26%	23%	28%
TIRUPPUR	COIMBATOR	u.a	ind			
SIVAKASI	RAMNATHAPUR	ua	ind			
HOSUR	DHARMAPUR	tp	ind			
ERODE	PERIYAR	ua	ind			
ALIGARH	ALIGARH	m.b	ind-cum-services	20%	10%	31%
BARIELLY	BARIELLY	u.a	services-cum-ind-cum-tr.&com	18%	13%	23%
GHAZIABAD	GHAZIABAD	u.a	ind-cum-services	20%	14%	28%
MORADABAD	MORADABAD	u.a	ind	2%	3%	4%
GORAKHPUR	GORAKHPUR	m.c	services-cum-tr.&com-cum-ind			
MUZAFFARNAGAR	MUZAFFARNAGA	u.a	tr.&com-cum-services	35%	28%	44%
HARDWAR	SAHARANPUR	ua	ind-cum-services	44%	40%	48%
BULANSHAHAR	BULANSHAHAR	m.b	services-cum-tr.&com	23%	16%	30%
HALDWANI	NAINITAL	mb	services-cum-tr&com--cum-ind			
UNNAO	UNNAO	mb	services-cum-tr&com--cum-ind	35%	28%	43%
RISHIKESH	DEHRADUN	u.a	ind			
MATHURA	MATHURA	u.a	services-cum-ind	29%	17%	43%
DURGAPUR	BARDHAMAN	na	ind			
HALDIA	MEDINIPUR	na	services-cum-pr act	39%	34%	44%
DARJEELING	DARJEELING	m	services			
BOLPUR-SHANTINI	BIRBHUM	m	serv-cum-tr&com-cum-ind			
ASANSOL	BARDHAMAN	ua	ind-cum-pr act-cum-tr&com	33%	28%	38%
SILIGURI	DARJEELING	m	tr&com-cum-services	47%	46%	48%
KRISHNANAGAR	NADIA	m	serv-cum-tr&com-cum-ind	10%	17%	3%

Table 3 Employment Quotient for industrial and service category

Developed		Municipal status	functional classification	Employment quotient(concentration of city employment to state urban) ind(vb+6)			serv(vii +viii+ix)		
				p	m	f	p	m	f
city	district								
MAHARASHTRA	MAHARASHTRA								
AURANGABAD	AURANGABAD	u.a	ind-cum-services	0.99	0.98	1.02	1.04	1.04	1.07
DHULE	DHULE	m	ind-cum-services	0.88	0.84	1.24	1.13	1.15	1.03
NANDED	NANDED	ua	ind-cum-services -cum-tr.&com	0.85	0.82	1.02	1.12	1.14	1.01
ICHALKARANJE	**KOLHAPUR**	**u.a**	ind	1.85	1.8	1.73	0.51	0.49	0.68
CHANDRAPUR	CHANDRAPUR	m	services-cum-ind-cum-pract	0.62	0.59	0.92	1.04	1.02	1.16
PARBHANI	PARBHANI	m	services-cum-ind-cum-tr&com	0.57	0.57	0.54	1.16	1.17	1.06
BID	BID	m	services-cum-tr.&com-cum-ind	0.57	0.55	0.71	1.17	1.19	1
NASHIK	**NASHIK**	**u.a**	ind-cum-services	1	1.03	0.77	0.94	0.94	0.92
GUJARAT	GUJARAT								
NAVSARI	VALSAD	ua	ind	1.46	1.49	1.01	0.73	0.7	1.01
ANAND	KHEDA	ua	Ind-cum--services-cum-tr.& com	0.84	0.86	0.57	1.06	1.05	1.04
HIMATNAGAR	SABARKANTHA	m	services-cum-tr.&com	0.62	0.61	0.64	1.39	1.39	1.41
ANKLESHWAR	**BHARUCH**	**ua**	ind	1.23	1.22	1.35	0.75	0.73	0.87
WEST BENGAL	WEST BENGAL								
DURGAPUR	**BARDHAMAN**	**NA**	ind	1.52	1.5	1.36	0.72	0.71	0.89
HALDIA	MEDINIPUR	NA	services-cum-pr act	0.41	0.41	0.3	0.9	0.9	0.93
ASANSOL	BARDHAMAN	UA	ind-cum-pr act-cum-tr&com	0.9	0.89	0.8	0.81	0.81	0.81
SILIGURI	DARJEELING	M	tr&com-cum-services	0.54	0.55	0.49	1.4	1.41	1.29
KRISHNANAGA	NADIA	M	serv-cum-tr&com-cum-ind	0.55	0.56	0.5	1.25	1.26	1.19
TAMILNADU	TAMILNADU								
TUTICORIN	**TIRUNELVELI**	**u.a**	ind-cum-tr&com-cum-services	1.12	1.06	1.51	1.05	1.02	1.15
TIRUPPUR	**COIMBATOR**	**u.a**	ind	2.21	2.07	2.99	0.53	0.55	0.48
SIVAKASI	RAMNATHAPURA	ua	ind						
HOSUR	**DHARMAPUR**	**tp**	ind	1.61	1.61	1.14	0.82	0.77	1.27
ERODE	**PERIYAR**	**ua**	ind	1.17	1.11	1.55	1.08	1.08	1.05
HARYANA	HARYANA								
PANIPAT (mc)	**KARNAL**	**u.a**	ind	1.37	1.32	2.81	0.87	0.88	0.77
FARIDABAD	**FARIDABAD**	**adm**	ind	2.03	2.01	2.38	0.67	0.65	0.85

Contd.

HISSAR	HISSAR	u.a	services-cum-tr.&com--cum-ind	0.77	0.79	0.45	1.06	1.06	1.02
SONIPAT	SONIPAT	m.c	services-cum-ind	0.93	0.95	0.55	1.07	1.06	1.12
SIRSA	SIRSA	m.c-iii	tr.&com.-cum-services	0.79	0.79	0.63	1.15	1.16	1.1
JIND	JIND	m.c-iii	tr.&com.-cum-services	0.6	0.6	0.43	1.18	1.19	1.14
PUNJAB	PUNJAB								
BATHINDA	BATHINDA	m.c	services-cum -Tr.&com-CUM-IND	0.7	0.7	0.81	1.23	1.24	1.04
BATALA	GURDASPUR	UA	TR&COM-CUM-ind-cum-services	0.93	0.93	0.6	1.03	1.04	0.93
HOSHIARPUR	HOSHIARPUR	m.c	services-cum-tr.&com-cum-ind	0.78	0.78	1.36	1.05	1.06	0.94
PHAGWARA	**KAPURTHALA**	**u.a**	ind	1.53	1.53	1.01	0.8	0.79	0.97
GOBINDGARH	**PATIALA**	**ua**	ind	1.72	1.68	0.63	0.79	0.79	1.07
RUPNAGAR	RUPNAGAR	mc	services	0.54	0.56	0.4	1.34	1.35	1.13

Developing

KARNATAKA	KARNATAKA								
MANGALORE	**D. KANNAD**	**ua**	ind	1.51	1.1	2.49	0.92	1.08	0.65
DAVANGERE	**CHITRADURGA**	**ua**	IND-CUM-TR.&.COM	1.1	1.07	1.25	1.06	1.07	0.99
SHIMOGA	SHIMOGA	ua	Ind-cum--tr.& comcum services	0.83	0.87	0.54	1.13	1.09	1.32
RAICHUR	RAICHUR	ua	services	0.31	0.32	0.26	1.46	1.46	1.47
TUMKUR	TUMKUR	ua	ind-cum-services-cum-tr&com	0.97	0.98	0.91	1.1	1.09	1.09
BIDAR	BIDAR	ua	services-cum-tr&com	0.46	0.46	0.42	1.39	1.38	1.36
HARIHAR	**CHITRADURGA**	**tmc**	ind	1.34	1.42	0.81	0.79	0.79	0.73
KARWAR	U. KANNAD	cmc	services-cum-ind-cum-tr&com	0.5	0.55	0.2	1.19	1.08	1.85
GULBARGA	GULBARGA	ua	services-cum-tr&com-cum-ind	0.77	0.77	0.71	1.33	1.28	1.62
ORISSA	ORISSA								
CUTTACK	**CUTTACK**	**u.a**	services-cum-tr.&com	1.12	1.12	0.62	1.22	1.19	1.46
BERHAMPUR	BERHAMPUR	m	services-cum-tr.&com	0.78	0.79	0.61	1.22	1.22	1.19
SAMBALPUR	**SAMBALPUR**	**u.a**	services-cum-ind-cum -cum-tr.&com	1.09	1.06	1.77	1.03	1.04	0.92
PARADEEP	CUTTACK	nac	trs&comm-cum-services-cum-TR&C	0.58	0.54	1.66	1.21	1.21	1.22
KORAPUT	KORAPUT	NAC	SERVICES	0.36	0.38	0.2	1.2	1.23	1.02
UTTAR PRADES	UTTAR PRADESH								
BARIELLY	BARIELLY	u.a	services-cum-ind-cum-tr.&com	0.9	0.9	0.74	1.2	1.19	1.43
GHAZIABAD	**GHAZIABAD**	**u.a**	ind-cum-services	1.75	1.75	1.89	1.03	1.01	1.29
MORADABAD	**MORADABAD**	**u.a**	ind	1.72	1.73	0.55	0.96	0.94	1.41

Contd.

GORAKHPUR	GORAKHPUR	m.c	services-cum-tr.&com-cum-ind	0.86	0.87	0.64	1.16	1.16	1.11
MUZAFFARNAG	**MUZAFFARNAGA**	**u.a**	tr.&com-cum-services	1.08	1.09	0.52	1.21	1.2	1.47
HARDWAR	**SAHARANPUR**	**ua**	ind-cum-services	1.84	1.87	1.18	0.97	0.94	1.41
BULANSHAHAR	**BULANSHAHAR**	**m.b**	services-cum-tr.&com	1.01	1.02	0.44	1.18	1.17	1.41
HALDWANI	**NAINITAL**	**mb**	services-cum-tr&com--cum-ind	1.1	1.12	0.56	1.23	1.22	1.51
UNNAO	**UNNAO**	**mb**	services-cum-tr&com--cum-ind	1.05	1.06	0.84	1.08	1.06	1.31
RISHIKESH	**DEHRADUN**	**u.a**	ind	1.93	1.94	2.12	0.92	0.9	1.18
MATHURA	**MATHURA**	**ua**	serc-cum-ind	1.08	1.09	0.91	1.19	1.18	1.3
KERALA	KERALA								
TRICHUR	**TRICHUR**	**ua**	ind-cum-services-cum-tr&com	1.03	1.09	0.78	1.16	1.14	1.23
CANNANORE	CANNANORE	m	pract-cum-ind-cum-services	0.92	0.95	0.56	1.28	1.24	1.6
SHORNUR	PALGHAT	ua	tr&com-cum-services-cum-ind	0.76	0.88	0.35	0.97	1.02	0.79
Less developed									
RAJASTHAN	RAJASTHAN								
ALWAR	**ALWAR**	**u.a**	services-cum-ind	1.01	1.02	0.72	1.19	1.16	1.53
BHILWARA	**BHILWARA**	**mcl**	ind-cum-tr&com-cum-services	1.48	1.53	0.98	0.8	0.8	0.74
BHARATPUR	**BHARATPUR**	**u.a**	services-cum-ind	1.05	1.06	0.66	1.1	1.07	1.47
AP									
GUNTUR	**GUNTUR**	**m**	Services-cum-ind-cum-tr.&com	1.07	1.02	1.49	1.11	1.1	1.15
WARANGAL	**WARANGAL**	**ua**	Ind-cum--services-cum-tr.& com	1.07	0.95	1.95	1.07	1.13	0.78
RAJAMUNDRY	**EAST GODAVARI**	**ua**	services-cum-tr.&com-cum-ind	1.13	1.12	1	1.14	1.07	1.58
NELLORE	**NELLORE**	**m**	Ind-cum--services-cum-tr.& com	1.06	1.07	0.95	1.06	1.02	1.26
KURNOOL	**KURNOOL**	**ua**	Ind-cum--services-cum-tr.& com	1.13	1.1	1.48	1	1.04	0.9
NIZAMABAD	NIZAMABAD	m	Ind-cum--services-cum-tr.& com	0.77	0.73	1.13	0.97	1.13	0.5
TIRUPATI	CHITTOOR	ua	services-cum-tr.&com	0.76	0.76	0.66	1.37	1.3	1.86
CUDDAPAH	CUDDAPAH	ua	services-cum-tr.&com-cum-ind	0.87	0.87	0.79	1.13	1.11	1.21
BHEEMAVARAM	WEST GODAVARI	m	pract-cum-tr.&com.-cum-services	0.8	0.86	0.47	0.93	0.93	0.95
KHAMMAM	KHAMMAM	ua	services-cum-tr.&com-cum-ind	0.8	0.79	0.79	1.21	1.17	1.4
MAHBUBNAGAR	MAHBUBNAGAR	m	services-cum-tr.&com--cum-ind	0.8	0.73	1.3	1.17	1.18	1.08
KARIMNAGAR	KARIMNAGAR	m	services-cum-tr.&com--cum-ind	0.8	0.74	1.25	1.29	1.25	1.41
ONGOLE	PRAKASAM	ua	services-cum-tr.&com--cum-ind	0.8	0.79	0.82	1.21	1.16	1.45
NARASAROEPE	GUNTUR	m	tr.&com.cum pr act cum services	0.76	0.78	0.55	1.06	1.07	0.92
NALGONDA	NALGONDA	m	services	0.69	0.67	0.75	1.23	1.2	1.33
MADANAPALLE	CHITTOOR	m	tr.&com.-cum-servicescum ind	0.9	0.87	1.03	1.08	1.06	1.16
ADILABAD	**ADILABAD**	**m**	Services-cum-ind-cum-tr.&com	1.17	1.05	2.14	1.01	1.02	0.93
DHARMAVARAM	ANANTPUR	m	ind	0.58	0.57	0.61	0.61	0.62	0.51

Contd.

SIDDEPET	**MEDAK**	**m**	ind-cum-Tr&com-cum-services	1.01	0.82	2.19	0.95	1.09	0.47
BIHAR	BIHAR								
BIHAR SHARIF	**NALANDA**	**m**	ind-cum-pr act-cum services	1.06	1.01	2.23	0.87	0.9	0.54
BERMO	GIRIDIH								
PATRATU	HAZARIBAGH	ua	pr.act	0.56	0.55	0.72	0.64	0.62	0.83
DEHRI	**ROHTAS**	**m**	services-cum-tr&com	1.21	1.2	0.48	1.24	1.22	1.76
HAZARIBAGH	HAZARIBAGH	m	services-cum-tr&com						
BEGUSARAI	BEGUSARAI	ua	services-cum-pr act-cum-tr&com	0.96	0.95	0.96	1.07	1.04	1.6
GIRIDIH	**GIRIDIH**	**m**	services-cum-tr&com	1.13	1.11	1.19	1.36	1.33	1.7
NARLATIAGANJ	PAS. CHAMPARA	na	services-cum-pr act-cum-tr&com	0.7	0.69	0.09	1.1	1.1	1.04
MADHYA PRAD	MADHYA PRADESH								
RAIPUR	**RAIPUR**	**u.a**	services-cum-tr.&com--cum-ind	1.04	1.01	1.04	1.26	1.2	1.63
BILASPUR	BILASPUR	u.a	services-cum-tr.&com--cum-ind	0.73	0.71	0.9	1.33	1.3	1.51
SATNA	**SATNA**	**u.a**	Ind-cum-tr.& com-cum-services	1.24	1.24	0.99	0.98	0.98	0.91
RAJNANDGAON	**RAJNANDGAON**	**m.c**	Ind-cum--pract-cum-services	1.07	1.09	1.31	0.92	0.98	0.79
DEWAS	**DEWAS**	**m.c**	ind	2.01	2.05	1.26	0.77	0.72	1.16
BHIND	BHIND	m	services-cum-tr.&com--cum-pr act	0.62	0.6	0.36	1.18	1.13	1.68
MORENA	MORENA	m	pr.act-cum-services-cum-tr.&com	0.63	0.6	0.75	0.96	0.92	1.38
ITARSI	**HOSHANGABAD**	**u.a**	services-cum-ind	1.11	1.09	0.86	1.27	1.22	1.73
VIDISHA	VIDISHA	m	services-cum-tr&com-cum-ind	0.87	0.85	0.98	1.22	1.16	1.7
GUNA	GUNA	m	services	0.79	0.72	1.62	1.26	1.26	1.28
CHHATRAPUR	CHHATRAPUR	u.a	services-cum-tr.&com--cum-ind	0.77	0.76	0.69	1.16	1.13	1.4
SHAHDOL	SHAHDOL	u.a	services	0.65	0.63	0.72	1.37	1.33	1.57
BETUL	BETUL	u.a	services-cum-ind-cum-tr&com	0.88	0.86	1.11	1.17	1.14	1.38
UJJAIN	**UJJAIN**	**u.a**	ind-cum-services	1.43	1.4	1.67	1.1	1.06	1.38
PITHAMPUR	dHAR	m	services-cum-tr&com-cum-ind	3.41	3.29	3.88	.27	.23	.67

Note: Cities in bold have the industrial employment quotient greater than 1

Contd.

Table 4 Selection Criteria for NPC and SPC								
Town/city	District		Proportion of industrial component in total workforce (as a %)					
			1981	1981	1981	1991	1991	1991
			Total	Male	Female	Total	Male	Female
AP								
GUNTUR	GUNTUR		27.17	25.96	32.35	22.97	23.63	20.23
WARANGAL	WARANGAL		27.51	24.36	40.72	22.86	21.71	27.21
RAJAMUNDRY	EAST GODAVARI	UA	27.85	29.65	16.85	24.1	25.88	13.63
NELLORE	NELLORE		27.43	29.11	18.8	22.74	24.68	12.98
KURNOOL	KURNOOL		21.26	23.81	10.8	23.74	25.25	18.42
NIZAMABAD	NIZAMABAD		17.22	17.06	17.66	16.51	16.95	17.66
TIRUPATI	CHITTOOR		18.12	19.48	19.48	16.25	17.55	9.25
CUDDAPAH	CUDDAPAH		35.14	34.78	34.78	19.65	20.75	10.93
BHEEMAVARAM	WEST GODAVARI					17.1	19.83	6.45
KHAMMAM	KHAMMAM *		21.78	22.52	16.5	17.51	18.46	11.88
MAHBUBNAGAR	MAHBUBNAGAR *		24.92	25.44	23.24	17.05	16.92	17.64
KARIMNAGAR	KARIMNAGAR *		30.32	23.66	51.51	17.17	17.2	16.91
ONGOLE	PRAKASAM					17.23	18.18	12.1
NARASAROEPET	GUNTUR					16.37	18.12	7.47
NALGONDA	NALGONDA *		23.17	24.67	15.96	14.77	15.55	10.25
MADANAPALLE	CHITTOOR					19.24	20.15	13.97
ADILABAD	ADILABAD *		33.68	31.77	44.85	25.11	24.35	28.94
DHARMAVARAM	ANANTPUR					12.47	13.29	8.35
SIDDEPET	MEDAK					21.59	18.93	29.66
BIHAR	BIHAR							
BIHAR SHARIF	NALANDA		29.69	30.33	20.01	14.5	14.45	14.92
BERMO	GIRIDIH	UA	6.7	7.38	1.43	10.1	10.33	8.08
PATRATU	HAZARIBAGH		5.99	6.19	1.93	14.26	14.23	14.95
DEHRI	ROHTAS		47.1	48.1	11.62	16.6	17.21	3.26
HAZARIBAGH	HAZARIBAGH *		14.81	14.85	14.13	NA		
BEGUSARAI	BEGUSARAI	UA	15.24	15.84	4.9	13.23	13.67	6.47
GIRIDIH	GIRIDIH *		15.85	16.74	4.8	15.43	15.87	8
NARLATIAGANJ	PAS. CHAMPARAN					9.59	9.95	0.65
GUJARAT	GUJARAT							
NAVSARI	VALSAD					52.92	57.09	16.57

Contd

ANAND	KHEDA					30.36	33.1	9.47
HIMATNAGAR	SABARKANTHA					22.41	23.58	10.59
ANKLESHWAR	**BHARUCH**					44.62	46.87	22.2
HARYANA	HARYANA							
PANIPAT	KARNAL		39.31	39.68	34.86	36.36	37.04	28.93
FARIDABAD	FARIDABAD		57.14	58.73	30.2	54.01	56.22	24.54
HISSAR	HISSAR		30.45	32.11	6.13	21.13	22.62	4.56
SONIPAT	SONIPAT		33.53	35.43	11.72	24.72	26.68	5.76
SIRSA	SIRSA					21.17	22.15	6.57
JIND	JIND					16.02	16.78	4.43
KARNATAKA	KARNATAKA							
MANGALORE	**D. KANNAD**	**UA**	37.53	34.71	42.61	45.18	33.65	66.24
DAVANGERE	CHITRADURGA		36.17	36.98	31.51	33.9	33.26	37.45
SHIMOGA	SHIMOGA		27.13	27.86	22.67	25.35	27.06	14.96
RAICHUR	RAICHUR		24.97	24.04	29.45	10.02	10.29	8.56
TUMKUR	TUMKUR		24.02	24.1	23.5	28.49	28.77	26.09
BIDAR	BIDAR		21.94	21.52	24.52	13.71	14.06	9.31
HARIHAR	CHITRADURGA					39.98	43.31	21.56
KARWAR	U. KANNAD					15.01	16.84	5.44
GULBARGA	GULBARGA		24.79	25.12	21.87	22.98	23.66	17.83
KERALA	KERALA							
TRICHUR	TRICHUR	UA	23.43	26.21	15.11	24.83	27.51	15.78
CANNANORE	CANNANORE	UA	43.18	45.64	26.4	34.39	34.29	34.9
SHORNUR	PALGHAT					18.24	22.02	7.08
MADHYA PRADE	MADHYA PRADESH							
RAIPUR	RAIPUR	UA	22.83	24.41	14.79	23.62	25.36	14.09
BILASPUR	BILASPUR	UA	17.1	17.02	17.45	10.47	17.27	12.08
SATNA	SATNA *		34.88	34.04	39.18	27.77	29.77	13.34
RAJNANDGAON	RAJNANDGAON *		31.13	30.53	33.18	24.24	26.43	17.63
DEWAS	DEWAS *		31.1	34.08	13.65	45.37	49.38	16.94
BHIND	BHIND *		15.53	15.73	9.18	14.09	14.62	4.85
MORENA	MORENA *		23.51	23.44	25.18	14.35	14.5	10.18
ITARSI	HOSHANGABAD					23.15	24.38	11.13
VIDISHA	VIDISHA *		25.48	24.72	32.68	19.71	20.58	13.17

Contd.

GUNA	GUNA *		30.41	27.92	49.54	17.99	17.4	21.76
CHHATRAPUR	CHHATRAPUR *		17.07	17.71	12.36	17.73	18.64	9.63
SHAHDOL	SHAHDOL *		22.81	23.02	21.19	14.32	14.77	10.15
BETUL	BETUL *		20	20.19	18.46	19.75	20.45	14.97
UJJAIN	UJJAIN	UA	36	37.84	20.96	32.35	33.88	22.41
PITHAMPUR	DHAR					76.58	79.19	52.17
MAHARASHTRA	MAHARASHTRA							
AURANGABAD	AURANGABAD	UA	35	35.35	32.49	34.26	36.56	21.31
DHULE	DHULE		34.73	33.72	41.32	30.79	31.46	25.74
NANDED	NANDED	UA	28.84	28.9	28.31	28.63	29.25	21.35
ICHALKARANJE	KOLHAPUR	UA	62.66	64.76	35.24	65.49	67.64	36.02
CHANDRAPUR	CHANDRAPUR		19.4	20.2	13.72	21.64	22.03	19.2
PARBHANI	PARBHANI		18.33	18.73	16.19	20.01	21.5	11.34
BID	BID*		18.65	19.5	13.9	19.76	20.47	14.88
NASHIK	NASHIK	UA	36.31	38.64	17.8	34.66	38.31	16.14
ORISSA	ORISSA							
CUTTACK	CUTTACK	UA	24.16	25.67	6.26	20.92	22.23	5.75
BERHAMPUR	BERHAMPUR		16.47	17.9	6	14.58	15.79	5.59
SAMBALPUR	SAMBALPUR	UA	23.49	24.36	18.49	20.41	21.04	16.3
PARADEEP	**CUTTACK**					10.95	10.71	15.26
KORAPUT	**KORAPUT***		19.82	20.51	16.21	6.69	7.64	1.85
PUNJAB	PUNJAB							
BATHINDA	BATHINDA	UA	22.79	23.68	12.64	19.84	20.93	6.87
BATALA	GURDASPUR					25.85	27.2	2.67
HOSHIARPUR	HOSHIARPUR*		22.14	23.15		22.25	23.3	11.53
PHAGWARA	KAPURTHALA					43.29	45.44	8.67
GOBINDGARH	PATIALA					48.32	49.48	6.57
RUPNAGAR	RUPNAGAR*		31.67	33.18		15.41	16.68	3.41
RAJASTHAN	RAJASTHAN							
ALWAR	ALWAR		27.53	28.2	18.1	26.95	28.34	11.14
BHILWARA	BHILWARA		30.85	31.62	22.47	37.2	40.11	15.12
BHARATPUR	BHARATPUR		31.26	31.54	26.8	26.56	27.7	10.78
TAMILNADU	TAMILNADU							

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TUTICORIN	TIRUNELVELI	UA	36.51	35.38	42.78	32.99	32.62	35.13
TIRUPPUR	COIMBATOR		52.5	52.4	52.89	67.26	65.4	74.54
SIVAKASI	RAMNATHAPURAM							
HOSUR	DHARMAPUR					47.17	49.45	26.63
ERODE	PERIYAR	UA	39.48	24.54	40.42	34.47	34.12	36.15
UTTAR PRADESH	UTTAR PRADESH							
BARIELLY	BARIELLY	UA	31.23	32	13.12	18.59	19.09	8.62
GHAZIABAD	GHAZIABAD	UA	29.65	30.47	13.55	36.2	37.12	21.8
MORADABAD	MORADABAD	UA	38.23	38.93	11.59	35.47	36.84	6.41
GORAKHPUR	GORAKHPUR	UA	10.43	10.67	4.81	17.78	18.6	7.41
MUZAFFARNAGA	MUZAFFARNAGAR		26.73	27.21	13.66	22.31	23.16	6.08
HARDWAR	SAHARANPUR	UA	29.71	30.06	21.83	28.79	29.91	13.63
BULANSHAHAR	BULANSHAHAR*		28.19	28.52	19.87	20.82	21.67	5.16
HALDWANI	NAINITAL					22.78	23.87	6.53
UNNAO	UNNAO*		20.75	20.69	22.1	21.67	22.59	9.69
RISHIKESH	DEHRADUN					29.06	30.27	13.71
MATHURA	MATHURA	UA	25.19	25.66	14.43	22.44	23.17	10.57
WEST BENGAL	WEST BENGAL							
DURGAPUR	**BARDHAMAN**	**UA**	56.31	57.77	29.69	48.37	50.28	20.21
HALDIA	**MEDINIPUR**					13.23	13.84	4.53
ASANSOL	BARDHAMAN					24.35	25.55	6.07
SILIGURI	DARJEELING		20.82	21.9		17.35	18.59	7.28
KRISHNANAGAR	NADIA		20.86	22.42		17.61	18.95	7.41
Note :(i) Cities in Bold are NPC								
(ii) * denotes that the district urban industrial employment percentage value of NIC data								
has been assumed for these cities								

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