GROWTH AND CHARACTERISTICS OF CLASS I CITIES WITHIN AND OUTSIDE URBAN AGGLOMERATIONS A COMPARATIVE ANALYSIS (1991-2001)

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MASTER OF PHILOSOPHY

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DECLARATION

This is to certify that the dissertation entitled **"Growth and Characteristics of Class I Cities Within and Outside Urban Agglomerations in India: A Comparative Analysis (1991-2001)"** is my bonafide work for the Degree of Master of Philosophy and may be placed before the examiners for evaluation.

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We Recommended that the dissertation be placed before the examiners for evaluation.

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DEDICATED

TO MY

DEAR

PARENTS

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CHAPTER 1

INTRODUCTION

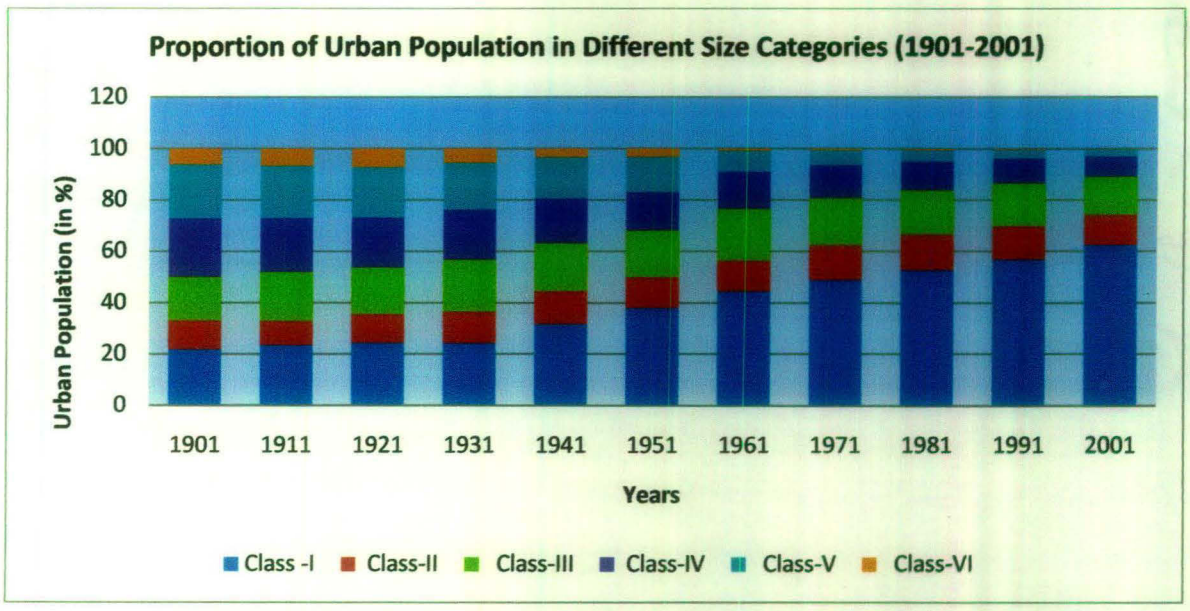
Chapter 1

INTRODUCTION

1.1 INTRODUCTION

Urbanization is a relatively recent phenomenon and is closely related with industrial revolution and associated economic development of an economy. Presently the developed countries are characterized by high levels of urbanization, some of them being in the final stages of the urbanization process, experiencing slowing down of urbanization due to a number of factors.[1] Majority of the developing countries, on the other hand, started experiencing urbanization only since the middle of 20th century. India shares most of the characteristic features of urbanization in the developing countries. This process in India has experienced a gradual increasing trend with low levels of urbanization. Number of urban agglomerations/towns in the country has grown from 1827 in 1901 to 5161 in 2001, with the population residing in urban areas increasing from 2.58 crores in 1901 to 28.53 crores in 2001 which is 28 percent of the total population of the country.

Figure: 1.1



Source: Census of India 2001

[1] Brockerhoff, M. (1999), Urban Growth in Developing Countries: *A review of Projections and Predictions, Population and development Review*, Vol 25. No 4, pp 757-778.

Over the years there has been a continuous concentration of population in class I cities which now have about 65 percent of the urban population. The concentration of population in medium and small towns, on the other hand has either fluctuated or declined. This has resulted in top heavy structure of urban population in India.

The decade just after independence in India, recorded the highest urban growth rate (annual exponential growth of 3.5 percent). This led to the emergence of various theories of 'over-urbanization'. This high growth rate of urbanization in India has been attributed to independence and partition of the country and also to non-rigorous identification of towns and cities in the 1951 Census. The 1961 Census, on the other hand, showed a dramatic decline in urban growth figures due to formalization of the criteria for identifying urban centres.[2] The 1970s, nevertheless, saw a very high urban growth of 3.8 per cent, fuelling speculation that India was on the verge of an urban explosion. In spite of these speculations, the growth rate came down to 3.1 per cent in the 1980s which has further gone down to 2.7 percent in the 1990s, which has been the lowest in the post-independence period. As a consequence, the level of urbanisation has risen sluggishly from17.3 in 1951 to 23.3 in 1981 and then to 27.78 in 2001.

The development strategy associated with structural reforms since early 1990s was expected to link the country, mainly its urban centres, with the global economy. Proponents of the strategy argue that the reform would accelerate rural-urban migration and give a boost to urban growth.[3] This expectation is based on the assumption that massive inflow of capital, both from outside the country and indigenous investment, will result in rapid development of infrastructure and industries. This is likely to drive up the process of urbanization since much of the industrial growth and consequent increase in employment would take place within or around the existing urban centres. Even if the industrial units are located in rural settlements, in a few years they would be urbanized. All this would in turn lead to high income and employment growth along with alleviation of poverty and general improvement in the quality of life. Critics of the new development strategy, however, point out that employment generation in the formal urban economy might not be high due to capital intensive nature of industrialization. A low rate of infrastructural investment, necessary for keeping budgetary deficits low, would slow down even

[2] Kundu, A. (2006), 'Trends and Patterns of Urbansation and their economic Implications', *Indian Infrastructure Report,* pp. 27.

[3] Sivaramakrishnan, K.C et al, (2005), *'Handbook of Urbanisation in India'*. Oxford University Press, p. 26

agricultural growth. This, coupled with an open trade policy is likely to destabilize the agrarian economy causing high unemployment and exodus from rural areas. This would lead to rapid growth in urban population. Thus, the protagonists, as also the critics of economic reform, seem to converge on the proposition that urban growth in the post-liberalisation phase would be very high[4]. However, the critics hold that this will be associated with growth of low productive employment and poverty and its impact on the quality of life in the cities would be negative.

Given the alternative perspectives, it is important to empirically assess the impact of economic liberalisation on the nature and pattern of urban growth in the country focusing on some of the regions experiencing rapid economic growth. The present work, thus, is a comparative study of class I cities, in the pre- and post-reform period (1991-2001). Since population and economic activities are mainly concentrated in large cities, the impact of structural reforms would be more pronounced in these cities. The location of an urban centre as well as its relative size also plays an important role in its growth and development. Existing literature suggests that the cities which are a part of the urban agglomerations get several benefits due to scale economies and urbanization. The study is an attempt to look into the disparity between class I cities in terms of their growth pattern and workforce characteristics based on their location within or outside urban agglomerations.

[4] Kundu, A. (2000), Globalising Gujarat- Urbanisation, Employment and Poverty, Economic and Political Weekly, p. 3172.

1.2 OBJECTIVES

This study aims to:

A. Analyze the distribution and growth of Urban Agglomerations in India across size class and states between 1991 and 2001.

B. Compare the growth of class I cities according to their location within or outside urban agglomerations across size class and states.

C. Examine the workforce structure of class I cities across size class and states under the following categories:

   a) Class I cities which were common in the 1991 and 2001 Censuses.

   b) Cities which were demoted from class I status in 2001.

   c) Towns which have achieved class I status in 2001.

   d) Class I cities with million plus population (metropolitan cities).

D. Assess the spatial and sectoral concentration of workers in class I cities located within or outside urban agglomerations.

1.3 RESEARCH QUESTIONS

A. What has been the distribution and growth pattern of urban agglomerations in India according to 1991 and 2001 Censuses?

B. How the common class I cities between 1991 and 2001 are distributed across size classes and states and what is the difference in their growth pattern?

C. What is the size class and state wise distribution of cities which are either demoted from or promoted to class I status?

D. Is there any difference in workforce structure of class I cities in different size categories located within or outside UAs?

E. What kind of changes in the nature and structure of workforce are observed in class I cities located within or outside UAs in 1991 and 2001?

F. What are the differentials in core and peripheral growth and density of cities with million and above population? Is there concentration of population within the core or dispersion to the periphery?

G. What has been the pattern of spatial and sectoral concentration of workforce in class I cities

within and outside UAs.

1.4 LITERATURE REVIEW

The study of urbanization has been channelled in a number of different streams. One stream has emphasized historical element of the process. Enormous population movements from rural to urban areas have fuelled urban growth throughout the world. A related theme focuses on the physical structure of cities and how it may change as cities grow. Another stream has focused on understanding the evolution of the system of cities – that is, the interaction and changing functions of cities of different sizes as the economy develops, the comparison of the size distribution of urban areas for economies at different stages of development and the impact of growing national population on the properties of the system of cities and of city size distribution. There is also literature that studies the link between urban growth and economic growth and examines the allocation of various functions to cities of different sizes in a growing economy. Understandably, all these streams are closely related and none of them can be independently understood, theoretically and empirically. Due to the large variation in the nature of urban environment and associated problems, scholars from different disciplines have studied and explained this from different perspectives such sociological, economic, political and geographical. Most of the scholars especially, geographers have as approached the study of urbanization from three view points: spatio-structural, regional and locational.[5]

In order to present the Literature Survey in a more systematic way, relevant literature has been classified into specific themes. The first one deals with urban growth, the second discusses the urban workforce structure; and the third focuses on workforce diversity in Class I cities of India.

1.4.1 URBAN GROWTH

The modern study of urban forms and institutions began with works such as 'The Ancient City'[6] by **Fustel de Coulanges** and 'The Growth of Cities in the nineteenth century'[7] by **Weber**. These studies

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[5] R. Ramachandran (1989), *Urbanisation & Urban systems in India*, Oxford University Press pp 2-6.

[6] Fustle de Coulanger and Denis (1864), *'The Ancient City'* (Translated by Sillard Small), New York, Doubleday and Company.

[7] Weber and Adna (1899), *'The Growth of cities in the Nineteenth Century'*, Columbia University Studies in History, Economics and Public Law, New York.

were restricted to the narrower demographic perspective – the distribution of population between urban and rural areas and the causes and consequences of this distribution.

An understanding of urbanization and economic growth requires an understanding of the variety of factors that can affect city size and therefore its short-term dynamics. All of them lead to the basic forces that generate the real and economic externalities that are exploited by urban agglomeration, on one hand, and congestion, which follows from agglomeration, on the other. **Marshall**[8] has outlined Three basic types of agglomeration forces have been used to explain the existence of urban agglomerations: (a) knowledge spillovers (b) thick markets for specialized inputs: the more the number of firms that hire specialized programmers, the larger the pool from which an additional firm can hire when the others may be laying off workers; and, (c) backward and forward linkages. Local amenities and public goods can themselves be relevant agglomeration forces.

An important study by **Moonis Raza, Habib and Kundu**[9] gave an historical explanation to the present pattern of urban growth i.e. concentration in metropolitan, particularly port cities, due to their colonial legacy.

The Handbook of Urbanisation[10] **by Sivaramakrishnan et al** analyses trends in urbanization using the most recent census data. The study discusses trends, patterns, growth, and the socioeconomic characteristics of urbanization as well as the availability of infrastructure, the migration trends, and employment opportunities. Two important developments in urban policies incorporated into this edition are recent data on migration by Census of India and the launch of the Jawaharlal Nehru National Urban Renewal Mission.

Analysing the size class distribution of urban population and their growth rates over the decades and the interstate variation in the levels and growth in urban population, **Kundu** found that the recent trend is a sharp departure from the past. A dualism in urbanization is emerging. The process of urbanization has become exclusionary in nature.[11]

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[8] Marshall, A. (1920), *Principles of Economics*, 8th edn. Macmillan, London.

[9] Raza,M.,et al. (1977), *Spatial Organisation and Urbanisation in India-A Case Study of Underdevelopment*, Centre for the Study of Regional Development, Jawaharlal Nehru University, New Delhi.

[10] Sivaramakishnan, K.C et al, (2005), '*The Handbook of Urbanisation*', Oxford University Press, New Delhi.

[11] Kundu, A. (2006), *'Trends and Patterns of Urbanisation and Their Economic Implications', Indian Infrastructure Report.*

1.4.2 URBAN WORKFORCE

The pattern of concentration of economic activity and its evolution have been found to be important determinants, and in some cases, the result of urbanization as well as of the structure of cities, the organization of economic activity and national economic growth. The size distribution of cities in a country reflects the pattern of urbanization. The level and nature of urbanization and urban growth is in turn closely linked to the national economic growth and the phase through which the national economy is passing.

Rakesh Mohan in his study[12] explained the regional differences in urbanization as well as size distribution of cities in India by linking various theories related to urbanisation. He found that the close relationship between the urbanization and economic development linked with economic base theory and central place theory explains well the regional pattern of urbanization in India. Manufacturing employment is found to be a key determinant of population of large cities while employment in agriculture largely generates the demand for urban population in small towns. Thus the growth of small and medium sized towns is likely to be brought about by agricultural growth in backward regions rather than through industrial dispersal, on the other hand, the policy on industrial dispersal is likely to succeed if there is a concentration of dispersal in large cities rather than dispersal to small towns.

Markandeya in his study on Rayalseema[13] also came to the conclusion that increase in size of towns leads to an increase in the employment in non household industry, trade and commerce and other services. The **'New Economic Geography'** literature has emphasized how an economy can become 'differentiated' into an industrialized core (urban sector) and an agricultural 'periphery'[14]. That is, urban concentration is beneficial because the population benefits from the greater variety of goods produced (forward linkages) and may be sustained because a larger population in turn generates greater demand for those goods (backward linkages). This process exploits the increasing returns to scale that

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[12] Mohan, R. (1984), *The Economic Determinants of Urbanisation: The Regional Pattern of Urbanisation in India Explained*, Development Research Department. World Bank, Washington D.C.

[13] Markendeay, K. (1990), 'Spatio-Temporal Urbanisation, *Rawat Publication*. Jaipur, P. 83-121.

[14] Krugman, P. (1991). 'Increasing returns and economic geography' *Journal of Political Economy*, Vol. 99, 483–99.

characterize goods production but does not always lead to concentration of economic activity.
In a case study of Mexico City, **Krugman** argued that the rise of giant metropolises in developing countries after World War II may have been due in large part to the rise of import substituting industrialization policies. Correspondingly, the shift away from such policies may well limit the future growth of huge Third World cities.[15] **Begovic**[16] in a case study of Yugoslavia gave a theoretical explanation for industrial diversification and city size relationship.

Hughes[17], based on his city level study, concluded that traditional monocentric specifications of metropolitan cities no longer describe the distribution of population and economic activity in many metropolitan areas and much of the deviation is attributed to the changes in the sub-urban ring. In a case study of New York City, **Godfrey**[18] showed the evolution of New York City from monocentric to polycentric metropolis through demographic and employment shift from city to its metropolitan area.

A study by **Ramakrishna** [19]showed a positive association between urbanization and economic growth. It also concluded that cities with larger population size have higher growth rates of population compared to small and medium tows with regional variations in economic growth. It is also evident that the old hierarchy of four megacities in India located in different regions of the country is replaced by urban corridors and clusters of new investment. These cores are geographically confined to the Ahmedabad-Pune urban corridor, the southern urban triangle of Bangalore- Chennai Coimbatore, the northern region centered on the Delhi capital region and nearby areas in Rajasthan and Punjab, and new hubs of growth in the south such as Hyderabad, Vishakhapatnam and Kochi. The remaining metropolises and the regions surrounding them have been virtually bypassed by the new growth that

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[15] Elizondo,R.L. and Krugman (1992), ' Trade Policy and Third World Metropolis', Working Paper No. 4238, *National Bureau of Economic Research*, 1050 Massachussetts Avenue Cambridge, MA 02138, pp.

[16] Begovic, E (1992), 'Industrial Diversification and City Size: The Case of Yugoslavia, *Urban Studies*, Vol. 29, No. 1, pp. 77-88.

[17] Hughes, H.L. (1993). 'Metropolitan Structure and the Suburban Hierarchy, *American Sociological Review*, Vol. 58, No. 3, pp. 417-433.

[18] Godfrey, B J. (1995), Restructuring and Decentralization in a World City, Geographical Review, Vol. 85, No. 4, pp. 436-457.

[19] Ramakrishna, G (1999), 'Urbanisation and economic growth in India', in Rao, R.R.M and Simhadri, S. (ed): 'Indian Cities: Towards next Millennium, Rawat Publications, Jaipur.

has followed the liberalisation of the Indian economy[20].

There have been limited studies in India focusing on spatial dimension of growth and development. Studies by **Chakravorty**[21] deserve special mention in this context, which shows the emergence of India's new economic geography in post reform period- wherein the nonmetropolitan and coastal districts that are in reasonably close proximity to metropolitan areas are leading in terms of public as well as private investment where as share of investment has declined in existing metropolitan districts. Another finding is that metropolitan investment is located outside the original city area in sub-urban or peri-urban districts. He concluded that attractiveness of metropolitan regions as a whole is lower in the post-reform period than in the pre-reform period and it is initial evidence in support of Krugman's thesis that liberalization breaks the monopoly power of metropolitan centers. Only two of the top ten districts from the pre-reform period have managed to remain in the top ten in the post-reform period.[22] As urban centers fill up, firms relocate to the periphery of these centers or to other large cities[23]

In order to be able to understand these issues better, **Jesim Pais**[24], in his study has examined changes in patterns of industrial employment in urban India and concluded that the casual employment has declined in manufacturing industry accompanied by increase in the incidence of casual labour in construction and agriculture.

A study by **Mitra**[25] on female employment found an increase in the regular but subsidiary activities of urban women workers along with rising open unemployment rates and deteriorating work conditions in terms of lower wages and lack of non-wage remuneration. Feminization tendencies have developed mainly for the work at the lower end of the value chain which involves low paid, inferior working

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[20] Shaw, A.,(1999), Emerging Patterns of Urban Growth in India, *Economic Geography*

[21] Chakravorty, S., (2000), 'How Does Structural Reform Affect Regional Development? Resolving Contradictory Theory with Evidence from India', *Economic Geography*, Vol. 76, No. 4, pp. 367-394

[22] Chakravorty, S. (2003), 'Industrial Location in Post Reform India: Patterns of Inter regional Divergence and Intra-regional Convergence', *Journal of Development Studies*, Vol. 40, No. 2, pp. 120-152

[23] Deichmann et al. (2008), 'Industrial Location in Developing Countries', The world Bank Research Observer, Vol. 23, No. 2. pp. 219-246

[24] Pais, J. (2002), 'Casualisation of Urban Labour Force Analysis of Recent Trends in Manufacturing, Economic and Political Weekly, Vol. 37, No. 07, pp. 631-652

[25] Mitra, S. (2006), 'Patterns of Female Employment in Urban India Analysis of NSS Data (1983 to 1999-2000)', *Economic and Political Weekly*

conditions.

Ramaswami[26] in his study examined some aspects of regional employment growth and employment structure in India between 1983 to 2004-05 this results confirm that urban employment growth occurs in initially urbanized states implying that benefits of growth in terms of employment have largely gone to urbanised states in the years since liberalisation.

Another study by **Unni and Raveendran**[27] showed that employment has grown in urban areas over the past decade, but there has been a substantial increase in self-employment, much of which is poorly remunerated along with erosion of formal jobs and increase of informal and part time jobs. **Joshi** in her study showed that the primary and tertiary sectors witnessed deceleration in growth rates of employment during the post liberalisation period (1994-2000). The declining growth rate of the latter was mainly due to the sharp deceleration in employment growth in community, social and personal services in the post –liberalisation period. A well-known feature of the Indian employment scene after globalisation and liberalisation is the domination of the unorganized sector with irregular and insecure jobs, low productivity and earnings and no social protection.[28]

1.4.3 EMPLOYMENT DIVERSITY

Begovic[29], in his study on major cities of Yugoslavia, concluded that growth of cities leads to an increase in net urbanization economies, implying that the mix of sectors in a local economy somehow reflects on the size of relevant economy. An increase in net urbanization economies leads to diversification. He concluded that as a city grows in size its economy becomes more mixed.

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[26](2007) Ramasvami, K.V., Regional Dimension of Growth and Employment, *Economic and Political Weekly,* Vol. 42, No. 49, pp. 47-46

[27] Unni and Raveendran (2007), 'Growth of Employment: Illusion of Inclusiveness?', *Economic and Political Weekly,* Vol. 42, No. 03, pp. 196-199

[28] Awasthi, D et al., (2009),Changing Sectoral Profile of Urban Economy and Implications for Urban Poverty', *India: Urban Poverty Report*

[29] Begovic, B. (1992), 'Industrial Diversification and City Size: The Case of Yugoslavia', *Urban Studies,* Vol. 29, No. 1, p. 77-88.

Octania and Diddee[30] in their study concluded that as a result of natural increase in population, medium towns attract additional services and some administrative status, which provides a temporary boost to their growth. The service sector remains stagnant. Consequently these towns rarely show any diversification/development in their economic base. In other words they get 'population' but not developers. The diversity with development does not take place because of weak secondary sector and its lack of integration with the tertiary sector. The tertiary sector appeared consistent in all classes of towns but it is not well integrated with the secondary sector which has yet to be firmly rooted in the economic base.

Donoghue[31] on the other hand, concluded that growth accompanies specialization. Applying Gini coefficient to observe the change, he concluded that in British urban system there was an inverse relation between diversification of employment and growth. **De**[32] in his study used several methods like Herfindahl index, Ogive index, Entropy index and modified Entropy index to find out the level of diversification in cropping pattern in West Bengal. The different indices as obtained are visualized in terms of their growth rate over two different time periods.

In a district level study on Punjab **Neena**[33] found that industrially developed districts are not only specialized in few industries but also have a larger proportion of employment in diversified native industries. Such districts specialize in more than one industry and hence have relatively diversified industrial structure. **Boiteux-Orain,** investigating the spatial distribution of employment in a region, highlighted the process of suburbanization of employment. A study by **Ramaswami**[34] concluded that all states in India are found to be diversifying in terms of employment, but at a slower pace in low income states. A geographic concentration of skilled labour is observed in financial and business services.

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[30] Octania, S. and Diddee (1997), 'Functional base of medium towns: the material experience' in Jaymala, D. (ed.): *Indian Medium Towns: An Appraisal of their role as growth centres*, Rawat Publication, Jaipur, pp. (244-245).

[31] Donoghue D.O' (1999), ' The Relationship between Diversification and Growth: Some Evidence from the British Urban System 1978 to 1991', *International Journal of Urban and Regional Research*, Vol. 23, No. 3, p. 549-566.

[32] De U.K. (2000), 'Diversification of Crop in West Bengal: A Spatio-Temporal Analysis', *Artha Vijnana*, Vol. 52, No.2, pp. 170-182.

[33] Neena (1996), Trends in Inter-District Industrial Diversification in Punjab', *Indian Journal of Regional Science*, Vol. 28, No. 2, pp. 69-80.

[34] (2007) Ramasvami, KV., Regional Dimension of Growth and Employment, *Economic and Political Weekly*

1.5 DATA SOURCES AND METHODOLOGY

1.5.1 DATA BASE

The study is based on secondary data from the sources given below:

A. Census of India:

a) Town Directory, Census of India 1991

b) A Series, Census of India 2001.

c) Town Primary Census Abstract, Census of India 1991.

d) B Series, Census of India 2001.

B. National Sample Survey:

a) Employment and Unemployment Situation in Cities and Towns, Report No. 441 NSS Fiftieth Round, National Sample Survey Organization, 1993-1994.

b) Employment and Unemployment Situation in Cities and Towns, Report No. 462(55/10/4) NSS 55th Round, National Sample Survey Organization, 1999-2000.

c) Employment and Unemployment Situation in Cities and Towns, Report No. 520 (61/10/6) NSS 61st Round, National Sample Survey Organization 2004-2005.

1.5.2 METHODOLOGY

Annual Exponential growth rates have been calculated to show the growth of population and employment in class I cities. For this purpose only common cities between 1991 and 2001 are considered.

To examine the workforce structure across size class or states, percentage share of workers has been calculated for each industrial division. Since industrial classification in 1991 (NIC-87) and 2001 (NIC-98) is based on different NIC classifications. The first level of classification in NIC-1998 is Divisions in Tabulation Categories in place of 'Sections' in NIC-1987 used in 1991 These broad categories used

for presenting data for 2001 and comparable categories of 1991 along with NIC groupings are given below.

COMPARATIVE NIC TABULATION CATEGORIES OF 1991-2001

1991		2001	
Sections of NIC 87	Activities	Tabulation Category Of NIC 98	Activities
0	Agriculture, Hunting, Forestry and Fishing	A B	Agriculture, Hunting and Forestry Fishing
1	Mining and Quarrying	C	Mining and Quarrying
2&3	Manufacturing (Include Repair Services Codes 970, 971, 972, 973, 974, 975 & 979)	D	Manufacturing
4	Electricity, Gas and Water	E	Electricity, Gas and Water supply
5	Construction	F	Construction
6	Wholesale and Retail Trade and Restaurants and Hotels	G H	Wholesale and Retail Trade, Repair of Motor Vehicles, Motor Cycles and Personal and Household Goods (Repair Services transferred from section 2&3 of 1991 to G of 2001) Hotels and Restaurants
7	Transport, Storage and Communication	I	Transport, Storage and Communications
8	Financing, Insurance, Real Estate and Business Services (Include Scientific and Research Services Code 922)	J K	Financial Intermediation Real Estate, Renting and Business Activities *(Scientific and Research Services transferred from 9 of 1991 to K of 2001)*
9	Community, Social and Personal Services (Exclude & Scientific and research services code 922)	L M N O P Q	Public Administration and Defence, Compulsory Social Security Education Health and Social Work Other Community, Social and Personal Activities Private Households with Employed Persons Extra-Territorial Organizations and Bodies

From the above tabulation, the industrial classification of workers (NIC-98) obtained is given below:

I: Cultivators

II: Agricultural Labourers

III: Mining and Quarrying

IV: Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities

Va: Manufacturing Processing, Servicing and repairs in Household industries

Vb: Manufacturing Processing, Servicing and repairs in other than Household industries

VI: Construction

VII: Trade and Commerce

VIII: Transport Storage and Communication

IX Other Services

Herfindhal-Hirschman index has been used to examine the industrial concentration of employment using nine fold industrial classification as per National Industrial Classification (NIC 1987). The index is estimated for class I cities within and outside UAs according to their size class as well as at state level for year 1991 and 2001. The HH index is defined as sum of the squares of employment shares (percentage) in each state or size class of cities.

$$H = \sum_{i=1}^{N} s_i^2$$

Where s, is the share of ith industrial division in total workers and N is the number of industrial divisions. The Herfindahl Index (H) ranges from $1/N$ to one, where N is the number of industrial divisions. Equivalently, if percents are used as whole numbers, the index can range up to 100^2, or 10,000.

Grossack's index of industrial concentration has been used to analyze the spatial concentration of employment. It is a dynamic measure of structural (concentration, diversity) change which can determine whether dominant states in specialization increased their specialization relative to their former positions. The proposed scheme entails regressing a given observation of a terminal period on the initial period.

For this purpose, we let xi = the average for years 1991 and 2001, denoted as Period I: the initial value of E for state i, i = each of the 15 major states of India, and yi = the terminal E value for state i, year 2000, denoted as Period II. Then the covariance formula, obtained from regressing yi on xi,

$$b = \sum xi\, yi / \sum xi^2 \qquad (4)$$

where xi and yi are deviations from their respective means, provides a way of measuring dynamic changes in diversity. Grossack shows that an alternative way to express "b" of equation (4) is

$$b = 1 + \sum Wi\,[(yi - xi)/xi] \qquad (5)$$

where $Wi = xi / \sum xi^2$

Equation (5) shows that "b" differs from one in an amount and direction which is a function of a weighted average, Wi, of the relative changes between two periods. Note that greater weight is given to the states that are farther away from the mean in the initial year. When looked at in terms of the concepts of divergence and convergence, $b > 1.0$ implies divergence among the states. In other words, some states diverge further between the two periods. Broadly, this scheme resembles regression to the mean. However, in this research the relationship between the two periods is assumed to be bi-variate with a conditional expectation expressed as a linear function estimated as

$y = a + bx$

In order to show the spatial variation and for visual interpretation the information has been plotted on choropleth maps using Arc Map software.

1.5.3 DATA LIMITATIONS

This study intended to compare the industrial structure of workers during 1991 and 2001 using nine-fold National Industrial Classification (NIC-1987) of workers for main and marginal workers separately. Due to unavailability of industrial classification of marginal workers for class I cities in 1991 Census, the comparison of industrial distribution of workers has been done only for main workers between 1991 and 2001. Besides, the industrial distribution of total and marginal workers is analyzed for 2001.

1.5.4 AREA OF STUDY

The study has been conducted at three levels;

Level I: at all India level taking the 15 major states as unit of analysis[35];

Level II: taking the three size classes of class I cities as the unit of analysis; and

Level III: metropolitan level taking cities with million plus population.

1.6 CONCEPTS AND DEFINITIONS

1.6.1 Urban Agglomeration: As per Census of India, Urban agglomeration is a continuous urban spread constituting a town and its adjoining urban outgrowths (OGs), or two or more physical contiguous towns together and any adjoining urban outgrowths of such towns. Examples of Outgrowth are railway colonies, university campuses, port area, military camps etc. that may have come up near a statutory town or city but within the revenue limits of a village or villages contiguous to the town or city. For Census of India, 2001, it was decided that the core town or at least one of the constituent towns of an urban agglomeration should necessarily be a statutory town and the total population of all the constituents should not be less than 20,000 (as per 1991 Census). With these two basic criteria having been met, the following are the possible different situations in which urban agglomerations could be constituted.

i) A city or town with one or more contiguous outgrowths;

ii) Two or more adjoining towns with or without their outgrowths;

iii) A city and one or more adjoining towns with their outgrowths all of which form a continuous spread.

For the purpose of comparison core and periphery are defined as follows:

Core: The main city within an urban agglomeration

Periphery: The urban areas around the main city within an urban agglomeration.

1.6.2 Categories of Workers

A. **Main worker:** [36]According to Census of India, main worker is the one who had participated in any economically productive activity for a period of more than six months, at any time during the reference period of preceding one year.

B. **Marginal worker**[37]**:** According to Census of India, a person who had worked for less than six months during the reference period was defined as 'Marginal worker'.

[36] B Series, Introduction ,Census of India2001, p. 1

Following Concepts have been taken from National Sample Survey

C. Workers (or employed):[38] Persons who were engaged in any economic activity or who, despite their attachment to economic activity, abstained from work for reason of illness, injury or other physical disability, bad weather, festivals, social or religious functions or other contingencies necessitating temporary absence from work, constituted workers. Unpaid helpers who assisted in the operation of an economic activity in the household farm or non-farm activities were also considered as workers. Workers were further categorized as self-employed, regular wage/ salaried employee, and casual wage labour.

a) **Self-employed**[39]: Persons who operated their own farm or non-farm enterprises or were engaged independently in a profession or trade on own-account or with one or a few partners were deemed to be self-employed in household enterprises. The essential feature of the self-employed is that they have autonomy (i.e., how, where and when to produce) and economic independence (i.e., market, scale of operation and money) for carrying out their operation. The remuneration of the self-employed consists of a non-separable combination of two parts: a reward for their labour and profit of their enterprise. The combined remuneration is given by the revenue from sale of output produced by self-employed persons minus the cost of purchased inputs in production. Categories of self-employed persons: Self-employed persons were categorised as follows:

(i) **Own-account workers**[40]: those self-employed persons who operated their enterprises on their own account or with one or a few partners and who, during the reference period, by and large, ran their enterprise without hiring any labour. They could, however, have had unpaid helpers to

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[37] Ibid

[38] Employment and Unemployment Situation in Cities and Towns, Report No. 520 (61/10/6) NSS 61st Round, National Sample Survey Organization 2004-2005, pp. 10.

[39] Ibid. pp. 10

[40] Employment and Unemployment Situation in Cities and Towns, Report No. 520 (61/10/6) NSS 61st Round, National Sample Survey Organization 2004-2005, pp. 10.

assist them in the activity of the enterprise;

(ii) **Employers**[41]: those self-employed persons who worked on their own account or with one or a few partners and, who, by and large, ran their enterprise by hiring labour; and

(iii)**Helpers in household enterprise**[42]: those self-employed persons (mostly family members) who were engaged in their household enterprises, working full or part time and did not receive any regular salary or wages in return for the work performed. They did not run the household enterprise on their own but assisted the related person living in the same household in running the household enterprise.

b) **Regular wage/ salaried employee**[43]: These were persons who worked in others' farm or non-farm enterprises (both household and non-household) and, in return, received salary or wages on a regular basis (i.e. not on the basis of daily or periodic renewal of work contract). This category included not only persons getting time wage but also persons receiving piece wage or salary and paid apprentices, both full time and part-time.

c) **Casual wage labour**[44]: A person, who was casually engaged in others' farm or non-farm enterprises (both household and non-household) and, in return, received wages according to the terms of the daily or periodic work contract, was a casual wage labour.

D. Usual activity status considering principal and subsidiary status taken together[45]: The usual status, determined on the basis of the usual principal activity and usual subsidiary economic activity of a person taken together, is considered as the usual activity status of the person and is written as usual status (ps+ss). According to the usual status (ps+ss), workers are those who perform some work activity either in the principal status or in the subsidiary status. Thus, a person who is not a worker in the usual principal status is considered as worker

[41] Ibid. pp. 11

[42] Ibid. pp. 11

[43] Ibid. pp. 11

[44] Ibid. pp. 11

[45] Ibid. pp. 11

according to the usual status (ps+ss), if the person pursues some subsidiary economic activity for 30 days or more during 365 days preceding the date of survey.

1.7 CHAPTERISATION

Following the present introductory chapter, the second chapter focuses on two aspects. Firstly, the analysis of size class and state level distribution of urban agglomerations and class I cities under three categories: a) common class I cities between 1991 and 2001 b) cities which are demoted from class I status in 2001 c) cities which have achieved class I status in 2001. Secondly, the size class wise and state level analysis of demographic growth of common urban agglomerations and class I cities between 1991 and 2001. The third chapter analyses some important characteristics of workforce like workforce participation rates, share of main and marginal workers for total, males and females separately and share of males and females in total workers. This analysis has been done for above mentioned three types of cities according to size class and state level. The fourth chapter examines the workforce structure of the same three types of class I cities during 1991 and 2001 according to size class and state level. Due to unavailability of data on industrial classification for marginal workers in 1991 Census, the comparison between 1991 and 2001 has been possible only for main workers. Therefore workforce structure of marginal workers has been analyzed separately for 2001. The fifth chapter focuses on the core and peripheral growth and process of concentration/decentralization within the urban agglomerations of cities with million and above population as well as economic structure of these cities in post reform period. It further examines the spatial and sectoral concentration of workforce in above mentioned three types of cities according to their location within and outside urban agglomerations. The sixth i.e. the last chapter summarizes the conclusions of all the chapters.

CHAPTER 2

TRENDS OF URBAN GROWTH

Chapter 2

TRENDS OF URBAN GROWTH

This chapter analyses the trends and patterns of urbanization in India, by taking into consideration the size class and the location of towns inside and outside the Urban Agglomeration with special reference to class I cities. An attempt has also been made to look into the levels as well as growth of urban population across the states, size class of towns and class I cities inside and outside the Urban Agglomerations. The study has taken two Censuses (1991 and 2001) into consideration. However data from Census of 1981 is also incorporated wherever necessary.

With the increasing integration of Indian Economy with Global system, the structure of urbanization and urban growth has shown some interesting features during last few decades. The urban population of India doubled between 1901 and 1947 and has further increased six fold since independence to 2001.

Although the basic structure inherited from the colonial regime has dominated and dictated the processes and growth pattern since independence, planned interventions by the central and state government policies have led to some significant departures from trends witnessed in the past.[1] But the success of these policies had limited impact as there are number of urban growth nuclei and corridors along with the emergence of a number of new towns. The adaption of new economic policy in early 1990s has had an additional impact on the pattern and process of urban growth. Moreover, the last decade is also significant from the point of view of urbanization as the 74th Constitutional Amendment was adopted to empower the urban local bodies by placing the responsibility for managing the cities and towns principally on institutions of local self Government.

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[1] Sivaramakrishnan, Kundu and Singh, 2005

2.1 SIZE CLASS DISTRIBUTION AND GROWTH OF URBAN POPULATION

2.1.1 TOWNS AND CITIES:

Let us look at the size class distribution of towns in 1991 and 2001 (Table 2.1.1a)

Table: 2.1.1a

Distribution of Towns According to Size Class (1991and 2001)

Class of Town	Number of Towns 1991	Number of Towns 2001	% Increase and Decrease in Number of Towns 1991-2001
All Classes	4,615	5,161	11.83
Total Class-I	322	441	36.96
(a)	18	31	72.22
(b)	32	40	25
(c)	272	370	36.03
Class-II	421	496	17.81
Class-III	1,161	1,387	19.47
Class-IV	1,451	1,564	7.79
Class-V	971	1,042	7.31
Class-VI	289	231	-20.07

Source: Census of India for year 2001

The total number of towns in the country has gone up from 4615 to 5161 between 1991 and 2001 (Table: 2.1.1). The larger size classes of towns have recorded higher growth in their number compared to smaller size classes, in addition the number of towns in class VI have declined from 289 in 1991 to 231 in 2001. The highest increase is registered by class III towns with an addition of 226 towns in this class in 2001. This is followed by class I cities and class II towns which have increased from 322 to 441 and 421 to 496 during this period. Within class I cities, the cities which have million plus population have increased from 18 to 31 ,while the number of class Ib and class Ic cities has increased by 8 and 98 respectively. On the other hand, class IV and class V towns have increased by 113 and 71 in their number while the number of class VI towns has declined by 58 during the same period. However, the number of urban centers has gone up from1991 basically due to the increase in statutory towns (+802) despite a decline in the number of census towns (-330) in 2001. Therefore increase in the total number of towns is only 472 in

2001.[2] The graduation of number of urban centers from lower population size categories to class I cities has resulted in top heavy structure of urban population of India. However, beside these official figures, for the first time in the Census history of India, the number of "villages" having more than 10,000 inhabitants surpassed the number of official "towns" and "urban areas" having more than 10,000 inhabitants. If these villages were included in urban category of statistics the urban rate of India would be significantly higher.[3] At the moment, India is among the countries of low level of urbanization. As per 2001 census, only 28% of population was living in urban areas. The process of urbanization in India is large city oriented as there has been continuous concentration of population in class I cities throughout all the decades in last century. According to 1991 census 56.68% of the countries urban population lived in class I cities which increased to 62.29% in 2001.

Table-2.1.1b

Distribution of Urban Population According to Size Class (1991and 2001)

	Share of Urban Population (in %)		% Increase or Decrease in Population of Class
Class of Town	**1991**	**2001**	**1991-2001**
All Classes	100	100	32.6
Total Class-I	56.68	62.29	45.74
(a)	23	27.31	57.41
(b)	10.25	10.12	30.98
(c)	23.42	24.86	40.73
Class-II	13.33	12.04	19.77
Class-III	16.35	14.72	19.41
Class-IV	9.77	7.9	7.28
Class-V	3.43	2.76	6.73
Class-VI	0.45	0.29	-15.53

Source: Calculated using data from Census of India for year 2001

[2] See K.C. Sivaramakrishnan, et al, 2005.

[3] K.M. Gnanouand Ebrad, 2007.

While looking at the proportion of urban population in different size class of towns, similar trend has been observed in Table- 2.1.1b where class I cities dominate India's urban scene in terms of their share of urban population compared to other size classes of towns. The percentage of population living in class I cities has gone up from 56.68 percent in 1991 to 62.29 percent in 2001.Whereas other size classes have shown decline in their share of urban population during the same period. However, the share of class IV and V towns has been declining during last century. The combine share of these two categories of towns has gone down from 41 per cent to 9.2 per cent during 1901 to 2001.[4] The massive increase in the share of class I cities is often attributed to the faster growth of large cities. Within class I cities also, the share of class Ia (million plus cities) has shown much higher decadal growth rate compared to class Ib and Ic viz. 57.41, 30.98 and 40.73 percent respectively. The basic reason for increasing dominance of these cities is a graduation of lower order towns into class I category. The pattern of growth has remained similar over time although there is a general deceleration in urban growth in all size categories in the past two decades. Class I cities have maintained an edge over class II, III, IV and class V towns in terms of the growth rate (of common towns). The gap, however, seems to have widened during 1991-01. (Kundu, 2006, Indian Infrastructure Report). The decadal growth of class II, II, IV, V and VI was 19.77, 19.41, 7.28, 6.73 and -15.53 percent respectively between 1991 and 2001. Here the negative growth of class VI towns is not because they are experiencing depopulation but because many of them have moved into higher size classes.

2.1.2 URBAN AGGLOMERATIONS

The phenomenon of agglomerations in urbanization is one of the most pronounced realities of the present. An Urban Agglomeration forms a continuous urban spread and normally consists of a town and its adjoining urban outgrowths (OGs), or two or more physically contiguous towns together with contiguous well recognized outgrowths, if any, or such towns. Table-2.1.2a presents distribution of UAs in 1991 and 2001 according to size class. It may be observed that the number of UAs has increased only by 15 from 369 in 1991 to 384 in 2001. Understandably, large number of UAs are concentrated in class I category which is 176 and 240 for 1991 and

[4] Sivaramakrishnan, et al 2005.

2001 respectively. Within class I category, class Ia UAs with million plus population have increased by 11 from 21 to 32 and class Ib have increased by 4 from 24 to 28, class Ic has shown highest increase in its number of UAs. Whereas class II, IV and V UAs have declined in their number by 4, 42 and 4 respectively during the same period and class III has increased only by 1.

Table-2.1.2a

Distribution of Urban Agglomerations and their Population According to Size Class (1991 To 2001)

Class of U.A.	Number of U.A. 1991	Number of U.A. 2001	Share of Urban Population 1991	Share of Urban Population 2001
All Classes	369	384	57.01	58.47
Total Class-I	176	240	52.83	55.62
(a)	21	32	31.93	36.13
(b)	24	28	8.11	6.98
(c)	131	180	12.79	12.5
Class-II	84	80	2.93	2.07
Class-III	62	63	0.92	0.77
Class-IV	43	1	0.31	0.01
Class-V	4	0	0.01	0
Class-VI	0	0	0	0

Source: Calculated using data from Census of India for year 1991 and 2001

Table-2.1.2b

Decadal Growth of Urban Agglomerations

Size Class	% Change in Population 1991-2001
Class I	39.24
Class I (a)	49.67
Class I (b)	13.84
Class I (c)	29.31
Class II	-6.40
Class III	10.25
Class IV	-97.74
Class V	-100.00
Class VI	0*
Total	**35.64**

Source: Calculated using data from Census 1991 and 2001

In terms of percentage share 92.67% UAs were in class I category in 1991 whereas their percentage share for 2001 was 95.13%. On the other hand, in other size classes, the percentage share of UAs has gone down. The figures for class II UAs were 5.14 and 3.55 for 1991 and 2001 respectively. The corresponding figures for class III were 1.62 and 1.31 and for class IV these were 0.55 and 0.01 percent. Class V had only 0.03 % UAs in 1991 whereas in 2001 there was no UA in this category and class VI did not have any UA at both points of time.

While looking at the decadal growth in Table- 2.1.2b it is observed that total population of UAs has witnessed 35.64% growth during 1991 and 2001. The highest growth was recorded by class I UAs i.e. 39.24%, particularly by class Ia (49.67%), followed by class Ic (29.31%). Besides class I category, only class III UAs have recorded positive growth i.e. 10.25 % whereas class II, class IV and V has shown negative growth in their population. Table-2.1.2c presents number of UAs in different size class categories including declassified and newly added ones.

Table-2.1.2c

Distribution of Urban Agglomerations According to Size Class and Status

	Number of Urban Agglomerations			
Size Class	**1991**	**2001**	**Declassified**	**Newly Formed**
Class I	176	240	19	56
Class I (a)	21	32	1	2
Class I (b)	24	28	3	8
Class I (c)	131	177	15	46
Class II	84	80	17	30
Class III	62	63	19	30
Class IV	43	1	43	1
Class V	4	0	4	0
Class VI	0	0	0	0
Total	**369**	**384**	**102**	**117**

Source: Calculated using data from Census 1991 and 2001

It is observed that the total number of UAs between 1991 and 2001 has increased only by 15 (from 369 in 1991 and 384 in 2001). The reason for the addition of only few UAs is that despite the addition of 117 new UAs, 102 already existing UAs were derecognized as UAs. Since it was a matter of concern that several agglomerations in the 1991 Census did not have a statutory town as a constituent other than the core town, therefore Census office added few conditions for giving

UA status to a group of contiguous cities/ towns, to make the identification of UAs less informal and more stringent in 2001 Census.[5] These are (a) the core town or at least one of the units in the group must be a statutory town and (b) the total population of all the constituent units, that is, towns and outgrowths of a UA should not be less than 20,000 (as per 1991 census). Indeed, this has resulted in a very small increase in their number as also de-recognition of several units as UAs in 2001.

Table-2.1.2d

Change in the Size Class Distribution of Urban Agglomerations

	Number of Urban Agglomerations		
Size Class	**1991**	**2001**	**Change in Number**
Class I	157	184	27
Class I (a)	20	30	10
Class I (b)	21	20	-1
Class I (c)	116	134	18
Class II	63	49	-14
Class III	43	33	-10
Class IV	0	0	0
Class V	0	0	0
Class VI	0	0	0
Total	**266**	**266**	**0**

Source: Calculated using data from Census 1991 and 2001

Note: Only common UAs between 1991 and 2001 are used by considering their size class distribution in the base year.

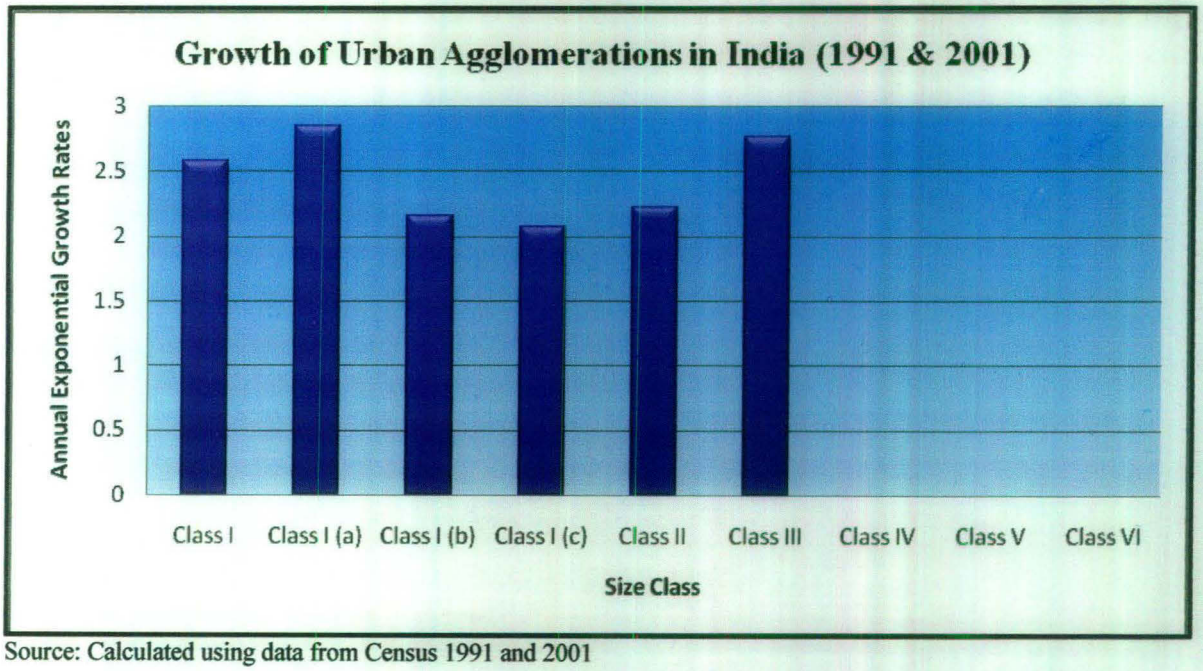
The effect of these stringent criteria is clearly visible from the fact that all size classes have lost some already existing UAs with highest number of derecognized UAs i.e. 43 in class IV category, followed by class III (19), class I (19), and class II (17) and V (4). Within class I UAs, maximum number of UAs were derecognized in class Ic (15), followed by class Ib (3) and class Ia (1). Here Jaipur was the only class Ia UA which was de-recognized as UA due to merger of its adjoining into municipal area of this city.

Table-2.1.2d shows the change in the size class distribution of UAs in India, considering only common UAs between 1991 and 2001 census. There were 266 common UAs which existed at

[5] Sivaramakrishnan, et al, 2005.

both points of time and a clear upward shift of UAs between different size classes may be observed in this table. Herein, number of class I UAs have increased by 27 from 157 in 1991 to 184 in 2001. Within this category, UAs with million plus population have increased by 10 (from 20 to 30) whereas UAs in class Ib has gone down by 1 and UAs in class Ic have increased by 18 (from 116 to 134). On the other hand class III and IV both have observed a decline in their number of UAs from 63 to 49 and 43 to 33 respectively. Decadal growth rate and annual exponential growth rate of common UAs between 1991 and 2001 are given in figure 2.1.2a. The highest annual exponential growth rate i.e. 2.85% is experienced by largest UAs which have million plus population, followed by class III UAs (2.77%) and class II UAs (2.23%). Within class I category Ib and Ic UAs have recorded 2.16% and 2.08% growth rate respectively.

Figure: 2.1.2a



Source: Calculated using data from Census 1991 and 2001

Note: (a) The growth rates for UAs in different size categories have been computed for common UAs between 1991 and 2001 by considering their size class distribution in the base year.

(b) There was no UA in size class IV, V and VI.

2.2 REGIONAL DISTRIBUTION OF URBAN AGGLOMERATIONS

To understand the dynamics of urban development in a large country like India, it is important to examine the level and pace of urbanization across the states. There is a significant regional variation in the distribution of urban population. For instance, about half of the country's urban

Table-2.2.1

Share of Urban Population in Urban Agglomerations and Growth (1991-2001)

	1991		2001		1991-2001	
STATE	Level of Urbanization	% of Urban Population in UAs	Level of Urbanization	% of Urban Population in UAs	Annual Exponential Growth Rate of Urban Population	Annual Exponential Growth Rate of Population within UAs
Andhra Pradesh	26.89	50.39	27.08	68.85	1.37	4.49
Assam	11.10	15.48	12.72	52.29	3.09	15.26
Bihar	13.14	53.66	13.36	21.85	2.56	-6.42
Delhi	89.93	99.38	93.01	99.78	4.14	4.18
Goa	41.01	51.77	49.77	44.55	3.32	1.82
Gujarat	34.49	75.67	37.35	78.39	2.83	3.18
Haryana	24.63	22.83	29.00	38.39	4.11	9.30
Himachal Pradesh	8.69	26.48	9.79	24.30	2.81	1.95
Jammu & Kashmir	NA	NA	24.88	77.73	0*	0*
Karnataka	30.92	56.87	33.98	53.64	2.53	1.95
Kerala	26.39	68.35	25.97	71.71	0.74	1.22
Madhya Pradesh	23.18	48.66	24.98	42.36	2.79	1.41
Maharashtra	38.69	69.74	42.40	66.36	2.95	2.45
Manipur	27.52	40.11	23.88	43.12	1.21	1.93
Meghalaya	18.60	67.68	19.63	59.19	3.16	1.82
Orissa	13.38	31.46	14.97	43.06	2.61	5.75
Punjab	29.55	16.46	33.95	38.08	3.19	11.58
Rajasthan	22.88	26.82	23.38	30.63	2.71	4.04
Tamil Nadu	34.15	65.46	43.86	53.33	3.56	1.51
Uttar Pradesh	19.84	43.72	21.02	38.46	2.84	1.56
West Bengal	27.48	77.64	28.03	74.61	1.84	1.44
India	25.73	57.01	27.78	58.47	2.80	3.05

Source: Calculated from Census of 1991 and 2001
Note: (a) State boundaries are considered according to 1991 Census
(b) NA: Not Available
(c.) 0*: 1991 Census was not conducted in Jammu and Kashmir

population is concentrated in the six most urbanized states namely Maharashtra, Gujarat, Tamil Nadu, Karnataka, Punjab and West Bengal. By 2001 Census, the percentage of urban population in these states is much higher than the national average of 27.78% whereas the figures for less developed states are significantly low. Indeed, the level of urbanization is high in states with high per capita income and vice versa.[6]

Table-2.2.1 shows the level of urbanization, proportion of urban population in UAs and annual exponential growth rate of both across states in 1991 and 2001. The level of urbanization of India has increased from 25.73% to 27.78% and proportion of urban population residing in UA has also shown a nominal increase rising from 57.01 to 58.47%. It is found that there is a positive correlation between the level of urbanization and proportion of population within UA, the correlation values for 1991 and 2001 are 0.65 and 0.61 respectively.

There are variations at state level wherein some states with lower level of urbanization have significant proportion of their urban population residing within UAs. Another important point to be noticed is that many of the states have recorded a decline in the proportion of their urban population within UAs, which can be attributed to de-recognition of a number of UAs during the considered period. States which have shown increase in their proportion of population within UAs are namely Bihar, Punjab, Andhra Pradesh, Haryana, Orissa, Kerala, Rajasthan, Manipur, Gujarat and Delhi. Among these states Kerala and Manipur are the states which despite a rise in share of population within UAs, have experienced a decline in their level of urbanization viz. 0.43% and 3.64% respectively.

The growth pattern of urban population at state level indicates that developed states which have higher level of urbanization have also recorded higher exponential growth rate with exception of West Bengal, whose growth rate is low due to specific policies followed by state government.[7] Backward states on the other hand have either experienced growth rate below average of the country or equal to that. This decade is a significant departure from the earlier trend because since independence until 1991, the developed states which have higher percentage of people

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6 Kundu, 2006.

7 Kundu, 2006.

residing in urban areas have recorded either medium or low growth of urban population, however higher urban growth has been registered by relatively underdeveloped states that have low percentage of urban population. This implies that the relationship between urban growth and development is generally negative.[8] Thus the process of urbanization has become more concentrated in developed regions excluding backward areas in post reform period.

Appendix 2.1 and 2.2 present state level distribution of UAs according to size class. Though there has been addition of only few UAs during 1991 and 2001 but that is due to de-recognition of 102 already existing UAs besides formation of 117 new UAs. Therefore, it will be useful to look at the regional pattern of UAs at both the points of time to see which are the states that experienced de-recognition and addition of UAs. Many states have registered decline in their number of UAs namely West Bengal (17), Tamil Nadu (7), Madhya Pradesh (6), Gujarat (5), Maharashtra (3), Punjab (2), Himachal (1), and Bihar (1). On the other hand Andhra Pradesh is the leading state which has registered 22 new UAs during 1991 and 2001, that is followed by Uttar Pradesh (9), Rajasthan (6), Haryana (4), Assam (4), Karnataka (3), Kerala (1), and Orissa (1). Thus regional distribution of UAs shows a similar pattern as shown by growth of urban population wherein underdeveloped states have registered an increase in their number of UAs and developed states which have higher level of urbanization have recorded a decline in the number of UAs.

2.3 DISTRIBUTION AND GROWTH OF CLASS I CITIES WITHIN AND OUTSIDE URBAN AGGLOMERATIONS

The process of Indian urbanization is basically large city oriented as the number of class I cities has systematically gone up during last century. Between 1991 and 2001 their number has increased from 322 to 441. Within class I category, the number of cities with million plus population (Ia) has increased from 18 to 31. There were 32 cities in class Ib category which have increased to 40 in 2001. The corresponding figures for class Ic were 272 and 370.

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[8] Kundu, 2006.

Table-2.3.1

Class I Cities According to Size Class (1991-2001)

Size Class	Number of Cities		% Increase in Population
	1991	2001	
I	322	441	45.74
Ia	18	31	57.41
Ib	32	40	30.98
Ic	272	370	40.73

Source: Calculated from Census of 1991 and 2001

In terms of decadal growth class I cities have recorded 45.74% growth during 1991 and 2001, while cities with million plus population have registered higher growth (57.41) followed by class Ic (40.73%) and class Ib (30.98%). Table-2.3.2 presents the distribution of class I cities within and outside UAs.

Table-2.3.2

Distribution of Class I Cities Within and Outside the Urban Agglomerations (1991-2001)

Size Class	Number of Class I Cities					
			1991		2001	
	1991	2001	Inside UA	Outside UA	Inside UA	Outside UA
I	322	422	214	108	268	154
Ia	18	27	17	1	24	3
Ib	32	42	27	5	32	10
Ic	272	353	170	102	212	141

Source: Calculated from Census of 1991 and 2001
Note: In 2001 parts of same city treated as class I cities are excluded

During 1991, out of 322 cities I class I category 214 cities were located within UAs, while 108 cities were outside UAs. The corresponding figures for 2001 were 268 and 154. The concentration of class I cities within UAs is observed in their size class distribution also. It shows that in 1991, out of 18 million plus cities 17 cities were located within UAs against 1 located outside UA. In 2001, out of 27 million plus cities only 3 cities were located outside UAs. Similar is the case with cities in Ib and Ic.

Table-2.3.3

Size Class Distribution of Common Class I Cities Within and Outside the Urban Agglomerations (1991-2001)

Size Class	Number of Class I Cities			
	1991		2001	
	Inside UA	Outside UA	Inside UA	Outside UA
I	204	104	204	104
Ia	16	1	24	2
Ib	27	5	31	10
Ic	161	98	149	92

Source: Calculated from Census of 1991 and 2001
Note: Only common cities between 1991 and 2001 are used by considering their size class distribution in the base year.

Table-2.3.3 presents size class distribution of common cities between 1991 and 2001 to show the change in their class during this period. It may be observed here that within class I category cities from class Ib and Ic have graduated to higher size class. In 1991, there were 16 cities in class Ia category located within UAs which increased to 24 in 2001 whereas the figures for cities located outside UAs were 1 and 2 respectively.

Number of class Ib cities has increased by 4 (from 27 to 31) within UAs and their number outside UAs have increased by 5 (from 5 to 10). On the other hand class Ic has registered a decline in its number of cities within and outside UAs by 12 and 6 respectively during considered period. The observed pattern confirms that a larger number of class I cities located within UAs have moved to higher size classes compare to cities which are located outside UAs.

The share of urban population in class I cities within and outside UAs and their growth are given in tables-2.3.4 and 2.3.5. It may be clearly observed that during this period, class I cities located outside UAs have shown increase in their share of urban population by 3.36% (from 18.18% to 21.54%) as against a decline in population share of cities within UAs. Among class I cities larger increase (by 9.35%) was recorded by class Ib, followed by class Ia (4.44%) and class Ic (1.02%).

Figure: 2.3.1

Population Distribution of Class I Cities Within and Outside the Urban Agglomerations

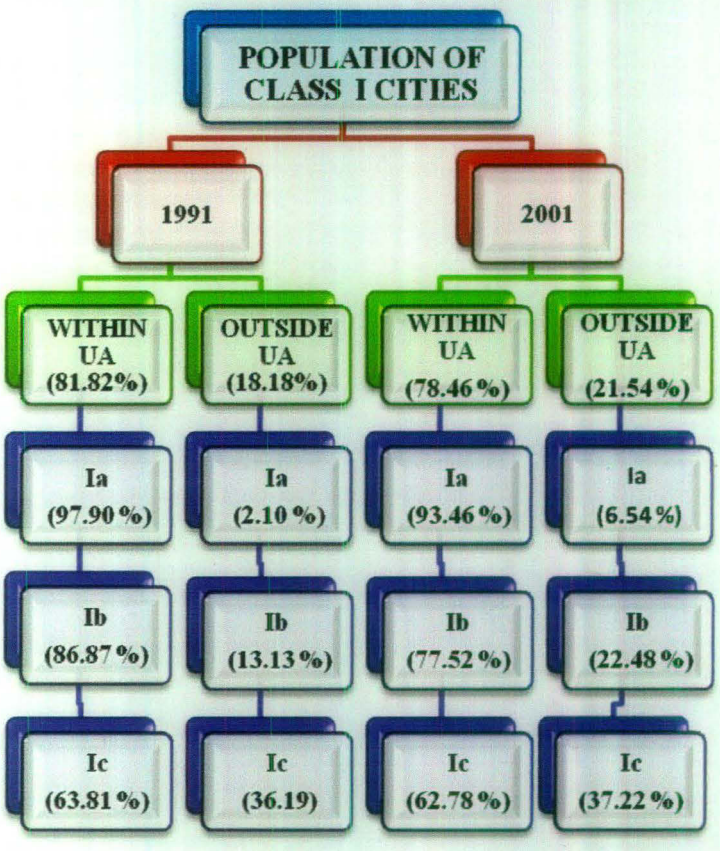

Table-2.3.4

Population Distribution of Class I Cities Within and Outside the Urban Agglomerations

	1991		2001	
Size Class	**Inside UA**	**Outside UA**	**Inside UA**	**Outside UA**
I	81.82	18.18	78.46	21.54
Ia	97.90	2.10	93.46	6.54
Ib	86.87	13.13	77.52	22.48
Ic	63.81	36.19	62.78	37.22

Source: Calculated from Census of 1991 and 2001

Note: Only common cities between 1991 and 2001 are used by considering their size class distribution in the base year.

Figure: 2.3.2

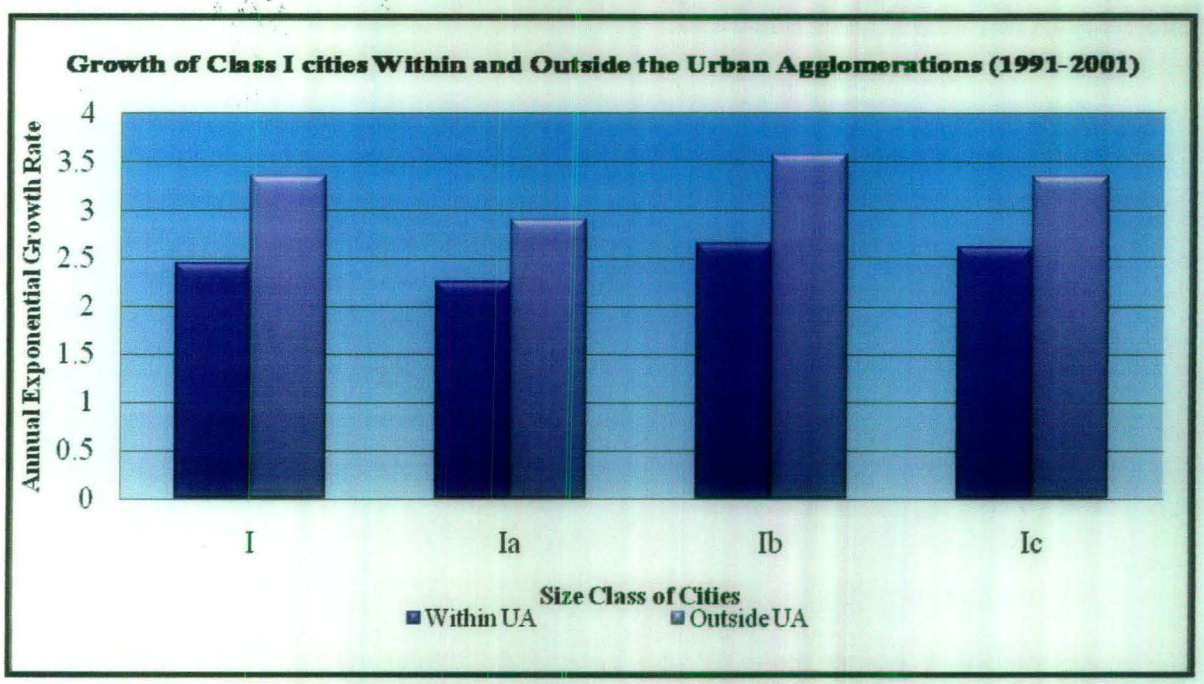

Table-2.3.5

Growth of Class I cities within and Outside the Urban Agglomerations (1991-2001)

	Inside UA		Outside UA	
Size Class	Decadal Growth Rate	Annual Exponential Growth Rate	Decadal Growth Rate	Annual Exponential Growth Rate
I	27.82	2.45	40.00	3.36
Ia	25.35	2.26	33.79	2.91
Ib	30.49	2.66	42.87	3.57
Ic	29.93	2.62	39.90	3.36

Source: Calculated from Census of 1991 and 2001

Note: Only common cities between 1991 and 2001 are used by considering their size class distribution in the base year.

A similar pattern is observed in terms of growth of these cities, where in class I cities outside UAs have recorded higher annual exponential growth rate (3.36%) compared to cities located within UAs (2.45%). Among class I category higher growth rate was registered by class Ib

(3.57%) followed by class Ic (3.36%) and Ia (2.91%). This higher growth rate of cities which are outside UAs may be because , the marginal increase in population in UAs is generally absorbed by smaller urban areas located around the large city due to high cost of living, lack of infrastructure and high land value within large city, where as individual cities located outside UAs easily accommodate their increasing population.

Table-2.3.6 and Table-2.3.7 gives an account of class I cities which are declassified and newly added between 1991 and 2001.

Tables-2.3.6

Declassified and Newly Formed Class I Cities between 1991 & 2001

	Number of Class I Cities	
Size Class	Declassified	Newly Formed
I	10	110
Ia	0	0
Ib	0	1
Ic	10	109

Source: Calculated from Census of 1991 and 2001

Since the number of class I cities in the country during this decade has gone up from 322 to 422 (excluding parts of same city) because 10 cities have lost their class I status, on the other hand 110 new cities attained class I status. The 10 cities which lost their class I status belonged to class Ic, while out of 110 new class I cities 1 city has attained class Ib and other 109 cities were added in class Ic category.

Tables-2.3.7

Change in Status of Class I Cities Within and Outside Urban Agglomerations (1991-2001)

	Number of Class I Cities			
	Within UA		Outside UA	
Size Class	Excluded	Added	Excluded	Added
I	10	64	4	54
Ia	1	0	0	1
Ib	0	1	0	0
Ic	9	63	4	53

Source: Calculated from Census of 1991 and 2001

If we look at the change in the number of cities located within UAs and located outside UAs then it is observed that 10 cities which were located within UAs were excluded during this period against 4 cities located outside UAs, while 64 new cities were added in former and 54 cities were added in latter category. A million plus city which has excluded from UA and added in class I cities outside UA is Jaipur, which was an UA in 1991 census but derecognizes as UAs in 2001 census. In class Ib, only 1 city was added that is within UAs category, while in class Ic, 9 and 4 cities were excluded respectively from within and outside UA category. The corresponding figures for newly added cities were 63 and 53.

2.4 GROWTH PATTERN OF CLASS I CITIES/UAs WITH MILLION AND ABOVE POPULATION

Class I cities with million and above population are a major feature of Indian urbanization because despite their small number they contain a large proportion of the urban population. According to the 2001 census India has 35 cities and UAs with a million and above population which were only 23 in 1991. These cities are further concentrated in few developed states which have a higher level of urbanization. Here an important observation is noticed from table-2.4.1 is that some of the largest and historically important cities/UAs for example Greater Mumbai, Kolkata Chennai have recorded lower growth rates compare to other cities.

While some regionally important cities like Faridabad, Nasik, Jabalpur, Asansol and Dhanbad etc. have come up as metro cities by achieving million plus population during this period. Most of these cities are either located near already existing UAs or along forming urban corridor. The demographic growth in metro cities has been higher than that of common towns or even the class I cities in recent decades.[9] The growth would have been even higher but due to pressure exerted by environment lobby to locate the industrial units outside the municipal boundary it is not as high as expected. This is facilitated by easy availability of land, access to unorganized labour market, besides lesser awareness and less stringent implementation of environmental regulations in the rural settlements at the urban periphery. The poor are able to build shelters in these

[9] Kundu, 2006.

'degenerated peripheries' and find jobs in the industries located therein or commute to the central city for work.[10] The entrepreneurs, engineers, executives, etc., associated with modern industries

Table-2.4.1

Growth of Urban Agglomerations & Class I Cities with Million and Above Population (1991-2001)

Urban Agglomeration/City	Decadal Growth Rate	Annual Exponential Growth Rate
UAs/Cities common in 1991 & 2001		
Greater Mumbai	29.94	2.62
Kolkata	19.91	1.82
Delhi	51.93	4.18
Chennai	18.49	1.7
Bangalore	37.69	3.2
Hyderabad	27.37	2.42
Ahmadabad	36.44	3.11
Pune	50.58	4.09
Surat	85.09	6.16
Kanpur	32.54	2.82
Jaipur	52.98	4.25
Lucknow	35.81	3.06
Nagpur	27.58	2.44
Patna	55.27	4.4
Indore	47.79	3.91
Vadodara	32.44	2.81
Bhopal	37.23	3.16
Coimbatore	31.37	2.73
Ludhiana	34.11	2.94
Kochi	18.83	1.73
Visakhapatnam	25.76	2.29
Varanasi	17.55	1.62
Madurai	10.01	0.95

Census of India 1991 and 2001

[10] Kundu 1989 and Kundu et al. 2002.

and business, however, reside within the central city and travel to the periphery through rapid transport.

Table-2.4.2

Growth of New Urban Agglomerations & Class I Cities with Million and Above Population (1991-2001)

Urban Agglomeration/City	Decadal Growth Rate	Annual Exponential Growth Rate
UAs/Cities common in 1991 & 2001		
Meerut	37.37	3.18
Nashik	58.83	4.63
Jabalpur	25.68	2.29
Jamshedpur	32.88	2.84
Asansol	42.7	3.56
Dhanbad	30.6	2.67
Faridabad	70.94	5.36
Allahabad	24.28	2.17
Amritsar	41.63	3.48
Vijayawada	19.56	1.79
Rajkot	53.12	4.26

Census of India 1991 and 2001

2.5 CORE AND PERIPHERAL GROWTH OF METROPOLITAN CITIES/ URBAN AGGLOMERATIONS

As mentioned earlier, there were 23 million plus cities in 1991 whereas their number has gone up to 35 in 2001. Most of these cities are multi municipal agglomerations which comprise a large city in the core with smaller urban areas in the periphery. Present section examines the growth of million plus cities in terms of the core[11] vis-a-vis the periphery.[12] (add foot note). While looking at the growth of million plus cities four important features have been noticed , that is, declining

[11] The main city within urban agglomeration

[12] Periphery is defined as urban areas around the main city but within the boundaries of urban agglomeration

core-growing periphery, growing core-declining periphery, growing core-growing periphery, declining core- declining periphery. These are presented in table-2.5. Among 35 metropolitan cities Jaipur, Faridabad, and Ludhiana do not have an agglomeration whereas Rajkot and Bhopal UAs do not have peripheral urban areas. However, an observation of intra-urban agglomeration of large metropolitan cities indicates that within agglomerations of the large cities for example, Greater Mumbai, Kolkata, Chennai, Hyderabad and Ahmadabad have recorded declining growth rate in core as well as in periphery but at the same time higher growth rate is recorded by their peripheries. These are one of the oldest UAs of the country and have been experiencing high growth rate and influx of population for a long period of time. On the other hand Delhi, Nagpur, Lucknow, Madurai, Coimbatore and Nasik have declining core and growing peripheries. Here Delhi needs a special mention because there have been planned efforts to control the growth of core city by creating counter magnet towns in its hinterland which resulted in higher growth of its peripheries. Huge population, lack of infrastructure and amenities, cost of living, and stringent land laws, may have decelerated the capacity of the core areas of there cities to absorb the marginal increase of population, which as a matter of fact, find place in and around the core city, indicating the faster growth of UA.[13]

Another category of UAs comprises Pune, Surat, Indore, Agra, Jabalpur and Jamshedpur which have growing core and declining peripheries. The characteristic feature of these cities is that these cities except Surat have acquired million plus population in 1991 census, since these are emerging UAs therefore experiencing concentration of population in their core cities. Whereas UAs of Bangalore, Kanpur, Patna, Vishakhapatnam and Dhanbad have growing cores and growing peripheries. Here Kanpur and Dhanbad are located near Lucknow and Kolkata which are experiencing declining core and periphery therefore these two ***cities*** play***ing*** important role in absorbing the increasing population. The regional cities like Jamshedpur and Asansol which have shown faster growing peripheries may play an important role in terms of rural urban integration. Thus smaller metropolitan cities in India still continue to experience in-filling within

[13] Sivaramakrishnan, et al 2005.

Figure: 2.5.1

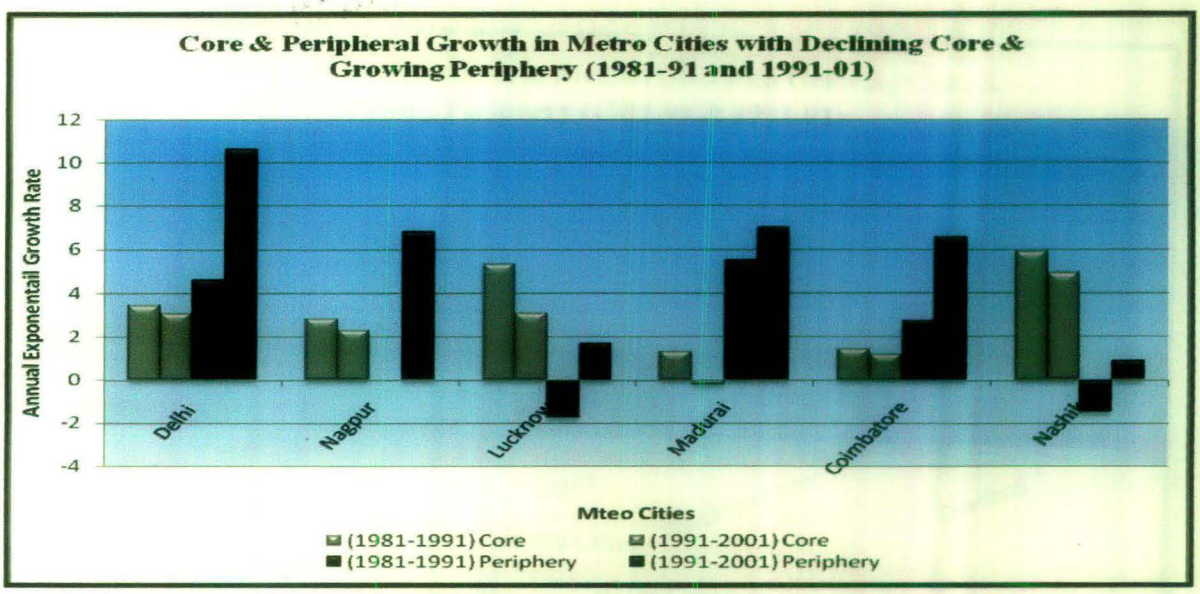

Figure: 2.5.2

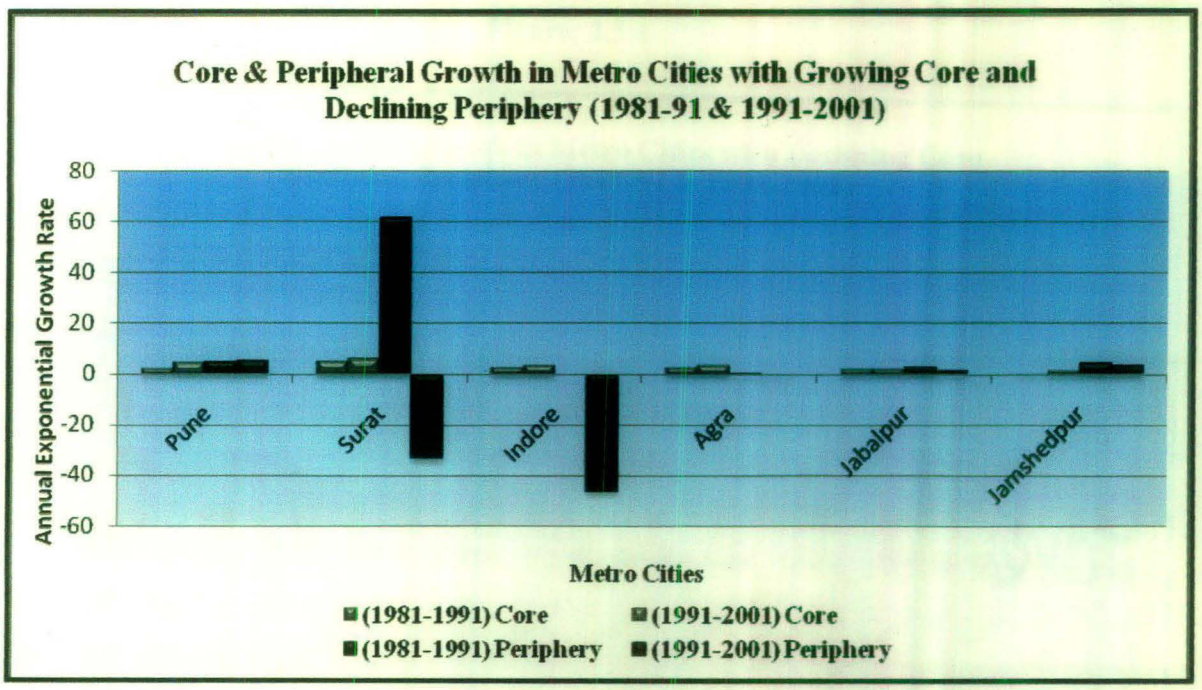

Figure: 2.5.3

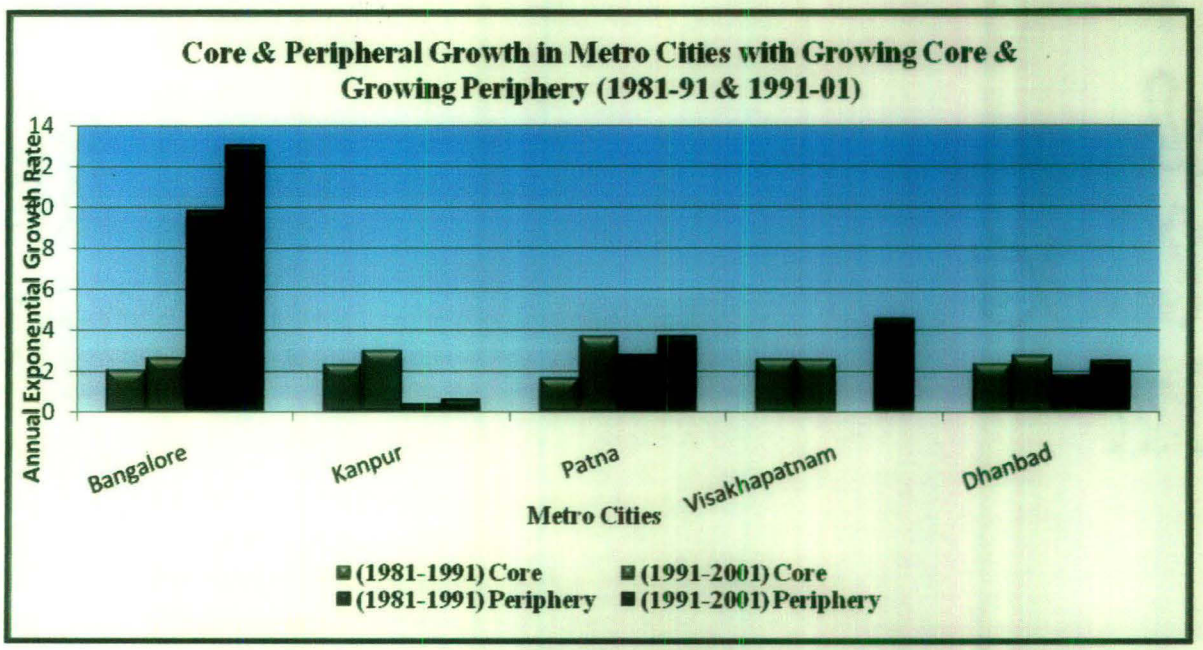

Figure: 2.5.4

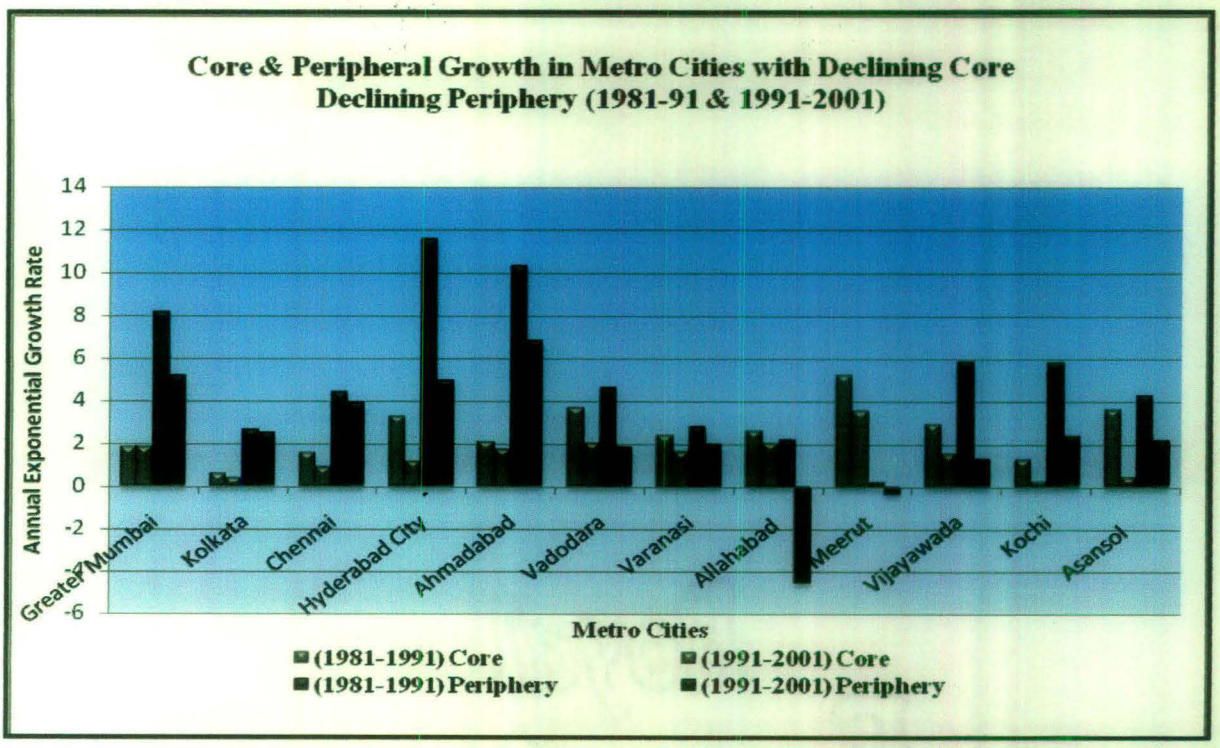

Table-2.5

Growth of Urban Population Inside and Outside Urban Agglomerations (1991-2001)

	1981-1991		1991-2001	
Metropolitan Cities	**Core**	**Periphery**	**Core**	**Periphery**
Declining Core; Growing Periphery				
Delhi Municipal Corporation (Urban)	3.46	4.59	3.09	10.63
Nagpur	2.87	0*	2.33	6.79
Lucknow	5.35	-1.74	3.10	1.74
Madurai	1.37	5.52	-0.19	7.00
Coimbatore	1.47	2.75	1.23	6.56
Nashik	5.91	-1.48	4.94	0.93
Growing Core; Declining Periphery				
Pune	2.01	5.19	4.83	5.01
Surat	4.89	61.63	5.85	-33.22
Indore	2.91	0*	3.65	-46.27
Agra	2.50	0.58	3.46	-0.01
Jabalpur	1.96	3.08	2.19	1.32
Jamshedpur	0.47	4.51	1.75	3.40
Growing Core; Growing Periphery				
Bangalore	1.98	9.75	2.62	12.99
Kanpur	2.29	0.37	2.98	0.60
Patna	1.61	2.78	3.64	3.69
Visakhapatnam	2.52	0*	2.54	4.56
Dhanbad	2.33	1.73	2.71	2.47
Declining Core; Declining Periphery				
Greater Mumbai	1.86	8.18	1.83	5.12
Kolkata	0.64	2.68	0.40	2.50
Chennai	1.59	4.44	0.93	3.90
Hyderabad City	3.31	11.53	1.21	4.94
Ahmadabad	2.09	10.32	1.74	6.84
Vadodara	3.68	4.64	2.07	1.85
Varanasi	2.43	2.85	1.66	1.99
Allahabad	2.64	2.23	2.05	-4.55
Meerut	5.19	0.19	3.54	-0.33
Vijayawada	2.94	5.83	1.53	1.27
Kochi	1.27	5.80	0.24	2.36
Asansol	3.61	4.24	0.45	2.15

Source: Calculated from Census of India 1991 and 2001.
Note: 0* Did not have periphery in 1981.

city limits, while the large metros mostly show declining growth in the core and continue to expand outwards engulfing many villages and smaller towns in the surrounding area.[14] In addition, proximity of such cities for example, Vadodara-Ahmadabad-Surat, Mumbai-Pune-Nasik, Kolkata-Dhanbad-Jamshedpur, Amritsar-Jalandhar-Ludhiana and Chennai-Coimbatore-Madurai indicates a spatial concentration of population along these urban corridors

2.6 CONCLUSION

Based on the above analysis following conclusions can be drawn about distribution and growth pattern of urban agglomerations and class I cities located within or outside urban agglomerations in post reform period:

1. Though the pattern of urbanization between 1991 and 2001 in was quite different from the past trend but still confirms the thesis of concentrated urban development. This decade has recorded an addition of only few UAs i.e. because few conditions are added in criteria to make the identification of UAs more informal and stringent. As a consequence, 102 UAs were derecognized and while 117 new UAs were added during this period. There is a positive correlation between level of urbanization and proportion of urban population residing in UAs.

2. The class I UAs and class I cities, particularly which have a population of more than a million have recorded higher growth rates compared to UAs and cities of lower size classes. A large number of class I cities are located within UAs in 1991 and 2001. The number of cities with million plus population located within UAs has significantly increased from 17 to 24 while the figures for cities located outside UAs is 1 and 3.

3. The share of urban population living in class I cities within UAs has gone down compared to their counterparts outside UAs. At the same time, the class I cities which

[14] Shaw, A. (2005), Peri-Urban Interface of Indian Cities, Growth, Governance and Local Initiatives, Economic and Political Weekly, p. 129

are located outside UAs have registered higher annual exponential growth rate than the cities located within UAs.

4. An analysis of intra-urban agglomerations of large metropolitan cities have shown that within the UAs of one of the largest cities of the country, both core and periphery have recorded a declining growth rates but at the same time a higher growth is recorded by their periphery. On the other hand, metro cities which have registered higher growth in both the core and periphery are located in close proximity to the above mentioned cities along urban corridors. This pattern of urban growth indicates the shift from traditional monocentric metropolitan growth to polycentric pattern of growth within UAs.

CHAPTER 3

SIZE AND COMPOSITION OF URBAN WORKFORCE

Chapter 3

SIZE AND COMPOSITION OF URBAN WORKFORCE

This chapter gives an overview of size, composition and growth of workers in class I cities located within and outside UAs in the pre and post reform period with special reference to cities with million plus population. For this purpose class I cities have been divided into three categories namely cities which maintained their class I status between 1991 and 2001, the cities which are demoted from class I status and those which have achieved class I status in 2001census. The analysis has been done at two levels viz. according to size class of cities and state level.

Cities are considered to be the growth engines of economy and growth impulses naturally disseminate to the small towns and villages in the hinterland. Further, it would be erroneous to consider the urban segment to be homogenous or assume that the growth process helps in pushing up the entire urban system. Indeed, the disparity within the urban segment works out to be high and growing over the years[1]. The proponents as well as the critics of economic reforms both expected an increase in the employment as a consequence of larger investment within and around urban centers. Understanding intra urban-differences in growth and composition of employment with focus on large cities is important in light of large city oriented urbanization and urbanization of poverty.

3.1 SIZE AND COMPOSITION OF WORKFORCE

This section presents a comparative analysis of size and composition of workforce in class I cities located within and outside UAs according to their size class in 1991 and 2001. For this purpose class I cities have been divided into above mentioned three categories. The analysis has been put across in all-India as well as state-level format.

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[1] A. Kundu (2006), Trends and Patterns of Urbanization and Their Economic Implications, *Indian Infrastructure report*, p. 32

3.1.1 ALL INDIA LEVEL ANALYSIS

This section presents An All-India comparative analysis of size and composition of workforce in class I cities located within and outside UAs according to their size class in 1991 and 2001.

3.1.1.1 CITIES WHICH MAINTANED CLASS I STATUS

This category of class I cities comprises all those which have maintained class I status during 1991 and 2001. The section the size and composition of total workers in terms of workforce participation rate, main and marginal workers and share of males and females in total workers

Between 1991 and 2001 the workforce participation rate (WPR), defined as the percentage of workers to total population for class I cities has registered 3.06 percent increase from 30.12 percent to 33.19 percent. According to size class categories, the cities of class Ic have shown a relatively higher increase (4.81 percent) in workforce participation rate increasing from 29.44 to 35.09 followed by class Ib cities and metro cities. This trend shows a decline in WPR with increase in the size of city. WPR for class I cities located within UAs has gone up by 2.67 percent (from 30.41 to 33.08 percentage points) and respective figures for class I cities located outside UAs is 4.75 percent (from 28.84 and 33.59 percent).

Table: 3.1.1.1a

Work Participation Rate in Class I Cities Within and Outside UAs (1991-2001)

	Work Participation Rate (in percentage)					
	Total		Within UA		Outside UA	
Size Class	1991	2001	1991	2001	1991	2001
I	30.12	33.19	30.41	33.08	28.84	33.59
Ia	31.54	32.07	31.51	31.16	32.93	46.62
Ib	29.26	34.03	29.19	34.37	29.73	31.99
Ic	29.08	33.89	29.44	35.09	28.46	31.82

Source: Census of India 1991 and 2001

Note: Only common cities between 1991 and 2001 are considered.

All the three size categories have shown increase in their workforce participation rate except metro cities located within UAs which have experienced a marginal decline (-0.36 percent) in

workforce participation rate from 31.51 percent in 1991 to 31.16 in 2001. Metro cities located outside UAs on the other hand have registered a significant increase (13.69 percent) in their

Table: 3.1.1.1b

Work Participation Rate in Class I Cities by Gender (1991-2001)

Size Class	Work Participation Rate (in percentage)					
	Total		Male		Female	
	1991	2001	1991	2001	1991	2001
I	30.12	33.19	49.57	52.82	7.99	11.05
Ia	31.54	32.07	51.53	50.37	8.31	10.86
Ib	29.26	34.03	48.45	54.52	7.44	10.94
Ic	29.08	33.89	48.07	54.48	7.92	11.27

Source: Census of India 1991 and 2001

Table: 3.1.1.1c

Work Participation Rate in Class I Cities by Location and Gender (1991-2001)

	1991					
	Work Participation Rate (in percentage)					
	Within UA			Outside UA		
Size Class	Total	Male	Female	Total	Male	Female
I	30.41	50.03	8.03	28.84	47.55	7.83
Ia	31.51	51.42	8.41	32.93	56.47	3.32
Ib	29.19	48.61	7.13	29.73	47.42	9.40
Ic	29.44	48.68	7.97	28.46	47.02	7.83
						2001
Size Class	Total	Male	Female	Total	Male	Female
I	33.08	52.52	11.08	33.59	53.98	10.91
Ia	31.16	48.78	10.76	46.62	75.14	12.36
Ib	34.37	55.42	10.70	31.99	49.15	12.40
Ic	35.09	56.28	11.76	31.82	51.37	10.43

Source: Census of India 1991 and 2001
Note: Only common cities between 1991 and 2001 are considered.

work force participation rate, increasing from 32.93 percent to 46.62 percent. Here, it may be pointed out that in case of big cities located within UAs, many of the pollutant and low valued industries have been shifted outside their municipal boundaries or have come up in rural areas

around them employing a significant proportion of workers causing relatively lower workforce participation in these cities. Whereas only one metro city located outside UAs is Ludhiana which has recorded a much higher increase in WPR.

Looking at gender differences in the workforce participation rate, it can be observed that male work participation rate for class I cities has gone up from 49.57 to 52.87 percent (Table 3.1.1.1b) but this increase was only contributed to by class Ib and Ic. Metro cities have registered a decline in their male workforce participation rate from 51.53 percent in 1991 to 50.37 percent in 2001 whereas class Ib and Ic cities have shown 6.07 and 6.41 percent increase respectively. The

Table: 3.1.1.1d

Share of Main and Marginal Workers in Class I Cities by Location and Gender (1991-2001)

	1991					
	Share of Workers (in Percentage)					
	Total		Within UA		Outside UA	
Size Class	Main Workers	Marginal Workers	Main Workers	Marginal Workers	Main Workers	Marginal Workers
I	98.68	1.32	98.76	1.24	98.30	1.70
Ia	99.01	0.99	98.99	1.01	100.00	0.00
Ib	98.71	1.29	98.62	1.38	99.27	0.73
Ic	98.31	1.69	98.48	1.52	98.02	1.98
	2001					
Size Class	Main Workers	Marginal Workers	Main Workers	Marginal Workers	Main Workers	Marginal Workers
I	92.85	7.15	93.13	6.87	91.73	8.27
Ia	94.11	5.89	94.12	5.88	94.08	5.92
Ib	92.46	7.54	92.34	7.66	93.24	6.76
Ic	91.86	8.14	92.35	7.65	90.92	9.08

Source: Census of India 1991 and 2001

Note: Only common cities between 1991 and 2001 are considered.

female workforce participation on the other hand has increased in all size class of cities. Between 1991 and 2001 male WPR in metro cities located within UAs has gone down whereas it has increased in other two size classes. On the other hand Ludhiana, the only metro city outside UA has shown a significant rise in male WPR.

In terms of share of main and marginal workers in total workforce, as is clearly visible in the Table, the last one decade witnessed a decline in proportion of main workers in class I cities of all three size classes located within and outside UAs. In 1991, the proportion of main workers in class I cities was 98.68 percent which in 2001 came down to 92.85 percent. In 1991 the proportion of main workers in class I cities located within and outside UAs was 98.76 percent and 98.30 while the corresponding figures for 2001 are 93.13 and 91.73 percent. This shows that class I cities located outside UAs have experienced relatively higher increase in their proportion of marginal workers as compared to those within UAs.

Table: 3.1.1.1e

Share of Male and Female Workers in Class I Cities Within and Outside UA(1991)

						1991
	Share of Workers (in Percentage)					
	Total		Within UA		Outside UA	
Size Class	Male Workers	Female Workers	Male Workers	Female Workers	Male Workers	Female Workers
I	87.59	12.41	87.67	12.33	87.22	12.78
Ia	87.82	12.18	87.65	12.35	95.54	4.46
Ib	88.11	11.89	88.56	11.44	85.28	14.72
Ic	87.12	12.88	87.20	12.80	86.98	13.02
						2001
Size Class	Male Workers	Female Workers	Male Workers	Female Workers	Male Workers	Female Workers
I	84.36	15.64	84.29	15.71	84.63	15.37
Ia	84.33	15.67	83.98	16.02	87.95	12.05
Ib	84.88	15.12	85.34	14.66	81.89	18.11
Ic	84.15	15.85	84.04	15.96	84.35	15.65

Source: Census of India 1991 and 2001

Note: Only common cities between 1991 and 2001 are considered.

The gender-wise composition of workforce in class I cities shows that though male workers constitute a much larger proportion of workforce at both points of time, the proportion of female workers in all class I cities both located within and outside UAs have also undergone an increase over the period under consideration. The class I cities located within UAs have shown a relatively higher increase (3.39 percentage points) in the share of female workers

compared to class I cities located outside UAs. The latter have recorded 2.58 percent increase in the share of female workers in the total workforce. Another important observation is that metro cities, particularly those located outside UAs have registered a higher increase (3.50 percent) in their proportion of female workers as against other class I cities. Since class I cities which are located within UAs have relatively larger service sector which is able to absorb a higher share of female workers.

3.1.1.2 CITIES DEMOTED FROM CLASS I STATUS

In the 2001 Census ten cities were demoted from class I status as they could not fulfill the criteria of minimum population (100,000) to be called class I city. All ten cities were part of class Ic which has population size ranging from 100000 to 500000. Out of these ten cities which lost their class I status two cities namely Valparai (in Tamil Nadu) and Dabgram (in West Bengal) are located outside UAs while others are part of UAs. Here it is important to note that these cities have registered relatively higher WPR compared to average WPR of their size class. Valparai and Dabgram which are located outside UAs have a much higher WPR vis-à-vis other cities. Table given below presents the WPR of cities which are demoted from class I status in 2001.

Looking at the WPR by gender as shown in Table and it has been observed that these cities have reported relatively higher WPR for male and female both. The cities which are located outside UAs have shown marginally higher WPR of male and female workers compared to their average WPR but the two cities located outside UAs have shown much higher WPR particularly for female workers. This high WPR is mainly distress driven which is evident from the fact that considerable proportion of workers in these cities are engaged in agriculture and allied activities.

The average WPRs for male and female workers in cities which have lost their class I status are 49.47 and 11.80 percent respectively. While looking at within and outside UAs separately, it is observed that male and female both have higher WPR in cities located outside UAs. Male WPR is slightly higher in cities outside UAs whereas there is significant

Table: 3.1.1.2a

Work Participation Rate in Cities Demoted from Class I Status Within and Outside UAs (1991)

	Work Participation Rate (in percentage)		
Size Class	Total	Within UA	Outside UA
I	31.34	29.54	38.62
Ia	0.00*	0.00*	0.00*
Ib	0.00*	0.00*	0.00*
Ic	31.34	29.54	38.62

Source: Census of India 2001

Note: 0.00* represent absence of class I city in a particular size class

Table: 3.1.1.2b

Work Participation Rate by Gender in Cities Demoted from Class I Status (1991)

	Work Participation Rate (in percentage)		
Size Class	Total	Male	Female
I	31.34	49.47	11.80
Ia	0.00*	0.00*	0.00*
Ib	0.00*	0.00*	0.00*
Ic	31.34	49.47	11.80

Source: Census of India 2001

Note: 0.00* represent absence of class I city in a particular size class

Table: 3.1.1.2c

Work Participation Rate by Gender and Location in Cities Demoted from Class I Status Within and Outside UAs (1991)

	Work Participation Rate					
	Within UA			Outside UA		
Size Class	Total	Male	Female	Total	Male	Female
I	29.54	48.86	8.70	38.62	51.94	24.31
Ia	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Ib	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Ic	29.54	48.86	8.70	38.62	51.94	24.31

Source: Census of India 2001

Note: 0.00* represent absence of class I city in a particular size class

difference in female WRP within and outside UAs. This high WPR among females in these cities is due to their larger participation in low productive economic activities like agriculture and allied activities.

Table: 3.1.1.2d

Share of Main and Marginal Workers in Cities Demoted from Class I Status Within and Outside UAs (1991)

	Share of Workers (in percentage)					
	Total		Within UA		Outside UA	
Size Class	Main Workers	Marginal Workers	Main Workers	Marginal Workers	Main Workers	Marginal Workers
I	98.16	1.84	97.77	2.23	99.36	0.64
Ia	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Ib	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Ic	98.16	1.84	97.77	2.23	99.36	0.64

Source: Census of India 2001

Note: 0.00* represent absence of class I city in a particular size class

Table: 3.1.1.2e

Share of Workers by Workers by Gender and Location in Cities Demoted from Class I Status Within and Outside UAs (2001)

	Share of Workers (in Percentage)					
	Total		Within UA		Outside UA	
Size Class	Male Workers	Female Workers	Male Workers	Female Workers	Male Workers	Female Workers
I	81.88	18.12	85.83	14.17	69.66	30.34
Ia	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Ib	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Ic	81.88	18.12	85.83	14.17	69.66	30.34

Source: Census of India 2001

Note: 0.00* represent absence of class I city in a particular size class

Marginal workers comprise only a nominal share (1.84 %) in these cities particularly those cities which are located outside UAs have negligible share of marginal workers. The gender wise

composition of workforce shows that cities which are not part of UAs have relatively higher share of females in workforce.

3.1.1.3 TOWNS PROMOTED TO CLASS I STATUS

In 2001 Census, hundred and ten towns were promoted to class I status. The Table 3.1.1.2f gives the WPRs in these cities according to size class. It has been observed that these towns have recorded higher WPR (37.06 %) compared to common class I cities (33.19 %). These cities are new entrants in class I category therefore higher WPR may be the result of their faster economic growth in the process of catching up with older class I cities. The observation at the size class level shows that class Ib cities have relatively lower WPR while class Ic have reported higher WPR compared to average of all that size class. Similar observation has been made in class I cities within UAs. The WPR of Cities, which are located outside UAs is only one percent higher than the average (31.82 %) of class I cities outside UAs. Table 3.1.1.2f shows that cities which are located within UAs particularly class Ic have reported higher WPR compared to cities which are located outside UAs.

Table: 3.1.1.2f

Work Participation Rate in Cities which have achieved class I status Within and Outside UAs (2001)

	Work Participation Rate (in percentage)		
Size Class	Total	Within UA	Outside UA
I	37.06	39.36	32.92
Ia	0.00*	0.00*	0.00*
Ib	29.80	29.80	0.00*
Ic	37.50	40.30	32.92

Source: Census of India 2001

Note: 0.00* represent absence of class I city in a particular size class

The Table 3.1.12g shows that these cities have relatively higher WPR (59.91 %) for males compared to average male WPR (52.82%) of cities which have maintained class I status in both the years. Whereas female WPR is almost similar to average female WPR of common cities between considered period. Added to this, male and female WPR is considerably high in class Ic

cities compared to class Ib. Considering the location of cities it has been observed that males and females both have reported relatively higher WPR in cities which are located within UAs as compared to their counterparts located outside UAs.

Table: 3.1.1.2g

Work Participation Rate by Gender in Cities which have achieved class I status (2001)

	Work Participation Rate (in percentage)		
Size Class	Total	Male	Female
I	37.06	59.91	11.52
Ia	0.00*	0.00*	0.00*
Ib	29.80	47.27	9.43
Ic	37.50	60.69	11.64

Source: Census of India 2001
Note: 0.00* represent absence of class I city in a particular size class

Table: 3.1.1.2h

Work Participation Rate by Gender and Location in Cities which have achieved class I status (2001)

	Work Participation Rate (in percentage)					
	Within UA			Outside UA		
Size Class	Total	Male	Female	Total	Male	Female
I	39.36	63.60	12.31	32.92	53.28	10.10
Ia	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Ib	29.80	47.27	9.43	0.00*	0.00*	0.00*
Ic	40.30	65.24	12.59	32.92	53.28	10.10

Source: Census of India 2001
Note: 0.00* represent absence of class I city in a particular size class

The cities which have achieved class I status have shown slightly higher percentage share of marginal (8.83 %) workers compared to common class I cities (7.15 %) between 1991 and 2001. The cities of class Ib have relatively higher share of marginal workers compared to class Ic. Within class Ic, cities located outside UAs have slightly higher share of marginal workers than those located within UAs.

The percentage share of male and female workers in cities which have achieved class I status is similar to common cities.

Table: 3.1.1.2i

Share of main and marginal workers in Cities which have achieved class I status (2001)

	Share of Workers (in percentage)					
	Total		Within UA		Outside UA	
Size Class	Main Workers	Marginal Workers	Main Workers	Marginal Workers	Main Workers	Marginal Workers
I	91.17	8.83	91.37	8.63	90.73	9.27
Ia	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Ib	89.06	10.94	89.06	10.94	0.00*	0.00*
Ic	91.27	8.73	91.54	8.46	90.73	9.27

Source: Census of India 2001

Note: 0.00* represent absence of class I city in a particular size class

Table: 3.1.1.2j

Share of Male and Female workers in Cities which have achieved class I status (2001)

	Share of Workers (in percentage)					
	Total		Within UA		Outside UA	
Size Class	Male Workers	Female Workers	Male Workers	Female Workers	Male Workers	Female Workers
I	85.32	14.68	85.22	14.78	85.54	14.46
Ia	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Ib	85.39	14.61	85.39	14.61	0.00*	0.00*
Ic	85.32	14.68	85.21	14.79	85.54	14.46

Source: Census of India 2001

Note: 0.00* represent absence of class I city in a particular size class

3.1.2 STATE LEVEL ANALYSIS

This section presents a state-wise comparative analysis of size and composition of workforce in class I cities located within and outside UAs according to their size class in 1991 and 2001.

3.1.2.1 CITIES WHICH MAINTANED CLASS I STATUS

The state level trends in WPR in class I cities located within and outside UAs a·e presented in Table 3.1.2.1a

Table: 3.1.2.1a

Work Participation Rate in Class I Cities Within and Outside UAs (1991-2001)

	Work Participation Rate					
	Total		Within UA		Outside UA	
States	1991	2001	1991	2001	1991	2001
Andhra Pradesh	29.34	31.92	28.83	31.58	32.12	33.84
Assam	32.62	34.64	32.62	34.64	0.00*	0.00*
Bihar	24.14	47.23	24.63	46.88	22.64	47.86
Gujarat	30.20	23.68	30.24	23.46	28.73	30.22
Haryana	29.04	31.17	28.65	31.59	29.51	30.74
Karnataka	31.01	35.09	31.46	35.79	29.98	33.27
Kerala	29.64	32.49	29.64	32.49	0.00*	0.00*
Madhya Pradesh	28.62	29.48	28.79	29.91	27.95	27.78
Maharashtra	32.63	37.29	33.55	38.75	27.70	29.44
Orissa	29.91	31.06	30.53	31.37	27.27	29.76
Punjab	30.73	35.08	29.71	32.64	28.52	31.47
Rajasthan	28.33	29.73	27.99	28.55	29.30	30.65
Tamil Nadu	31.69	35.51	31.81	35.80	30.68	32.67
Uttar Pradesh	26.70	23.39	26.56	21.69	27.00	26.73
West Bengal	30.48	34.24	30.64	34.42	29.37	33.11

Source: Census of India 1991-2001

Though there is not much difference in average WPR of cities within and outside UAs, state level picture shows a considerable variation. In 1991, most of the states have recorded relatively higher WPR in cities located within UA whereas Andhra Pradesh, Haryana, Rajasthan and Uttar Pradesh are exceptions. According to 2001 Bihar, Gujarat, Rajasthan and Uttar Pradesh are the states with relatively higher WPR in cities outside UAs. It has been observed t hat cities within UAs have shown rise in WPR in all states except Uttar Pradesh and Gujarat which have reported a considerable decline (5 and 7 % decline respectively) in WPR. Whereas highest increase has been registered by Bihar and Maharashtra situated at two extreme ends of develo ment ladder. In

case of cities which are located outside UAs Uttar Pradesh is the only state which has recorded a decline whereas all states have shown increase in WPR with highest rise in Bihar.

Analyzing the male and female WPR separately it has been observed that Gujarat, Punjab and Uttar Pradesh have shown decline in male WPR whereas highest increase is registered by Bihar. Females on the other hand, have shown rise in their WPR in all states.

Table: 3.1.2.1b

Work Participation Rate in Class I Cities by Gender (1991-2001)

States/ UTs	Work Participation Rate					
	Total		Male		Female	
	1991	2001	1991	2001	1991	2001
Andhra Pradesh	29.34	31.92	48.40	51.39	9.34	11.64
Assam	32.62	34.64	52.01	53.80	8.61	12.11
Bihar	24.14	47.23	40.81	77.90	4.35	11.49
Gujarat	30.20	23.68	51.58	39.05	6.23	6.04
Haryana	29.04	31.17	49.30	49.19	5.40	9.73
Karnataka	31.01	35.09	49.33	53.95	11.16	14.92
Kerala	29.64	32.49	48.03	51.83	11.50	13.85
Madhya Pradesh	28.62	29.48	46.61	46.61	8.45	10.41
Maharashtra	32.63	37.29	51.60	58.23	10.57	12.96
Orissa	29.91	31.06	48.81	49.90	6.93	9.26
Punjab	30.73	35.08	53.13	51.06	4.48	8.92
Rajasthan	28.33	29.73	47.43	48.21	6.36	8.76
Tamil Nadu	31.69	35.51	52.59	55.79	9.54	14.47
Uttar Pradesh	26.70	23.39	46.00	38.91	4.27	5.67
West Bengal	30.48	34.24	50.91	54.47	5.99	11.05

Source: Census of India 1991-2001

In 1991, all states accounted only a negligible share of marginal workers with highest share (4 percent) in Kerala i.e. in cities within UAs. While all states have reported a considerable increase in share of marginal workers in both type of cities with relatively higher increase in outside UAs. Gender wise composition of workforce shows that in 1991, Kerala (21.72 %) and Karnataka (20.74%) had the largest share of female workers in cities within UAs whereas Andhra Pradesh

Table: 3.1.2.1c

Work Participation Rate in Class I Cities by Location and Gender (1991-2001)

1991

States	Work Participation Rate					
	Within UA			Outside UA		
	Total	Male	Female	Total	Male	Female
Andhra Pradesh	28.83	47.99	8.65	32.12	50.67	13.09
Assam	32.62	52.01	8.61	0.00*	0.00*	0.00*
Bihar	24.63	41.43	4.56	22.64	38.87	3.73
Gujarat	30.24	51.69	6.19	28.73	47.88	7.38
Haryana	28.65	48.62	5.88	29.51	50.10	4.81
Karnataka	31.46	49.99	11.37	29.98	47.83	10.68
Kerala	29.64	48.03	11.50	0.00*	0.00*	0.00*
Madhya Pradesh	28.79	46.84	8.60	27.95	45.71	7.87
Maharashtra	33.55	52.84	10.84	27.70	44.75	9.22
Orissa	30.53	49.51	6.91	27.27	45.67	6.99
Punjab	29.71	51.66	4.93	32.01	54.89	3.88
Rajasthan	27.99	47.11	5.99	29.30	48.32	7.40
Tamil Nadu	31.81	52.84	9.42	30.68	50.35	10.56
Uttar Pradesh	26.56	45.82	4.11	27.00	46.38	4.60
West Bengal	30.64	51.15	5.89	29.37	49.19	6.68

2001

States	Within UA			Outside UA		
	Total	Male	Female	Total	Male	Female
Andhra Pradesh	31.58	51.14	11.11	33.84	52.87	14.62
Assam	34.64	53.80	12.11	0.00*	0.00*	0.00*
Bihar	46.88	77.06	11.41	47.86	79.42	11.64
Gujarat	23.46	38.72	5.94	30.22	49.27	9.00
Haryana	31.59	48.91	11.17	30.74	49.47	8.21
Karnataka	35.79	54.74	15.40	33.27	51.85	13.66
Kerala	32.49	51.83	13.85	0.00*	0.00*	0.00*
Madhya Pradesh	29.91	47.03	10.89	27.78	44.99	8.50
Maharashtra	38.75	60.26	13.34	29.44	46.76	11.02
Orissa	31.37	50.10	9.35	29.76	49.06	8.89
Punjab	32.87	49.67	12.31	31.57	50.74	9.48
Rajasthan	28.55	46.89	7.78	30.65	49.24	9.52
Tamil Nadu	35.80	56.09	14.67	32.67	52.73	12.56
Uttar Pradesh	21.69	35.98	5.33	26.73	44.68	6.34
West Bengal	34.42	54.80	10.92	33.11	52.38	11.85

Source: Census of India 1991-2001

Note: 0.00* represents absence of class I cities in particular state

Table: 3.1.2.1d

Share of Main and Marginal Workers in Cities which have maintained class I status (1991-2001)

1991

States/ UTs	Total		Within UA		Outside UA	
	Main Workers	Marginal Workers	Main Workers	Marginal Workers	Main Workers	Marginal Workers
Andhra Pradesh	98.92	1.08	98.98	1.02	98.64	1.36
Assam	99.03	0.97	99.03	0.97	0.00*	0.00*
Bihar	99.02	0.98	98.98	1.02	99.16	0.84
Gujarat	98.82	1.18	98.80	1.20	99.36	0.64
Haryana	99.50	0.50	99.31	0.69	99.73	0.27
Karnataka	98.77	1.23	99.07	0.93	98.06	1.94
Kerala	96.00	4.00	96.00	4.00	0.00*	0.00*
Madhya Pradesh	98.38	1.62	98.43	1.57	98.17	1.83
Maharashtra	98.02	1.98	97.94	2.06	98.56	1.44
Orissa	98.81	1.19	98.93	1.07	98.23	1.77
Punjab	99.79	0.21	99.87	0.13	99.70	0.30
Rajasthan	98.42	1.58	98.71	1.29	97.65	2.35
Tamil Nadu	99.07	0.93	99.17	0.83	98.19	1.81
Uttar Pradesh	98.64	1.36	98.92	1.08	98.06	1.94
West Bengal	99.20	0.80	99.36	0.64	98.01	1.99

2001

States/ UTs	Total		Within UA		Outside UA	
	Main Workers	Marginal Workers	Main Workers	Marginal Workers	Main Workers	Marginal Workers
Andhra Pradesh	91.66	8.34	91.96	8.04	90.01	9.99
Assam	94.50	5.50	94.50	5.50	0.00*	0.00*
Bihar	90.04	9.96	90.26	9.74	89.66	10.34
Gujarat	96.29	3.71	96.32	3.68	95.48	4.52
Haryana	91.27	8.73	91.07	8.93	91.49	8.51
Karnataka	93.82	6.18	94.15	5.85	92.90	7.10
Kerala	88.54	11.46	88.54	11.46	0.00*	0.00*
Madhya Pradesh	90.74	9.26	90.94	9.06	89.94	10.06
Maharashtra	93.95	6.05	94.19	5.81	92.26	7.74
Orissa	93.27	6.73	93.20	6.80	93.62	6.38
Punjab	94.25	5.75	93.71	6.29	94.83	5.17
Rajasthan	91.23	8.77	90.46	9.54	91.79	8.21
Tamil Nadu	94.23	5.77	94.14	5.86	95.16	4.84
Uttar Pradesh	89.11	10.89	88.64	11.36	89.85	10.15
West Bengal	92.46	7.54	92.87	7.13	89.79	10.21

Source: Census of India 1991-2001

Note: 0.00* represents absence of class I cities in particular state

Table: 3.1.2.1e

Share of Male and Female Workers in Cities which have maintained class I status (1991-2001)

1991

States/ UTs	Total		Within UA		Outside UA	
	Male Workers	Female Workers	Male Workers	Female Workers	Male Workers	Female Workers
Andhra Pradesh	84.46	15.54	85.39	14.61	79.89	20.11
Assam	88.22	11.78	88.22	11.78	0.00*	0.00*
Bihar	91.76	8.24	91.57	8.43	92.40	7.60
Gujarat	90.28	9.72	90.35	9.65	87.86	12.14
Haryana	91.42	8.58	90.41	9.59	92.59	7.41
Karnataka	82.73	17.27	82.67	17.33	82.88	17.12
Kerala	80.46	19.54	80.46	19.54	0.00*	0.00*
Madhya Pradesh	86.07	13.93	85.89	14.11	86.78	13.22
Maharashtra	85.01	14.99	85.17	14.83	84.03	15.97
Orissa	89.55	10.45	89.92	10.08	87.80	12.20
Punjab	93.29	6.71	92.21	7.79	94.56	5.44
Rajasthan	89.56	10.44	90.05	9.95	88.26	11.74
Tamil Nadu	85.40	14.60	85.66	14.34	82.97	17.03
Uttar Pradesh	92.60	7.40	92.85	7.15	92.09	7.91
West Bengal	91.06	8.94	91.29	8.71	89.40	10.60

2001

States/ UTs	Total		Within UA		Outside UA	
	Male Workers	Female Workers	Male Workers	Female Workers	Male Workers	Female Workers
Andhra Pradesh	82.14	17.86	82.81	17.19	78.52	21.48
Assam	83.94	16.06	83.94	16.06	0.00*	0.00*
Bihar	88.76	11.24	88.81	11.19	88.68	11.32
Gujarat	88.13	11.87	88.22	11.78	85.92	14.08
Haryana	85.74	14.26	83.76	16.24	87.88	12.12
Karnataka	79.46	20.54	79.26	20.74	80.02	19.98
Kerala	78.28	21.72	78.28	21.72	0.00*	0.00*
Madhya Pradesh	83.29	16.71	82.75	17.25	85.56	14.44
Maharashtra	83.93	16.07	84.22	15.78	81.86	18.14
Orissa	86.18	13.82	86.31	13.69	85.63	14.37
Punjab	87.22	12.78	86.20	13.80	88.33	11.67
Rajasthan	86.20	13.80	87.23	12.77	85.45	14.55
Tamil Nadu	80.00	20.00	79.93	20.07	80.79	19.21
Uttar Pradesh	88.67	11.33	88.54	11.46	88.88	11.12
West Bengal	84.96	15.04	85.27	14.73	82.98	17.02

Source: Census of India 2001

Note: 0.00* represents absence of class I cities in particular state

highest share of females in cities outside UAs. Punjab has recorded lowest share of females in workforce in both types of cities. 2001 Census has recorded increase in proportion of females in workforce showing the trend similar to1991.

3.1.2.2 CITIES DEMOTED FROM CLASS I STATUS

The cities which are demoted from class I status belong to seven states. Among these states the lowest WPR is observed in Kerala whereas Andhra Pradesh has reported the highest WPR, followed by Tamil Nadu. There are two states Tamil Nadu and West Bengal which have demoted cities both within and outside UAs, both the states have higher WPR in their cities located outside UAs as compare to those located within UAs.

Table: 3.1.2.2a

State-Level Work Participation Rate in Cities Demoted from Class I Status Within and Outside UAs (2001)

	Work Participation Rate (in percentage)		
State	**Total**	**Within UA**	**Outside UA**
Andhra Pradesh	37.57	37.57	0.00*
Assam	31.77	31.77	0.00*
Gujarat	30.07	30.07	0.00*
Kerala	25.42	25.42	0.00*
Maharashtra	29.39	29.39	0.00*
Tamil Nadu	36.88	29.25	51.18
West Bengal	27.31	25.44	29.53

Source: Census of India 2001

Note: 0.00* represent absence of class I city in a particular state

Gender wise WPR shows that highest WPR among males and females both is reported by Andhra Pradesh and Tamil Nadu. Lowest male WPR is shown by Kerala whereas West Bengal has reported the lowest WPR.

There are only two states namely Tamil Nadu and West Bengal which have demoted cities within and outside UAs. In Tamil Nadu the city demoted within UA is Tuticorin and city demoted outside UA is Valparai. There is significant difference in two cities in terms female

Table: 3.1.2.2b

State-Level Work Participation Rate by Gender in Cities Demoted from Class I Status (2001)

State	Work Participation Rate (in percentage)		
	Total	Male	Female
Andhra Pradesh	37.57	53.39	21.75
Assam	31.77	50.18	9.75
Gujarat	30.07	51.91	5.51
Kerala	25.42	44.39	7.79
Maharashtra	29.39	48.02	9.71
Tamil Nadu	36.88	51.61	21.91
West Bengal	27.31	46.51	5.01

Source: Census of India 2001

WPR since Valparai has recorded a much higher female WPR compared to Tuticorin whereas the male WPR is marginally high in the former. In West Bengal Burnpur and Dabgram are

Table: 3.1.2.2c

State-Level Work Participation Rate by Gender and Location in Cities Demoted from Class I Status Within and Outside UAs (2001)

State	Work Participation Rate (in percentage)					
	Within UA			Outside UA		
	Total	Male	Female	Total	Male	Female
Andhra Pradesh	37.57	53.39	21.75	0.00*	0.00*	0.00*
Assam	31.77	50.18	9.75	0.00*	0.00*	0.00*
Gujarat	30.07	51.91	5.51	0.00*	0.00*	0.00*
Kerala	25.42	44.39	7.79	0.00*	0.00*	0.00*
Maharashtra	29.39	48.02	9.71	0.00*	0.00*	0.00*
Tamil Nadu	29.25	50.64	7.45	51.18	53 43	48.91
West Bengal	25.44	42.90	4.60	29.53	50 91	5.49

Source: Census of India 2001

Note: 0.00* represent absence of class I city in a particular state

located within and outside UAs respectively. Here Dabgram has slightly higher male and female WPR compared to Burnpur.

Among seven states which have experienced demotion of class I cities, Andhra Pradesh, Kerala and Maharashtra have only a nominal share of marginal workers whereas in Assam and Tamil Nadu it is negligible. It is observes that the share of female workers in demoted cities in these

states is relatively higher compared to average of class I cities. Valparai located outside UA in Tamil Nadu has s significant share of female workers.

Table: 3.1.2.2d

State-Level Share of Main and Marginal Workers by Location in Cities Demoted from Class I Status Within and Outside UAs (2001)

	Share of Workers (in percentage)					
	Total		Within UA		Outside UA	
State	Main Workers	Marginal Workers	Main Workers	Marginal Workers	Main Workers	Marginal Workers
Andhra Pradesh	96.85	3.15	96.85	3.15	0.00*	0.00*
Assam	99.59	0.41	99.59	0.41	0.00*	0.00*
Gujarat	98.81	1.19	98.81	1.19	0.00*	0.00*
Kerala	96.52	3.48	96.52	3.48	0.00*	0.00*
Maharashtra	95.51	4.49	95.51	4.49	0.00*	0.00*
Tamil Nadu	99.12	0.88	99.27	0.73	98.95	1.05
West Bengal	98.09	1.91	96.36	3.64	99.87	0.13

Source: Census of India 2001

Note: 0.00* represent absence of class I city in a particular state

Table: 3.1.2.2e

State-Level Share of Workers by Workers by Gender and Location in Cities Demoted from Class I Status Within and Outside UAs (2001)

	Share of Workers (in percentage)					
	Total		Within UA		Outside UA	
State	Male Workers	Female Workers	Male Workers	Female Workers	Male Workers	Female Workers
Andhra Pradesh	71.05	28.95	71.05	28.95	0.00*	0.00*
Assam	86.01	13.99	86.01	13.99	0.00*	0.00*
Gujarat	91.38	8.62	91.38	8.62	0.00*	0.00*
Kerala	84.11	15.89	84.11	15.89	0.00*	0.00*
Maharashtra	83.94	16.06	83.94	16.06	0.00*	0.00*
Tamil Nadu	70.52	29.48	87.38	12.62	52.44	47.56
West Bengal	91.51	8.49	91.76	8.24	91.25	8.75

Source: Census of India 2001

Note: 0.00* represent absence of class I city in a particular state

3.1.2.3 TOWNS PROMOTED TO CLASS I STATUS

The state level WPR of cities which have achieved class I status shows that the state with highest work participation rate in these new class I cities is Punjab (64.96%) whereas lowest WPR is shown by Uttar Pradesh (26.81 %). According to location of cities Karnataka and Bihar are the states with highest WPRs in both type of cities located within and outside UAs.

Table: 3.1.2.3a

State-Level Work Participation Rate in Towns which Promoted to Class I Status Within and Outside UAs (2001)

	Work Participation Rate (in percentage)		
State	**Total**	**Within UA**	**Outside UA**
Andhra Pradesh	31.72	31.05	35.47
Assam	34.10	34.10	0.00*
Bihar	38.20	37.02	38.98
Delhi *	31.34	31.34	0.00*
Gujarat	31.33	30.53	33.98
Haryana	30.21	30.84	29.75
Jammu & Kashmir	30.29	30.29	0.00*
Karnataka	38.15	39.40	34.04
Kerala	32.49	32.49	0.00*
Madhya Pradesh	29.56	30.23	28.56
Maharashtra	33.33	34.06	33.00
Punjab	31.96	0.00*	31.96
Rajasthan	27.63	0.00*	27.63
Tamil Nadu	33.17	33.63	32.27
Uttar Pradesh	26.81	27.77	24.91
West Bengal	32.39	32.45	31.98

Source: Census of India 2001

Note: 0.00* represent absence of class I city in a particular state

WPR by gender shows that highest male WPR has been reported by Bihar and Assam on the other hand lowest WPR is observed by Uttar Pradesh. In case of female WPR Karnataka and Kerala are the leading states whereas Uttar Pradesh and Rajasthan are at lower end.

Table: 3.1.2.3b

State-Level Work Participation Rate by Gender in Towns which have achieved Class I Status (2001)

State	Work Participation Rate (in percentage)		
	Total	Male	Female
Andhra Pradesh	31.72	50.93	11.63
Assam	34.10	55.61	9.90
Bihar	38.20	63.97	8.71
Delhi	31.34	51.38	6.33
Gujarat	31.33	52.14	8.47
Haryana	30.21	47.93	9.43
Jammu & Kashmir	30.29	47.86	9.65
Karnataka	38.15	56.70	17.89
Kerala	32.49	52.06	14.00
Madhya Pradesh	29.56	47.27	9.83
Maharashtra	33.33	51.98	12.49
Punjab	28.17	44.36	10.14
Rajasthan	27.63	46.24	6.68
Tamil Nadu	33.17	54.89	11.51
Uttar Pradesh	26.81	45.06	5.80
West Bengal	32.39	52.70	10.36

Source: Census of India 2001

The WPR of males and females in cities located within and outside UAs shows that Karnataka and Punjab have highest WPR in cities located within and outside UAs respectively whereas Uttar Pradesh has reported lowest WPR in both types of cities. Bihar and Karnataka are the states with highest male WPR on the other hand Uttar Pradesh has shown lowest male WPR in cities located within UAs. In terms of female WPR Karnataka and Kerala are the leading states with higher WPR in cities located within UAs and Uttar Pradesh has lowest female WPR. In case of cities located outside UAs lowest WPR are observed in Uttar Pradesh and highest WPR is reported by Andhra Pradesh.

In case of main and marginal workers in cities which have achieved class I status in 2001 it may be observed that Assam, Delhi, Gujarat, Punjab and Tamil Nadu have lower share of marginal workers compared to average of common class I cities (7.15 %) whereas other states

Table: 3.1.2.3c

State-Level Work Participation Rate by Gender and Location in Towns which have achieved Class I Status Within and Outside UAs (2001)

State	Work Participation Rate (in percentage)					
	Within UA			Outside UA		
	Total	Male	Female	Total	Male	Female
Andhra Pradesh	31.05	50.05	11.05	35.47	55.98	14.79
Assam	34.10	55.61	9.90	0.00*	0.00*	0.00*
Bihar	37.02	61.51	8.96	38.98	65.62	8.55
Delhi	31.34	51.38	6.33	0.00*	0.00*	0.00*
Gujarat	30.53	50.68	8.47	33.98	57.00	8.46
Haryana	30.84	49.05	9.20	29.75	47.07	9.60
Jammu & Kashmir	30.29	47.86	9.65	0.00*	0.00*	0.00*
Karnataka	39.40	57.81	18.98	34.04	52.95	14.46
Kerala	32.49	52.06	14.00	0.00*	0.00*	0.00*
Madhya Pradesh	30.23	48.61	10.31	28.56	45.37	9.10
Maharashtra	34.06	52.72	13.21	33.00	51.66	12.17
Punjab	0.00*	0.00*	0.00*	28.17	44.36	10.14
Rajasthan	0.00*	0.00*	0.00*	27.63	46.24	6.68
Tamil Nadu	33.63	55.84	11.52	32.27	53.00	11.48
Uttar Pradesh	27.77	46.72	5.96	24.91	41.80	5.48
West Bengal	32.45	52.89	10.19	31.98	51.39	11.52

Source: Census of India 2001

Note: 0.00* represent absence of class I city in a particular state

have reported relatively higher share of marginal workers. In case of class I cities which are located within UAs relatively lower share of marginal workers are found in states of Assam, Delhi, Gujarat and Tamil Nadu whereas higher share of marginal workers is found in Andhra Pradesh, Haryana and West Bengal.

The gender wise composition of workers shows that Karnataka is the state with highest share of female workers whereas Delhi which is the most urbanized state has lowest share of the same. In case of cities located within UAs Karnataka, Kerala, Madhya Pradesh, Maharashtra, Tamil Nadu and Andhra Pradesh have reported relatively higher share of female workers as compared to common class I cities. On the other hand states which have shown higher

Table: 3.1.2.3d

State-Level Share of Main and Marginal Workers by Location in Towns which have achieved Class I Status Within and Outside UAs (2001)

State	Share of Workers (in percentage)					
	Total		Within UA		Outside UA	
	Main Workers	Marginal Workers	Main Workers	Marginal Workers	Main Workers	Marginal Workers
Andhra Pradesh	89.45	10.55	89.34	10.66	90.01	9.99
Assam	96.46	3.54	96.46	3.54	0.00*	0.00*
Bihar	88.10	11.90	90.37	9.63	86.66	13.34
Delhi	93.90	6.10	93.90	6.10	0.00*	0.00*
Gujarat	94.99	5.01	94.85	5.15	95.39	4.61
Haryana	89.83	10.17	89.69	10.31	89.95	10.05
Jammu & Kashmir	90.98	9.02	90.98	9.02	0.00*	0.00*
Karnataka	92.49	7.51	93.07	6.93	90.30	9.70
Kerala	91.59	8.41	91.59	8.41	0.00*	0.00*
Madhya Pradesh	90.86	9.14	92.39	7.61	88.49	11.51
Maharashtra	92.72	7.28	92.79	7.21	92.68	7.32
Punjab	95.14	4.86	0.00*	0.00*	95.14	4.86
Rajasthan	89.38	10.62	0.00*	0.00*	89.38	10.62
Tamil Nadu	96.36	3.64	96.58	3.42	95.90	4.10
Uttar Pradesh	89.97	10.03	90.14	9.86	89.59	10.41
West Bengal	90.26	9.74	89.96	10.04	92.31	7.69

Source: Census of India 2001

Note: 0.00* represent absence of class I city in a particular state

share of female workers in cities located outside UAs are Andhra Pradesh, Karnataka, Maharashtra, Punjab, Tamil Nadu and West Bengal whereas Bihar and Uttar Pradesh are at the lower end.

Table: 3.1.2.3e

State-Level Share of Workers by Workers by Gender and Location in Towns which have achieved Class I Status Within and Outside UAs (2001)

State	Share of Workers (in percentage)					
	Total		Within UA		Outside UA	
	Male Workers	Female Workers	Male Workers	Female Workers	Male Workers	Female Workers
Andhra Pradesh	82.08	17.92	82.66	17.34	79.23	20.77
Assam	86.33	13.67	86.33	13.67	0.00*	0.00*
Bihar	89.36	10.64	88.72	11.28	89.77	10.23
Delhi	91.02	8.98	91.02	8.98	0.00*	0.00*
Gujarat	87.11	12.89	86.75	13.25	88.19	11.81
Haryana	85.64	14.36	86.36	13.64	85.07	14.93
Jammu & Kashmir	85.35	14.65	85.35	14.65	0.00*	0.00*
Karnataka	77.58	22.42	77.17	22.83	79.13	20.87
Kerala	77.83	22.17	77.83	22.17	0.00*	0.00*
Madhya Pradesh	84.26	15.74	83.64	16.36	85.23	14.77
Maharashtra	82.30	17.70	81.70	18.30	82.57	17.43
Punjab	82.96	17.04	0.00*	0.00*	82.96	17.04
Rajasthan	88.63	11.37	0.00*	0.00*	88.63	11.37
Tamil Nadu	82.63	17.37	82.83	17.17	82.23	17.77
Uttar Pradesh	89.94	10.06	90.02	9.98	89.77	10.23
West Bengal	84.64	15.36	84.96	15.04	82.46	17.54

Source: Census of India 2001

Note: 0.00* represent absence of class I city in a particular state

3.2 GROWTH OF WORKERS: CITIES WHICH HAVE MAINTAINED CLASS I STATUS

Present section examines the growth of employment in class I cities viz. common cities between 1991 and 2001 considering their location within and outside UAs. The section is divided into two parts. First part gives the all India trends of growth of workers in class I cities according to size class and their location within and outside UAs and second part presents similar analysis at state level.

3.2.1 ALL INDIA LEVEL ANALYSIS

Table shows the growth of total workers in class I cities located within and outside UAs according to size class. Between 1991 and 2001 the total workers in class I cities have increased by 3.85 percent exponentially. However, size class wise metro cities have registered a lower growth rate of workers (2.80 percent) compared to class Ib (4.87 percent) and class Ic (4.46 percent). In terms of location, an interesting observation is that metro cities located outside UAs have shown higher growth rate as against recorded by their counterparts located within UAs. Equally important to note is the fact that Ludhiana[2] was the only common metro city located outside UA between 1991 and 2001 census.

Table: 3.2.1a

Annual Exponential Growth Rates of Total Workers (1991-2001)

	Annual Exponential Growth Rate		
Size Class	**Total**	**Within UA**	**Outside UA**
I	3.85	3.51	5.33
Ia	2.80	2.12	16.19
Ib	4.87	4.94	4.45
Ic	4.46	4.68	4.04

Source: Census of India (1991 and 2001)

Note: The growth rates for cities in different size categories have been computed by considering these by their size class distribution in the base year.

On the other hand cities of class Ib and Ic (4.94 and 4.68 percent) located within UAs experienced a relatively higher growth rate of workers than the cities of same size class (4.45 and 4.04 percent respectively by class Ib and Ic) located outside UAs.

Looking at the growth of male and female workers separately it is observed that number of female workers have grown faster than that of male workers for all size classes of class I cities

[2] Since the analysis has been done for common class I cities between 1991 and 2001, the size-class Ia for class I cities located outside UAs represent only Ludhiana.

located both within and outside UAs. In all class I cities the female workers have grown by an annual exponential growth rate of 6.71 percent. The growth rate of male workers was 3.40

Table: 3.2.1b
Growth of Workers by Gender (1991-2001)
Annual Exponential Growth Rate

Size Class	Total	Male	Female
I	3.85	3.40	6.71
Ia	2.80	2.35	5.61
Ib	4.87	4.42	7.86
Ic	4.46	4.00	7.32

Source: Census of India (1991 and 2001)

Note: The growth rates for cities in different size categories have been computed by considering these by their size class distribution in the base year.

percent per annum for the same time period. According to size class, male workers in metro cities have recorded an annual growth rate of 2.35 percent while in class Ib and Ic their growth rate was 4.2 percent and 4.00 percent per annum respectively. Female workers have also shown a higher growth rate in class Ib (2.86 percent) and class Ic (7.32 percent) as compared to metro cities (5.61 percent). This increase in female urban employment is often called feminization of labourforce. These developing tendencies of feminisation have developed mainly for the work at the lower end of the value chain which involves low paid, inferior working conditions. It can be inferred that as an impact of the liberalisation policies and the labour market deregulations, this kind of feminisation was a response to the need of the employers for a more flexible labour force. This pattern of "feminisation" does not call for any celebration but what it requires essentially is to frame a social policy to protect the rights of such women workers and provide them with better employment contracts[3]

Looking at the growth rates of workers based on the location of class I cities, it is found that both, male as well as female workers, have grown at a faster rate in class I cities located

[3] S. Mitra (2006), Patterns of Female Employment in Urban India Analysis of NSS Data (1983 to 1999-2000), *Economic and Political Weekly*, Vol. 41, No. 48, p. 5008

Table: 3.2.1c

Growth of Workers in Class I Cities by Location and Gender (1991-2001)

	Annual Exponential Growth Rate					
	Within UA			Outside UA		
Size Class	Total	Male	Female	Total	Male	Female
I	3.51	3.05	6.41	5.33	4.91	8.03
Ia	2.12	1.66	5.01	16.19	15.37	26.13
Ib	4.94	4.48	8.08	4.45	4.00	6.79
Ic	4.68	4.22	7.55	4.04	3.60	6.88

Source: Census of India (1991 and 2001)

Note: The growth rates for cities in different size categories have been computed by considering these by their size class distribution in the base year.

outside UAs. Unlike class I cities which are part of UAs, class I cities which are located outside UAs have rural hinterland and are regionally important cities dominating large area, therefore concentration of economic activities or industries in these cities has lead to relatively higher workforce growth as compared to their counterparts located within UAs. Added to this, they do not face the problems of congestion high rent and land prices within city so they are in process of catching up with the large cities located within UAs. Further looking at differences in size class level within UAs, it is observed that in case of metro cities the growth of male and female workers (1.66 and 5.01 percent respectively) is lower than other two size class cities. The growth rate of male and female workers in these two size class cities are 4.48 and 8.08 percent and 4.22 and 7.55 percent respectively. At the same time, however, class I cities located outside UAs shows that Ludhiana, the only metro city located outside UA, has shown a substantial growth in the number of both, male and female workers (15.37 and 26.13 percent per annum respectively) in its workforce. On the other hand, class Ib and Ic cities located within UAs have registered a higher growth rate of male and female workers compared to their counterparts located outside UAs.

Last decade has observed a faster growth of marginal workers in class I cities, being 20.63 percent annual exponential as against growth of main workers at 3.24 percent per annum.

Table: 3.2.1d

Growth of Main and Marginal Workers in Class I Cities Within and Outside UAs (1991-2001)

	Annual Exponential Growth Rate					
	Total		Within UA		Outside UA	
Size Class	Main Workers	Marginal Workers	Main Workers	Marginal Workers	Main Workers	Marginal Workers
I	3.24	20.63	2.92	20.53	4.64	20.97
Ia	2.29	20.53	1.62	19.62	15.58	0*
Ib	4.22	22.40	4.28	21.95	3.83	26.62
Ic	3.78	20.04	4.04	20.68	3.30	19.09

Source: Census of India (1991 and 2001)

Note: The growth rates for cities in different size categories have been computed by considering these by their size class distribution in the base year.

According to size class, the highest growth in the number of main workers was recorded by class Ib cities by 4.22 percent, followed by class Ic (3.78 percent) and Ia (2.29 percent). In case of marginal workers also Class Ib has shown a higher growth rate (22.40 percent), followed by class Ia or metro cities (20.53 percent) and class Ic (20.04 percent). In term of location of class I cities within and outside UAs, it is observed that among the cities which are located within UAs, class Ib cities have recorded a higher growth rate of main workers, at the rate of 4.28 percent followed by class Ic cities (4.04 percent) and class Ia cities (1.62 percent). Excluding class Ia for cities located outside UAs as latter constitutes just one city, which is Ludhiana. Other two size classes viz. class Ib and Ic have shown 3.83 percent and 3.30 percent annual exponential growth rate of marginal workers respectively. At the same time, however, the growth rate of main workers has been higher in class I cities located within UAs. In case of marginal workers, class Ib cities have registered a higher growth rate (26.62 percent) as compared to cities of same size class located within UAs. The growth rate of marginal workers in the latter has been 21.95 percent during the same decade. On the other hand class Ic cities located within UAs have recorded a relatively higher growth rate of marginal workers (20.68 percent) than their counterparts located outside UAs (19.09). Ludhiana, the only metro city outside UA, did not have marginal workers in 1991. A large proportion of marginal workers in urban areas is employed in informal activities mainly in service sector. As Mitra's study shows, in around 70

per cent of the class I cities, i.e. each with a population of 1,00,000 and above, tertiary activities accounted for more than 60 per cent of the informal sector[4].

3.2.2 STATE LEVEL ANALYSIS

Table 3.2.2a presents the state level annual exponential growth rates of workers in class I cities according to their location within and outside UAs. Punjab has the highest growth rate of workers (10.46 percent) in its class I cities. It is followed by Bihar (7.9 percent) and Karnataka

Table: 3.2.2a

Growth of Total Workers in Class I Cities Within and Outside UAs (1991-2001)

	Annual Exponential Growth Rate		
State	**Total**	**Within UA**	**Outside UA**
Andhra Pradesh	2.69	2.84	1.90
Assam	3.39	3.39	0.00*
Bihar	7.90	7.28	9.75
Gujarat	0.68	0.54	4.79
Haryana	4.55	4.20	4.94
Karnataka	5.14	5.57	4.01
Kerala	3.62	3.62	0.00*
Madhya Pradesh	4.48	3.52	3.37
Maharashtra	4.57	4.70	3.68
Orissa	3.28	3.14	3.92
Punjab	10.46	10.15	10.81
Rajasthan	3.84	-1.65	11.48
Tamil Nadu	3.09	3.22	1.71
Uttar Pradesh	1.80	0.83	3.57
West Bengal	3.19	3.01	4.45

Source: Census of India (1991 and 2001)

Note: (a) The growth rates have been computing for common cities between 1991 and 2001.

(b) 0.00* represents absence of class I city in a particular state.

[4] A. Mitra, (1994), *Urbanisation, Slums, Informal Sector Employment and Poverty: An Exploratory Study,* DK Publishers and Distributor,p.79

(5.14 percent). The lowest growth rates of workers are recorded by Gujarat (0.68percent), Uttar Pradesh (1.80 percent) and Andhra Pradesh (2.69 percent). It is important to be noted that Bihar which is one of the most rural and under developed state has registered a much higher growth of workers in class I cities compared to many state. This is again an example of catching up.

While looking at the growth rates of workers separately for the class I cities which are located within and outside UAs it is observed that Punjab and Bihar have shown highest growth rates of workers in both types of cities. The growth rate of workers in class I cities located within UAs for Punjab and Bihar are 10.15 percent and 7.28 percent respectively while their growth rates in class I cities located outside UAs are 10.81 and 9.75 percent. Rajasthan is the only state

Table: 3.2.2b

Growth of Workers by Gender (1991-2001)

State	Annual Exponential Growth Rate		
	Total	Male	Female
Andhra Pradesh	2.69	2.34	4.46
Assam	3.39	2.83	6.93
Bihar	7.90	7.45	12.22
Gujarat	0.68	0.36	3.45
Haryana	4.55	3.87	10.01
Karnataka	5.14	4.66	7.22
Kerala	3.62	3.28	4.93
Madhya Pradesh	4.48	3.99	7.27
Maharashtra	4.57	4.36	5.73
Orissa	3.28	2.84	6.60
Punjab	10.46	9.77	17.13
Rajasthan	3.84	3.33	7.76
Tamil Nadu	3.09	2.36	6.67
Uttar Pradesh	1.80	1.26	7.48
West Bengal	3.19	2.47	8.69

Source: Census of India (1991 and 2001)

Note: The growth rates have been computing for common cities between 1991 and 2001.

which has recorded a negative growth rate of workers (-1.65 percent) in its class I cities located within UAs whereas highest growth rate (11.48percent) in its cities which are located outside UAs. Bihar, Gujarat, Haryana, Orissa, Punjab and Uttar Pradesh are the states which have higher growth rate of workers in class I cities located outside UAs compared to cities which are located within UAs. With the exception of Gujarat these are the states which have lower level of urbanization and a large proportion of their population is concentrated in class I cities. Gujarat has only two classes I cities lying outside UAs and is also one of the most industrialized states of the country. Its growth pattern can thus be a result of expanding industries outside the congested UAs, into other large cities of the state.

Table 3.2.2b gives the growth rates of male and female workers. It is clearly visible that in all states of India, female workers have been growing much faster than male workers in class I cities. States of Punjab and Bihar have shown highest growth rates of both, male and female workers. The growth rates for male workers in Punjab and Bihar are 9.77 percent and 7.45 percent respectively while female workers have grown by 17.13 percent and 12.12 percent per annum respectively. Other states which have shown comparatively higher growth rates of male workers are Karnataka (4.66 percent) and Maharashtra (4.36percent). The states which recorded low growth rate of male workers are Gujarat (0.36 percent) and Uttar Pradesh (1.26 percent). On the other hand, states other than Punjab and Bihar, recording higher growth rates of female workers are Uttar Pradesh (7.48 percent), Rajasthan (7.76 percent), Madhya Pradesh (7.27 percent) and Karnataka (7.22 percent). The lowest growth rates of female workers have been recorded by Gujarat (3.45percent).

Table 3.2.2c presents the growth rates of male and female workers in class I cities within and outside UAs. It is observed that in both types of class I cities for all the states, female workers have recorded a higher growth rate as compared to their male counterparts. The states which have registered a higher growth rate of male workers in their class I cities located within UAs as against those cities which are located outside UAs are Andhra Pradesh (2.47 and 1.36 percent within and outside UAs respectively), Karnataka (5.10 and 3.53 percent), Maharashtra (4.50 and 3.34 percent) and Tamil Nadu (2.46 and 1.36 percent). The states which have shown higher growth rate of male workers in their class I cities located outside UAs are Bihar (6.83 and9.27 percent within and outside UAs respectively), Gujarat (0.22 and 4.54 percent), Haryana

Table: 3.2.2c

Growth of Workers in Class I Cities by Location and Gender (1991-2001)

State/UT	Annual Exponential Growth Rate					
	Within UA			Outside UA		
	Total	Male	Female	Total	Male	Female
Andhra Pradesh	2.84	2.47	4.82	1.90	1.62	3.01
Assam	3.39	2.83	6.93	0.00*	0.00*	0.00*
Bihar	7.28	6.83	11.48	9.75	9.27	14.53
Gujarat	0.54	0.22	3.32	4.79	4.54	6.48
Haryana	4.20	3.38	9.98	4.94	4.40	10.06
Karnataka	5.57	5.10	7.59	4.01	3.53	6.21
Kerala	3.62	3.28	4.93	0.00*	0.00*	0.00*
Madhya Pradesh	3.52	3.02	6.31	3.37	2.93	6.08
Maharashtra	4.70	4.50	5.79	3.68	3.34	5.41
Orissa	3.14	2.68	6.68	3.92	3.58	6.28
Punjab	10.15	9.47	15.95	10.81	10.11	18.90
Rajasthan	-1.65	-2.07	1.78	11.48	10.97	15.17
Tamil Nadu	3.22	2.46	6.99	1.71	1.30	3.65
Uttar Pradesh	0.83	0.28	6.65	3.57	3.06	9.01
West Bengal	3.01	2.31	8.45	4.45	3.60	10.15

Source: Census of India (1991 and 2001)

Note: (a) The growth rates have been computing for common cities between 1991 and 2001.

(b) 0.00* represents absence of class I city in a particular state.

(3.38 and 4.40 percent), Orissa (2.68 and 3.06 percent) and West Bengal (2.31 and 3.60 percent). Rajasthan is the only state which has shown a negative growth rate of male workers (-0.99 percent), in its class I cities located within UAs and 10.97 percent growth rate in cities located outside UAs. In case of female workers, Karnataka (7.59 and 6.21 percent), Madhya Pradesh (6.31 and 6.08 percent), Maharashtra (5.79 and 5.41 percent), Orissa (6.68 and 6.28percent), Tamil Nadu (6.99 and 3.65 percent) and Andhra Pradesh (4.82 and 3.01),have registered higher growth rates of female workers in class I cities located within UAs while states of Bihar (11.48 and 14.53 percent), Haryana (9.98 and 10.06 percent), Punjab (15.95 and 18.90 percent), Rajasthan (1.78 and 15.17 percent), Uttar Pradesh (6.65 and 9.01 percent) and West Bengal (8.45 and 10.15percent) have recorded higher growth rate of female workers located outside UAs.

Table: 3.2.2d

Growth of Main and Marginal Workers in Class I Cities Within & Outside UA (1991-2001)

	Annual Exponential Growth Rate					
	Total		Within UA		Outside UA	
State	Main Workers	Marginal Workers	Main Workers	Marginal Workers	Main Workers	Marginal Workers
Andhra Pradesh	1.93	23.02	2.11	23.35	0.99	21.69
Assam	2.92	20.62	2.92	20.62	0.00*	0.00*
Bihar	6.91	31.35	6.30	30.29	8.74	34.78
Gujarat	0.42	11.99	0.29	11.63	4.39	24.32
Haryana	3.68	33.18	3.33	29.77	4.07	39.31
Karnataka	4.62	21.16	5.06	23.84	3.47	16.81
Kerala	2.82	13.73	2.82	13.73	0.00*	0.00*
Madhya Pradesh	3.76	20.82	2.77	20.52	2.49	20.27
Maharashtra	4.15	15.56	4.31	14.87	3.03	20.34
Orissa	2.71	20.49	2.54	21.56	3.45	16.57
Punjab	9.89	43.58	9.51	48.78	10.31	39.28
Rajasthan	3.08	20.84	-2.53	18.23	10.87	23.75
Tamil Nadu	2.59	21.28	2.70	22.68	1.40	11.35
Uttar Pradesh	0.79	22.48	-0.27	24.24	2.70	19.94
West Bengal	2.49	25.56	2.34	27.10	3.58	20.58

Source: Census of India (1991 and 2001)

Note: (a) The growth rates have been computing for common cities between 1991 and 2001.
(b) 0.00* represents absence of class I city in a particular state.

Table 3.2.2d gives the growth rates of main and marginal workers in class I cities located within and outside UAs which shows *marginalization* of workforce in urban India during last decade since in all the states except Himachal Pradesh the number of marginal workers have grown at a rate, much faster than that of main workers. Punjab has recorded highest growth rate of main workers in class I cities at 9.89 percent, followed by Bihar (6.91percent), Karnataka (4.62 percent) and Maharashtra (4.15 percent). Low growth rates are experienced by Gujarat (0.42 percent) and Uttar Pradesh (0.79 percent). In case of main workers highest growth rate was shown by Haryana (33.18 percent) and Bihar (31.35 percent) whereas Himachal Pradesh has recorded negative growth rate (-4.12 percent). Other states with lower growth rate of marginal workers are Gujarat (11.99 percent) and Kerala (13.73 percent). While looking at the location of

cities within and outside UAs, it is observed that states of Andhra Pradesh (2.11 and 0.99 percent within and outside UAs respectively), Karnataka (5.06 and 3.47 percent), Madhya Pradesh (2.77 and 2.49 percent), Maharashtra (4.31 and 3.03) and Tamil Nadu (2.70 and 1.40 percent) have registered higher growth rates of main workers in class I cities located within UAs compared to cities which are located outside UAs. On the other hand Bihar (6.30 and 8.74 percent), Gujarat (0.29 and 4.39 percent), Orissa (2.54 and 3.45 percent), Punjab (9.51 and 10.31 percent) and West Bengal (2.34 and 3.58 percent) have shown higher growth rate of main workers in their class I cities located outside UAs. Two states namely Rajasthan and Uttar Pradesh have registered negative growth rates of main workers viz. -2.53 and -0.27 respectively in their class I cities located within UAs. In case of marginal workers, the states which have shown higher growth rates of marginal workers in class I cities are Andhra Pradesh (23.35 and 21.69 percent), Karnataka (23.84 and 16.81 percent), Madhya Pradesh (20.52 and 20.27 percent), Orissa (21.56 and 16.57 percent), Punjab (48.78 and 39.28 percent) and Tamil Nadu (22.68 and 11.35 percent), Uttar Pradesh (24.24 and 19.94 percent) and West Bengal (27.10 and 20.58 percent). On the other hand, states of Bihar (30.29 and 34.78 percent), Gujarat (11.63 and 24.32 percent), Haryana (29.77 and 39.31 percent), Maharashtra (14.87 and 20.34 percent) and Rajasthan (18.23 and 23.75 percent) have shown higher growth rates of marginal workers in class I cities outside UAs.

3.3 CONCLUSION

The conclusions drawn from the above analysis are presented as follows:

Cities which maintained class I status in 1991 and 2001:

1. For cities which have maintained class I status both in 1991 and 2001, the Workforce Participation Rate increases with the decreasing size class. The lowest Workforce Participation Rate was observed in metropolitan cities and the highest in class Ic cities. The cities which are located outside UAs have recorded a higher Workforce Participation Rate as compared to those located within UAs.

2. All the three size categories have shown increase in their Workforce Participation Rate except metro cities located within UAs which have experienced a marginal decline in

Workforce Participation Rate between 1991 and 2001. It can be attributed to the high rent and land values in large cities within UAs. This has led to the establishment of industries in other large cities which are located outside UAs, whereas only one metro city Ludhiana located outside UAs Ludhiana has recorded a much higher rise in Workforce Participation Rate.

3. Between 1991 and 2001, an increase in male Workforce Participation Rate has been observed in class Ib and Ic cites within UAs, whereas it has declined in metropolitan cities. Ludhiana, the only metropolitan city, has shown an increase in male Workforce Participation Rate. The female workforce participation on the other hand has increased in all size class of cities.

4. The period between 1991 and 2001 witnessed an increase in proportion of marginal workers in class I cities with relatively higher increase in class I cities located outside UAs as compared to those within UAs. Since class I cities which are located within UAs have relatively larger service sector which is able to absorb a higher share of female workers, these cities have shown a relatively higher increase in the share of female workers compared to class I cities located outside UAs.

5. Between 1991 and 2001, cities which belong to class Ib and class Ic, have registered a higher growth of workers compared to metropolitan cities. On the other hand, Ludhiana which is the only metro city located outside UAs has shown a higher growth rate than its counterparts located within UAs. Cities of class Ib and Ic located within UAs have experienced a relatively higher growth rate of workers than metropolitan cities as well as the cities of the same size class located outside UAs.

6. The period under consideration has experienced a phenomenon often called feminization of workforce, wherein the number of female workers has grown faster than that of male workers for all size classes of class I cities located both within and outside UAs. Looking at the growth rates of workers based on the location of class I cities, it is found that both, male as well as female workers, have grown at a faster rate in class I cities located outside UAs.

7. The last decade has observed a faster growth of marginal workers in class I cities, as against growth of main workers. According to size class, the highest growth in the number of both main and marginal workers was recorded by class Ib cities.

Cities which were demoted from class I status in 2001

8. This group of cities has registered a relatively higher Workforce Participation Rate compared to average of their size class. Only in two cities, Valparai and Dabgram, which are located outside UAs the Work Participation Rate is much higher vis-à-vis other cities. They have shown much higher Work Participation Rate for female workers. The male Work Participation Rate is also high. This high WPR is mainly distress driven which is evident from the fact that considerable proportion of workers in these cities are engaged in agriculture and allied activities.

Towns Promoted to class I status in 2001

9. These cities have recorded a higher Workforce Participation Rate compared to those cities which have maintained class I status. These cities are new entrants in class I category therefore higher Workforce Participation Rate may be the result of their faster economic growth as a consequence of new investment patterns in post reform India which favors cities which are located in close proximity to large metropolitan cities as compared to the existing metropolitan cities. Therefore these cities are in the process of catching up with older class I cities. Cities which are located within UAs particularly class Ic have reported higher Workforce Participation Rate compared to cities which are located outside UAs.

10. Considering the location of cities it has been observed that male and female workers both have reported relatively higher Workforce Participation Rate in cities which are located within UAs as compared to their counterparts located outside UAs. These cities have also shown a slightly higher percentage share of marginal workers compared to those cities which have maintained their class I status.

CHAPTER 4

STRUCTURE OF WORKFORCE IN URBAN INDIA

CHAPTER 4

STRUCTURE OF WORKFORCE IN URBAN INDIA

INTRODUCTION

The Chapter is a comparative study of the workforce structure of class I cities located within and outside UAs between 1991 and 2001. The analysis has been done at three levels: a) all India analysis across size class of cities, b) state level analysis taking major states, c) city level analysis for metropolitan cities, for total, main, marginal as well as for male and female workers separately.

Since a larger share of GDP is contributed by large cities due to concentration of most productive activities in this cities which in turn leads to more employment generation. At the same time, there exists a considerable variation within this so called homogeneous group of cities based on their relative size, location within or outside UAs and the region in which they are located. Therefore, in the absence of income data at settlement level, the disparity among the class I cities can be assessed through information on sectoral distribution of employment. Given the acceleration in the pace of Liberalization in 1990s, it is important to link the process of liberalization and changing structure of workforce. There is a growing literature on links between specific policies of liberalization, including deregulation of the labour market, export promotion and trade liberalization with process of casualisation, informalisation and feminization of labour-force.[1] The chapter does not deals directly with this complex issue, however in order to be able to understand these issues better it is necessary to examine the changes in the patterns of industrial employment.

WORKFORCE STRUCTURE OF CLASS I CITIES

This section presents a comparative analysis of employment structure of class I cities located within and outside UAs in 1991 and 2001. This analysis has been done by dividing the class I cities into three categories viz. cities which have maintained their class one status during

[1] Pais Jesim (2001), Casualisation of Urban Labour-force: Analysis of Recent Trends in Manufacturing, Economic and Political Weekly

considered period, cities which were demoted from class I status and towns which were promoted to class I status.

4.1 CITIES WHICH HAVE MAINTAINED CLASS I STATUS

Between 1991 and 2001 Census, 312 class I cities are common which have maintained their class I status. Present section analyses the industrial distribution of workforce this category of cities under three subsections: a) total workers, b) main workers, c) marginal workers.

4.1.1 ALL INDIA LEVEL ANALYSIS

4.1.1.1 TOTAL WORKERS

According to 2001 census, the industrial distribution of workers in class I cities understandably shows that a major proportion of workers i.e. 61.57 percent is employed in tertiary sector, followed by secondary sector (34.50percent). Primary sector contains only a small share (3.93 percent) of workers. According to size class, the share of workers in secondary sector is about 35 percent in all three size classes of cities whereas the proportion of workers in primary and tertiary sector increases with decreasing size class. Considering the location of cities within and outside UAs, it is observed that cities which are located outside UAs have a higher proportion of their workers in primary and secondary sector as compared to those located within UAs. This difference can be attributed to the shift of certain industries and manufacturing units outside the municipal boundaries of large cities into their peripheries, especially in case of cities located within UAs.

Table: 4.1.1.1a

Industrial Distribution of Total Workers in Class I Cities (2001)

(Total)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	0.88	1.31	1.24	0.49	4.39	21.88	8.23	22.28	9.30	29.98
Ia	0.50	0.41	0.65	0.27	3.33	23.83	7.68	22.12	9.71	31.49
Ib	1.08	1.44	1.42	0.35	5.24	20.37	8 93	21.77	9.18	30.23
Ic	1.15	2.09	1.71	0.75	4.98	20.78	8.41	22.67	8.98	28.48

(Within UA)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	0.69	0.96	1.13	0.46	3.98	22.17	8.20	22.33	9.54	30.53
Ia	0.41	0.34	0.63	0.26	3.08	22.90	7.74	22.42	10.01	32.21
Ib	1.09	1.38	1.46	0.35	5.05	20.17	9.00	22.02	9.30	30.17
Ic	0.80	1.50	1.58	0.79	4.51	22.44	8.32	22.41	9.06	28.58

(Outside UA)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	1.66	2.70	1.68	0.58	5.99	20.76	8.33	22.09	8.37	27.84
Ia	1.42	1.20	0.88	0.35	6.09	33.71	7.14	18.96	6.45	23.82
Ib	1.02	1.76	1.11	0.34	6.48	21.66	8.48	20.14	8.36	30.65
Ic	1.83	3.21	1.97	0.67	5.88	17.61	8.58	23.16	8.82	28.27

Source: Census of India 2001
Note: Industrial distribution of workers has been presented for common class I cities considering their size class in base year

Table 4.1.1.1a presents industrial distribution of total workers in class I cities during 2001, linked to their size class and location within and outside urban agglomerations. It shows that Other Services (IX) employing 30 percent workers is the major industrial group in class I cities. Looking at class I cities according to their location within and outside UAs it is observed that cities which are located within UAs have relatively higher proportion of their workers in Other Services, Transport Storage and Communication, Trade and Commerce and Non Household Manufacturing industries compared to those cities which are located outside UAs. Ludhiana which is the only metro city outside UA is an exception with a significant share (33.71 percent) of its workers in Non Household industries. Cities located within UAs have a lower share of workers in low productive activities within primary sector because they are located in a larger urban environment i.e. dominated by secondary and tertiary sector.

The industrial distribution of workers by gender shows that female workers have a larger concentration (about 50 Per cent workers) in Other Services as compared to male workers (26 Per cent) in all three size classes of cities. The other major industrial groups employing significant proportion of male workers are Non Household Manufacturing and Trade and Commerce whereas a considerable share of females is employed in Household Manufacturing also. Cities located within UAs have relatively larger share of males and female workers in Other

Services and Non Household Manufacturing industries compared to those located outside UAs. On the other hand, cities which are located outside UAs account for relatively higher proportion of male and female workers in Household Manufacturing compared to their counterparts.

4.1.1.2 MAIN WORKERS

Between 1991 and 2001, industrial distribution of main workers shows that main workers are mainly concentrated in tertiary and secondary sector with only a nominal share of workers in primary sector at both points in time (Table 4.1.1.2a).

Table: 4.1.1.2a

Industrial Distribution of Total Main Workers in Class I Cities (1991-2001)

1991

	Industrial Classification									
Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	1.63	2.18	1.16	0.41	2.33	26.25	5.55	23.97	9.41	27.11
Ia	0.49	0.52	0.69	0.19	1.31	29.26	5.78	25.37	9.78	26.62
Ib	2.02	2.47	1.36	0.30	3.23	24.55	5.49	22.65	9.38	28.54
Ic	2.69	3.87	1.60	0.70	3.05	23.72	5.32	23.02	9.02	27.01

2001

Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	0.85	0.98	1.21	0.50	3.91	22.25	7.55	22.69	9.55	30.51
Ia	0.47	0.33	0.65	0.27	3.00	24.14	7.05	22.40	9.92	31.75
Ib	1.05	1.12	1.39	0.35	4.74	20.67	8.18	22.18	9.41	30.91
Ic	1.12	1.53	1.67	0.78	4.40	21.18	7.73	23.19	9.27	29.14

Source: Census of India 1991

Note: Industrial distribution of workers has been presented for common class I cities considering their size class in base year

During this period, an increase in share of workers has been observed only in tertiary sector from 60.49 percent to 62.75 percent in class I cities whereas the share of secondary sector has witnessed a decline from 34.13 percent to 33.71 percent (-0.42 percent increase). According to location of class I cities, the cities which are located within UAs and those located outside UAs both have noticed an increase in the share of workers in their tertiary sector by 2..38 and 2.27 percent respectively.

. Table: 4.1.1.2b

Industrial Distribution of Main Workers in Class I Cities Within UAs (1991-2001)

										1991
	Industrial Classification									
Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	1.18	1.52	1.07	0.41	2.10	27.01	5.61	24.27	9.61	27.23
Ia	0.48	0.42	0.66	0.19	1.33	28.91	5.77	25.48	9.86	26.90
Ib	1.96	2.44	1.37	0.29	3.39	23.65	5.44	22.98	9.63	28.85
Ic	1.91	2.80	1.57	0.83	2.63	25.83	5.43	23.00	9.18	26.82
										2001
Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	0.66	0.72	1.11	0.48	3.52	22.51	7.52	22.71	9.79	30.99
Ia	0.39	0.26	0.63	0.26	2.74	23.20	7.09	22.69	10.24	32.49
Ib	1.06	1.09	1.44	0.36	4.53	20.45	8.23	22.47	9.54	30.84
Ic	0.76	1.09	1.55	0.82	3.93	22.86	7.66	22.87	9.35	29.11

Source: Census of India 1991
Note: Industrial distribution of workers has been presented for common class I cities considering their size class in base year

In case of secondary sector which comprises Household Manufacturing, Non Household Manufacturing and Construction industries, the cities which are located within UAs have recorded a decline from 34.72 percent and 33.56 percent (-1.16 percent decrease) whereas their counterparts located outside UAs have observed an increase from 31.38 percent 34.32 percent in their share of workers in this sector.

The industrial distribution of main workers in class I cities shows that in 1991, the largest proportion of workers (27.11 percent) was engaged in Other Services. In case of metro cities Non-household manufacturing industries employed largest proportion of workers (29.26 percent) while other two size class cities showed the general patterns of class I cities as mentioned above. Incidence of non-household manufacturing industries which has the highest productivity across sectors as well as high growth potential is an extremely important industrial group.[2] According to

[2] A. Kundu (2006), Trends and Patterns of Urbanization and Their Economic Implications, *Indian Infrastructure report*, p. 32

Table: 4.1.1.2c

Industrial Distribution of Main Workers in Class I Cities Outside UAs (1991-2001)

1991

	Industrial Classification									
Size Ciass	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	3.70	5.30	1.62	0.43	3.39	22.69	5.29	22.58	8.48	26.52
Ia	1.32	4.88	1.98	0.00	0.19	44.50	6.32	20.47	6.23	14.12
Ib	2.42	2.65	1.29	0.38	2.23	30.15	5.84	20.57	7.85	26.62
Ic	4.08	5.78	1.65	0.47	3.80	19.93	5.13	23.06	8.74	27.35

2001

Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	1.62	2.01	1.62	0.59	5.48	21.19	7.65	22.62	8.63	28.59
Ia	1.36	1.01	0.85	0.36	5.76	34.17	6.60	19.32	6.61	23.97
Ib	1.00	1.33	1.06	0.33	6.07	22.05	7.83	20.36	8.59	31.38
Ic	1.80	2.36	1.90	0.70	5.30	17.93	7.87	23.82	9.13	29.19

Source: Census of India 1991

Note: Industrial distribution of workers has been presented for common class I cities considering their size class in base year

2001 census also, Other Services was the major industry with 30.51 percent share of workers. Between 1991 and 2001 the industrial divisions namely Cultivators, Agricultural Labourers, Non-Household manufacturing industries and Trade and Commerce have observed a decline in their share of workers in total main worker whereas Other Services has seen a rise of 3.40 percent in its share of workers. In addition metro cities have noticed a larger increment in proportion of workers in Other Services, Transport Storage and Communication and Manufacturing, Processing, Servicing and repairs in Household industries as compared to other size classes of cities. Given the nature of industries, experiencing rapid growth after launching of the programme of liberalisation, it is not surprising that employment in the organised sector has shown negligible growth. Private industries within this sector, where growth in output has been significant in the 1990s, have high capital intensity and a low potential for employment generation. The public units, on the other hand, have registered a negative growth in their workforce. Importantly, there has been a steady decline in the proportion of regular/salaried workers over the past decade and a half, as reported by the National Sample Survey Organisation. This is because a large part of employment growth in the urban economy is taking

place through a process of subcontracting, using casual and self-employed workers that have a high incidence of poverty. Several of these workers are getting classified under the tertiary sector, resulting in a decline in the share of manufacturing employment[3].

Distribution of main workers by gender, in 1991 also shows the dominance of Other Services (23.79 percent), Trade and Commerce (25.45 percent), Non Household Manufacturing (27.70 percent) and Transport Storage and Communication industries (10.29 percent) which employed a large proportion of male workers whereas female workers are mainly concentrated in Other Services (51.99 percent),. Further the cities located within and outside UAs have not shown any major difference except higher proportion of male workers in Non-Household Manufacturing industries (Vb) in cities located within UAs as compared to their counterparts located outside UAs. Female workers have shown a larger concentration in Other Services, Trade and Commerce and Construction industries in cities located within UAs particularly in metro cities compared to those located outside UAs. Between 1991 and 2001 class I cities have experienced only a marginal increase in their share of male workers in Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities, Household Manufacturing, Construction, Trade and Commerce and Transport Storage and Communication industries but Other Services and Non Household Manufacturing have shown a decline in their share of male workers. On the other hand class I cities have recorded a huge increase in share of female workers in Other Services from 27.23 percent in 1991 to 54.59 percent in 2001 except primary sector which has shown a decline in its share of female workers.

4.1.1.3 MARGINAL WORKERS

According to 2001 census, more than 90 percent of marginal workers are employed in tertiary and secondary sector in class I cities whether located within or outside UAs. Industrial distribution of marginal workers is quite different from main workers.

It shows that Other Services have employed the largest proportion (23.19 percent) of marginal workers. The Non Household Manufacturing industries come next with 17.18 percent share of marginal workers. According to size class of cities, metro cities have a relatively larger share of

[3] A. Kundu (2003), Urbanisation and Urban Governance Search for a Perspective beyond Neo-Liberalism, *Economic and Political Weekly* ,Vol. 38, No. 29, pp. 3083

Table: 4.1.1.1.3a

Industrial Distribution of Marginal Workers in Class I Cities (2001)

(Total)

	Industrial Classification									
State	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	1.32	5.67	1.65	0.33	10.61	17.18	17.03	17.01	5.99	23.19
Ia	0.93	1.77	0.69	0.19	8.64	18.83	17.79	17.66	6.23	27.27
Ib	1.41	5.25	1.79	0.35	11.36	16.74	18.22	16.64	6.29	21.95
Ic	1.55	8.45	2.23	0.42	11.62	16.27	16.02	16.74	5.70	21.00

(Within UA)

Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	1.09	4.21	1.42	0.32	10.28	17.54	17.42	17.26	6.14	24.33
Ia	0.79	1.55	0.64	0.19	8.38	18.11	17.99	18.08	6.45	27.81
Ib	1.42	4.91	1.80	0.33	11.26	16.81	18.33	16.57	6.44	22.13
Ic	1.20	6.41	1.97	0.44	11.58	17.41	16.29	16.86	5.65	22.20

(Outside UA)

Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	2.07	10.41	2.39	0.39	11.69	16.03	15.79	16.22	5.50	19.51
Ia	2.38	4.11	1.22	0.19	11.34	26.43	15.69	13.24	3.87	21.53
Ib	1.40	7.75	1.71	0.50	12.14	16.19	17.37	17.13	5.21	20.60
Ic	2.12	11.71	2.65	0.40	11.68	14.44	15.60	16.55	5.79	19.07

Source: Census of India 2001

Note: Industrial distribution of workers has been presented for common class I cities considering their size class in base year

their workers in Other Services, Trade and Commerce, Non Household Manufacturing compared to cities of class Ib and class Ic whereas other industries employed a larger share of marginal workers in class Ib and Ic cities. This is observed in both types of cites located within and outside UAs. Industrial distribution of cities according to their location within and outside UAs shows that cities which are located within UAs have larger proportion of their workers in Other Services, Trade and Commerce, Transport Storage and Communication, Construction, Household industries whereas in case of cities which are located outside UAs, other industries employment relatively larger percentage of marginal workers. Therefore larger share of marginal workers in class I cities located outside UAs are engaged in low productive activities of primary sector and Non Household Manufacturing.

Industrial distribution of marginal workers by gender in 2001 (Appendix 4.11)shows that a major proportion of male workers in class I cities was engaged in Construction (21.63 percent), Trade and Commerce (20.46 percent), Other Services (18.22 percent) and Transport Storage and Communication (8.5 percent). Metro cities have shown a larger concentration of male marginal workers in these industries as compared to class Ib and Ic cities. On the other hand, larger proportion of female workers was employed in Other Services (33.33 percent). Metro cities have observed a larger concentration of their female workers in above mentioned industries except Household Manufacturing industries compared to other two size class of cities.

In term of location of class I cities located within and outside UAs it is observed that both types of cities have shown similar distribution of male workers except a relatively higher share of workers in industries namely Non Household Manufacturing, Construction, Trade and Commerce, Transport Storage and Communication and Other Services in cities located within UAs as compared to those located outside UAs. Similar pattern was also visible in case of female workers except that they have shown a higher share of workers in Household Manufacturing in cities located outside UAs as against to those located within UAs. The prominent reason for urban informalisation is the reorganization or collapse of industrial structure in major industrial centres[4].

4.1.2 STATE LEVEL ANALYSIS

4.1.2.1 TOTAL WORKERS

The state level industrial distribution of total workers is presented in the table 4.1.2.1a, given below. State level industrial distribution of workers in class I cities according to 2001 shows that a major proportion of workers was employed in other services ranging from 21.86 percent in Gujarat. Other Services include services like public administration and defense, compulsory social services, education, health and social work, other community social and personal activity and private households with employed persons. Second major industry namely Trade and Commerce has larger share of workers in Delhi (24.59 percent). An important observation is that

[4] Dinesh Awasthi, S. P. Kashyap, Jignasu Yagnik, 'Changing Sectoral Profile of Urban Economy and Implications for Urban Poverty'.

Table 4.1.2.1a

State Level Industrial Distribution of Total Workers in Class I Cities (2001)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.02	3.00	1.40	1.09	4.38	14.05	10.47	22.98	10.82	30.80
Assam	0.62	0.39	2.10	0.90	1.73	9.53	6.24	24.06	11.69	42.75
Bihar	1.88	4.05	2.74	0.63	5.70	14.67	5.98	24.01	8.79	31.53
Gujarat	0.31	0.51	1.09	0.23	2.69	35.47	8.20	21.56	8.08	21.86
Haryana	0.89	0.90	1.56	0.46	4.16	25.85	8.60	22.66	6.66	28.25
Karnataka	1.11	1.55	0.86	0.35	3.85	19.91	9.58	22.18	10.04	30.57
Kerala	0.26	1.43	7.49	0.25	2.31	14.78	11.46	20.68	11.81	29.53
Madhya Pradesh	1.25	1.19	1.14	0.84	4.99	18.67	10.68	21.83	8.85	30.58
Maharashtra	0.60	0.77	0.96	0.34	3.36	25.83	8.83	21.09	10.80	27.43
Orissa	0.57	0.98	2.36	0.31	3.05	14.82	10.67	23.26	9.71	34.28
Punjab	0.83	1.92	0.94	0.22	4.99	27.87	6.85	22.48	6.73	27.17
Rajasthan	2.04	0.81	1.43	0.69	5.61	20.36	10.12	20.87	8.73	29.34
Tamil Nadu	0.91	1.24	1.01	0.56	4.73	20.38	7.63	21.70	8.18	33.66
Uttar Pradesh	1.50	1.81	1.25	0.27	9.08	19.47	7.03	22.16	7.83	29.59
West Bengal	0.50	0.72	0.86	0.67	3.42	22.34	5.17	24.15	10.06	32.12

Source: Census of India 2001

Note: Industrial distribution of workers has been presented for common class I cities between 1991 and 2001

most productive industries i.e. Non Household Manufacturing has larger share of worker in developed states of Gujarat (35.47 percent), Haryana (25.85 percent), Maharashtra (25.83 percent) and Punjab (27.87 percent). State with lower proportion of their workers in this industry is Himachal Pradesh. Construction industry has employed a considerable proportion of workers in rural states like Kerala (11.46 percent, Orissa (10.67 percent), and Rajasthan (10.12 percent) whereas Bihar has a very small share of total workers engaged in this industry. In case of Transport Storage and Communication, states which have larger share of workers are Kerala (11.8 percent), Andhra Pradesh (10.82 percent) and Maharashtra (10.80 percent). Less developed states like Uttar Pradesh (9.08 percent), Bihar (5.70 percent) and Rajasthan (5.61 percent) have highest proportion of their workforce employed in Household Manufacturing. In rest of the states less than 5 percent of the total workforce was engaged in this industry.

Table 4.1.1.2.1b

State Level Industrial Distribution of Total Workers in Class I Cities within and Outside UAs (2001)

Within UAs

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	0.96	2.12	1.27	1.24	3.97	13.84	10.72	22.90	10.95	32.03
Assam	0.62	0.39	2.10	0.90	1.73	9.53	6.24	24.06	11.69	42.75
Bihar	1.72	3.52	2.57	0.81	5.28	15.72	6.31	22.71	9.08	32.29
Gujarat	0.31	0.49	1.07	0.23	2.76	36.42	8.00	21.75	7.87	21.10
Haryana	0.87	1.11	1.75	0.26	4.68	23.34	8.18	23.60	6.61	29.59
Karnataka	0.55	0.50	0.70	0.25	3.61	21.55	9.36	21.50	9.82	32.17
Kerala	0.26	1.43	7.49	0.25	2.31	14.78	11.46	20.68	11.81	29.53
Madhya Pradesh	0.87	0.84	1.06	0.48	5.70	18.94	11.02	22.40	9.23	29.45
Maharashtra	0.54	0.52	0.81	0.28	2.95	26.75	8.62	20.91	10.95	27.68
Orissa	0.59	1.08	2.09	0.35	2.86	16.04	11.37	21.66	9.80	34.16
Punjab	0.87	2.00	0.94	0.06	4.49	21.33	7.52	24.51	7.37	30.91
Rajasthan	1.06	0.78	1.48	0.96	5.16	16.72	11.39	22.68	10.45	29.33
Tamil Nadu	0.92	1.07	0.89	0.59	4.68	20.60	7.58	21.40	8.27	34.01
Uttar Pradesh	1.24	1.51	1.12	0.32	9.04	18.60	7.05	22.72	7.72	30.68
West Bengal	0.42	0.46	0.76	0.65	2.92	23.04	4.85	24.26	9.97	32.67

Outside UAs

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.33	7.75	2.08	0.27	6.58	15.17	9.13	23.43	10.09	24.19
Bihar	2.31	5.46	3.19	0.18	6.82	11.93	5.12	27.41	8.03	29.54
Gujarat	0.31	0.82	1.51	0.29	1.25	13.11	12.98	17.07	13.07	39.59
Haryana	0.91	0.69	1.36	0.68	3.60	28.55	9.04	21.65	6.72	26.81
Karnataka	2.69	4.51	1.32	0.63	4.53	15.27	10.21	24.10	10.67	26.07
Madhya Pradesh	3.30	3.18	1.74	2.67	4.19	19.86	10.20	20.79	8.64	25.44
Maharashtra	1.00	2.50	1.98	0.79	6.29	19.33	10.33	22.35	9.75	25.67
Orissa	0.46	0.52	3.57	0.15	3.89	9.45	7.58	30.31	9.29	34.77
Punjab	0.79	1.82	0.95	0.40	5.54	34.99	6.13	20.27	6.03	23.10
Rajasthan	2.75	0.83	1.40	0.50	5.93	23.02	9.19	19.54	7.48	29.35
Tamil Nadu	0.78	3.06	2.33	0.31	5.35	17.93	8.25	24.98	7.23	29.79
Uttar Pradesh	1.92	2.28	1.44	0.19	9.15	20.86	7.00	21.28	8.02	27.86
West Bengal	0.99	2.36	1.50	0.76	6.67	17.85	7.26	23.45	10.62	28.53

Source: Census of India 2001

Note: Industrial distribution of workers has been presented for common class I cities between 1991 and 2001

In terms of cities located within and outside UAs, both types of cities have only a nominal share of their workers in industries falling in primary sector. Kerala was the only exception with its 7.49 percent workers in Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities. In case of Household Manufacturing, Uttar Pradesh has highest proportion of workers (about 9 percent) in this industry in both types of cities located within and outside UAs. Gujarat (36.42 percent), Maharashtra (26.75 percent), and Haryana (23.34 percent) are leading states in their proportion of workers in Non Household industries. On the other hand most of the states have shown relatively lower proportion of their workers in cities outside UAs, engaged in this industry which indicates the concentration of most productive economic activities in cities located within UAs which in turn leads to intra urban disparity. Orissa, Kerala, Madhya Pradesh and Rajasthan are leading states in terms of their workers in Construction industry in both types of cities. Away from emerging global centers, these cities in these states have expanding built environment which leads to higher employment in Construction industry. Trade and Commerce has higher proportion of workers in class I cities located within UAs of Delhi, Punjab and West Bengal, whereas in terms of cities which are located outside UAs, Bihar was leading state. In case of class I cities located within UAs, Transport, Storage and Communication industry accounts for, highest proportion of workers in states of Kerala and Rajasthan. For the same industry, Gujarat, Karnataka and West Bengal have considerable shares of workers in class I cities located outside UAs.

Industrial distribution of male and female workers is given in Appendix 4.14, shows that in most of the states male workers are concentrated in industrial categories Other Services, Trade and Commerce, Non Household Manufacturing, Transport Storage and Communication and Construction whereas female workers are mainly concentrated in industrial category Other Services. In case of cities located within UAs, major industries employing larger share of workers are Other Services, Trade and Commerce and Non Household Manufacturing. Himachal Pradesh has its highest share of workers in Other Services (IX) vis-à-vis other states while Gujarat has shown lowest percent of workers in this industry. In case of Trade and Commerce industry Punjab is the leading state.

Looking at distribution of male workers in cities located outside UAs (Appendix 4.16) it is found that major industrial categories are Other Services, Trade and Commerce and Non Household

Manufacturing but they have lesser concentration of male workers as compared to the cities which are located within UAs. The leading state in terms of higher percentage of workers in Of all states, Orissa has highest proportion of workers employed in Trade and Commerce, the second major industry and Gujarat (18.17 percent) has lowest percent of workers engaged in this industry. Non Household Manufacturing industries which is another important industry has recorded a larger proportion of workers in states of Punjab (37.34 percent) and lowest share in Orissa (9.59 percent) as compared to other states. State level distribution of female workers in class I cities located within UAs shows that majority of the states have more than half of their female workers concentrated in Other Services. The percentage share of female workers in this industry ranges from 45.55 percent in Madhya Pradesh to 82.06 percent in Himachal Pradesh. There has been increase in the subsidiary activities in service sector. An increase in the subsidiary activity in this sector might have taken the form of increased domestic service among urban women[5]. Other industries employing relatively larger share of female workers are Non Household Manufacturing and Trade and Commerce with share of works ranging from 2.87 to 21.84 percent and 5.04 to 17.70 respectively. The micro level trends show that there have been tendencies of feminization of the manufacturing workforce in a particular manner whereby the utilization of urban women workers has been at the lowest and poorest paid rungs of the production chain.[6] States which have relatively larger concentration of their female workers in Non Household Manufacturing industry are Karnataka, Kerala, Haryana whereas Himachal Pradesh, Meghalaya and Bihar have shown least concentration of female workers as compared to other states. On the other hand, female workers have shown lesser concentration in Other Services in case of cities which are located outside UAs. Since class I cities located within UAs are relatively have larger population size as well as service sector where urban female workers provide a support mechanism by working in low paid jobs. Share of workers in Other Services across different states ranges from 29.40 percent in Andhra Pradesh to 57.45 percent in Gujarat. In case of Non Household Manufacturing industry Punjab (17.21 percent), Tamil Nadu (17.15 percent) and Madhya Pradesh (15.14 percent) have shown higher percent of their female workers in this industry vis-à-vis other states whereas lowest share of workers in same industry was recorded by Gujarat (7.54 percent). Trade and Commerce industry has relatively higher

[5] S. Mitra (2006), Patterns of Female Employment in Urban India Analysis of NSS Data (1983 to 1999-2000), *Economic and Politicai Weekly*, Vol. 41, No. 48, p. 5005

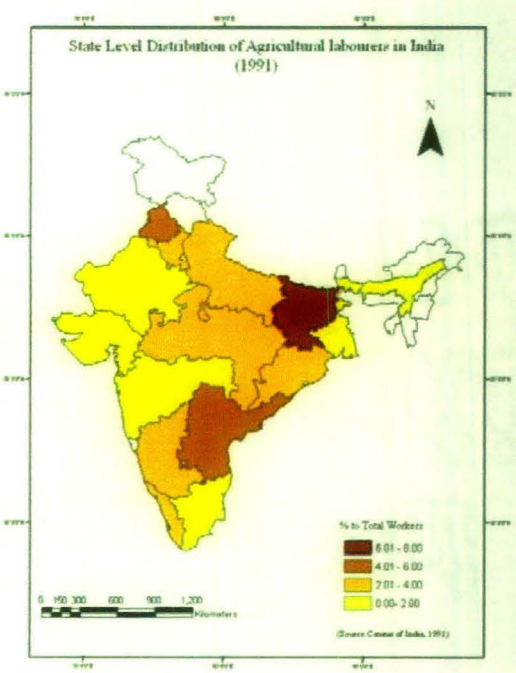
[6] Ibid. pp. 5003-5004.

percentage of female workers in Orissa (13.53 percent), and lowest share of workers in Uttar Pradesh (6.86 percent).

4.1.2.2 MAIN WORKERS

State level industrial distribution of main workers in 1991 and 2001 shows that in most of the states, majority of proportion of workers in class I cities are employed in industrial category Other Services, Trade and Commerce, Non Household Manufacturing, Transport Storage and Communication and Construction however there exists considerable variations at state level. In 1991, Himachal Pradesh recorded highest share of its workers in Other Services (55.68 percent), vis-à-vis other states whereas Gujarat (21.62 percent) and Punjab (22.46 percent) have a small proportion of workers in this industry.

Map: 4.1.2.2a



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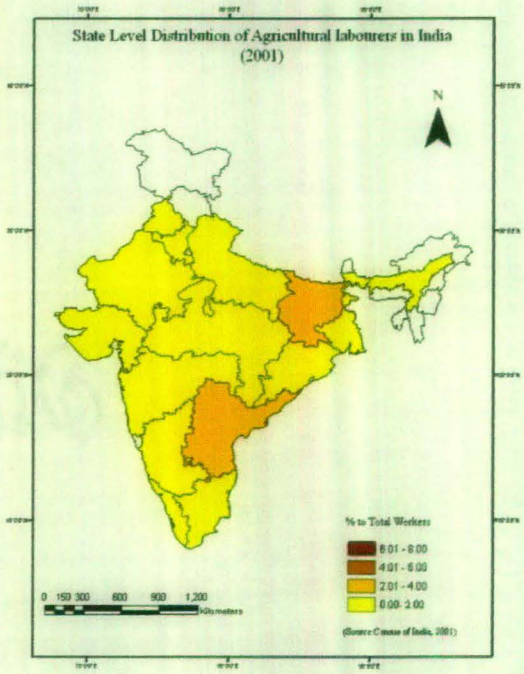

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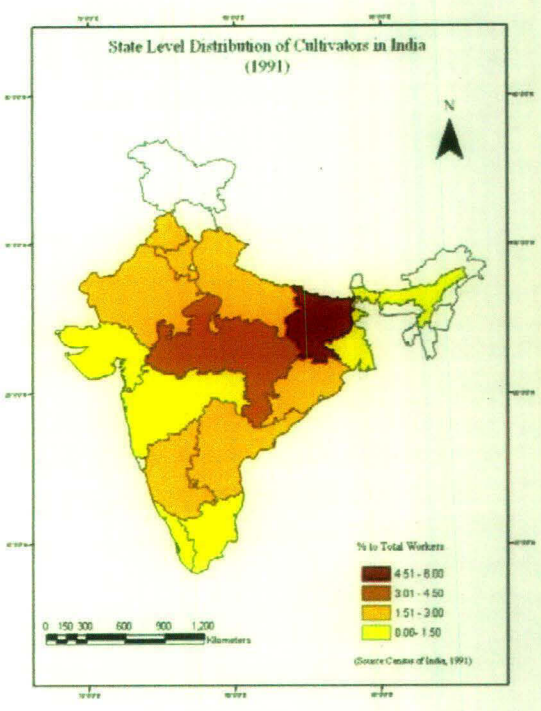
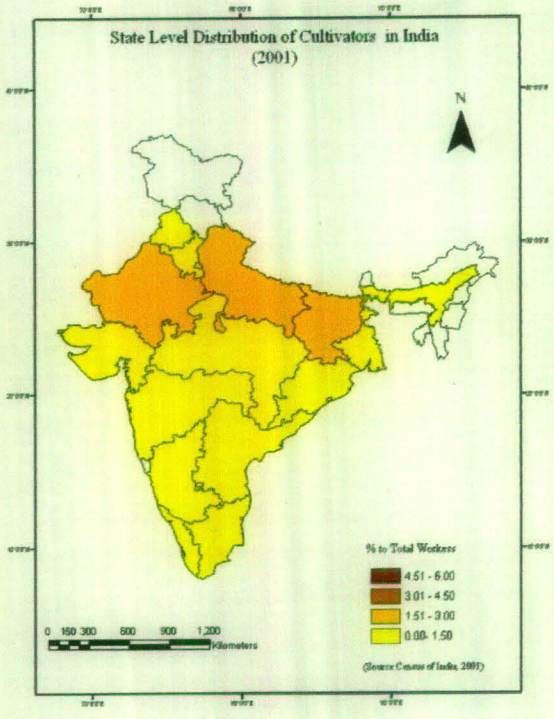


Map: 4.1.2.2d



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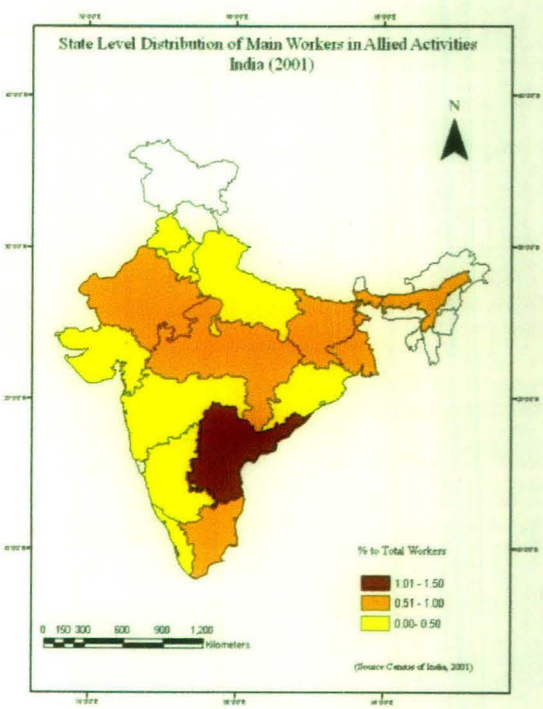
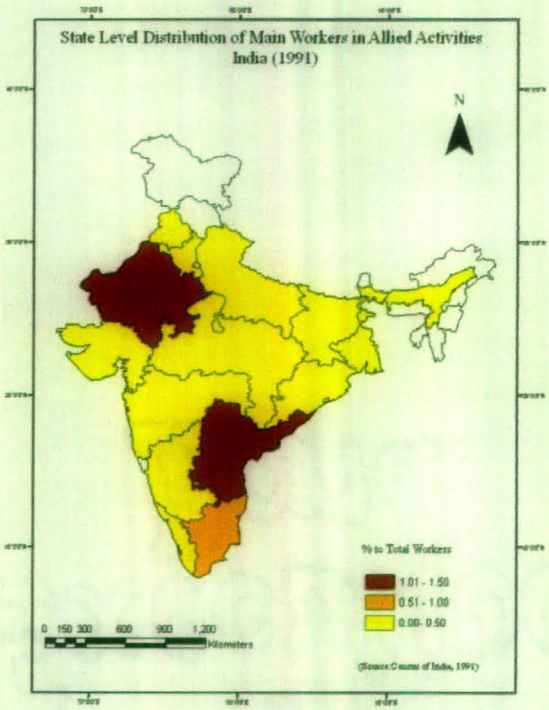


Map: 4.1.2.2f



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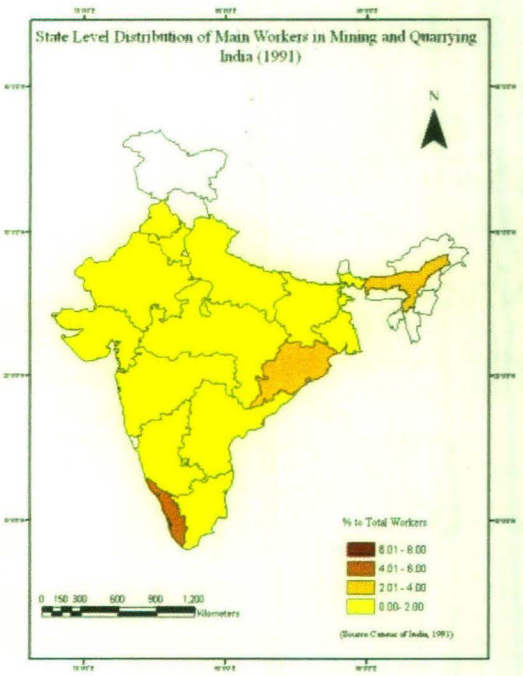

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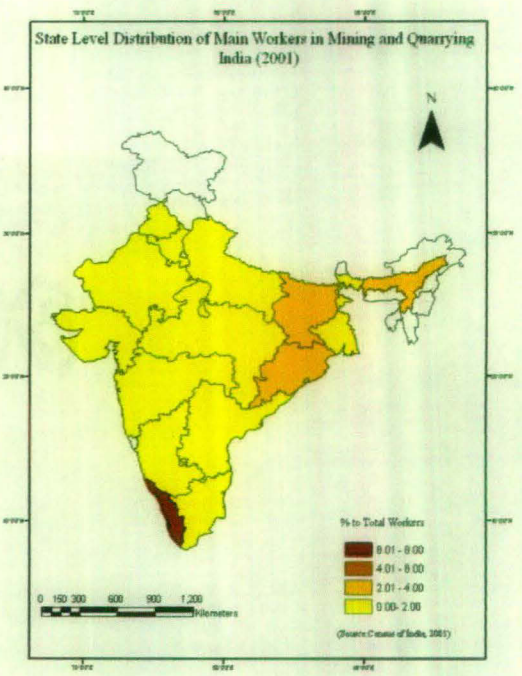

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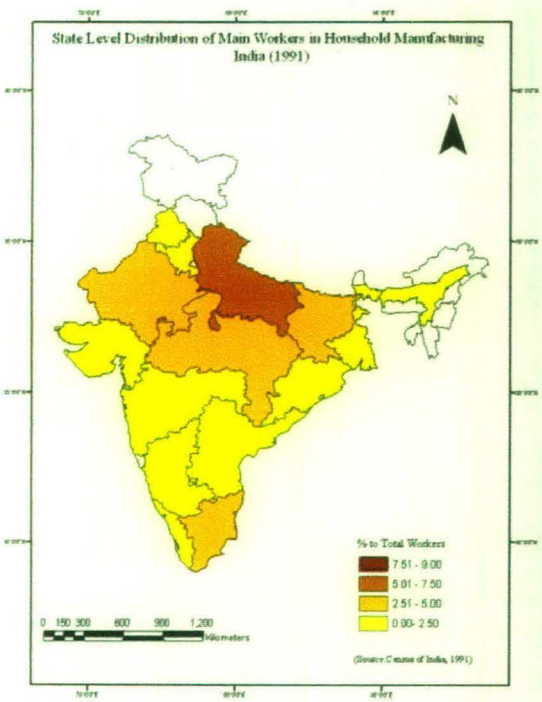

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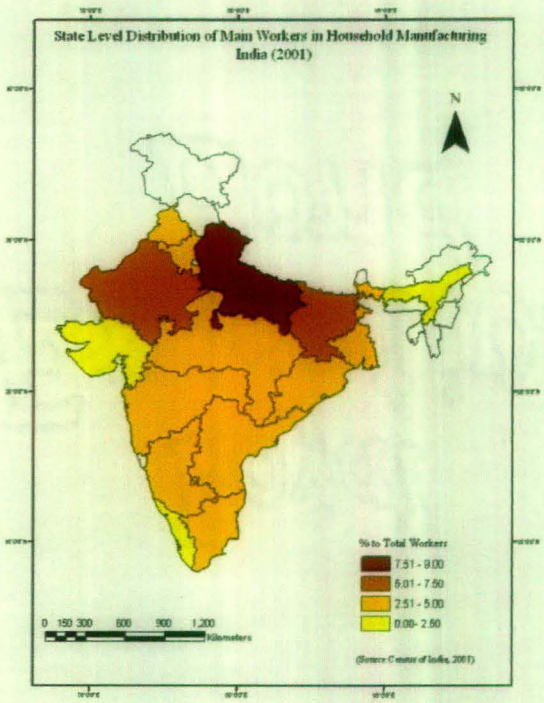

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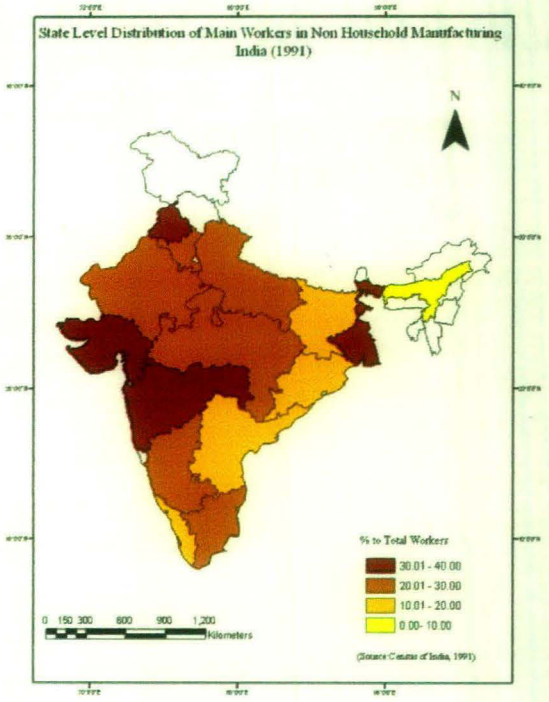

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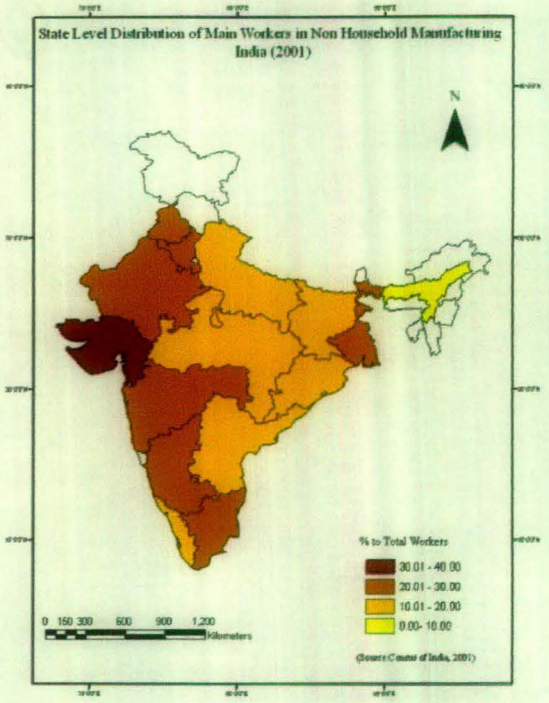

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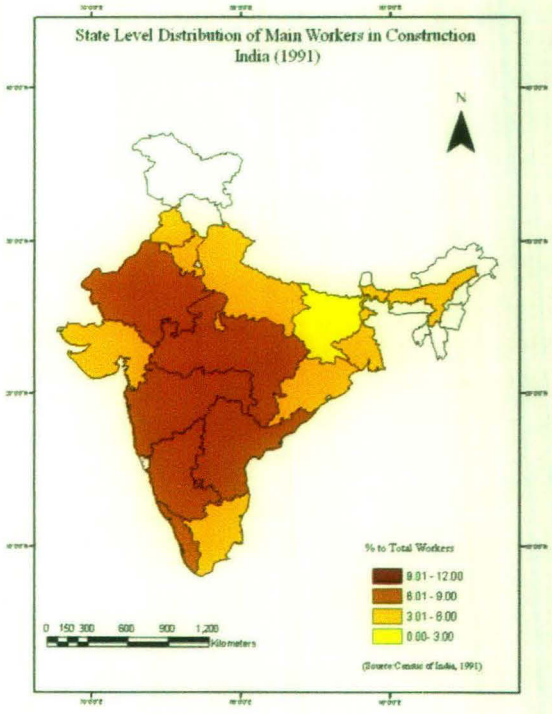

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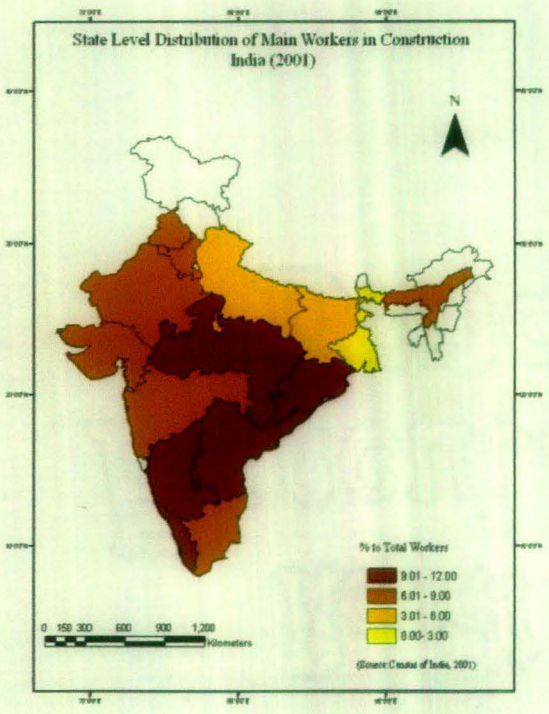

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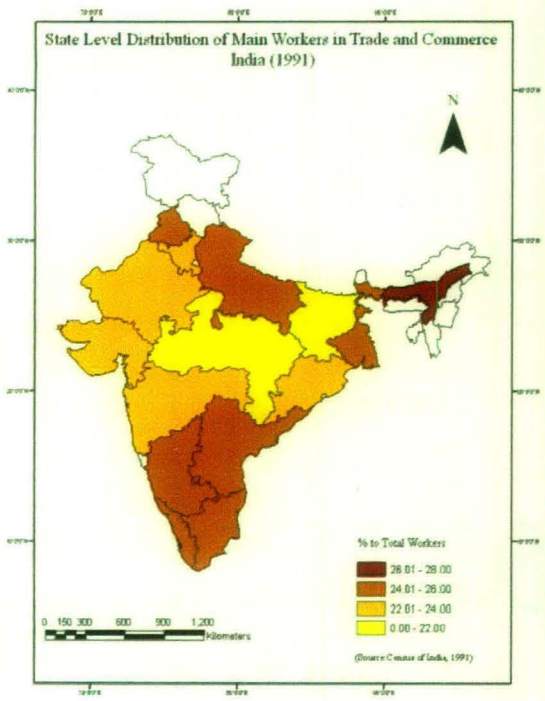

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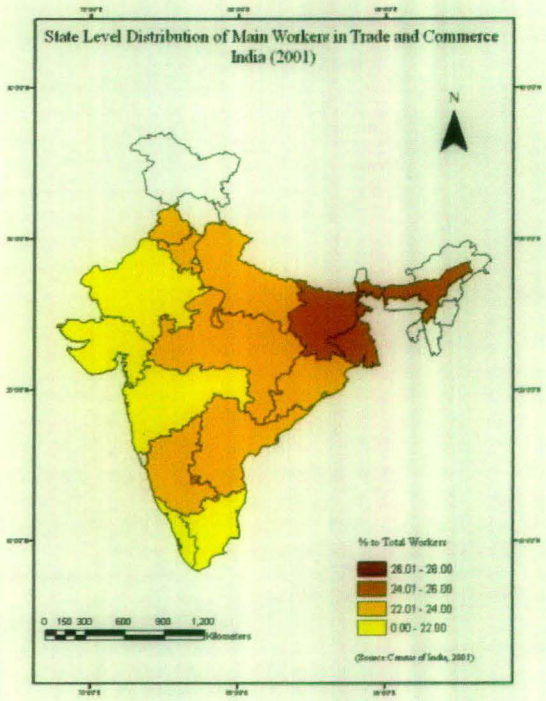

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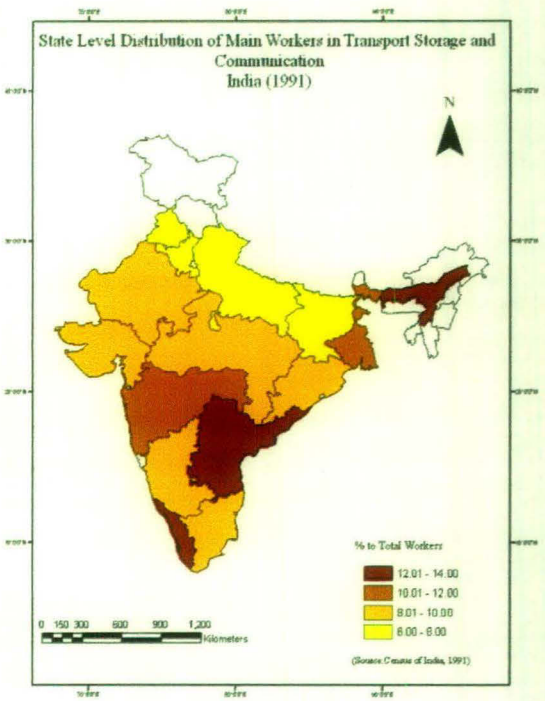

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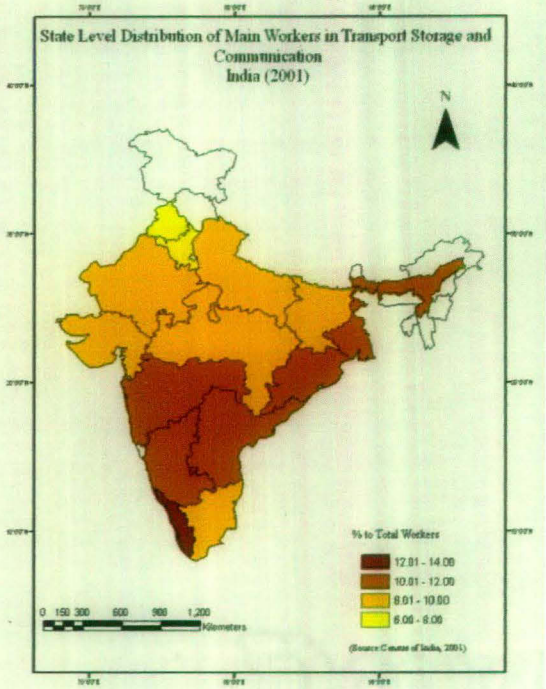

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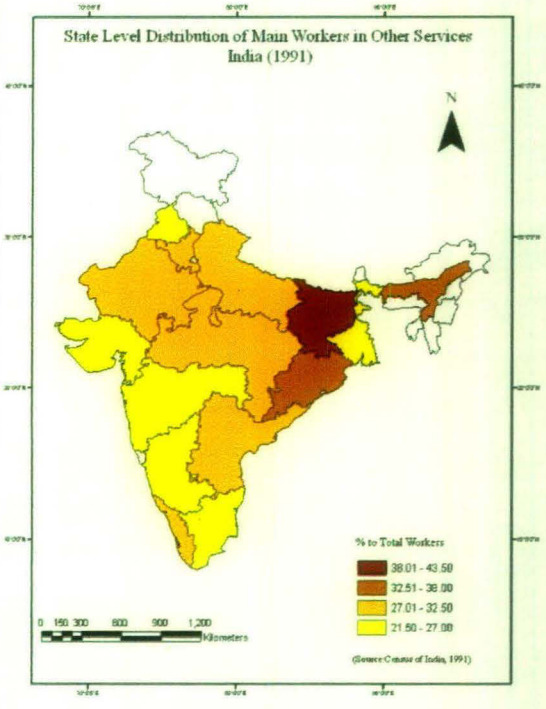

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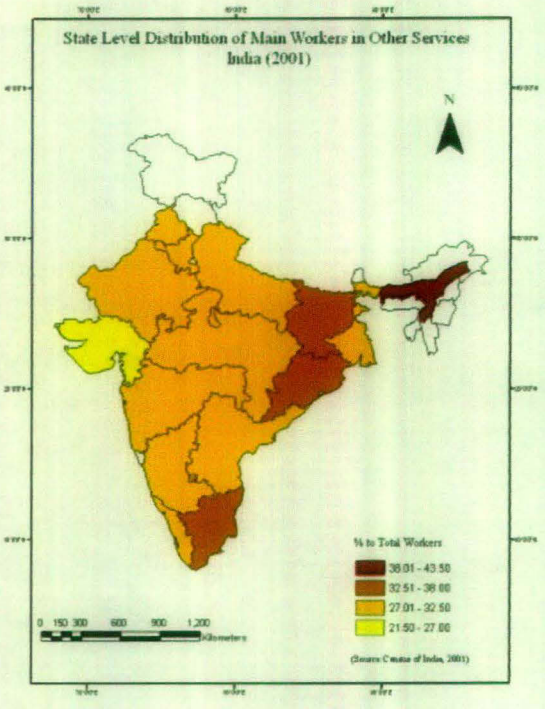

Table 4.1.2.2a

State Level Industrial Distribution of Total Main Workers in Class I Cities (1991-2001)

(1991)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.56	5.42	1.22	1.23	2.28	17.27	6.53	24.14	12.49	27.86
Assam	1.15	0.93	2.61	0.46	0.64	10.97	5.66	27.52	13.92	36.14
Bihar	4.80	6.24	1.10	0.44	3.43	16.07	2.83	20.73	6.30	38.08
Gujarat	0.67	0.82	1.08	0.37	1.13	37.85	4.66	23.18	8.63	21.62
Haryana	2.12	2.66	1.31	0.39	2.10	28.45	5.23	23.37	6.45	27.92
Karnataka	2.41	2.39	1.08	0.35	1.85	25.52	6.87	25.35	9.46	24.71
Kerala	0.98	3.55	5.30	0.12	1.14	15.83	6.60	25.00	12.99	28.50
Madhya Pradesh	3.22	2.41	1.71	0.38	2.87	22.55	6.79	21.79	9.04	29.24
Maharashtra	1.06	1.29	0.87	0.36	1.70	33.04	6.13	22.60	10.31	22.65
Orissa	1.74	3.14	2.73	0.27	2.15	17.53	4.50	22.85	9.57	35.52
Punjab	2.13	4.97	1.32	0.01	1.36	30.27	4.64	25.55	7.31	22.46
Rajasthan	2.57	1.49	1.38	1.01	2.89	21.72	7.38	22.17	8.81	30.59
Tamil Nadu	0.92	1.20	0.77	0.64	2.99	26.60	5.76	25.88	9.24	26.02
Uttar Pradesh	2.93	2.87	1.29	0.05	5.45	21.18	3.61	24.55	7.54	30.53
West Bengal	0.79	1.28	0.92	0.32	1.50	30.69	3.44	25.82	10.52	24.72

(2001)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.01	2.26	1.37	1.14	3.93	14.22	9.81	23.36	11.31	31.60
Assam	0.60	0.26	2.14	0.93	1.37	9.63	6.01	24.19	12.00	42.88
Bihar	1.80	3.07	2.75	0.67	5.02	15.13	5.10	24.80	8.86	32.81
Gujarat	0.30	0.42	1.06	0.23	2.15	36.14	7.99	21.69	8.25	21.77
Haryana	0.86	0.60	1.51	0.46	3.64	26.27	7.45	23.29	6.85	29.06
Karnataka	1.11	1.21	0.83	0.35	3.50	20.24	9.15	22.50	10.27	30.84
Kerala	0.24	1.06	7.18	0.23	2.15	14.55	10.52	21.05	12.04	30.98
Madhya Pradesh	1.24	0.78	1.14	0.87	4.49	18.90	9.35	22.35	9.04	31.84
Maharashtra	0.57	0.59	0.96	0.35	2.84	26.24	8.24	21.37	11.11	27.72
Orissa	0.53	0.62	2.38	0.31	2.60	14.52	10.11	23.73	10.06	35.13
Punjab	0.81	1.62	0.92	0.23	4.71	28.14	6.36	22.94	6.87	27.39
Rajasthan	1.92	0.54	1.41	0.70	5.09	20.48	8.80	21.48	9.04	30.54
Tamil Nadu	0.87	1.06	1.01	0.58	4.56	20.66	7.30	21.96	8.36	33.66
Uttar Pradesh	1.53	1.25	1.24	0.28	8.37	19.65	5.98	22.92	8.02	30.76
West Bengal	0.45	0.45	0.83	0.69	2.88	22.66	4.69	24.64	10.44	32.27

Source: Census of India 1991-2001

Note: Industrial distribution of workers has been presented for common class I cities between 1991 and 2001

In Trade and Commerce industry Assam is the leading states in terms of proportion of workers engaged in this industry whereas Bihar recorded lowest shares of workers in the same. Transport Storage and Communication industry showed higher concentration of workers in states of Kerala (12.99 percent) and Andhra Pradesh (12.49 percent) and least concentration in Bihar (6.30 percent). In case of Construction industry, Rajasthan has highest share of workers whereas Bihar (2.83 percent) on the other hand is at the lower end. 2001 Census showed further concentration of workers in most of the states in Other Services with their share ranging from 21.77 percent in Gujarat to 38 percent in Bihar. The states which observed a decline in their share of workers in this industry are Bihar, Orissa, and Rajasthan. Trade and Commerce has shown a marginal decline in its share in most of the states except Bihar, Orissa and Madhya Pradesh which observed a nominal increase in their proportion of workers in this industry. Non Household Manufacturing industries have noticed a marginal decline in their share of workers in most of the states. Transport Storage and Communication have shown a minor change in its share of workers whereas Bihar has observed an increase of 2.56 percent. Construction industry has shown an increase in its share of workers in most of the states.

Looking at the industrial distribution of workers in cities located within UAs, it is observed that between 1991 and 2001, Other Services have noticed a relatively larger increase in most of the states as compared to other industrial groups. The states which have noticed a decline in share of workers in this industry are Bihar, Gujarat, Haryana, Orissa, Rajasthan and Uttar Pradesh whereas West Bengal showed an opposite pattern. Trade and Commerce has witnessed a decline in its share of workers in most of the states over the period under view while the states which have observed an increase in their share of workers in same industry are Bihar (4.20 percent), Orissa (0.91 percent), and Madhya Pradesh (0.66 percent). Non Household Manufacturing has also seen a decline with exception of Haryana with 2.83 percent increase. Transport Storage and Communication has shown a marginal increase in its share of workers in states of Bihar (2.91 percent), Rajasthan (1.84 percent), Maharashtra (0.79 percent), Uttar Pradesh (0.45 percent) and Orissa (0.69 percent) and Karnataka (0.64 percent) whereas other states have noticed a slight decline in this industry.

The cities which are located outside UAs have also witnessed relatively higher concentration in Other Services in last decade in states of Punjab, Karnataka, Haryana, West Bengal, Andhra Pradesh and Uttar Pradesh. These are the states which have observed concentration of workers in this industry in their cities located within UAs. Madhya Pradesh is the only state which has observed a decline in their share of workers in this industry. Other Services industry has recorded concentration of main workers in most of the states in both types of cities viz. located within and outside UAs. In Trade and Commerce industry, Andhra Pradesh, Bihar, Gujarat, Haryana, Madhya Pradesh, Maharashtra, Orissa and West Bengal have shown a slight increase in their share of workers whereas among these states Andhra Pradesh, Gujarat, Haryana, Maharashtra and West Bengal have registered a decline in share of workers in this industry in their cities located within UAs. Construction industry has recorded increase in share of workers in all states in cities located outside UAs. Trade and Commerce industry has seen marginal increase in its share of workers in Andhra Pradesh, Bihar, Gujarat, Haryana, Madhya Pradesh, Maharashtra, Orissa and West Bengal. Another important industry i.e. Transport Storage and Communication has shown only slight increase in states of West Bengal, Bihar, Haryana, Karnataka and Madhya Pradesh.

Industrial distribution of male main workers in 1991 showed that Other Services was the largest industrial group in terms of employing male workers in most of the states. Maharashtra had lowest share of workers (18.78 percent). The second major industrial group was Manufacturing, Processing, Servicing and repairs in other than Household industries with least concentration of workers in Gujarat (40.03 percent), Maharashtra (35.28 percent) and West Bengal (32.37 percent). On the other hand least concentration was observed in Himachal Pradesh (5.52 percent). Another major group in 1991 was Trade and Commerce with its percentage o workers ranging from 9.68 percent in Mizoram to 29.87 percent in Assam. The leading states in this industry are West Bengal (27.44 percent), Karnataka (27.64 percent) and Kerala (27.21 percent). State which has largest proportions of workers in Transport Storage and Communication is Kerala (15.02percent) while, states with lowest share of workers in this industry is Bihar (6.71percent).

Industrial distribution of male workers in 2001 shows further concentration of main workers in Other Services ranging from 17.99 percent in Gujarat to 37 percent in Assam. Non Household

Manufacturing shows large variation in their share of workers ranging from 4.45 percent in Himachal Pradesh to 38.77 percent in Gujarat. Beside Gujarat other leading states are Haryana (27.86 percent), Punjab (29.90 percent), and Maharashtra (28.43 percent). Other state with higher percentage of workers in this industry is West Bengal (27.03 percent). Construction industry has recorded increase in its share of workers in most of the states. Household Manufacturing industries have shown only a nominal increase in their share of workers in all states.

Industrial distribution of female workers over the period under consideration shows that in 1991 majority of female main workers in class I cities are employed in Other Services, Trade and Commerce, Non Household Manufacturing, Household Manufacturing (Appendix 4.19). The percentage share of female workers in other services in 1991 varied between 39.59 to 90.90 percent whereas the corresponding figures for 2001 are 39.75 percent & 84.30 percent respectively.

Many states have observed a decline in proportion of female workers in this industry. Some states like Maharashtra and Karnataka, however, have shown considerable increase in their share of workers in this industry. Industrial categories Construction, Trade and Commerce, Transport Storage and Communication have not shown significant changes in their proportion of female workers in most of the states. On the other hand, Non Household Manufacturing has shown increase in its proportion of female workers in most of the states. In case of Household Manufacturing industries majority of states have experienced a rise in their share of female workers employed in this industry. The highest increase was recorded by Punjab (2.22 to 8.19 percent) and Karnataka (4.58 to 10.05 percent).

4.1.2.3 MARGINAL WORKERS

The Table 4.1.1.2.3a presents the state-level industrial distribution of total marginal workers in class I cities. State level distribution of workers in 2001 shows concentration of workers in Other Services in most of the states, ranging from 16.81 to 52.83 in Rajasthan and Assam respectively. The leading state in this industry is Tamil Nadu (33.63 Per cent) with a large proportion of total marginal workers employment. States which have shown a low engagement of marginal workers in this industry have been Madhya Pradesh (16.85 percent), Kerala (18.36 percent), and Haryana (19.82 percent). Trade and Commerce was major industrial group which contained a major

Table: 4.1.2.3a

State Level Industrial Distribution of Total Marginal Workers in Class I Cities (2001)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.15	11.18	1.73	0.58	9.28	12.13	17.75	18.78	5.37	22.05
Assam	1.05	2.75	1.47	0.43	7.92	7.75	10.18	21.73	6.24	40.49
Bihar	2.63	12.65	2.68	0.28	11.69	10.66	13.67	17.12	8.20	20.42
Gujarat	0.58	2.79	1.75	0.23	16.72	18.06	13.73	18.32	3.67	24.15
Haryana	1.21	4.11	2.10	0.46	9.63	21.37	20.56	16.06	4.68	19.83
Karnataka	1.00	6.66	1.29	0.35	9.23	14.85	16.19	17.40	6.60	26.44
Kerala	0.39	4.27	9.85	0.43	3.53	16.63	18.69	17.79	10.05	18.36
Madhya Pradesh	1.31	5.62	1.22	0.52	10.42	16.12	25.07	16.16	6.71	16.86
Maharashtra	1.04	3.47	0.93	0.22	11.45	19.48	17.95	16.61	5.99	22.86
Orissa	1.03	6.00	2.05	0.28	9.21	18.95	18.43	16.74	4.82	22.49
Punjab	1.05	6.83	1.36	0.07	9.57	23.43	14.86	14.97	4.36	23.52
Rajasthan	3.27	3.64	1.68	0.61	10.93	19.19	23.86	14.43	5.57	16.82
Tamil Nadu	1.59	4.10	1.07	0.34	7.57	15.78	13.07	17.53	5.32	33.63
Uttar Pradesh	1.33	6.34	1.32	0.19	14.90	18.00	15.65	15.94	6.27	20.04
West Bengal	1.14	3.96	1.19	0.39	10.00	18.50	11.05	18.20	5.35	30.21

Source: Census of India 2001

Note: Industrial distribution of workers has been presented for common class I cities between 1991 and 2001

proportion of marginal workers with lowest share of marginal workers in Himachal Pradesh (12.37 percent). Other states which dominate in terms of share of marginal workers in same industry are Andhra Pradesh (18.77 percent) Gujarat and Delhi. Construction industry was also an important industry in terms of employing a significant proportion of marginal workers particularly in Madhya Pradesh (25.07 percent) and Rajasthan (23.86 percent). States with lower percentage share of marginal workers employed in this industry are West Bengal (11.04 percent) and Tamil Nadu (13.07 percent). Household Manufacturing industries and Non Household Manufacturing industries show large variations in their share of marginal workers in different states ranging from 2.69 to 26.68 percent in former and 5.40 to 23.42 in latter. Leading states in Household Manufacturing are Gujarat (16.71 percent) and Uttar Pradesh (14.90 percent) while Kerala is at lower end with 3.12 percent, 3.52 percent and 3.95 percent of their marginal workers in this industry. Another industry i.e. Transport Storage and Communication has

Table: 4.1.2.3b

State Level Industrial Distribution of Total Marginal Workers in Class I Cities within and Outside UAs (2001)

(Within UA)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.19	7.99	1.51	0.66	8.84	11.91	18.72	19.42	5.65	24.09
Assam	1.05	2.75	1.47	0.43	7.92	7.75	10.18	21.73	6.24	40.49
Bihar	2.52	10.75	2.24	0.34	11.19	11.09	15.12	16.92	8.85	20.98
Gujarat	0.59	2.67	1.67	0.22	16.98	18.54	13.51	18.47	3.51	23.83
Haryana	0.86	5.04	2.13	0.10	11.75	22.16	18.65	15.46	3.98	19.87
Karnataka	0.78	2.77	1.03	0.22	8.93	15.99	17.40	16.68	6.71	29.49
Kerala	0.39	4.27	9.85	0.43	3.53	16.63	18.69	17.79	10.05	18.36
Madhya P	0.64	3.43	0.97	0.35	11.19	16.79	26.49	16.41	6.86	16.87
Maharashtra	1.08	2.54	0.84	0.20	10.98	20.42	18.07	16.51	5.97	23.39
Orissa	1.09	6.38	2.05	0.30	8.18	20.71	18.97	15.35	4.75	22.24
Punjab	1.10	7.43	1.31	0.02	9.12	21.93	16.61	15.31	5.00	22.19
Rajasthan	1.48	3.47	1.56	0.96	10.15	16.58	27.67	16.18	6.68	15.27
Tamil Nadu	1.65	3.52	0.83	0.35	7.31	15.86	13.31	17.36	5.39	34.42
Uttar P	1.16	5.18	1.04	0.19	14.98	17.65	15.94	16.28	6.11	21.46
West Bengal	0.95	2.15	1.00	0.36	9.66	19.99	10.41	18.90	5.34	31.24

(Outside UA)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.00	24.99	2.67	0.25	11.19	13.08	13.57	15.98	4.12	13.16
Bihar	2.91	17.57	3.84	0.11	12.99	9.55	9.89	17.63	6.54	18.96
Gujarat	0.34	5.12	3.29	0.34	11.75	8.89	18.03	15.46	6.61	30.17
Haryana	1.61	3.07	2.06	0.86	7.23	20.48	22.71	16.75	5.46	19.78
Karnataka	1.50	15.69	1.89	0.63	9.93	12.22	13.39	19.07	6.33	19.35
Madhya P	3.78	14.10	2.05	1.18	8.49	14.27	21.65	14.41	6.56	13.51
Maharashtra	0.81	8.44	1.40	0.35	13.96	14.49	17.27	17.14	6.06	20.08
Mizoram	4.47	8.09	14.37	0.91	3.96	5.41	15.82	25.66	2.07	19.25
Orissa	0.77	4.24	2.07	0.21	14.07	10.65	15.88	23.25	5.18	23.68
Punjab	0.97	6.03	1.43	0.14	10.16	25.41	12.55	14.51	3.51	25.29
Rajasthan	4.79	3.79	1.78	0.31	11.59	21.41	20.63	12.95	4.63	18.13
Tamil Nadu	0.80	11.71	4.22	0.13	11.02	14.66	10.02	19.68	4.38	23.38
Uttar P	1.65	8.42	1.82	0.17	14.75	18.63	15.14	15.35	6.54	17.51
West Bengal	2.01	12.16	2.07	0.51	11.56	11.78	13.94	15.04	5.37	25.56

Source: Census of India2001

Note: Industrial distribution of workers has been presented for common class I cities between 1991 and 2001

recorded highest share of workers in Kerala (10.05 percent).Whereas it has recorded negligible share of marginal workers in Himachal Pradesh and Gujarat. Unlike main workers, a considerable concentration of marginal workers has been observed in industrial categories related to primary sector have been observed. For example Kerala (9.85 percent) have considerable proportion of their marginal workers engaged in Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities whereas Bihar (12.64 percent) and Andhra Pradesh (11.17 percent) have largest number of Agricultural Labourers. On the other hand Himachal Pradesh (8.17 percent) has highest proportion of marginal workers working as Cultivators, compared to other states. Mining and Quarrying contains only a negligible percentage of marginal workers.

In terms of class I cities located within UAs, the industrial distribution of marginal workers shows a similar picture as discussed above with Other Services, Trade and Commerce, Construction, Non Household Manufacturing and Household Manufacturing being the leading industrial groups.

State level industrial distribution of marginal workers in class I cities located outside UAs presents an entirely different picture (Table 4.1.2.3b). Other Services was the largest industrial group with highest share of workers. Other major industrial groups are Trade and Commerce, Non Household Manufacturing, Construction, Household Manufacturing and Transport Storage and Communication. States with larger share of their workers in Other Services are Gujarat (30.16 percent) and West Bengal (25.56 percent) whereas Andhra Pradesh (13.16 percent) and Madhya Pradesh (13.51 percent) have lowest share of workers in this industry vis-à-vis other states. Trade and Commerce, the second major industrial group, comprises of a significant share of workers in all the states ranging from 12.95 percent in Rajasthan to 23.25 percent in Orissa. Non Household Manufacturing is a dominant industrial group in states of Punjab (25.41 percent), Rajasthan (21.41 percent) and Haryana (20.47 percent) whereas Gujarat (8.89 percent) has shown lowest share of workers in the same. Transport Storage and Communication has a considerable proportion of workers in all states ranging from 3.50 percent in Punjab to 6.61 percent in Gujarat. Industrial categories Cultivators, Agricultural Labourers and Mining and Quarrying engage only a marginal share of workers. Andhra Pradesh (24.99 percent), Karnataka

(15.69 percent), Madhya Pradesh (14.09 percent) and West Bengal (12.16 percent) have significant proportion of Agricultural Labourers.

Industrial distribution of male marginal workers (Appendix 4.25) in class I cities at state level shows that most of the states have their largest proportion of workers in Other Services. The leading state in this regard is Tamil Nadu. Trade and Commerce is another major industrial group with its highest share of workers in Gujarat (24.23 percent) and West Bengal (22.67 percent) whereas Punjab (18.50 percent) and Uttar Pradesh (18.73 percent) have relatively lower shares of workers in same industrial group. Construction industry was also an important industry in most of the states which employed a major proportion of male marginal workers. The leading state with highest proportion of workers in this industry is Rajasthan (30.02 percent) whereas West Bengal (15.22 percent) and Bihar (15.91 percent) have lowest proportion of workers in this industry. Non Household Manufacturing accounted for a significant proportion of workers in Gujarat (23.21 percent), Punjab (23.91 percent) and Maharashtra (22.61 percent) while it constitute relatively lesser share of workers in Himachal Pradesh (4.512 percent). Transport Storage and Communication is another industry which constitute a considerable percentage of workers. Kerala and Bihar are the leading states with 13.36 percent and 10.80 percent share of workers respectively in this industry. In case of Household Manufacturing Uttar Pradesh (9.48 percent) and Bihar (7.11 percent) have larger share of workers in this industry as compared to other states. Primary sector comprises only a small percentage of workers except few exceptions. Within primary sector, Agricultural Labourers have relatively larger share in many states compared Cultivators and Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities.

State level distribution of male marginal workers in class I cities located within UAs shows that all the states have a major proportion of workers in Trade and Commerce, Construction and Other Services, Household Manufacturing and Non Household Manufacturing. States which have highest proportion of male marginal workers in Trade and Commerce are Meghalaya (27.79 percent), Assam (26.13 percent), Gujarat (24.49 percent) and West Bengal (23.36 percent) whereas Himachal Pradesh has lowest share in this industry (see Appendix 4.26 and 4.27). Other Services have recorded the largest share of workers in Karnataka. On the other hand Kerala (10.28 percent) and Madhya Pradesh (12.67 percent) have witnessed lowest percentage of

marginal workers in this industrial group as compared to other states. Construction industry has largest proportion of workers in Himachal Pradesh (38.45 percent), and lowest proportion of workers in Kerala (10.28 percent). In case of Non Household Manufacturing, the states with highest percentage of workers in this industrial group are Maharashtra (23.94 percent) and Gujarat (23.91 percent). On the other hand Household Manufacturing industries do not show any significant share of workers in any states.

According to 2001, State level industrial distribution of female marginal workers shows that most of the states have larger concentration of their female marginal workers employed in Other Services. West Bengal is the leading state with 45.92 percent workers in this industry whereas Rajasthan was at lower end with 18.93 percent of female workers in same industry. Kerala and Gujarat are the leading states in Trade and Commerce with 13.51 and 12.46 percent of their workers in this industry respectively. Another major industrial group i.e. Non Household Manufacturing has recorded highest proportion of marginal workers in Kerala (28.11 percent), Haryana (23.60 percent) and Rajasthan (21.78 percent) whereas lowest proportion of workers in this industry was shown by Bihar (9.25 percent) and Andhra Pradesh (10.85). Looking at primary sector, Andhra Pradesh (16.43 percent) and Bihar (15.65 percent) have a significant proportion of female marginal workers as Agricultural Labourers whereas Himachal Pradesh (12.21 percent) and Rajasthan (7.15 percent) have highest percentage of cultivators compare to other states.

The industrial distribution of male marginal workers, at state level in cities located outside UAs indicate that the major industrial groups in most of the states are Trade and Commerce, Construction, Other Services and Non Household Manufacturing. In terms of the percentage share of marginal workers in Trade and Commerce, the leading state is Orissa (30.73 percent) whereas the state which stayed at the other extreme is Uttar Pradesh (18.18 percent). Construction industry has recorded a significant proportion of male marginal workers in all states ranging from lowest in Bihar (12.63 percent) to highest in Haryana (27.20 percent). Proportion of workers in other services ranges between 11.89 percent in Andhra Pradesh to 23.11 percent in Gujarat. Non Household Manufacturing, another important industrial group, has shown high proportion of workers in Punjab (28.07 percent), Haryana (21.91 percent) and Uttar Pradesh (20.54 percent). In case of Household Manufacturing, Orissa was the leading state with (10.62

percent) of marginal workers in this industrial group whereas lowest proportion was recorded by Gujarat (2.26 percent). In addition, some states like Andhra Pradesh (20.47 percent), Bihar (16.93 percent) and West Bengal (14.36 percent) have recorded significant proportion of their marginal workers as Agricultural Labourers.

State level industrial distribution of female marginal workers in class I cities located within UAs shows that Other Services is the largest industrial group containing a major proportion of female marginal workers in all states ranging from 20.14 percent in Rajasthan to 48.55 percent in West Bengal (see Appendix 4.26). Other major industrial group which employs a significant share of female marginal workers was Manufacturing, Processing, Servicing and repairs in Household industries. Here in Uttar Pradesh has recorded the largest share of its marginal workers (30.59 percent) in this industry compared to other states, whereas lowest share was recorded by Kerala (6.45 percent). Considering the industrial distribution of female marginal workers, it is observed that large proportion of these workers in all states is concentrated in Other Services, Household Manufacturing, Non Household Manufacturing and Trade and Commerce. The leading state in terms of the percentage of female marginal workers in Other Services was Punjab (40.49 percent) whereas lowest percentage was recorded by Andhra Pradesh (14.77 percent). In case of Household Manufacturing, the highest percent of female marginal workers was recorded by Uttar Pradesh (33.92 percent) and lowest share was recorded by Haryana (14.97 percent). Non Household Manufacturing has shown highest percentage of marginal workers in states of Rajasthan (22.66 percent) and Punjab (20.79 percent) whereas it has lesser share of workers in Gujarat (5.65 percent). State which has relatively higher proportion of their female marginal workers in Trade and Commerce is Tamil Nadu (12.29 percent) whereas Uttar Pradesh (6.15 percent) and Madhya Pradesh (7.07 percent) have recorded lowest proportion of marginal workers. Added to this, female marginal workers account for a significant proportion of Agricultural Labourers in states of Andhra Pradesh (30.72 percent), Madhya Pradesh (23.18 percent), Karnataka (22.42 percent), Bihar (20.98 percent), Tamil Nadu (14.45 percent) and Uttar Pradesh (10.38 percent).

4.2 CITIES DEMOTED FROM CLASS I STATUS

As per 2001 Census, 10 cities which belong to seven states were demoted from class I status. All of these cities are a part of class size Ic as per 1991 census. Due to unavailability of data for total and marginal workers, the analysis has been done only for main workers.

4.2.1 ALL INDIA

The industrial distribution of main workers in cities which were demoted from class I status in 2010 Census; show a completely different picture from those which maintained their status during the considered period.

Table: 4.2.1a

Industrial distribution of workers in cities demoted from Class I status (1991)

	Industrial Classification									
Class Size	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	2.39	5.22	13.29	1.57	2.44	19.38	4.63	20.62	9.84	20.62
Ia	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Ib	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Ic	2.39	5.22	13.29	1.57	2.44	19.38	4.63	20.62	9.84	20.62

Source: Census of India 1991

Note: Industrial distribution of workers has been presented for common class I cities between 1991 and 2001

It is observed that no industrial group has shown major concentration of workers. The three major industrial groups namely Other Services (20.62 percent), Trade and Commerce (20.62 percent) and Manufacturing Processing, Servicing and repairs in other than Household industries (19.38 percent) employed almost equivalent share of workers. In addition, a significant proportion of workers (13.29 percent) were engaged in Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities which was followed by Transport Storage and Communication (9.84 percent), Agricultural Labourers (5.22 percent) and Cultivators (2.39 percent).

While comparing the industrial distribution of class I cities located within and outside UAs, a sharp contrast has been observed. The dominant industrial groups in class I cities located within

UAs are Other Services, Trade and Commerce and Non Household Manufacturing which employed 23.30, 23.27 and 20.65 percent of workers respectively in 1991. Transport Storage and Communication accounted for 10.25 percent workers followed by Agricultural Labourers (5.98 percent), Construction Industry (4.71 percent) and Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities (4.05percent). Lowest share of workers was recorded by Household Manufacturing (3.02 percent) and Cultivators (2.73 percent). On the other hand, in case of class I cities located outside UAs, 41.41 percent of workers are engaged in Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities. This high proportion of workers in this industry indicates the movement of surplus labour from distressed agriculture to Allied Activities.

4.2.2 STATE LEVEL

The industrial distribution of total male workers in cities which are demoted in 2001 is presented in Table 4.1.2.2a.

Table: 4.1.2.2a

State-Level Industrial distribution of main workers in cities demoted from Class I status (1991)

	Industrial Classification									
State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	4.22	26.36	0.59	0.01	15.44	11.02	2.74	19.08	7.05	13.50
Assam	2.67	1.08	11.51	1.85	0.47	9.74	5.14	30.18	7.23	30.13
Gujarat	0.79	1.70	1.60	4.32	0.97	12.61	4.56	24.72	11.98	36.76
Kerala	0.71	3.15	9.05	0.18	1.20	19.25	5.76	30.07	10.94	19.69
Maharashtra	9.34	10.71	0.83	0.04	1.13	20.25	5.10	21.96	10.25	20.38
Tamil Nadu	0.15	0.69	38.75	0.13	1.02	18.01	3.42	15.38	8.35	14.09
West Bengal	3.25	4.06	1.48	3.02	1.07	33.34	6.40	18.10	12.02	17.27

Source: Census of India 1991

It shows that Andhra Pradesh (22.50 Per cent), Assam (34.22 Per cent), Kerala (34.00 Per cent) and Maharashtra (23.70 Per cent) have largest proportion of their male workers in Trade and Commerce industries whereas Gujarat has 34.78 Per cent male workers in Other Services. On the other hand the leading industries in Tamil Nadu and West Bengal are Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities and Non Household

Manufacturing respectively. Manufacturing sector in all states shown in table 4.1.2.2a, comprises only a negligible percentage of male workers except Andhra Pradesh which shows quite different industrial structure with significant share of workers Non Household Manufacturing, Agricultural Labourers.

In case of total female workers, beside Andhra Pradesh and Tamil Nadu, other states have a larger concentration of their female workers in Other Services. Andhra Pradesh has registered highest proportion of workers as Agricultural Labourers (43.65 Per cent) followed by workers in Non Household Manufacturing (24.42 Per cent). A huge proportion of female workers (63.51 Per cent) in Tamil Nadu are engaged in Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities.

State level industrial distribution of male workers in class I cities located within UAs shows a considerable variation (Appendix 4.28). Among seven states, Andhra Pradesh (22.50 Per cent), Kerala (34.00Per cent), Maharashtra (23.70) and Tamil Nadu (28.76 Per cent) have largest share of their male workers in Trade and Commerce whereas Gujarat (34.78 Per cent) and West Bengal (50.45 Per cent) recorded their larger concentration of their male workers in Other Services and Manufacturing Processing, Servicing and repairs in Household industries with 34.78 Per cent and 50.45 Per cent workers respectively. Other Services is another important industry with larger percentage of workers in Gujarat (34.78 percent) and lowest in West Bengal (12.25 Per cent). Non Household industry also contains a considerable proportion of workers in all states which ranges from 10.80 Per cent in Assam to 50.45 Per cent in West Bengal. The percentage of workers in transport Storage and Communication varies from 6.24 in West Bengal to 16.51 Per cent in Tamil Nadu. Construction industry, on the other has accounted for a small share of workers from 3.37 Per cent in Andhra Pradesh to 5.88 Per cent in Kerala. Industries related to primary sector constitute only a negligible proportion of workers with exceptions like Andhra Pradesh which has 5.2 and 19.91 Per cent share of male workers as Cultivators and Agricultural Labourers. In case of Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities, only Kerala (10.30 Per cent) and Assam (8.94 Per cent) have registered a considerable share of workers.

From the industrial distribution of male workers in class I cities located outside UAs, it is observed that Tamil Nadu has much concentration of male workers (66.58 Per cent) in

Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities followed by Manufacturing Processing, Servicing and repairs in other than Household industries (13.11Per cent) and Other Services (8.64 Per cent). On the other hand West Bengal has higher proportion of its workers in Trade and Commerce (25.36 Per cent) followed by Transport Storage and Communication (19.37 Per cent) and Manufacturing Processing, Servicing and repairs in other than Household industries (19.40 Per cent). Here it is important to note that Tamil Nadu and West Bengal represent only two cities namely Valparai and Dabgram respectively.

On the other hand female workers have observed relatively larger concentration in Other Services, Manufacturing Processing, Servicing and repairs in other than Household industries and Trade and Commerce. Other Services is the major industrial group in Gujarat (59.76 Per cent), Kerala (52.01 Per cent) and Assam (50.99 Per cent), Tamil Nadu (48.76 Per cent) and West Bengal (45.87 Per cent) and Maharashtra (38.17 Per cent). The second major industrial group i.e. Manufacturing Processing, Servicing and repairs in other than Household industries has shown lowest Per cent of workers in Assam (3.20 Per cent) and highest in Kerala (22.16 Per cent). The leading states in Trade and Commerce were Tamil Nadu (11.53 Per cent), Maharashtra (10.59 Per cent) and Gujarat (10.90 Per cent) whereas West Bengal recorded lowest percentage of its workers (3.43 Per cent) in this industry. Manufacturing Processing, Servicing and repairs in Household industries have shown a significant proportion of workers in only two states viz. are Andhra Pradesh (24.42 Per cent) and Tamil Nadu (10.41 Per cent). Within Primary Sector , Agricultural Labourers are reported a significant proportion in Andhra Pradesh (43.65 Per cent) and Maharashtra (25.57 Per cent) whereas Assam was the only state with a significant share of workers (27.36 Per cent) in Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities. In case of class I cities located outside UAs, a huge concentration of female main workers was observed in Tamil Nadu (80.78 Per cent), whereas the largest industrial group in West Bengal was Other Services 47.84 Per cent of workers. The other industrial groups in Tamil Nadu were Manufacturing Processing, Servicing and repairs in other than Household industries and Other Services with 12.94 5 and 3.96 Per cent of workers. On the other hand, West Bengal has shown a considerable proportion of workers in Manufacturing Processing, Servicing and repairs in other than Household industries (9.64 Per cent), Construction (8.93 Per cent) and Agricultural Laborers (8.19 Per cent).

4.3 TOWNS PROMOTED TO CLASS I STATUS

In 2001 Census, 110 towns were promoted to class I status which have achieved population size of one lakh or above. The following two sub-sections analyze the workforce structure of these cities at all India and state level.

4.3.1 ALL INDIA

4.3.1.1 TOTAL WORKERS

The industrial distribution of workforce in cities which have achieved class I status in 2001 is given in table 4.3.1.1a below.

Table: 4.3.1.1a

Industrial Distribution of Total Workers in Cities promoted to Cass I status (2001)

(Total)

	Industrial Classification									
Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	1.52	2.30	1.76	0.86	4.39	20.62	8.44	22.20	8.17	29.75
Ib	1.83	1.89	0.82	0.19	14.44	9.68	5.26	20.21	5.79	39.89
Ic	1.51	2.32	1.81	0.89	3.90	21.15	8.59	22.30	8.28	29.26

(Within UA)

Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	0.94	1.35	1.70	0.81	4.07	22.42	8.82	21.22	8.35	30.32
Ib	1.83	1.89	0.82	0.19	14.44	9.68	5.26	20.21	5.79	39.89
Ic	0.87	1.31	1.77	0.86	3.32	23.34	9.08	21.30	8.53	29.63

(Outside UA)

Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	2.78	4.33	1.90	0.95	5.07	16.75	7.61	24.32	7.77	28.52
Ic	2.78	4.33	1.90	0.95	5.07	16.75	7.61	24.32	7.77	28.52

Source: Census of India 2001

The industrial distribution of towns which have achieved class I status in 2001 shows that Other Services, Trade and Commerce and Non Household Manufacturing were the major industrial groups with 29.75 Per cent, 22.20 Per cent and 20.62 Per cent of workers respectively (4.3.1.1a). Construction industry accounted for 8.44 Per cent share of workers followed by Household

Manufacturing 8.17 Per cent. Other industrial groups namely Cultivators, Agricultural Labourers, Mining and Quarrying and Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities employ only a nominal share of workers. According to size class, the towns which are promoted to class I status have achieved class Ic and I b status. Here, class Ib cities have 39.89 Per cent of its workers in Other Services whereas class Ic cities contain 29.26 5 workers in this industry. In case of industrial groups Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities and Other Services, class Ib cities have larger proportion of their workers in these industries compare to class Ic cities. Whereas other industrial groups have shown higher percentage of workers in class Ic cities.

Class I cities which are located within UAs also have larger concentration of workers in Other Services (30.52 Per cent), Non Household Manufacturing (22.42 Per cent) and Trade and Commerce (22.22 Per cent). Apart from this, other industrial groups like Transport, Storage and Communication (8.17 Per cent), Construction (8.44 Per cent) and Household Manufacturing industries (4.39 Per cent) also accounted for a considerable proportion of workers. A nominal share of workers is observed to be employed in other industries. While comparing class Ib and Ic it has been observed that Other Services and Household Manufacturing contain a much larger share of workers in class Ib cities (39.89 Per cent and 14.44 Per cent respectively) as compare to class Ic (29.63 Per cent and 3.32 Per cent). On the other hand, the cities which are located outside UAs have relatively lesser concentration of workers i.e. 28.52 Per cent in Other Services. The other important industrial groups were Trade and Commerce (24.32 Per cent) and Non Household Manufacturing (16.75 Per cent). The industrial groups namely Cultivators, Agricultural Labourers and Mining and Quarrying account for 2.78 Per cent, 4.33 Per cent and 1.90 Per cent share of workers respectively.

While looking at industrial distribution of male and female workers separately, a larger concentration of female workers has been observed in Other Services, Household Manufacturing and industries related to primary sector. Other services i.e. a major industrial group constitute 47.58 Per cent share of female workers as against 26.71 Per cent in case of male workers. Household Manufacturing is another important industrial group which employs relatively larger share of female workers (9.85 Per cent) compare to male workers (3.45 Per cent). Except

primary sector, other industrial groups contain larger proportion of male workers in comparison to female workers.

Class I cities which are located within UAs have relatively larger share of male workers concentrated in Other Services (27.30 Per cent), Trade and Commerce (23.23 Per cent), Non Household Manufacturing (23.15 Per cent) and Transport Storage and Communication (9.46 Per cent) and Construction (9.23 Per cent).Whereas other industrial groups contain only a marginal share of male workers in these cities. Class I cities which are located outside UAs have also shown major proportion of their male workers in above mentioned industries but the relative share of workers is more in Trade and Commerce (26.94) which is followed by Other Services (25.45 Per cent).

In case of female workers, the class I cities located within UAs have recorded 47.72 Per cent of their female workers in other services.

4.3.1.2 MAIN WORKERS

The major industrial groups with larger concentration of main workers are Other Services (23.19 percent), Household Manufacturing (17.18 percent), Construction (17.03 percent) and Trade and Commerce (17.01 percent). A considerable proportion of main workers are also employed in Transport Storage and Communication (5.99 percent) and Agricultural Labourers (5.67 percent). Within class I cities, metro cities have relatively larger proportion of workers in Other Services, Trade and Commerce, Non Household Manufacturing compared to other cities.

The Comparison of cities located within and outside UAs shows that former have recorded a relatively larger percentage of its workers in Other Services, Transport Storage and Communication, Trade and Commerce, Construction and Non Household Manufacturing as compared to latter. This shows that cities which are located outside UAs have relatively larger share of workers in primary sector.

Table: 4.3.1.2a

Industrial Distribution of Main Workers in Towns Promoted to Cass I status (2001)

Total

	Industrial Classification									
Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	1.32	5.67	1.65	0.33	10.61	17.18	17.03	17.01	5.99	23.19
Ia	0.93	1.77	0.69	0.19	8.64	18.83	17.79	17.66	6.23	27.27
Ib	1.41	5.25	1.79	0.35	11.36	16.74	18.22	16.64	6.29	21.95
Ic	1.55	8.45	2.23	0.42	11.62	16.27	16.02	16.74	5.70	21.00

(Within UA)

Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	1.09	4.21	1.42	0.32	10.28	17.54	17.42	17.26	6.14	24.33
Ia	0.79	1.55	0.64	0.19	8.38	18.11	17.99	18.08	6.45	27.81
Ib	1.42	4.91	1.80	0.33	11.26	16.81	18.33	16.57	6.44	22.13
Ic	1.20	6.41	1.97	0.44	11.58	17.41	16.29	16.86	5.65	22.20

(Outside UA)

Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	2.07	10.41	2.39	0.39	11.69	16.03	15.79	16.22	5.50	19.51
Ia	2.38	4.11	1.22	0.19	11.34	26.43	15.69	13.24	3.87	21.53
Ib	1.40	7.75	1.71	0.50	12.14	16.19	17.37	17.13	5.21	20.60
Ic	2.12	11.71	2.65	0.40	11.68	14.44	15.60	16.55	5.79	19.07

Source: Census of India 2001

Looking at industrial distribution of male and female main workers separately, it has been observed that in case of male workers Construction is largest industry employing 21.63 percent of main workers followed by Trade and Commerce (20.46 percent). On the other hand, female main workers have shown highest concentration in Other Services (33.13 percent), Household Manufacturing (20.84 percent), Non Household Manufacturing (15.46 percent), Trade and Commerce (10.12 percent) and Construction (7.84 percent).

4.3.1.3 MARGINAL WORKERS

Industrial distribution of total marginal workers shows that largest percentage of workers was concentrated in Other Services (30.51 percent). Other industrial groups, which employed a considerable proportion of workers, are Transport Storage and Communication (9.55 percent),

Construction (7.55 percent). Within class I cities, metro cities have shown a higher percentage of workers in Non Household Manufacturing as compared to other cities.

In case of class I cities located within UAs, a relatively larger proportion of workers are employed in Other Services, Transport Storage and Communication and Non Household Manufacturing whereas cities which are located outside UAs have shown higher percentage of workers in other industries.

In case of male marginal worker, the major industrial groups which employed significant proportion of male workers are Other Services (26.99 percent), Trade and Commerce (24.79 percent) and Non Household Manufacturing (23.66 percent). Unlike male workers, 54.59 percent of female workers are concentrated in Other Services.

Table: 4.1.3.1.2a

Industrial Distribution of Main Workers in Towns Promoted to Class I status (2001)

Total

	Industrial Classification									
Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	0.85	0.98	1.21	0.50	3.91	22.25	7.55	22.69	9.55	30.51
Ia	0.47	0.33	0.65	0.27	3.00	24.14	7.05	22.40	9.92	31.75
Ib	1.05	1.12	1.39	0.35	4.74	20.67	8.18	22.18	9.41	30.91
Ic	1.12	1.53	1.67	0.78	4.40	21.18	7.73	23.19	9.27	29.14

(Within UA)

Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	0.66	0.72	1.11	0.48	3.52	22.51	7.52	22.71	9.79	30.99
Ia	0.39	0.26	0.63	0.26	2.74	23.20	7.09	22.69	10.24	32.49
Ib	1.06	1.09	1.44	0.36	4.53	20.45	8.23	22.47	9.54	30.84
Ic	0.76	1.09	1.55	0.82	3.93	22.86	7.66	22.87	9.35	29.11

(Outside UA)

Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	1.62	2.01	1.62	0.59	5.48	21.19	7.65	22.62	8.63	28.59
Ia	1.36	1.01	0.85	0.36	5.76	34.17	6.60	19.32	6.61	23.97
Ib	1.00	1.33	1.06	0.33	6.07	22.05	7.83	20.36	8.59	31.38
Ic	1.80	2.36	1.90	0.70	5.30	17.93	7.87	23.82	9.13	29.19

Source: Census of India 2001

Class I cities which are located within UAs have relatively higher percentage of male marginal workers in Other Services, Transport Storage and Communication, Trade and Commerce and Non Household Manufacturing as compared to those cities which are located outside UAs. In case of female workers Other Services have shown 56.39 percent and 47.04 percent workers in class I cities located within and outside UAs, respectively. Among other industrial groups, Transport Storage and Communication, Trade and Commerce, Construction and Non Household Manufacturing have relatively larger percentage of female workers in cities located within and outside UAs.

4.1.3.2 STATE LEVEL ANALYSIS

4.3.2.1 TOTAL

Table: 4.3.2.1a

State Level Industrial Distribution of Total Workers in Towns Promoted to Class I status (2001)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	0.95	4.09	1.92	1.08	7.18	20.58	13.32	16.55	8.53	25.80
Assam	0.18	0.33	1.82	0.51	1.53	13.54	4.24	33.10	8.98	35.77
Bihar	3.42	8.01	3.71	0.44	4.86	12.67	5.99	26.68	7.77	26.44
Gujarat	1.62	1.55	4.21	0.22	2.17	26.24	8.46	24.48	7.88	23.17
Haryana	1.41	1.68	1.70	0.17	3.84	18.59	9.83	23.88	6.26	32.63
Karnataka	1.17	2.30	1.48	1.17	3.12	32.69	11.81	15.81	8.21	22.25
Kerala	0.55	1.88	4.76	0.35	3.32	16.53	8.59	22.15	10.46	31.42
Madhya Pradesh	4.90	2.72	1.65	5.03	3.14	14.76	11.16	22.24	8.51	25.90
Maharashtra	1.29	3.32	1.12	0.42	2.75	23.50	7.62	20.37	9.95	29.66
Punjab	2.04	2.35	1.41	0.17	3.62	21.74	6.57	21.48	5.53	35.09
Rajasthan	1.91	2.02	2.37	1.34	4.79	19.98	13.76	25.35	8.77	19.70
Tamil Nadu	0.46	0.49	6.48	1.57	3.34	18.82	5.87	22.91	9.69	30.37
Uttar Pradesh	1.66	1.26	0.99	0.24	4.43	19.58	6.37	25.88	7.89	31.72
West Bengal	0.75	1.09	1.23	1.70	3.85	20.90	7.63	22.46	9.49	30.91

Source: Census of India 2001

The state level industrial distribution of total workers in class I cities which have achieved class I status in 2001 shows that industries related to primary sector have negligible share of workers in majority of states with few exceptions of Bihar, Madhya Pradesh and Tamil Nadu which have 8.01, 4.90 and 6.48 percent of workers in Agricultural Labourers, Cultivators, Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities respectively.

Other Services is leading industrial group in most of the states except Gujarat, Karnataka, and Rajasthan. In the second major industrial group i.e. Trade and Commerce, Assam (33.10 percent), Bihar (26.68 percent) and Rajasthan (2.35 percent) showed very high share of their workers. Another important industrial group i.e. Non Household Manufacturing has reported higher percentage of workers in Karnataka (32.69 percent) and Gujarat (26.24 percent). Transport Storage and Communication also accounted for a considerable proportion of workers in all states ranging from a low of 5.53 percent in Punjab to 10.46 percent in Kerala. Construction is another important industry which shows a variation at state level with lowest

Table: 4.3.2.1b

State Level Industrial Distribution of Total Workers in Towns Promoted to Class I status Within and Outside UAs (2001)

(Within UA)

	Industrial Classification									
State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	0.87	2.24	2.15	1.21	3.67	22.32	14.77	16.16	8.72	27.90
Assam	0.18	0.33	1.82	0.51	1.53	13.54	4.24	33.10	8.98	35.77
Bihar	2.58	7.23	4.27	0.66	4.33	15.98	7.03	22.64	8.11	27.16
Gujarat	1.05	1.22	5.13	0.27	2.13	19.86	9.19	26.05	8.50	26.59
Haryana	1.09	1.37	1.92	0.16	4.31	23.93	8.07	22.51	6.24	30.39
Karnataka	0.58	0.64	1.17	1.38	2.39	36.37	12.66	14.39	8.16	22.26
Kerala	0.55	1.88	4.76	0.35	3.32	16.53	8.59	22.15	10.46	31.42
Madhya Pradesh	1.68	1.53	1.37	0.44	3.67	15.23	9.79	26.47	10.25	29.58
Maharashtra	0.36	0.49	0.62	0.42	2.03	28.91	7.35	17.70	9.85	32.26
Tamil Nadu	0.31	0.28	9.20	1.16	2.89	19.68	5.65	21.92	10.26	28.63
Uttar Pradesh	1.13	0.94	0.74	0.22	3.87	22.77	6.51	25.04	7.98	30.81
West Bengal	0.75	1.07	1.11	1.91	3.95	22.28	7.99	21.58	9.17	30.19

(Outside UA)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.36	13.19	0.79	0.44	24.53	12.00	6.19	18.45	7.61	15.43
Bihar	3.95	8.51	3.36	0.31	5.20	10.58	5.32	29.23	7.55	25.98
Gujarat	3.32	2.52	1.43	0.09	2.29	45.42	6.24	19.77	6.01	12.90
Haryana	1.66	1.93	1.53	0.17	3.48	14.42	11.21	24.94	6.28	34.37
Karnataka	3.42	8.55	2.62	0.37	5.87	18.79	8.60	21.15	8.42	22.21
Madhya Pradesh	9.90	4.59	2.08	12.16	2.32	14.02	13.29	15.67	5.80	20.17
Maharashtra	1.71	4.61	1.34	0.42	3.08	21.04	7.74	21.59	10.00	28.47
Punjab	2.04	2.35	1.41	0.17	3.62	21.74	6.57	21.48	5.53	35.09
Rajasthan	1.91	2.02	2.37	1.34	4.79	19.98	13.76	25.35	8.77	19.70
Tamil Nadu	0.75	0.90	0.85	2.42	4.27	17.06	6.32	24.95	8.51	33.97
Uttar Pradesh	2.81	1.95	1.54	0.30	5.66	12.55	6.08	27.71	7.69	33.72
West Bengal	0.71	1.21	2.05	0.21	3.12	11.34	5.10	28.58	11.74	35.94

Source: Census of India 2001

share of workers in Bihar (5.99 percent) and highest share of workers in Andhra Pradesh (13.31 percent). On the other hand, Andhra Pradesh is the leading state in Household Manufacturing with 7.18 percent of workers whereas other states comprise only a marginal share of workers in this industry.

In case of class I cities located within UAs the leading states in Other Services are Maharashtra 32.26 Per cent and Kerala (31.42 Per cent) of workers in this industry. Karnataka (22.26 percent) and Gujarat (26.59 percent) are the states which are lagging behind in terms of their share of workers engaged in this industry. Another major industrial group i.e. Trade and Commerce has shown highest percentage of workers in Madhya Pradesh (26.47 percent) and lowest proportion of workers in Andhra Pradesh (16.16 percent). In case of Non Household Manufacturing Madhya Pradesh (15.23 Per cent) has shown lowest proportion of its workers in this industry as compared to other states. Construction Industry which contains a considerable proportion of workers has recorded highest share of workers in Andhra Pradesh, Karnataka whereas lowest shares is observed in Tamil Nadu.

The state-level industrial distribution of class I cities located outside UAs show huge variations as compared to those located within UAs. The Other Services industry has shown highest percentage of workers in Punjab, and Haryana whereas lowest proportion of workers is recorded

by Gujarat and Andhra Pradesh. The leading states in terms of percentage of workers in Trade and Commerce Industry are Bihar and West Bengal. Madhya Pradesh has shown lowest percentage of workers in this industry as compared to other states. Non Household Manufacturing which is an important industrial group has recorded highest percentage of workers in Gujarat and lowest in west Bengal. The share of workers in Construction Industry varies between 5.10 percent in west Bengal to 13.76 in Rajasthan. Transport, Storage and Communication which makes a considerable share of workers has recorded highest percentage in West Bengal and lowest in Punjab.

State level industrial distribution of male workers shows that state which has highest proportion of workers in Other Services is Punjab. Lowest percentage of male workers was recorded by Rajasthan. Trade and Commerce Industries have shown a larger concentration of workers in Bihar and least concentration in Andhra Pradesh and Karnataka. In case of Non Household Manufacturing the leading states are Karnataka and Gujarat and lagging states are Bihar and Madhya Pradesh (15.59 Per cent). Transport, Storage and Communication and Construction Industries have shown a much variation at state level.

Unlike male workers, all states except Karnataka have largest proportion of their female workers employed in Other Services. The leading states in these industries are Punjab and Kerala and lagging states are Andhra Pradesh and Rajasthan. Non Household Manufacturing which is another major industry has shown highest percentage of female workers in Karnataka and lowest percentage share in Bihar. Trade and Commerce Industries have shown largest concentration of workers in Gujarat and Delhi and least concentration in Haryana. The share of workers in Household Manufacturing varies from (6.94 percent) in Haryana to 17.12 in Rajasthan.

State level industrial distribution of male workers in class I cities located within UAs shows acute concentration of male workers in industrial groups, namely Other Services ranging from 23.22 percent in Madhya Pradesh to 28.27 percent in Uttar Pradesh. The leading state in Trade and Commerce is Madhya Pradesh whereas lagging state is Andhra Pradesh. Non Household Manufacturing is another major industry which has larger percentage of workers in Karnataka (34.51 Per cent) and lowest percentage in Bihar (17.11 Per cent). Transport, Storage and Communication is another important industry which has higher percentage of workers in Kerala and Madhya Pradesh.

In case of female workers located within UAs Other Services is major industrial group in all states except Karnataka. The leading states in terms of share of female workers in this industry are Kerala (60.19 Per cent) and West Bengal (58.16 Per cent). The least proportion of female workers is found to be employed in Andhra Pradesh and Bihar. Other important industrial groups like Trade and Commerce, Manufacturing, Processing, Servicing and repairs in Household industries and Manufacturing, Processing, Servicing and repairs in other than Household industries have shown much variation at state level in their share of workers.

Now industrial distribution of male workers in class I cities located outside UAs shows (Appendix 4.41) that a major proportion of male workers was concentrated in four industrial groups namely Other Services, Trade and Commerce, Non Household Manufacturing and Transport Storage and Communication and Construction industry. Other industrial groups have accounted for only a small proportion of workers but relatively larger share than cities which are located within UAs. The states which are leading in other services are Uttar Pradesh and Tamil Nadu whereas states which are lagging behind are Andhra Pradesh with 14.66 percentage share in this industry. The Trade and Commerce industry has recorded highest percentage of workers in Bihar and lowest in Madhya Pradesh. Non Household Manufacturing is another important industry which clearly shows regional disparity with largest percentage of workers in one of the most developed and urbanized state i.e. Gujarat and lowest in Bihar.

The industrial distribution of female workers in class I cities located outside UAs shows a quite different picture compared to their counterparts located within UAs. Apart from the major industrial groups like Other Services, Non Household Manufacturing, Household Manufacturing and Trade and Commerce, a considerable proportion of female workers are reported to be employed in industries related to primary sector. Other Services which is the largest industry has recorded highest percentage of workers in west Bengal whereas lowest percentage was recorded by Andhra Pradesh. In case of Non Household Manufacturing Gujarat was leading state while Bihar has been lagging behind. Andhra Pradesh has shown highest percentage of female workers i.e. 33.01 percent in Household Manufacturing industries vis-à-vis other states. On the other hand agricultural laborers constitute a significant proportion of female workers in Andhra Pradesh, Karnataka, Madhya Pradesh and Maharashtra. Madhya Pradesh has largest percentage of cultivators compared to other states.

4.3.2.2 MAIN WORKERS

Industrial distribution of main workers (Table 4.3.2.2a) shows that leading states in terms of share of workers in other services are Karnataka and West Bengal whereas the states which lag behind in this respect are Madhya Pradesh and Kerala. Trade and Commerce which is another major industry has recorded higher percent of workers in Assam (21 percent). Construction is another important industry which has recorded a significant proportion of workers in most of the states with highest percentage in Himachal Pradesh (30.44percent) and Madhya Pradesh (25.07 percent) whereas lowest percentage of workers has been reported by West Bengal (11.05Per cent) and Tamil Nadu (13.07 Per cent). Non Household Manufacturing has recorded highest percentage of workers in Punjab (23.43 percent) and lowest in Himachal Pradesh (6.69 Per cent). Household Manufacturing shows much variation across state in terms of percentage of workers.

Table: 4.3.2.2a

State Level Industrial Distribution of Main Workers in Towns Promoted to Class I status (2001)

	Industrial Classification									
State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.15	11.18	1.73	0.58	9.28	12.13	17.75	18.78	5.37	22.05
Assam	1.05	2.75	1.47	0.43	7.92	7.75	10.18	21.73	6.24	40.49
Bihar	2.63	12.65	2.68	0.28	11.69	10.66	13.67	17.12	8.20	20.42
Gujarat	0.58	2.79	1.75	0.23	16.72	18.06	13.73	18.32	3.67	24.15
Haryana	1.21	4.11	2.10	0.46	9.63	21.37	20.56	16.06	4.68	19.83
Karnataka	1.00	6.66	1.29	0.35	9.23	14.85	16.19	17.40	6.60	26.44
Kerala	0.39	4.27	9.85	0.43	3.53	16.63	18.69	17.79	10.05	18.36
Madhya Pradesh	1.31	5.62	1.22	0.52	10.42	16.12	25.07	16.16	6.71	16.86
Maharashtra	1.04	3.47	0.93	0.22	11.45	19.48	17.95	16.61	5.99	22.86
Orissa	1.03	6.00	2.05	0.28	9.21	18.95	18.43	16.74	4.82	22.49
Punjab	1.05	6.83	1.36	0.07	9.57	23.43	14.86	14.97	4.36	23.52
Rajasthan	3.27	3.64	1.68	0.61	10.93	19.19	23.86	14.43	5.57	16.82
Tamil Nadu	1.59	4.10	1.07	0.34	7.57	15.78	13.07	17.53	5.32	33.63
Uttar Pradesh	1.33	6.34	1.32	0.19	14.90	18.00	15.65	15.94	6.27	20.04
West Bengal	1.14	3.96	1.19	0.39	10.00	18.50	11.05	18.20	5.35	30.21

Source: Census of India 2001

Gujarat (16.72 percent) is the leading state in this industry and Himachal Pradesh is at the lower end. Transport Storage and Communication industry has reported highest percentage of workers in Kerala (10.05 percent) and lowest in Himachal Pradesh (2.99 percent). Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities have accounted for a negligible share of workers in all major states. Only a few states like Bihar and Andhra Pradesh have recorded a considerable proportion of Agricultural Labourers.

While comparing industrial distribution of workers in class I cities located within and outside UAs, it has been observed that Other Services, Trade and Commerce, Construction, Non Household Manufacturing, Household Manufacturing industries are major industrial groups in class I cities within UAs in all states. Whereas in case of another set of cities, which are located outside UAs, the similar group of industries still dominates but others industries also employ a considerable proportion of workers. For instance Andhra Pradesh (24.99 percent) and Karnataka (15.69 percent) have shown a significant percentage of workers as Agricultural Labourers.

Table: 4.3.2.2b

State Level Industrial Distribution of Main Workers in Towns Promoted to Class I status Within and Outside UAs (2001)

(Within UA)

	Industrial Classification									
State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.19	7.99	1.51	0.66	8.84	11.91	18.72	19.42	5.65	24.09
Assam	1.05	2.75	1.47	0.43	7.92	7.75	10.18	21.73	6.24	40.49
Bihar	2.52	10.75	2.24	0.34	11.19	11.09	15.12	16.92	8.85	20.98
Gujarat	0.59	2.67	1.67	0.22	16.98	18.54	13.51	18.47	3.51	23.83
Haryana	0.86	5.04	2.13	0.10	11.75	22.16	18.65	15.46	3.98	19.87
Karnataka	0.78	2.77	1.03	0.22	8.93	15.99	17.40	16.68	6.71	29.49
Kerala	0.39	4.27	9.85	0.43	3.53	16.63	18.69	17.79	10.05	18.36
Madhya Pradesh	0.64	3.43	0.97	0.35	11.19	16.79	26.49	16.41	6.86	16.87
Maharashtra	1.08	2.54	0.84	0.20	10.98	20.42	18.07	16.51	5.97	23.39
Orissa	1.09	6.38	2.05	0.30	8.18	20.71	18.97	15.35	4.75	22.24
Punjab	1.10	7.43	1.31	0.02	9.12	21.93	16.61	15.31	5.00	22.19
Rajasthan	1.48	3.47	1.56	0.96	10.15	16.58	27.67	16.18	6.68	15.27
Tamil Nadu	1.65	3.52	0.83	0.35	7.31	15.86	13.31	17.36	5.39	34.42
Uttar Pradesh	1.16	5.18	1.04	0.19	14.98	17.65	15.94	16.28	6.11	21.46
West Bengal	0.95	2.15	1.00	0.36	9.66	19.99	10.41	18.90	5.34	31.24

(Outside UA)

State	I	II	iII	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.00	24.99	2.67	0.25	11.19	13.08	13.57	15.98	4.12	13.16
Bihar	2.91	17.57	3.84	0.11	12.99	9.55	9.89	17.63	6.54	18.96
Gujarat	0.34	5.12	3.29	0.34	11.75	8.89	18.03	15.46	6.61	30.17
Haryana	1.61	3.07	2.06	0.86	7.23	20.48	22.71	16.75	5.46	19.78
Karnataka	1.50	15.69	1.89	0.63	9.93	12.22	13.39	19.07	6.33	19.35
Madhya Pradesh	3.78	14.10	2.05	1.18	8.49	14.27	21.65	14.41	6.56	13.51
Maharashtra	0.81	8.44	1.40	0.35	13.96	14.49	17.27	17.14	6.06	20.08
Orissa	0.77	4.24	2.07	0.21	14.07	10.65	15.88	23.25	5.18	23.68
Punjab	0.97	6.03	1.43	0.14	10.16	25.41	12.55	14.51	3.51	25.29
Rajasthan	4.79	3.79	1.78	0.31	11.59	21.41	20.63	12.95	4.63	18.13
Tamil Nadu	0.80	11.71	4.22	0.13	11.02	14.66	10.02	19.68	4.38	23.38
Uttar Pradesh	1.65	8.42	1.82	0.17	14.75	18.63	15.14	15.35	6.54	17.51
West Bengal	2.01	12.16	2.07	0.51	11.56	11.78	13.94	15.04	5.37	25.56

Source: Census of India 2001

In case of industrial distribution of male main workers it is observed that Other Services has reported largest percentage of workers in Tamil Nadu (29.51 Per cent) and Himachal Pradesh (25.99 Per cent) and lowest percentage in Kerala (10.28 percent). Another major industrial group employing male main workers is Construction industry with highest concentration in Madhya Pradesh (30.26 percent) and least concentration in West Bengal (15.22Per cent). Trade and Commerce industry has reported a significant proportion of male workers in all states. Non Household Manufacturing is another important industrial group with larger percentage of workers in developed states like Punjab, Gujarat, Haryana and Maharashtra and only a small proportion of workers in Himachal Pradesh (4.51 percent). Transport Storage and Communication also constitute considerable share of male workers with lowest percentage share in Himachal Pradesh and highest in Kerala (13.36 percent).

Female workers, on the other hand, show a larger concentration in Other Services in all States. Unlike male workers, female workers have shown lesser concentration in industries like Manufacturing, Processing, Servicing and repairs in other than Household industries, Construction, Trade and Commerce while they have higher percentage share in Household Manufacturing industries. Female workers have only a negligible share in Transport Storage and Communication. The leading states in terms of share of female main workers are developed states of West Bengal (45.92 Per cent), Tamil Nadu (41.30 Per cent) and Punjab whereas state

with lowest share of these workers in this industry is Rajasthan (18.93 percent). Household Manufacturing and Non Household Manufacturing are other important industries which have recorded highest percentage of workers in Uttar Pradesh (31.74 Per cent) and Kerala (28.11 percent) respectively. Some states like Bihar, Karnataka, and Maharashtra have considerable share of female Agricultural Labourers.

Industrial distribution of male workers in class I cities within UAs show that manufacturing industries comprises relatively smaller share of workers in all states. In case of Trade and Commerce the leading states are Gujarat and West Bengal whereas Himachal Pradesh is the lagging state. Construction industry is another major industry, which has reported highest percentage of male workers in Himachal Pradesh and lowest in West Bengal (14.46 Per cent). Non Household Manufacturing is also an important industry, which has highest percentage of workers in Maharashtra (23.94 percent) and lowest in Himachal Pradesh (4.51 percent). Household manufacturing industries has reported a marginal share of workers in all states. In case of female workers, Other Services is largest industrial group in all states with its lowest share in Rajasthan and highest in Tamil Nadu (30.03 Per cent). Household Manufacturing industries on the other hand, employ only a nominal share of workers. Unlike male workers, females have a negligible share of workers in Transport Storage and Communication. While Construction and Trade and Commerce have relatively lesser concentration of female workers compared to male workers.

Industrial distribution of male workers in class I cities located outside UAs shows that West Bengal is the only state with highest proportion of its workers in Other Services, whereas most of the states have larger percentage of worker in Trade and Commerce and Construction industry. On the other hand, Punjab and Uttar Pradesh have largest proportion of male workers in Household Manufacturing industries. The states with significant proportion of Agricultural labourers are Andhra Pradesh, Karnataka and West Bengal.

Industrial distribution of female main workers in newly added class I cities located outside UAs show three major industries namely Other Services, Household Manufacturing and Non Household Manufacturing which comprise a larger share of total female workers in most of the states. The leading states in Other Services are again Punjab, Gujarat and West Bengal whereas Andhra Pradesh (14.77 percent) and Rajasthan are lagging behind with too less percentage of

their total female works employed in this industry. Household Manufacturing industries which is another major industry has larger percent of female workers in Uttar Pradesh (33.92 percent) and lowest percentage of female workers in Haryana (14.97 percent). In case of Non Household Manufacturing industries Rajasthan has reported highest percentage of female employment (22.66 percent) and Gujarat (5.65 Per cent) has shown lowest share of female workers in this industry. It is also important to note that Construction industry has higher proportion of female workers in less develop states like Orissa (19.68 percent), Madhya Pradesh (12.44 percent) and Rajasthan (11.81 percent). Agricultural Labourers have also reported higher percentage of female workers in Andhra Pradesh (30.72 percent), Madhya Pradesh (23.18 percent), Karnataka (22.42 percent) and Bihar (20.98 percent).

4.3.2.3 MARGINAL WORKERS

Table: 4.3.2.3a

State Level Industrial Distribution of Main Workers in Towns Promoted to Class I status (2001)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.01	2.26	1.37	1.14	3.93	14.22	9.81	23.36	11.31	31.60
Assam	0.60	0.26	2.14	0.93	1.37	9.63	6.01	24.19	12.00	42.88
Bihar	1.80	3.07	2.75	0.67	5.02	15.13	5.10	24.80	8.86	32.81
Gujarat	0.30	0.42	1.06	0.23	2.15	36.14	7.99	21.69	8.25	21.77
Haryana	0.86	0.60	1.51	0.46	3.64	26.27	7.45	23.29	6.85	29.06
Karnataka	1.11	1.21	0.83	0.35	3.50	20.24	9.15	22.50	10.27	30.84
Kerala	0.24	1.06	7.18	0.23	2.15	14.55	10.52	21.05	12.04	30.98
Madhya Pradesh	1.24	0.78	1.14	0.87	4.49	18.90	9.35	22.35	9.04	31.84
Maharashtra	0.57	0.59	0.96	0.35	2.84	26.24	8.24	21.37	11.11	27.72
Orissa	0.53	0.62	2.38	0.31	2.60	14.52	10.11	23.73	10.06	35.13
Punjab	0.81	1.62	0.92	0.23	4.71	28.14	6.36	22.94	6.87	27.39
Rajasthan	1.92	0.54	1.41	0.70	5.09	20.48	8.80	21.48	9.04	30.54
Tamil Nadu	0.87	1.06	1.01	0.58	4.56	20.66	7.30	21.96	8.36	33.66
Uttar Pradesh	1.53	1.25	1.24	0.28	8.37	19.65	5.98	22.92	8.02	30.76
West Bengal	0.45	0.45	0.83	0.69	2.88	22.66	4.69	24.64	10.44	32.27

Source: Census of India 2001

Industrial distribution of total marginal workers shows that Other Services is the largest industrial group in most of the states except Gujarat and Punjab which have larger concentration of marginal workers in Non Household Manufacturing industries. The leading states in Other Services are Himachal Pradesh (66.91 percent) whereas Gujarat (21.77 percent) lags behind in this respect. Trade and Commerce is second major industrial group with high percentage of marginal workers in West Bengal (24.64 percent) and lowest percentage in Himachal Pradesh (14.62 percent). Non Household Manufacturing is another important industrial group which has recorded larger percentage of marginal workers in Gujarat (36.14 percent) whereas lowest percentage is reported in Himachal Pradesh (4.11 percent). Transport Storage and Communication also accounts for considerable share of marginal workers employed with larger

Table: 4.3.2.3b

State Level Industrial Distribution of Main Workers in Towns Promoted to Class I status within and Outside UAs (2001)

(Within UA)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	0.94	1.61	1.25	1.29	3.55	14.01	10.02	23.20	11.41	32.72
Assam	0.60	0.26	2.14	0.93	1.37	9.63	6.01	24.19	12.00	42.88
Bihar	1.63	2.69	2.61	0.86	4.60	16.25	5.30	23.37	9.11	33.59
Gujarat	0.30	0.41	1.05	0.23	2.21	37.10	7.79	21.88	8.03	21.00
Haryana	0.87	0.72	1.72	0.28	3.99	23.45	7.16	24.40	6.87	30.55
Himachal Pradesh	0.62	0.16	0.51	0.07	0.97	4.11	8.05	14.62	3.98	66.91
Karnataka	0.53	0.35	0.67	0.25	3.28	21.90	8.86	21.80	10.02	32.33
Kerala	0.24	1.06	7.18	0.23	2.15	14.55	10.52	21.05	12.04	30.98
Madhya Pradesh	0.89	0.59	1.07	0.49	5.18	19.15	9.53	22.97	9.46	30.66
Maharashtra	0.51	0.40	0.81	0.28	2.45	27.14	8.03	21.18	11.25	27.94
Orissa	0.55	0.70	2.09	0.35	2.47	15.70	10.82	22.12	10.17	35.03
Punjab	0.85	1.63	0.92	0.06	4.18	21.29	6.91	25.13	7.53	31.50
Rajasthan	1.02	0.50	1.47	0.95	4.64	16.73	9.68	23.37	10.84	30.81
Tamil Nadu	0.88	0.92	0.89	0.60	4.51	20.90	7.22	21.65	8.45	33.99
Uttar Pradesh	1.25	1.04	1.13	0.34	8.28	18.72	5.91	23.55	7.92	31.86
West Bengal	0.38	0.33	0.74	0.68	2.40	23.27	4.42	24.67	10.33	32.78

(Outside UA)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.36	5.84	2.01	0.27	6.07	15.40	8.63	24.26	10.75	25.41
Bihar	2.24	4.06	3.11	0.19	6.10	12.21	4.57	28.54	8.21	30.77
Gujarat	0.31	0.61	1.43	0.29	0.75	13.31	12.74	17.15	13.37	40.04
Haryana	0.85	0.46	1.29	0.66	3.27	29.30	7.77	22.10	6.84	27.46
Karnataka	2.78	3.65	1.27	0.63	4.12	15.50	9.97	24.48	11.00	26.58
Madhya Pradesh	3.24	1.95	1.71	2.83	3.71	20.49	8.91	21.51	8.88	26.78
Maharashtra	1.02	2.00	2.03	0.83	5.64	19.74	9.75	22.79	10.06	26.14
Orissa	0.44	0.26	3.67	0.15	3.20	9.37	7.01	30.79	9.57	35.53
Punjab	0.78	1.60	0.92	0.41	5.28	35.51	5.78	20.58	6.17	22.98
Rajasthan	2.57	0.57	1.36	0.52	5.42	23.17	8.17	20.13	7.74	30.35
Tamil Nadu	0.78	2.62	2.23	0.32	5.06	18.10	8.16	25.25	7.37	30.12
Uttar Pradesh	1.95	1.58	1.40	0.19	8.52	21.11	6.08	21.94	8.19	29.02
West Bengal	0.88	1.25	1.44	0.79	6.12	18.54	6.50	24.41	11.21	28.86

Source: Census of India 2001

percentage of workers in Kerala (12.04 percent) and least percentage in Himachal Pradesh (3.98 percent).

In case of industrial distribution of class I cities which are located within UAs all states except Gujarat have recorded largest share of their marginal workers in Other Services. Another important industrial group i.e. Non Household Manufacturing has reported highest percentage of marginal workers employed in Gujarat (37.10 percent) and least percentage in Himachal Pradesh (4.11 percent). Trade and Commerce industry has shown relatively larger variation at state level with highest percentage of marginal workers in Kerala (12.04 percent) and lowest percentage in Himachal Pradesh (3.98 percent).

Industrial distribution of class I cities located outside UAs shows that Other Services Industry comprises largest share of marginal workers in most of the states except Haryana and Punjab where largest industry is Non Household Manufacturing. Trade and Commerce industry has shown highest percentage of marginal workers in Orissa (30.79 percent) and lowest in Gujarat (17.15 percent). Transport Storage and Communication is another important industry, which has recorded a high percentage of workers in Gujarat (13.37 percent), whereas its lowest percentage is seen in Punjab (6.17 percent).

The industrial distribution of male marginal workers shows that beside Other Services, the major industrial group employing larger share of male workers is Non Household Manufacturing industries and Trade and Commerce. The state with highest percentage of workers in Other Services is Assam whereas lowest percentage is recorded in Gujarat (17.99 percent). On the other hand Non Household Manufacturing has reported largest percentage of male marginal workers in Gujarat. Construction is another important industry, which varies in terms of its share of male marginal workers from 5.16 percent in West Bengal to 12.69 percent in Kerala.

Now the industrial distribution of female marginal workers shows that the largest proportion of female marginal workers in all states is concentrated in Other Services. The percentage of workers in this industry varies from 84.30 percent in Himachal Pradesh to 46.05 percent in Andhra Pradesh. Other major industry is Non Household Manufacturing, which has largest percentage of female marginal workers in Karnataka (20.13 percent) and lowest in Himachal Pradesh (2.43 percent). Trade and Commerce industry has shown a much variation in employment of female marginal workers at state level varying from 7.62 percent in Haryana to 12.17 percent in Andhra Pradesh. Construction industry has recorded highest percentage of female workers employed as marginal in Orissa (13.76 percent) and Andhra Pradesh (8.28 percent) while lowest percentage in West Bengal (1.68 percent).

Looking at the industrial distribution of male marginal workers in class I cities located within UAs, three major industrial groups are identified. They are Other Services, Trade and Commerce and Non Household Manufacturing. The leading state in Other Services is Assam while Gujarat (17.20 percent) is at lower end in this regard. Trade and Commerce industry has accounted for a significant proportion of male marginal workers in all states varying between 16.59 percent in Himachal Pradesh to 27.53 percent in Punjab. Non Household Manufacturing which is another important industrial group has reported highest percentage of male marginal workers in Gujarat (39.79 percent) and lowest percentage in Himachal Pradesh (4.45 percent). Transport Storage and Communication have relatively higher proportion of male workers as marginal in Kerala (14.10 percent) and lowest percentage in Haryana. With state level employment of male marginal workers in Construction industry varying from 4.88 percent in West Bengal to 12.69 percent in Kerala forms another industrial group that makes up only a small proportion of male marginal workers' employment.

From industrial distribution of female marginal workers in class I cities located within UAs it is clearly visible that female marginal workers are mainly concentrated to Other Services. The state with highest percentage of female workers in this industry is Assam and lowest percentage is employed in Andhra Pradesh (48.87 percent). The second major industry which employs significant share of female workers in Non Household Manufacturing has highest percentage of female marginal workers working in Karnataka (22.42 percent) and lowest share in Assam. Trade and Commerce is another important industry which has highest proportion of workers in Madhya Pradesh (12.52 percent) and lowest share in Haryana (6 percent). On the other hand the share of Household Manufacturing between 2.3 percent in Kerala to 13.54 percent in Uttar Pradesh.

The male workers in class I cities located outside UAs are mainly concentrated in Other Services, the Trade and Commerce and Non Household Manufacturing and Construction industry. The leading states in Other Services are Gujarat (37.08 percent) and lagging state is Punjab (19.04 percent). On the other hand, Trade and Commerce industry has recorded highest percentage of workers in Orissa (33.24 percent) and lowest percentage in Gujarat (18.13 percent). Non Household Manufacturing which is also an important industrial group with its percentage of workers varying from 9.53vpercent in Orissa to 37.70 percent in Punjab. Transport, Storage and Communication also accounted for an important share of workers which varies from 6.66 percent in Punjab to 14.54 percent in Gujarat.

The distribution of female marginal workers in class I cities located outside UAs also shows a great concentration of female workers in Other Services in all States ranging from 33.17 percent in Andhra Pradesh to 60.46 percent in Gujarat. Other important industrial groups which represent larger percentage share of female workers are Household Manufacturing, Non Household Manufacturing and Trade and Commerce industries. Trade and Commerce industry shows higher percentage of female workers in Orissa (13.70 percent) while lowest percentage in Tamil Nadu (3.94 percent). Household Manufacturing industries also accounted for considerable share of female marginal workers which varies from 1.42 percent in Gujarat to 24.78 percent in Maharashtra. On the other hand the percentage of workers in Non Household Manufacturing with highest percentage of workers in Tamil Nadu (19.31 percent) and lowest percentage in Gujarat (7.86 percent).

4.4 CONCLUSION

Workforce Structure in Cities which have maintained class I status in 1991 and 2001

1. The major industrial group in class I cities employing a larger share of workers is that of Other Services. A marked difference between cities located within and those located outside UAs is that the cities which are located within UAs have relatively higher proportion of their workers in more productive industries viz. Other Services, Transport Storage and Communication, Trade and Commerce and Non Household Manufacturing industries compared to their counterparts located outside UAs. Ludhiana which is the only metro city outside UA is an exception with a significant share of its workers in Non Household industries. Cities located within UAs have a lower share of workers in low productive activities within the primary sector (agriculture, allied activities and mining and quarrying) because they are located in an urban environment i.e. dominated by secondary and tertiary sector
2. Cities located within UAs have a relatively larger share of total male and total female workers in Other Services and Non Household Manufacturing industries compared to those located outside UAs. On the other hand, cities which are located outside UAs account for relatively a higher proportion of male and female workers in Household Manufacturing compared to their counterparts.
3. During the period under consideration, an increase in share of main workers has been observed only in tertiary sector in class I cities whereas the share of secondary sector has witnessed a decline. In case of secondary sector which comprises Household Manufacturing, Non Household Manufacturing and Construction industries, the cities which are located within UAs have recorded a decline in main workers whereas their counterparts located outside UAs have observed an increase in their share of workers in this sector. This may be attributed to the new pattern of investment emerged in post reform period which no longer favors the large metropolitan cities.
4. Between 1991 and 2001 the industrial divisions namely Cultivators, Agricultural Labourers, Non-Household manufacturing industries and Trade and Commerce have observed a decline in their share of workers in total main workers whereas Other Services has seen a rise in its share of workers.

5. Between 1991 and 2001 class I cities have shown a decline in their share of male workers in Other Services and Non Household Manufacturing. On the other hand class I cities have recorded a huge increase in the share of female workers in Other Services except primary sector which has shown a decline in its share of female workers.
6. Therefore larger share of marginal workers in class I cities located outside UAs are engaged in low productive activities of the primary sector and in Non Household Manufacturing.
7. Industrial distribution of marginal workers by gender in 2001 shows that a major proportion of male workers in class I cities was engaged in Construction, Trade and Commerce, Other Services and Transport Storage and Communication. Metro cities have shown a larger concentration of male marginal workers in these industries as compared to class Ib and Ic cities. On the other hand, larger proportion of female workers was employed in Other Services. Female workers in Other Services are working as low cost support system in large cities.

Workforce Structure in Cities which were Demoted from class I status in 2001

8. The industrial distribution of main workers in cities which were demoted from class I status in 2010 Census; show a completely different picture with no single industrial group showing major concentration of workers. The three major industrial groups namely Other Services, Trade and Commerce and Non Household Manufacturing employed almost equal share of workers.
9. The dominant industrial groups in class I cities located within UAs are Other Services, Trade and Commerce and Non Household Manufacturing. On the other hand, in case of class I cities located outside UAs a large proportion of workers are engaged in Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities. This high proportion of workers in this industry indicates the movement of surplus labour from distressed agriculture to Allied Activities.

Workforce Structure in Cities which were Promoted to class I status in 2001

10. Other Services, Trade and Commerce and Non Household Manufacturing were the major industrial groups of workers in these cities.

11. Cities of class Ib have a larger proportion of their workers in Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities and Other Services, as compared to class Ic cities. Whereas other industrial groups have shown higher percentage of workers in class Ic cities.
12. In case of cities which are located within UAs, a larger concentration of female workers has been observed in Other Services, Household Manufacturing and industries related to primary sector. On the other hand, the cities which are located outside UAs have a relatively lower concentration of workers in Other Services.

CHAPTER 5

CONCENTRATION/DECENTRALIZATION OF POPULATION AND EMPLOYMENT

Chapter 5

CONCENTRATION/DECENTRALIZATION OF POPULATION AND EMPLOYMENT

In this chapter an attempt has been made to analyze the nature and structure of workforce in million plus cities in India. Since the urban structure of India is dominated by class I cities and specifically by million cities therefore it is essential to look at the changing workforce structure in these cities in the context of structural adjustment program which was implemented in the country during the 1990s. We also analyze the process of concentration/dispersal of population in the urban agglomerations of these cities. The latter part of this chapter deals with the sectoral and spatial concentration of workforce in class I cities according to size class and their location within or outside the urban agglomerations.

5.1 ANALYSIS OF MILLION PLUS CITIES IN INDIA

5.1.1 SIZE AND COMPOSITION OF WORKFORCE IN MILLION PLUS CITIES

The million plus cites have reported a slight increase in their WPR from 31.54 percent in 1991 to 32.07 percent in 2001. However, the average WPR of class I cities has increased from 30.12 % to 33.19 % during the same period. According to the 1991 census the million plus cities with WPR higher than the average of class I cities were Greater Mumbai, Delhi Municiple Corporation, Kolkata, Bangalore, Surat Ludhiana and Kalyan Dombivali. The cities which have witnessed a decline in their WPR are Bangalore, Nagpur, Pune , Surat, and Kalyan-Dombivali. This happened mainly due to decline in male WPR whereas other million cities have had an increase in WPR. Equally important here is to note that this increase in WPR is mainly due to higher increase in female WPR in these cities. Between 1991 and 2001 censuses more cities have achieved million plus status viz. Patna, Thane, Agra, Varanasi, Nasik, Meerut, Faridabad, Haora and Pimpri Chindwad. Among these new million plus cities Agra, Nasik, Haora and Pimpri

Chindwad have slightly higher WPR than the average WPR i.e. again due to relatively high female WPR.

In terms of share of male and female workers in total workforce most of the cities have had an increase in percentage share of female workers .The few exceptions are Banglore, Pune, Vadodara and Kalyan-Dombivali which have shown a decline in their share of female workers. All million cities have witnessed increase in share of marginal workers with the highest increase in Pune, Surat and Bhopal. Among new million cities, Varanasi and Meerut have shown the highest increase .

Table shows WPR among males and females aged 15 and above according to principal and subsidiary occupation for years 1993-94 (50^{th} round), 1999-2000 (55^{th} round) and 2004-05 (61^{st} round) as given by National Sample Survey. It shows that out of 18 common million cities during these three rounds eight cities have shown decline in their male WPR. The highest decline is reported by Vadodara i.e. followed by Delhi, Lucknow, Kolkata, Chennai, Ludhiana and Nagpur. Whereas other cities have shown increase in male WPR with highest increase in Kanpur, Surat, and Bhopal. While in case of female workers Bhopal, Chennai, Delhi, Kanpur and Surat have shown an decline and other cities have recorded an increase in female WPR with sharp increase in Jaipur.

For urban India, in case of urban male workers, the share of casual employment has gone up, consequently the share of regular/ salaried workers has declined Whereas for urban female workers, the share of regular salaried workers has increased i.e. accompanied by a decline in self employed workers.[1] In case of million plus cites the analysis of 50^{th}, 55^{th} and 61^{st} rounds of National Sample Survey shows that out of eighteen million-plus cities six cities namely Bangalore, Kanpur, Kolkata, Jaipur , Mumbai and Pune have shown an increase in male casual workers along with decline in their share of regular/salaried workers. On the other hand Delhi, Ludhiana, Surat and Chennai have observed a significant increase in their male regular/salaried workers. Except six cities like Delhi,

[1] Kundu (1997), 'Trends and Structure of Employment in 1990's-Implications for Urban Growth', Ecomomic and Political Weekly', Vol. 32, No. 24, June 4

Ludhiana, Lucknow, Kanpur, Surat and Pune other million cities have reported an increase in their self employed male workers with higher increase in regionally important cities viz. are Bhopal, Vadodara, Jaipur, Indore and Hyderabad. Female workers, on the other hand present a different picture. The share of female regular/salaried workers has gone up in majority of million cities except Jaipur, Kayan-Dombivili, Kanpur and Kolkata. This is an indication of low cost support mechanism in large cities where females are mainly engaged in household works which are counted in the category of regular work. These four cities have shown a significant decline in the share of female regular, salaried workers. Most of the million cities have shown a decline in share of female casual worker but Surat has reported a significant increase in the same. Unlike urban India the share of female self employed workers is also found to be higher in many million plus cities. The above trend could be the consequence of current system of subcontracting in the urban economy. Females are getting employed in informal sector on more regular basis although at a low wage rate and poor working conditions.[2]

5.1.2 WORKFORCE STRUCTURE IN MILLION PLUS CITIES

The million plus cities have a different development dynamic as compare to class I cities in general. Unfortunately the comparison of the pattern of workforce distribution is not possible for total workers. This is because 1991 Census provides nine fold economic classification only for main workers . Consequently the discussion has been restricted to nine fold industrial classification of main workers. Employment data for million cities has also been incorporated in this analysis from NSS reports for the year 1999-2000 and 2004-05.

The industrial distribution of main workers between 1991 and 2001 shows a significant concentration of workers in three major industrial division viz. Trade and Commerce,

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[2] Kundu (1997), 'Trends and Structure of Employment in 1990's-Implications for Urban Growth', Ecomomic and Political Weekly', Vol. 32, No. 24, June 4

Non Household Manufacturing and Other Services. An important observation is that Non Household Manufacturing which is the most significant industrial division has reported decline in its share in all million cities except Lucknow and Chennai which has shown 40.16 and 1.27 percent increase in share of workers in this industry whereas a higher decline is observed in Surat, Bangalore and Ahmadabad. Construction and Other Services have reported an increase in their share in most of the million cities. Lucknow on the other hand has observed about 27 percent decline in Other Services. The share of workers in Household Manufacturing has shown a marginal increase in all cities except Jaipur. Transport Storage and Communication has also shown a marginal decline in majority of million cities except Bangalore, Kanpur, Surat and Jaipur which have gained marginally in this industry.

While comparing male and female workers separately it has been found that share of male workers in Other Services has gone up in all million cities with the exception of Lucknow and Jaipur. Construction and Household Manufacturing industries have reported a nominal increase in their share of workers in majority of the cities. On the other hand Non Household Manufacturing has witnessed a decline where Surat as observed 42 percent loss, Lucknow on the other hand has shown a 43 percent increases in this industry. Unlike male workers the share of female worker in Non Household Manufacturing has shown an increase in all million cities with the exception of Surat and Kayan-Dombivili which have observed a marginal decline in this industry but a significant increase in Other Services. Beside these two cities, Greater Mumbai, Bangalore, Delhi, Hyderabad, Bhopal and Nagpur have also reported an increment in the share of female workers in this industry.

The industrial distribution of marginal workers according to 2001 Census shows a concentration of male marginal workers in four major industrial categories viz. Non Household Manufacturing, Trade and Commerce, Construction and Other Services. Female workers, on the other hand have shown a larger concentration in Other Services. Another significant industrial division is Household Manufacturing in majority of million cities. Ahmadabad, Bangalore and Kanpur have a relatively lower share in this industry

compared to other cities. Non Household Manufacturing and Trade and Commerce also account for a significant proportion of workers. Few cities like Vadodara, Pune, Surat, Ahmadabad, Kanpur and Bhopal have a considerable share of female marginal workers in primary sector.

The National Sample Survey provides industrial classification of workers for million cities only for years 1991-2001 and 2004-05. According to NIC classification of 1998, the majority of the workers are employed in four industrial categories namely manufacturing, trade, hotel and restaurant, transportation and other services (65-93). Here other services includes real estate, renting and business activities (K), education (M), Health and social work (N), and other community, social and personal service activities (O).

In 1999-2000, cities with the highest proportion of male workers in manufacturing were Surat, Ludhiana, Agra, Thane, Howrah, Vadodara, and Varanasi whereas in 2004-05 cities with manufacturing as major sector were Faridabad, Varanasi, Surat and Ludhiana. Among these Ludhiana and Varanasi witnessed increase in their manufacturing sector whereas Agra, Thane and Vadodara experienced a decline in the same. Faridabad i.e. a newly designated million plus city has emerged as a major manufacturing center with a higher share of male workers. In case of trade, hotel and restaurant industry, major share of male workers is recorded by Varanasi, Nagpur, Lucknow and Ahmedabad in 1999-2000 whereas in 2004-05 the leading cities were Patna, Bhopal and Meerat. For other services (65-93) during 1999-2000 cities with highest share of male workers are Jaipur, Patna, Puna, Lucknow whereas in 2004-05 these cities were Lucknow, Chennai, Kalyan , Bhopal and Delhi. Construction, electricity and agriculture constitute a small proportion of workers where as mining and quarrying and two sub sectors of other services employ only a minor proportion of workers.

In case of female workers there is a large concentration in the service sector and manufacturing followed by trade, hotel and restaurant. In 1999-2000, highest share of female workers in manufacturing sector was recorded by Ludhiana, Varanasi, and

Banglore whereas in 2004-05 Varanasi and Jaipur recorded the highest share. At the same time Bangalore has witnessed a decline in female share in this industry. Most of the million cities have reported increase in share of female workers in manufacturing industry during this period. The service sector has also shown an increase in majority of million cities during the same period for instance Agra , Bhopal, Kolkata, Chennai whereas Jaipur, Indore, Varanasi and Bangalore etc have shown sharp decline . Construction industry has witnessed sharp decline with exceptions of Vadodara, Bhopal, and Hyderabad which have observed increase in share of female workers in this industry. In 1999-2000 only three cities Delhi, Ludhiana, and Madurai recorded 1% female workers in electricity whereas in 2004-05 only Jaipur recorded 1% female workers in electricity. During this period only Jaipur, and Vadodara have shown slight increase in share of workers in agriculture where as in most of the million plus cities it declined.

Larger proportion of workers in all million plus cities has been engaged in manufacturing and service sector (65-93). Since large cities are considered as major growth centers of economy and services and manufacturing are most productive sectors therefore their concentration in these cities is a part of policy decisions as well as result higher domestic and foreign investment due to better infrastructure and their integration with global economy. In 2004-05 largest manufacturing centers among these cities was Varanasi comprising 69% workers in this sector followed by Faridabad (61%) and Surat (61%), whereas leading service centers were Lucknow (39%), Kalyan (33%), Chennai (33%), Thane(31%). Cities leading in trade, hotel and restaurant sector were Patna (38%), Meerut, Pimprichwad, Bhopal and Kanpur. Mining and quarrying and electricity and water are smallest sectors in these cities where females are almost absent and share of male workers is less than 1 % in all cities.

Agriculture which is the smallest sector in million plus cities has witnessed a sharp decline in both male and female share of workers between 1999-2000 and 2004-05. Here Jaipur is an exception where proportion of female workers has increased in Agriculture during the same period. During this period million cities which have recorded an increase in share of workers in both manufacturing and service sector (65-93) are Ahmedabad,

Bhopal, Kolkata and Thane. Growth of Thane and emergence of new million cities like Nasik and Kalyan Dombivili can be linked to the proximity to Mumbai which is characterized by over urbanization, congestion, higher land prices and diseconomies of scale and led to the emergence of these million cities in its hinterland. Similarly emergence of Faridabad and Meerut in National Capital Region is associated with the process of decentralization of economic actives as well as shift in certain industrial units from Delhi to its neighboring towns. Hyderabad, Indore, Jaipur, Kanpur, Ludhiana, Nagpur and Varanasi are the million cities where share of workers in manufacturing sector has increased but decreased in other services whereas cities which recorded a decline in manufacturing and an increase in other services are Howrah, Lucknow and Thane.

The above analysis shows that the nature and structure of employment in million plus cities is quite different from urban India as well as in class I cities. The emergence of new million cities as an important manufacturing and service centers in the close proximity to pre existing metro cities confirms the large city oriented concentrated nature of urban development in India.

5.1.3 POPULATION CHANGE IN THE CORE CITY AND URBAN AGGLOMERATION (1991-2001)

Metropolitan areas and their component communities grow for a combination of four reasons: (1) because their businesses and industries have a competitive advantage in the national or global marketplace as a result of agglomeration economies, inherent resource advantages, an innovative culture, and/or a favorable business cost structure; (2) because of quality-of-life advantages that attract population and jobs; (3) because they are in a central location able to serve a growing "hinterland" and/ or are able to link into global trade and business networks; and (4) because their growth and development is subsidized or sponsored through increased (national) government spending.[3]

[3] J. Landis (2009), The Changing Shape of Metropolitan America, *The ANNALS of the American Academy of Political and Social Science.* Vol.626. No.154

For as long there have been cities and urban agglomerations, the urban growth is accompanied by decentralization. The table presents twenty UAs out of thirty five urban agglomerations (common UAs between 1991 and 2001, which have core and periphery).

Table: 5.1.3a

Core City and Urban Agglomeration Population Change 1991 and 2001

Urban Agglomeration	Population Change in Core City (%)	Population Change in UA (%)	Ratio of Core City to UA Population Change (%)	Share of Core City in UA Population Change (%)	City Size Rank (1991)	City Size Rank (2001)
Declining Core; Growing Periphery						
Delhi	36	52	0.70	60	2	2
Nagpur	26	28	0.95	93	9	13
Lucknow	36	36	1.01	98	10	12
Madurai	-2	10	-0.19	-17	19	30
Coimbatore	13	31	0.42	31	22	29
Growing Core; Declining Periphery						
Patna	44	54	0.81	70	18	17
Surat	62	85	0.72	72	12	10
Indore	44	48	0.92	92	14	14
Growing Core; Growing Periphery						
Bangalore	30	38	0.80	64	5	4
Kanpur	35	33	1.07	99	8	9
Pune	62	54	1.14	163	11	8
Visakhapatnam	29	26	1.12	80	26	26
Declining Core; Declining Periphery						
Greater Mumbai	20	30	0.67	53	1	1
Kolkata	4	20	0.21	8	3	3
Chennai	10	18	0.53	37	4	5
Hyderabad	13	27	0.47	33	6	7
Ahmadabad	19	36	0.52	46	7	6
Vadodara	23	32	0.71	67	16	18
Varanasi	18	18	1.03	93	20	20
Kochi	2	19	0.13	6	32	32

Source: Census of India 1991 and 2001

Comparison of core city growth vis-à-vis their urban agglomeration is presented in Table 5.1.3a. Here core is defined as the largest city in an urban agglomeration and its periphery includes all the towns and cities located within its urban agglomeration boundaries. Further, the UAs are classified into four categories viz. UAs with declining periphery, UAs with growing core and declining periphery, growing core and growing periphery and UA with declining core and declining periphery.

The core city population growth rates during 1991 and 2001 ranged from high of 62 percent in Surat and Pune to low of 2 percent in Kochi. While Madurai is the only core city which has lost its population during same period and this is located in UA with growing periphery. Out of twenty metropolitan cities three core cities namely Kanpur, Pune and Vishakhapatnam have grown faster than their urban agglomerations. All three are located in UAs with growing core and growing periphery. They have also shown larger percentage change in population as share of their UA population change. On the other hand Kolkata and Kochi have observed lowest population change as share of UA population change. It has also been observed that small core cities have grown somewhat faster than larger ones, although the relationship is not consistent. Added to this, some of the largest core cities like Mumbai, Chennai and Ahmadabad have recorded lower growth compared to other core cities.

5.1.4 PATTERNS OF DENSITY CHANGE

Along with the outward growth, India's UAs also grow upward. The Table 5.1.4a gives average density of largest urban agglomerations in India and percentage change in their density during 1991 and 2001.

Compared by the above mentioned categories it may be clearly observed that average densities increased the most among UAs with growing core and declining peripheries rising from 8273 persons per square kilometer in 1991 to 11444 persons per square kilometer in 2001. At the opposite end of the spectrum, average densities increased the

Table: 5.1.4a

Average Densities of Largest Urban Agglomerations 1991-2001

Urban Agglomeration	Density (Persons per Sq. Km) 1991	Density (Persons Per Sq. Km) 2001	Change in Density (Persons Per Sq. Km) 1991-2001	Percentage Density Change (Persons Per Sq. Km) 1991-2001
Declining Core; Growing Periphery	**8505**	**10036**	**1531**	**18.0**
Delhi	12801	14393	1591	12.4
Nagpur	7272	9263	1990	27.4
Lucknow	4946	6717	1771	35.8
Madurai	9853	8498	-1355	-13.8
Coimbatore	3612	3815	203	5.6
Growing Core; Declining Periphery	**8273**	**11444**	**3171**	**38.3**
Patna	8314	12560	4246	51.1
Surat	9917	11867	1950	19.7
Indore	6715	9923	3209	47.8
Growing Core; Growing Periphery	**5608**	**6212**	**604**	**10.8**
Bangalore	9185	10534	1350	14.7
Kanpur	6789	8938	2149	31.6
Pune	5890	5619	-271	-4.6
Visakhapatnam	3399	4080	681	20.0
Declining Core; Declining Periphery	**10005**	**10210**	**206**	**2.1**
Greater Mumbai	12101	14420	2319	19.2
Kolkata	12233	12787	554	4.5
Chennai	10225	9153	-1071	-10.5
Hyderabad	6538	6731	194	3.0
Ahmadabad	13011	10309	-2702	-20.8
Vadodara	8227	6978	-1249	-15.2
Varanasi	9835	10886	1052	10.7
Kochi	3129	2994	-135	-4.3

Source: Census of India 1991 and 2001

least among UA with declining core and declining periphery rising from 10005 persons per square kilometer in 1991 to 10210 persons per square kilometer in 2001. The average for UAs with declining core and growing periphery and UAs with growing core and growing periphery falls between these extremes.

5.2 ALL-INDIA ANALYSIS OF INDUSTRIAL AND SPATIAL CONCENTRATION OF WORKERS

This section looks at the concentration or diversification of workers across major industrial groups and spatial units (cities according to size class ad location within and outside UAs).

5.2.1 CONCENTRATION/ DIVERSIFICATION OF WORKERS ACROSS MAJOR INDUSTRIAL GROUPS

Herfindhal-Hirschman index (HH Index) of concentration has been used to measure the sectoral concentration of employment. The estimated values for HH index for common

Table: 5.2.1a

Sectoral Concentration of Workers in Common class I cities (1991-2001)

(Total)

	HH Index		
Size Class	**1991**	**2001**	**Change in HHI**
I	2132.2	2107.4	24.8
Ia	2339.9	2251.1	88.8
Ib	2071.2	2057.1	14.1
Ic	1966.4	2007.6	-41.2

(Within UA)

	HH Index		
Size Class	**1991**	**2001**	**Change in HHI**
I	2193.2	2149.9	43.3
Ia	2342.0	2271.8	70.1
Ib	2065.5	2057.9	7.7
Ic	2051.0	2059.3	-8.3

(Outside UA)

Size Class	HH Index		
	1991	2001	Change in HHI
I	1883.9	1950.8	-66.8
Ia	2706.6	2239.0	467.6
Ib	2156.2	2061.3	94.9
Ic	1847.4	1927.2	-79.8

Source: Computed from Census of India 1991 and 2001

class I cities between 1991 and 2001 are 2132.2 and 2107.4 respectively which sows high concentration of workers since index value above 1800 indicates concentration of workers (Table 5.2.1a). The negative change in the index during considered period shows diversification of employment in class I cities. According to size class, the metro cities have recorded relatively more diversification as compared to other size class cities. On the other hand, class Ic cities have recorded increase in the value of HH index indicating concentration tendencies of employment. While comparing class I cities according to their location within and outside UAs, it has been observed that class Ia and Ib both the cities have shown tendency for diversification, at the same time this tendency is much stronger in these cities which are located outside UAs, particularly metro cities. Whereas in case of class Ic cities, employment is found to be concentrating in certain industries.

At state level, the values of HH Index at both points of time are found to be low indicating diversified economies in their class I cities. It has been observed that many states show tendency of diversification by negative change in their index values. Herein, Bihar stands out as a state with greater diversification tendency. Gujarat and Maharashtra look similar in their diversification tend. The economies of Haryana, Kerala and Orissa show a substantially lower rate of diversification. On the other hand, Andhra Pradesh, Himachal Pradesh, Karnataka, Madhya Pradesh, Punjab and Tamil Nadu have shown concentration in their employment structure. Himachal Pradesh is the state with greater concentration whereas Punjab and Tamil Nadu have reported only a marginal concentration in their employment structure.

The comparison of class I cities located within and outside UAs shows that only three states namely Haryana, Maharashtra and Punjab have shown diversification of

employment during 1991 and 2001 with greater diversification reported by Haryana (Table 5.2.1b). While other states show trend concentration in their class I cities located within UAs. Tamil Nadu has observed greater concentration in this regard. Another set of cities which are located outside UAs show different picture since most of the states except Haryana and Punjab have experienced diversification of employment in their class I cities located outside UAs. Bihar is the leading state which shows greater diversity of employment, it is followed by Gujarat and Maharashtra. It is also important to know that

Table: 5.2.1b

State-Level Sectoral Concentration of Workers in Common class I cities (1991-2001)

State	HH Index		Change in HHI
	1991	2001	
Andhra Pradesh	1895.9	1995.5	-99.5
Assam	2419.1	2704.7	-285.6
Bihar	2260.8	2070.6	190.1
Gujarat	2536.9	2388.4	148.6
Haryana	2221.8	2196.4	25.4
Himachal Pradesh	3576.2	4789.6	-1213.4
Karnataka	2057.7	2071.8	-14.1
Kerala	1942.9	1927.6	15.3
Madhya Pradesh	1993.4	2064.4	-71.0
Maharashtra	2265.7	2115.2	150.5
Orissa	2227.6	2224.6	3.1
Punjab	2181.0	2182.4	-1.4
Rajasthan	2051.3	2005.2	46.1
Tamil Nadu	2184.7	2188.9	-4.2
Uttar Pradesh	2101.4	2033.4	68.0
West Bengal	2347.8	2302.7	45.1

Source: Computed from Census of India 1991 and 2001

Bihar and Gujarat which have shown relatively greater concentration of employment in their class I cities located outside UAs have experienced concentration of employment in their cities located within UAs. Since diversified urban economies are considered to be most dynamic economies, therefore the diversification tendencies of cities which are located outside UAs is a positive indication for development. As mentioned above, the metro cities located outside UAs have observed greater diversification of employment

compared to other cities, indicating their potential to emerge as major growth centers similar to those metro cities which are part of UAs. The cities which are demoted from class I status show relatively low values of HH Index as compared to the average of the same size class in 1991.

It shows that these cities have diversified employment structure that is because they have considerable proportion of workers in industries related to primary sector. Added to this, the cities which have achieved class I status in 2001 have also shown diversity in their employment structure.

Table: 5.2.1c

Sectoral Concentration of Workers in class I cities Demoted from class I status (1991)

Size Class	HH Index
I	1562.2
Ia	0.0
Ib	0.0
Ic	1562.2

State	HH Index
Andhra Pradesh	1676.1
Assam	2136.4
Gujarat	2311.2
Kerala	1909.0
Maharashtra	1642.7
Tamil Nadu	2344.2
West Bengal	1961.9

Source: Computed from Census of India 1991

Andhra Pradesh, Bihar, Kerala and Uttar Pradesh have shown relatively more diversified economies compare to average of all cities which are promoted to class I status. In case of class I cities which are located within UAs the states of Andhra Pradesh, Bihar, Kerala, and Uttar Pradesh have shown relatively lesser diversification compared to average of these cities. While all states except Madhya Pradesh have shown a bit lesser diversity in their newly added class I cities which are located outside UAs.

The values of HH index for cities which have achieved class I status in 2001 is given in table below.

Among the cities which are promoted to class I status, metro cities located within UAs have shown high industrial concentration of workers whereas class Ib and Ic cities have reported medium concentration of workers. Comparing cities according to their location is found that cities which are part of urban agglomerations have relatively diverse economy in all three size classes compared to their counter parts located outside UAs

Table: 5.2.1d

Sectoral Concentration of Workers in class I cities Promoted to class I status (2001)

	(Total)
Size Class	**HH Index**
I	1597.9
Ia	1844.4
Ib	1572.1
Ic	1488.9
	(Within UA)
Size Class	**HH Index**
I	1664.8
Ia	1867.2
Ib	1580.7
Ic	1558.1
	(Outside UA)
Size Class	**HH Index**
I	1435.5
Ia	1751.2
Ib	1521.3
Ic	1407.9

Source: Computed from Census of India 2001

The state level index values show high industrial concentration of workers in two states namely Assam and Tamil Nadu whereas all other states have reported medium concentration of workers. In case of cities located within UAs states with higher concentrations of workers are Assam, Tamil Nadu and West Bengal (Table 5.2.1e).

Lower concentration of workers, on the other hand is shown by Bihar, Kerala and Uttar Pradesh.

In case of cities locate outside UAs; Punjab is the only state with high concentration of workers in these cities whereas other states have shown low concentration of workers. Madhya Pradesh has reported highest diversity of workers, followed by Bihar. The equally important to note is that the higher diversity in these two states is due to considerable proportion of workers in agriculture and allied activities whereas most of the states have a nominal share of workers in these activities.

Table: 5.2.1e

Sectoral Concentration of Workers in class I cities Promoted to class I status (2001)

	HH Index		
State	**Total**	**(Within UA)**	**(Outside UA)**
Andhra Pradesh	1545.6	1628.3	1558.7
Assam	2387.6	2387.6	0.00*
Bihar	1388.5	1408.5	1403.1
Gujarat	1737.7	1746.3	1772.5
Haryana	1667.9	1657.3	1705.7
Karnataka	1660.2	1840.3	1457.9
Kerala	1508.7	1508.7	0.00*
Madhya Pradesh	1622.3	1722.9	1396.6
Maharashtra	1681.3	1727.8	1510.7
Orissa	1634.1	1654.6	1714.5
Punjab	1706.9	1649.5	1808.4
Rajasthan	1606.5	1700.8	1576.7
Tamil Nadu	1964.4	2013.0	1545.2
Uttar Pradesh	1530.3	1582.5	1456.1
West Bengal	1855.8	1969.7	1531.6

Source: Computed from Census of India 1991 and 2001

0.00 represent the absence of class I city in a particular state.*

5.2.2 SPATIAL CONCENTRATION OF WORKERS

The spatial concentration of workers in class I cities across size class has been measured by Grossack index of industrial concentration. To analyze the Grossack measure, the values of b, r and $(b/r)^2$ are estimated for relevant years. The 'b' coefficient gives us the magnitude of dispersal or concentration. For all class I cities since the value of b coefficient is < 1 i.e. 0.86 percent, it shows that significant spatial units of base year have lost about 14 percent share of their workers on an average. Since the value of 'r' is high (0.98) and it is low for $(b/r)^2$ i.e. 0.78, these conditions according to our method suggest that significant spatial units have lost their share to each other.

In other words it can be explained that the decade of 1991 and 2001 has experienced spatial diversification of employment with a shift of workers from large cities to relatively smaller cities where large cities within class I category have shown 14 percent

Table: 5.2.2a

Values of Parameters of Grosack's Measure

Parameters	Total	Within UAs	Outside UAs
b	0.86	0.72	0.77
r	0.98	0.98	0.99
$(b/r)^2$	0.78	0.53	0.61

Computed from Census of India 1991 and 2001

decline in their share of workers. This observation is also supported by the fact that relatively smaller class I cities have shown higher Work Participation Rate and workers growth as discussed in previous chapter.

The value of 'b' coefficient of class I cities located within UAs is 0.72 and for those located outside UAs is 0.77 which shows that significant spatial units have lost their 28 and 23 percent share of workers during the considered time period in both types of cities. But it is important to be noted that in case of class I cities which are located within UAs the significant units are metro cities employing a larger number of workers whereas in case of class I cities which are not part of UAs, the significant units are cities of class Ic.

Therefore the values of 'b' coefficient for both types of cities have different explanation where large cities within UAs have lost their 28 percent share of workers whereas within UAs relatively smaller class I cities have lost their 23 percent share of workers.

Both types of cities located within UAs and outside UAs have high r and low $(b/r)^2$. This indicates that either significant spatial units have lost to each other or large cities within UAs have lost their share of workers to other large cities. On the other hand relatively smaller cities outside UAs have lost their share to other smaller cities.

5.3 CONCLUSION

1) The cities which have a million plus population in 1991 and 2001 are those which are located in proximity to pre-existing large metropolitan cities. For instance Nasik and Kalyan-Dombivili are located near Mumbai whereas Faridabad and Meerut in National Capital Region.

2) The million plus cites have reported only a slight increase in their Work Participation Rate from 31.54 percent in 1991 to 32.07 percent in 2001. The cities which have witnessed a decline in their WPR are Bangalore, Nagpur, Pune, Surat, and Kalyan Dombivali. The decline is mainly due to decline in male WPR whereas other million cities have had an increase in Work Participation Rate. Equally important here is to note that, this increase in WPR is mainly due to higher increase in female Work Participation Rate in these cities.

3) In terms of share of male and female workers in total workforce most of the cities have had an increase in the percentage share of female workers, The few exceptions being Bangalore, Pune, Vadodara and Kalyan-Dombivali which have shown decline in their share of female workers.

4) Only six million plus cities (Bangalore, Kanpur, Kolkata, Jaipur, Mumbai and Pune) have shown a trend similar to general trend of urban India i.e. an increase in share of male casual workers along with a decline in the share of regular/salaried workers. On

the other hand Delhi, Ludhiana, Surat and Chennai have had a significant increase in their male regular/salaried workers. Except in six cities namely Delhi, Ludhiana, Lucknow, Kanpur, Surat and Pune- other million cities have reported an increase in the self employed male workers. A higher increase observed in regionally important cities viz. Bhopal, Vadodara, Jaipur, Indore and Hyderabad.

5) The share of female regular/salaried workers has gone up in the majority of million cities except Jaipur, Kayan-Dombivili, Kanpur and Kolkata. This indicates the emergence of low cost supporting mechanism in large cities, where females are mainly engaged in household works which are counted in regular work category. Most of the million cities have shown a decline in share of female casual worker but Surat has reported significant increase in same.

6) The million plus cities have a different development dynamic as compared to class I cities in general. They have no specific pattern. According to the Census data, an important observation is that Non Household Manufacturing which is the most significant industrial division has reported a decline in its share in all million cities except Lucknow and Chennai which has shown an increase in the share of workers in this industry .Construction and Other Services have reported an increase in their share in most of the million cities. Lucknow on the other hand have had about 27 percent decline in Other Services. The share of workers in Household Manufacturing has had a marginal increase in all cities except Jaipur.

7) In case of male workers, their share in Other Services has gone up in all million cities with two exceptions of Lucknow and Jaipur. Construction and Household Manufacturing industries have reported a nominal increase in their share of workers in majority of cities. On the other hand Non Household Manufacturing has witnessed a decline On the other hand, the share of female worker in Non Household Manufacturing has shown an increase in all million cities with the exception of Surat and Kayan-Dombivili. Faridabad i.e. a newly designated million plus city has emerged as a major manufacturing center with higher a share of male workers. Whereas Jaipur is the only city where proportion of female workers has increased in Agriculture between 1999-2000

and 2004-2005. The emergence of new million cities as important manufacturing and service centers in the close proximity to pre existing metro cities confirms large city oriented concentration of urban development in India.

8) Out of twenty metropolitan cities, three core cities namely Kanpur, Pune and Vishakhapatnam have grown faster than their urban agglomerations. All three are located in UAs with growing core and growing periphery.

9) It has also been observed that small core cities have grown somewhat faster than larger ones, although the relationship is not consistent. Some of the largest core cities like Mumbai, Chennai and Ahmadabad have recorded lower growth compared to other core cities.

10) Average urban population densities increased the most among UAs with growing core and declining peripheries, At the opposite end of the spectrum, average densities increased the least among UA with declining core and declining periphery. The average for UAs with declining core and growing periphery and UAs with growing core and growing periphery falls between these extremes.

11) According to Herfindahl Hirschman index of concentration, the metro cities have recorded relatively more diversification as compared to other size class cities. On the other hand, class Ic cities have recorded an increase in the value of HH index indicating concentration tendencies of workforce. Class Ia and Ib both the cities have shown a tendency for diversification, at the same time this tendency is much stronger in these cities which are located outside UAs, particularly metro cities. Whereas in the case of class Ic cities, employment is found to be concentrating in certain industries.

12) The results of Grossack index show that both types of cities located within UAs and outside UAs have high r and low $(b/r)^2$ values which indicates that large cities within UAs have lost their share of workers to other large cities whereas outside UAs relatively smaller cities have lost their share to other smaller cities.

CHAPTER 6

CONCLUSION

Chapter 6

CONCLUSION

In post reform period, the process of urbanization has not shown the expected growth pattern in the country. The results of the study can be summarized as follows:

URBAN GROWTH

1- Though the pattern of urbanization between 1991 and 2001 in was quite different from the past trend but still confirms the thesis of concentrated urban development. This decade has recorded an addition of only few UAs because few conditions are added in criteria to make the identification of UAs more informal and stringent. As a consequence, 102 UAs were derecognized and while 117 new UAs were added during this period. There is a positive correlation between level of urbanization and proportion of urban population residing in UAs.

2- The class I UAs and class I cities, particularly which have a population of more than a million have recorded higher growth rates compared to UAs and cities of lower size classes. A large number of class I cities are located within UAs in 1991 and 2001. The number of cities with million plus population located within UAs has significantly increased from 17 to 24 while the figures for cities located outside UAs is 1 and 3.

3- The share of urban population living in class I cities within UAs has gone down compared to their counterparts outside UAs. At the same time, the class I cities which are located outside UAs have registered higher annual exponential growth rate than the cities located within UAs.

4- An analysis of intra-urban agglomerations of large metropolitan cities have shown that within the UAs of one of the largest cities of the country, both core and periphery have recorded a declining growth rates but at the same time a higher growth is recorded by their periphery. On the other hand, metro cities which have registered higher growth in both the core and periphery are located in close proximity to the above mentioned cities

along urban corridors. This pattern of urban growth indicates the shift from traditional monocentric metropolitan growth to polycentric pattern of growth within UAs.

SIZE AND COMPOSITION OF WORKFORCE

Cities which maintained class I status in 1991 and 2001:

5. For cities which have maintained class I status both in 1991 and 2001, the Workforce Participation Rate increases with the decreasing size class. The lowest Workforce Participation Rate was observed in metropolitan cities and the highest in class Ic cities. The cities which are located outside UAs have recorded a higher Workforce Participation Rate as compared to those located within UAs.
6. All the three size categories have shown increase in their Workforce Participation Rate except metro cities located within UAs which have experienced a marginal decline in Workforce Participation Rate between 1991 and 2001. It can be attributed to the high rent and land values in large cities within UAs. This has led to the establishment of industries in other large cities which are located outside UAs, whereas only one metro city Ludhiana located outside UAs Ludhiana has recorded a much higher rise in Workforce Participation Rate.
7. Between 1991 and 2001, an increase in male Workforce Participation Rate has been observed in class Ib and Ic cites within UAs, whereas it has declined in metropolitan cities. Ludhiana, the only metropolitan city, has shown an increase in male Workforce Participation Rate. The female workforce participation on the other hand has increased in all size class of cities.
8. The period between 1991 and 2001 witnessed an increase in proportion of marginal workers in class I cities with relatively higher increase in class I cities located outside UAs as compared to those within UAs. Since class I cities which are located within UAs have relatively larger service sector which is able to absorb a higher share of female workers, these cities have shown a relatively higher increase in the share of female workers compared to class I cities located outside UAs.
9. Between 1991 and 2001, cities which belong to class Ib and class Ic, have registered a higher growth of workers compared to metropolitan cities. On the other hand, Ludhiana which is the only metro city located outside UAs has shown a higher growth rate than its

counterparts located within UAs. Cities of class Ib and Ic located within UAs have experienced a relatively higher growth rate of workers than metropolitan cities as well as the cities of the same size class located outside UAs.

10. The period under consideration has experienced a phenomenon often called feminization of workforce, wherein the number of female workers has grown faster than that of male workers for all size classes of class I cities located both within and outside UAs. Looking at the growth rates of workers based on the location of class I cities, it is found that both, male as well as female workers, have grown at a faster rate in class I cities located outside UAs.
11. The last decade has observed a faster growth of marginal workers in class I cities, as against growth of main workers. According to size class, the highest growth in the number of both main and marginal workers was recorded by class Ib cities.

Cities which were demoted from class I status in 2001

12. This group of cities has registered a relatively higher Workforce Participation Rate compared to average of their size class. Only in two cities, Valparai and Dabgram, which are located outside UAs the Work Participation Rate is much higher vis-à-vis other cities. They have shown much higher Work Participation Rate for female workers. The male Work Participation Rate is also high. This high WPR is mainly distress driven which is evident from the fact that considerable proportion of workers in these cities are engaged in agriculture and allied activities.

Towns Promoted to class I status in 2001

13. These cities have recorded a higher Workforce Participation Rate compared to those cities which have maintained class I status. These cities are new entrants in class I category therefore higher Workforce Participation Rate may be the result of their faster economic growth as a consequence of new investment patterns in post reform India which favors cities which are located in close proximity to large metropolitan cities as compared to the existing metropolitan cities. Therefore these cities are in the process of catching up with older class I cities. Cities which are located within UAs particularly class Ic have reported higher Workforce Participation Rate compared to cities which are located outside UAs.

Considering the location of cities it has been observed that male and female workers both have reported relatively higher Workforce Participation Rate in cities which are located within UAs as compared to their counterparts located outside UAs.

These cities have also shown a slightly higher percentage share of marginal workers compared to those cities which have maintained their class I status.

WORKFORCE STRUCTURE

Workforce Structure in Cities which have maintained class I status in 1991 and 2001

14. The major industrial group in class I cities employing a larger share of workers is that of Other Services. A marked difference between cities located within and those located outside UAs is that the cities which are located within UAs have relatively higher proportion of their workers in more productive industries viz. Other Services, Transport Storage and Communication, Trade and Commerce and Non Household Manufacturing industries compared to their counterparts located outside UAs. Ludhiana which is the only metro city outside UA is an exception with a significant share of its workers in Non Household industries. Cities located within UAs have a lower share of workers in low productive activities within the primary sector (agriculture, allied activities and mining and quarrying) because they are located in an urban environment i.e. dominated by secondary and tertiary sector
15. Cities located within UAs have a relatively larger share of total male and total female workers in Other Services and Non Household Manufacturing industries compared to those located outside UAs. On the other hand, cities which are located outside UAs account for relatively a higher proportion of male and female workers in Household Manufacturing compared to their counterparts.
16. During the period under consideration, an increase in share of main workers has been observed only in tertiary sector in class I cities whereas the share of secondary sector has witnessed a decline. In case of secondary sector which comprises Household Manufacturing, Non Household Manufacturing and Construction industries, the cities which are located within UAs have recorded a decline in main workers whereas their counterparts located

outside UAs have observed an increase in their share of workers in this sector. This may be attributed to the new pattern of investment emerged in post reform period which no longer favors the large metropolitan cities.

17. Between 1991 and 2001 the industrial divisions namely Cultivators, Agricultural Labourers, Non-Household manufacturing industries and Trade and Commerce have observed a decline in their share of workers in total main workers whereas Other Services has seen a rise in its share of workers.
18. Between 1991 and 2001 class I cities have shown a decline in their share of male workers in Other Services and Non Household Manufacturing. On the other hand class I cities have recorded a huge increase in the share of female workers in Other Services except primary sector which has shown a decline in its share of female workers.
19. Therefore larger share of marginal workers in class I cities located outside UAs are engaged in low productive activities of the primary sector and in Non Household Manufacturing.
20. Industrial distribution of marginal workers by gender in 2001 shows that a major proportion of male workers in class I cities was engaged in Construction, Trade and Commerce, Other Services and Transport Storage and Communication. Metro cities have shown a larger concentration of male marginal workers in these industries as compared to class Ib and Ic cities. On the other hand, larger proportion of female workers was employed in Other Services. Female workers in Other Services are working as low cost support system in large cities.

Workforce Structure in Cities which were Demoted from class I status in 2001

21. The industrial distribution of main workers in cities which were demoted from class I status in 2010 Census; show a completely different picture with no single industrial group showing major concentration of workers. The three major industrial groups namely Other Services, Trade and Commerce and Non Household Manufacturing employed almost equal share of workers.
22. The dominant industrial groups in class I cities located within UAs are Other Services, Trade and Commerce and Non Household Manufacturing. On the other hand, in case of class I cities located outside UAs a large proportion of workers are engaged in Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities. This high proportion of

workers in this industry indicates the movement of surplus labour from distressed agriculture to Allied Activities.

Workforce Structure in Cities which were Promoted to class I status in 2001

23. Other Services, Trade and Commerce and Non Household Manufacturing were the major industrial groups of workers in these cities.
24. Cities of class Ib have a larger proportion of their workers in Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities and Other Services, as compared to class Ic cities. Whereas other industrial groups have shown higher percentage of workers in class Ic cities.
25. In case of cities which are located within UAs, a larger concentration of female workers has been observed in Other Services, Household Manufacturing and industries related to primary sector. On the other hand, the cities which are located outside UAs have a relatively lower concentration of workers in Other Services.

CONCENTRATION OR DECENTRALIZATION

26. The cities which have a million plus population in 1991 and 2001 are those which are located in proximity to pre-existing large metropolitan cities. For instance Nasik and Kalyan-Dombivili are located near Mumbai whereas Faridabad and Meerut in National Capital Region.

27. The million plus cites have reported only a slight increase in their Work Participation Rate from 31.54 percent in 1991 to 32.07 percent in 2001. The cities which have witnessed a decline in their WPR are Bangalore, Nagpur, Pune, Surat, and Kalyan Dombivali. The decline is mainly due to decline in male WPR whereas other million cities have had an increase in Work Participation Rate. Equally important here is to note that, this increase in WPR is mainly due to higher increase in female Work Participation Rate in these cities.

28. In terms of share of male and female workers in total workforce most of the cities have had an increase in the percentage share of female workers, The few exceptions being Bangalore, Pune, Vadodara and Kalyan-Dombivali which have shown decline in their share of female workers.

29. Only six million plus cities (Bangalore, Kanpur, Kolkata, Jaipur, Mumbai and Pune) have shown a trend similar to general trend of urban India i.e. an increase in share of male casual workers along with a decline in the share of regular/salaried workers. On the other hand Delhi, Ludhiana, Surat and Chennai have had a significant increase in their male regular/salaried workers. Except in six cities namely Delhi, Ludhiana, Lucknow, Kanpur, Surat and Pune- other million cities have reported an increase in the self employed male workers. A higher increase observed in regionally important cities viz. Bhopal, Vadodara, Jaipur, Indore and Hyderabad.

30. The share of female regular/salaried workers has gone up in the majority of million cities except Jaipur, Kayan-Dombivili, Kanpur and Kolkata. This indicates the emergence of low cost supporting mechanism in large cities, where females are mainly engaged in household works which are counted in regular work category. Most of the million cities have shown a decline in share of female casual worker but Surat has reported significant increase in same.

31. The million plus cities have a different development dynamic as compared to class I cities in general. They have no specific pattern. According to the Census data, an important observation is that Non Household Manufacturing which is the most significant industrial division has reported a decline in its share in all million cities except Lucknow and Chennai which has shown an increase in the share of workers in this industry .Construction and Other Services have reported an increase in their share in most of the million cities. Lucknow on the other hand have had about 27 percent decline in Other Services. The share of workers in Household Manufacturing has had a marginal increase in all cities except Jaipur.

32. In case of male workers, their share in Other Services has gone up in all million cities with two exceptions of Lucknow and Jaipur. Construction and Household Manufacturing industries have reported a nominal increase in their share of workers in majority of cities. On the other hand Non Household Manufacturing has witnessed a decline On the other hand, the share of female worker in Non Household Manufacturing has shown an increase in all million cities with the exception of Surat and Kayan-Dombivili. Faridabad i.e. a newly designated million plus city has emerged as a major manufacturing center with higher a share

of male workers. Whereas Jaipur is the only city where proportion of female workers has increased in Agriculture between 1999-2000 and 2004-2005. The emergence of new million cities as important manufacturing and service centers in the close proximity to pre existing metro cities confirms large city oriented concentration of urban development in India.

33. Out of twenty metropolitan cities, three core cities namely Kanpur, Pune and Vishakhapatnam have grown faster than their urban agglomerations. All three are located in UAs with growing core and growing periphery.

34. It has also been observed that small core cities have grown somewhat faster than larger ones, although the relationship is not consistent. Some of the largest core cities like Mumbai, Chennai and Ahmadabad have recorded lower growth compared to other core cities.

35. Average urban population densities increased the most among UAs with growing core and declining peripheries, At the opposite end of the spectrum, average densities increased the least among UA with declining core and declining periphery. The average for UAs with declining core and growing periphery and UAs with growing core and growing periphery falls between these extremes.

36. According to Herfindahl Hirschman index of concentration, the metro cities have recorded relatively more diversification as compared to other size class cities. On the other hand, class Ic cities have recorded an increase in the value of HH index indicating concentration tendencies of workforce. Class Ia and Ib both the cities have shown a tendency for diversification, at the same time this tendency is much stronger in these cities which are located outside UAs, particularly metro cities. Whereas in the case of class Ic cities, employment is found to be concentrating in certain industries.

37. The results of Grossack index show that both types of cities located within UAs and outside UAs have high r and low $(b/r)^2$ values which indicate that large cities within UAs have lost their share of workers to other large cities whereas outside UAs relatively smaller cities have lost their share to other smaller cities.

APPENDICES

Appendices

Appendix: 2.1

Regional Distribution of Urban Agglomerations by Size Class (1991)

State	No. of UAs	Class I	Class Ia	Class Ib	Class Ic	Class II	Class III	Class IV	Class V	Class VI
Andhra Pradesh	15	14	2	1	11	0	1	0	0	0
Assam	6	2	0	0	2	0	3	1	0	0
Bihar	21	11	1	4	6	5	5	0	0	0
Chandigarh	1	1	0	1	0	0	0	0	0	0
Delhi *	1	1	1	0	0	0	0	0	0	0
Goa	3	0	0	0	0	3	0	0	0	0
Gujarat	46	19	3	1	15	17	8	2	0	0
Haryana	7	5	0	0	5	1	0	1	0	0
Himachal Pradesh	2	1	0	0	1		0	0	1	0
Jammu & Kashmir	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Karnataka	21	16	1	1	14	3	2	0	0	0
Kerala	16	14	1	2	11	2		0	0	0
Madhya Pradesh	60	12	1	3	8	18	10	19	1	0
Maharashtra	18	15	3	3	9	3	0	0	0	0
Manipur	1	1	0	0	1	0	0	0	0	0
Meghalaya	1	1	0	0	1	0	0	0	0	0
Orissa	9	4	0	0	4	2	3	0	0	0
Punjab	21	3	0	0	3	2	8	8	0	0
Rajasthan	17	5	1	0	4	6	4	2	0	0
Tamil Nadu	34	19	3	2	14	9	2	3	1	0
Uttar Pradesh	31	19	3	5	11	6	6	0	0	0
West Bengal	38	13	1	1	11	7	10	7	1	0
India	**369**	**176**	**21**	**24**	**131**	**84**	**62**	**43**	**4**	**0**

Source: Calculated from Census of 1991

Uttar Pradesh	40	24	6	2	16	7	8	1	0	0
West Bengal	21	16	2	0	14	3	2	0	0	0
Pondichery	1	1	0	1	0	0	0	0	0	0
India	**384**	**240**	**32**	**28**	**180**	**80**	**63**	**1**	**0**	**0**

Source: Calculated from Census of 2001

Appendix: 2.3

Growth of Urban Agglomerations in India (1991 & 2001)

Size Class	Decadal Growth Rate	Exponential Growth Rate
Class I	29.42	2.58
Class I (a)	32.94	2.85
Class I (b)	24.14	2.16
Class I (c)	23.18	2.08
Class II	24.96	2.23
Class III	31.98	2.77
Class IV	0*	0*
Class V	0*	0*
Class VI	0*	0*
Total	**29.26**	**2.57**

Source: Calculated using data from Census 1991 and 2001

Note: (a) The growth rates for UAs in different size categories have been computed for common UAs between 1991 and 2001 by considering their size class distribution in the base year.

(b) 0* there was no UA in this size class.

Appendix: 3.1

Share of Male and Female workers in Cities which have achieved class I status (2001)

	Share of Workers (in percentage)					
	Total		Within UA		Outside UA	
Size Class	Male Workers	Female Workers	Male Workers	Female Workers	Male Workers	Female Workers
I	85.32	14.68	85.22	14.78	85.54	14.46
Ia	0.00*	0.00*	0.00*	0.00*	0.00*	0.00*
Ib	85.39	14.61	85.39	14.61	0.00*	0.00*
Ic	85.32	14.68	85.21	14.79	85.54	14.46

Source: Census of India 2001

Note: 0.00* represent absence of class I city in a particular size class

Appendix: 3.2

Work Participation Rate in Class I Cities by Location and Gender (1991)

States	Work Participation Rate					
	Within UA			Outside UA		
	Total	Male	Female	Total	Male	Female
Andhra Pradesh	28.83	47.99	8.65	32.12	50.67	13.09
Assam	32.62	52.01	8.61	0.00*	0.00*	0.00*
Bihar	24.63	41.43	4.56	22.64	38.87	3.73
Gujarat	30.24	51.69	6.19	28.73	47.88	7.38
Haryana	28.65	48.62	5.88	29.51	50.1	4.81
Karnataka	31.46	49.99	11.37	29.98	47.83	10.68
Kerala	29.64	48.03	11.5	0.00*	0.00*	0.00*
Madhya Pradesh	28.79	46.84	8.6	27.95	45.71	7.87
Maharashtra	33.55	52.84	10.84	27.7	44.75	9.22
Orissa	30.53	49.51	6.91	27.27	45.67	6.99
Punjab	29.71	51.66	4.93	32.01	54.89	3.88
Rajasthan	27.99	47.11	5.99	29.3	48.32	7.4
Tamil Nadu	31.81	52.84	9.42	30.68	50.35	10.56
Uttar Pradesh	26.56	45.82	4.11	27	46.38	4.6
West Bengal	30.64	51.15	5.89	29.37	49.19	6.68

Sources: Census of India 1991

Appendix: 3.3

Work Participation Rate in Class I Cities by Location and Gender (2001)

States	Work Participation Rate					
	Within UA			Outside UA		
	Total	Male	Female	Total	Male	Female
Andhra Pradesh	31.58	51.14	11.11	33.84	52.87	14.62
Assam	34.64	53.8	12.11	0.00*	0.00*	0.00*
Bihar	46.88	77.06	11.41	47.86	79.42	11.64
Gujarat	23.46	38.72	5.94	30.22	49.27	9
Haryana	31.59	48.91	11.17	30.74	49.47	8.21
Karnataka	35.79	54.74	15.4	33.27	51.85	13.66
Kerala	32.49	51.83	13.85	0.00*	0.00*	0.00*
Madhya Pradesh	29.91	47.03	10.89	27.78	44.99	8.5
Maharashtra	38.75	60.26	13.34	29.44	46.76	11.02
Orissa	31.37	50.1	9.35	29.76	49.06	8.89
Punjab	32.87	49.67	12.31	31.57	50.74	9.48
Rajasthan	28.55	46.89	7.78	30.65	49.24	9.52
Tamil Nadu	35.8	56.09	14.67	32.67	52.73	12.56
Uttar Pradesh	21.69	35.98	5.33	26.73	44.68	6.34
West Bengal	34.42	54.8	10.92	33.11	52.38	11.85

Sources: Census of India 2001

Appendix: 3.4

Share of Main and Marginal Workers in Common Class I Cities (1991)

	Total		Within UA		Outside UA	
States/ UTs	Main Workers	Marginal Workers	Main Workers	Marginal Workers	Main Workers	Marginal Workers
Andhra Pradesh	98.92	1.08	98.98	1.02	98.64	1.36
Assam	99.03	0.97	99.03	0.97	0.00*	0.00*
Bihar	99.02	0.98	98.98	1.02	99.16	0.84
Gujarat	98.82	1.18	98.8	1.2	99.36	0.64
Haryana	99.5	0.5	99.31	0.69	99.73	0.27
Karnataka	98.77	1.23	99.07	0.93	98.06	1.94
Kerala	96	4	96	4	0.00*	0.00*
Madhya Pradesh	98.38	1.62	98.43	1.57	98.17	1.83
Maharashtra	98.02	1.98	97.94	2.06	98.56	1.44
Orissa	98.81	1.19	98.93	1.07	98.23	1.77
Punjab	99.79	0.21	99.87	0.13	99.7	0.3
Rajasthan	98.42	1.58	98.71	1.29	97.65	2.35
Tamil Nadu	99.07	0.93	99.17	0.83	98.19	1.81
Uttar Pradesh	98.64	1.36	98.92	1.08	98.06	1.94
West Bengal	99.2	0.8	99.36	0.64	98.01	1.99

Source: Census of India 1991

Note: 0.00* represents absence of class I cities in particular state

Appendix: 3.5

Share of Main and Marginal Workers in Common Class I Cities (2001)

	Total		Within UA		Outside UA	
States/ UTs	Main Workers	Marginal Workers	Main Workers	Marginal Workers	Main Workers	Marginal Workers
Andhra Pradesh	91.66	8.34	91.96	8.04	90.01	9.99
Assam	94.5	5.5	94.5	5.5	0.00*	0.00*
Bihar	90.04	9.96	90.26	9.74	89.66	10.34
Gujarat	96.29	3.71	96.32	3.68	95.48	4.52
Haryana	91.27	8.73	91.07	8.93	91.49	8.51
Karnataka	93.82	6.18	94.15	5.85	92.9	7.1
Kerala	88.54	11.46	88.54	11.46	0.00*	0.00*
Madhya Pradesh	90.74	9.26	90.94	9.06	89.94	10.06
Maharashtra	93.95	6.05	94.19	5.81	92.26	7.74
Orissa	93.27	6.73	93.2	6.8	93.62	6.38
Punjab	94.25	5.75	93.71	6.29	94.83	5.17
Rajasthan	91.23	8.77	90.46	9.54	91.79	8.21
Tamil Nadu	94.23	5.77	94.14	5.86	95.16	4.84
Uttar Pradesh	89.11	10.89	88.64	11.36	89.85	10.15
West Bengal	92.46	7.54	92.87	7.13	89.79	10.21

Source: Census of India 2001
Note: 0.00* represents absence of class I cities in particular state

Appendix: 3.6

Share of Male and Female Workers in Common Class I Cities (1991)

	Total		Within UA		Outside UA	
States/ UTs	Male Workers	Female Workers	Male Workers	Female Workers	Male Workers	Female Workers
Andhra Pradesh	84.46	15.54	85.39	14.61	79.89	20.11
Assam	88.22	11.78	88.22	11.78	0.00*	0.00*
Bihar	91.76	8.24	91.57	8.43	92.4	7.6
Gujarat	90.28	9.72	90.35	9.65	87.86	12.14
Haryana	91.42	8.58	90.41	9.59	92.59	7.41
Karnataka	82.73	17.27	82.67	17.33	82.88	17.12
Kerala	80.46	19.54	80.46	19.54	0.00*	0.00*
Madhya Pradesh	86.07	13.93	85.89	14.11	86.78	13.22
Maharashtra	85.01	14.99	85.17	14.83	84.03	15.97
Orissa	89.55	10.45	89.92	10.08	87.8	12.2
Punjab	93.29	6.71	92.21	7.79	94.56	5.44
Rajasthan	89.56	10.44	90.05	9.95	88.26	11.74
Tamil Nadu	85.4	14.6	85.66	14.34	82.97	17.03
Uttar Pradesh	92.6	7.4	92.85	7.15	92.09	7.91
West Bengal	91.06	8.94	91.29	8.71	89.4	10.6

Source: Census of India 1991
Note: 0.00* represents absence of class I cities in particular state

Appendix: 3.7

State-Level Work Participation Rate by Gender and Location in Towns promoted to Class I Status Within and Outside UAs (2001)

State	Work Participation Rate (in percentage)					
	Within UA			Outside UA		
	Total	Male	Female	Total	Male	Female
Andhra Pradesh	31.05	50.05	11.05	35.47	55.98	14.79
Assam	34.10	55.61	9.90	0.00*	0.00*	0.00*
Bihar	37.02	61.51	8.96	38.98	65.62	8.55
Delhi	31.34	51.38	6.33	0.00*	0.00*	0.00*
Gujarat	30.53	50.68	8.47	33.98	57.00	8.46
Haryana	30.84	49.05	9.20	29.75	47.07	9.60
Jammu & Kashmir	30.29	47.86	9.65	0.00*	0.00*	0.00*
Karnataka	39.40	57.81	18.98	34.04	52.95	14.46
Kerala	32.49	52.06	14.00	0.00*	0.00*	0.00*
Madhya Pradesh	30.23	48.61	10.31	28.56	45.37	9.10
Maharashtra	34.06	52.72	13.21	33.00	51.66	12.17
Punjab	0.00*	0.00*	0.00*	28.17	44.36	10.14
Rajasthan	0.00*	0.00*	0.00*	27.63	46.24	6.68
Tamil Nadu	33.63	55.84	11.52	32.27	53.00	11.48
Uttar Pradesh	27.77	46.72	5.96	24.91	41.80	5.48
West Bengal	32.45	52.89	10.19	31.98	51.39	11.52

Source: Census of India 2001

Note: 0.00* represent absence of class I city in a particular state

Appendix: 3.8

Share of Male and Female Workers in Common Class I Cities (2001)

	Total		Within UA		Outside UA	
States/ UTs	Male Workers	Female Workers	Male Workers	Female Workers	Male Workers	Female Workers
Andhra Pradesh	82.14	17.86	82.81	17.19	78.52	21.48
Assam	83.94	16.06	83.94	16.06	0.00*	0.00*
Bihar	88.76	11.24	88.81	11.19	88.68	11.32
Gujarat	88.13	11.87	88.22	11.78	85.92	14.08
Haryana	85.74	14.26	83.76	16.24	87.88	12.12
Karnataka	79.46	20.54	79.26	20.74	80.02	19.98
Kerala	78.28	21.72	78.28	21.72	0.00*	0.00*
Madhya Pradesh	83.29	16.71	82.75	17.25	85.56	14.44
Maharashtra	83.93	16.07	84.22	15.78	81.86	18.14
Orissa	86.18	13.82	86.31	13.69	85.63	14.37
Punjab	87.22	12.78	86.2	13.8	88.33	11.67
Rajasthan	86.2	13.8	87.23	12.77	85.45	14.55
Tamil Nadu	80	20	79.93	20.07	80.79	19.21
Uttar Pradesh	88.67	11.33	88.54	11.46	88.88	11.12
West Bengal	84.96	15.04	85.27	14.73	82.98	17.02

Source: Census of India 2001
Note: 0.00* represents absence of class I cities in particular state

Appendix: 4.1

Industrial Distribution of Total Workers in Class I Cities (2001)

(Male)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	0.77	1.04	1.22	0.53	3.22	23.34	8.74	24.55	10.56	26.03
Ia	0.37	0.34	0.65	0.29	2.72	25.61	8.19	24.33	10.94	26.56
Ib	0.94	1.18	1.44	0.38	3.94	21.69	9.49	23.86	10.38	26.70
Ic	1.07	1.63	1.65	0.81	3.35	22.00	8.90	25.06	10.30	25.22

(Female)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	1.49	2.77	1.37	0.26	10.72	14.02	5.47	10.08	2.49	51.32
Ia	1.21	0.81	0.69	0.13	6.67	14.23	4.95	10.24	3.08	58.00
Ib	1.87	2.86	1.27	0.19	12.53	12.94	5.83	10.01	2.41	50.07
Ic	1.57	4.53	2.03	0.42	13.65	14.30	5.79	9.97	1.98	45.77

Source: Census of India 2001

Note: Industrial distribution of workers has been presented for common class I cities considering their size class in base year

Appendix: 4.2

Industrial Distribution of Total Workers in Class I Cities Within UAs (2001)

(Male)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	0.58	0.77	1.13	0.50	2.96	23.67	8.70	24.60	10.81	26.27
Ia	0.31	0.27	0.63	0.29	2.45	24.58	8.26	24.72	11.32	27.17
Ib	0.93	1.17	1.50	0.38	4.12	21.41	9.47	24.02	10.46	26.55
Ic	0.72	1.16	1.55	0.86	2.92	23.87	8.79	24.80	10.38	24.94

(Female)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	1.24	1.99	1.12	0.25	9.46	14.16	5.52	10.16	2.69	53.41
Ia	0.96	0.72	0.62	0.13	6.36	14.08	4.96	10.34	3.18	58.66
Ib	2.02	2.64	1.25	0.21	10.45	12.98	6.26	10.38	2.53	51.28
Ic	1.18	3.27	1.71	0.43	12.91	14.91	5.84	9.82	2.16	47.79

Source: Census of India 2001

Note: Industrial distribution of workers has been presented for common class I cities considering their size class in base year

Appendix: 4.3

Industrial Distribution of Total Workers in Class I Cities Outside UAs (2001)

(Male)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	1.51	2.12	1.56	0.62	4.21	22.08	8.88	24.33	9.59	25.09
Ia	0.97	1.08	0.76	0.38	5.41	36.09	7.45	20.34	7.09	20.42
Ib	1.01	1.26	1.06	0.39	2.72	23.63	9.56	22.81	9.81	27.76
Ic	1.73	2.52	1.84	0.72	4.17	18.44	9.11	25.55	10.16	25.76

(Female)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	2.47	5.90	2.33	0.33	15.80	13.48	5.27	9.76	1.67	42.99
Ia	4.73	2.03	1.69	0.13	11.00	16.33	4.82	8.86	1.78	48.64
Ib	1.10	4.02	1.35	0.14	23.46	12.75	3.59	8.06	1.82	43.73
Ic	2.34	6.98	2.65	0.41	15.09	13.12	5.70	10.27	1.62	41.84

Source: Census of India 2001

Note: Industrial distribution of workers has been presented for common class I cities considering their size class in base year

Appendix: 4.4

Industrial Distribution of Total Workers in Class I Cities Outside UAs (2001)

(Male)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	1.51	2.12	1.56	0.62	4.21	22.08	8.88	24.33	9.59	25.09
Ia	0.97	1.08	0.76	0.38	5.41	36.09	7.45	20.34	7.09	20.42
Ib	1.01	1.26	1.06	0.39	2.72	23.63	9.56	22.81	9.81	27.76
Ic	1.73	2.52	1.84	0.72	4.17	18.44	9.11	25.55	10.16	25.76

(Female)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	2.47	5.90	2.33	0.33	15.80	13.48	5.27	9.76	1.67	42.99
Ia	4.73	2.03	1.69	0.13	11.00	16.33	4.82	8.86	1.78	48.64
Ib	1.10	4.02	1.35	0.14	23.46	12.75	3.59	8.06	1.82	43.73
Ic	2.34	6.98	2.65	0.41	15.09	13.12	5.70	10.27	1.62	41.84

Source: Census of India 2001

Note: Industrial distribution of workers has been presented for common class I cities considering their size class in base year

Appendix: 4.5

Industrial Distribution of Main Workers in Class I Cities (1991)

(Male)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	1.64	1.86	1.21	0.42	1.92	27.70	5.72	25.45	10.29	23.79
Ia	0.50	0.48	0.71	0.19	1.10	31.11	5.95	26.71	10.59	22.65
Ib	2.00	2.22	1.41	0.30	2.91	25.71	5.62	23.98	10.23	25.62
Ic	2.72	3.20	1.67	0.74	2.36	24.86	5.51	24.73	9.99	24.23

(Female)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	1.53	4.60	0.80	0.31	5.43	15.38	4.29	12.84	2.82	51.99
Ia	0.49	0.76	0.51	0.16	2.82	15.47	4.56	15.34	3.74	56.15
Ib	2.19	4.44	0.95	0.36	5.74	15.37	4.50	12.11	2.68	51.67
Ic	2.40	8.83	1.05	0.46	8.14	15.28	3.92	10.43	1.88	47.60

Source: Census of India 1991

Note: Industrial distribution of workers has been presented for common class I cities considering their size class in base year

Appendix: 4.6

Industrial Distribution of Main Workers in Class I Cities Within UAs (1991)

(Male)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	1.19	1.31	1.11	0.42	1.76	28.59	5.75	25.70	10.47	23.70
Ia	0.47	0.37	0.68	0.20	1.13	30.74	5.93	26.85	10.69	22.93
Ib	1.92	2.22	1.42	0.29	3.13	25.02	5.51	24.22	10.43	25.83
Ic	1.93	2.32	1.65	0.88	2.00	27.13	5.58	24.66	10.13	23.72

(Female)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	1.16	3.07	0.72	0.29	4.66	15.18	4.54	13.52	3.13	53.72
Ia	0.49	0.76	0.48	0.16	2.84	15.47	4.58	15.40	3.76	56.06
Ib	2.30	4.28	0.98	0.33	5.53	12.19	4.80	12.63	2.89	54.05
Ic	1.70	6.30	0.96	0.49	7.24	16.28	4.34	10.85	2.20	49.64

Source: Census of India 1991

Note: Industrial distribution of workers has been presented for common class I cities considering their size class in base year

Appendix: 4.7

Industrial Distribution of Main Workers in Class I Cities Outside UAs (1991)

(Male)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	3.76	4.44	1.67	0.44	2.63	23.55	5.58	24.30	9.42	24.22
Ia	1.37	5.05	1.88	0.00	0.18	45.83	6.53	21.06	6.44	11.67
Ib	2.54	2.23	1.37	0.36	1.48	30.17	6.30	22.39	8.88	24.27
Ic	4.14	4.75	1.71	0.48	3.01	20.80	5.39	24.85	9.73	25.14

(Female)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	3.27	11.80	1.21	0.41	9.06	16.29	3.11	9.63	1.37	43.84
Ia	0.40	1.27	4.00	0.00	0.49	15.82	1.66	7.88	1.78	66.71
Ib	1.68	5.17	0.82	0.49	6.68	30.03	3.08	9.66	1.70	40.68
Ic	3.68	13.44	1.22	0.41	9.77	13.47	3.16	9.66	1.29	43.90

Source: Census of India 1991

Note: Industrial distribution of workers has been presented for common class I cities considering their size class in base year

Appendix: 4.8

Industrial Distribution of Main Workers in Class I Cities (2001)

(Male)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	0.76	0.82	1.20	0.54	3.08	23.66	7.97	24.79	10.69	26.49
Ia	0.36	0.29	0.65	0.30	2.61	25.88	7.50	24.51	11.05	26.86
Ib	0.93	0.96	1.41	0.38	3.78	21.96	8.62	24.14	10.49	27.33
Ic	1.06	1.26	1.63	0.83	3.20	22.36	8.10	25.36	10.43	25.77

(Female)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	1.38	1.93	1.28	0.27	8.91	13.76	5.05	10.08	2.76	54.59
Ia	1.14	0.58	0.67	0.13	5.27	14.03	4.46	10.15	3.34	60.23
Ib	1.78	2.13	1.25	0.19	10.70	12.62	5.38	9.98	2.68	53.28
Ic	1.43	3.16	1.89	0.45	11.68	14.01	5.47	10.05	2.23	49.64

Source: Census of India 2001

Appendix: 4.9

Industrial Distribution of Main Workers in Class I Cities Within UAs (2001)

(Male)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	0.76	0.82	1.2	0.54	3.08	23.66	7.97	24.79	10.69	26.49
Ia	0.36	0.29	0.65	0.3	2.61	25.88	7.5	24.51	11.05	26.86
Ib	0.93	0.96	1.41	0.38	3.78	21.96	8.62	24.14	10.49	27.33
Ic	1.06	1.26	1.63	0.83	3.2	22.36	8.1	25.36	10.43	25.77

(Female)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	1.17	1.39	1.08	0.26	7.63	13.88	5.08	10.15	2.97	56.39
Ia	0.9	0.52	0.6	0.13	5.01	13.96	4.47	10.22	3.43	60.74
Ib	1.96	1.98	1.24	0.21	8.24	12.6	5.8	10.41	2.82	54.74
Ic	1.09	2.27	1.65	0.46	10.91	14.5	5.51	9.9	2.42	51.3

Source: Census of India 2001

Note: Industrial distribution of workers has been presented for common class I cities.

Appendix: 4.10

Industrial Distribution of Main Workers in Class I Cities Outside UAs (2001)

(Male)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	1.52	1.66	1.54	0.63	4.09	22.43	8.09	24.65	9.7	25.69
Ia	0.96	0.96	0.76	0.39	5.36	36.4	6.87	20.53	7.15	20.61
Ib	1.02	1.01	1.02	0.38	2.57	23.96	8.77	22.91	9.94	28.42
Ic	1.75	1.95	1.82	0.74	4.04	18.71	8.27	25.97	10.29	26.47

(Female)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	2.26	4.17	2.1	0.34	14.27	13.26	4.91	9.76	1.89	47.04
Ia	4.75	1.43	1.63	0.13	9.1	15.17	4.27	9	2.02	52.5
Ib	0.88	2.91	1.27	0.1	23.17	12.73	3.25	7.84	1.97	45.87
Ic	2.12	4.95	2.37	0.44	13.22	13.03	5.4	10.33	1.84	46.3

Source: Census of India 2001

Appendix: 4.11

Industrial Distribution of Marginal Workers in Class I Cities (2001)

(Male)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	0.95	4.76	1.54	0.40	5.50	18.04	21.63	20.46	8.50	18.22
Ia	0.57	1.44	0.61	0.22	4.74	20.29	22.07	20.79	8.59	20.67
Ib	0.99	4.54	1.98	0.42	6.35	17.66	22.71	19.57	8.70	17.10
Ic	1.19	7.20	2.00	0.51	5.65	16.64	20.82	20.62	8.35	17.00

(Female)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	2.08	7.48	1.87	0.21	20.84	15.46	7.84	10.12	0.97	33.13
Ia	1.71	2.49	0.87	0.11	17.03	15.69	8.57	10.91	1.15	41.46
Ib	2.36	6.82	1.38	0.20	22.44	14.70	8.29	10.16	0.98	32.67
Ic	2.20	10.72	2.65	0.27	22.53	15.59	7.24	9.63	0.85	28.32

Source: Census of India 2001

Note: Industrial distribution of workers has been presented for common class I cities considering their size class in base year

Appendix: 4.12

Industrial Distribution of Marginal Workers in Class I Cities Within UAs (2001)

(Male)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	0.81	3.55	1.44	0.38	5.37	18.39	21.94	20.69	8.63	18.79
Ia	0.52	1.23	0.60	0.22	4.58	19.51	22.22	21.20	8.84	21.07
Ib	1.01	4.38	2.02	0.40	6.49	17.63	22.64	19.38	8.85	17.21
Ic	0.98	5.46	1.96	0.54	5.48	17.70	21.19	21.00	8.27	17.42

(Female)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	1.67	5.55	1.39	0.19	20.32	15.80	8.17	10.24	1.05	35.63
Ia	1.39	2.24	0.75	0.11	16.73	15.04	8.71	11.21	1.21	42.62
Ib	2.33	6.10	1.31	0.18	21.99	14.97	8.64	10.25	1.01	33.21
Ic	1.58	8.13	1.99	0.26	22.57	16.88	7.46	9.39	0.92	30.82

Source: Census of India 2001

Note: Industrial distribution of workers has been presented for common class I cities considering their size class in base year

Appendix: 4.13

Industrial Distribution of Marginal Workers in Class I Cities Outside UAs (2001)

(Male)

	Industrial Classification									
Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	1.40	8.81	1.88	0.44	5.94	16.89	20.58	19.69	8.06	16.31
Ia	1.08	3.73	0.80	0.23	6.53	29.15	20.45	16.13	5.72	16.18
Ib	0.79	5.75	1.62	0.57	5.29	17.89	23.30	21.06	7.49	16.23
Ic	1.52	9.96	2.07	0.46	5.93	14.96	20.24	20.03	8.49	16.34

(Female)

Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	3.34	13.40	3.33	0.28	22.43	14.41	6.85	9.74	0.72	25.49
Ia	4.67	4.76	1.96	0.12	19.77	21.66	7.36	8.18	0.63	30.91
Ib	2.59	11.63	1.88	0.35	25.38	12.89	5.91	9.52	0.80	29.05
Ic	3.23	14.99	3.74	0.29	22.47	13.47	6.89	10.02	0.73	24.18

Source: Census of India 2001

Note: Industrial distribution of workers has been presented for common class I cities considering their size class in base year

Appendix: 4.14

State-Level Industrial Distribution of Total Workers by Gender in Class I Cities (2001)

(Male)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	0.84	2.14	1.38	1.21	2.79	14.70	10.82	25.33	12.69	28.10
Assam	0.52	0.32	2.23	1.01	1.22	10.42	6.88	26.92	13.05	37.43
Bihar	1.75	3.52	2.74	0.66	4.66	15.45	6.15	25.90	9.72	29.44
Gujarat	0.28	0.36	1.00	0.24	1.58	38.44	8.30	22.99	8.88	17.93
Haryana	0.83	0.75	1.21	0.52	3.47	27.35	9.22	25.19	7.56	23.91
Karnataka	1.10	1.07	0.82	0.36	2.01	19.99	10.70	25.32	11.93	26.71
Kerala	0.26	1.30	8.80	0.26	2.13	13.56	13.96	23.67	14.02	22.05
Madhya Pradesh	1.18	0.80	1.13	0.92	3.32	19.69	10.96	24.54	10.30	27.17
Orissa	0.53	0.80	2.23	0.34	2.53	15.49	10.09	25.57	10.93	31.48
Punjab	0.79	1.87	0.82	0.25	4.29	29.64	7.53	24.50	7.48	22.82
Rajasthan	1.44	0.58	1.26	0.75	4.44	21.27	10.52	22.93	9.82	27.00
Tamil Nadu	0.66	1.00	1.11	0.64	3.10	20.99	8.46	24.31	9.66	30.09
Uttar Pradesh	1.38	1.65	1.21	0.29	7.62	20.50	7.55	23.93	8.57	27.30
West Bengal	0.42	0.66	0.83	0.72	2.54	23.95	5.76	26.77	11.42	26.93

(Female)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.85	6.97	1.46	0.56	11.68	11.05	8.84	12.19	2.18	43.21
Assam	1.15	0.78	1.39	0.32	4.43	4.86	2.84	9.11	4.55	70.56
Bihar	2.92	8.11	2.72	0.39	13.59	8.72	4.71	9.70	1.72	47.41
Gujarat	0.55	1.59	1.75	0.14	10.95	13.38	7.51	10.97	2.15	51.01
Haryana	1.28	1.84	3.66	0.15	8.33	16.81	4.82	7.48	1.28	54.35
Karnataka	1.15	3.42	1.02	0.31	10.99	19.56	5.27	10.03	2.76	45.50
Kerala	0.27	1.89	2.74	0.24	2.96	19.19	2.43	9.90	3.86	56.52
Madhya Pradesh	1.58	3.06	1.21	0.43	13.07	13.74	9.30	8.75	1.83	47.03
Orissa	0.78	2.13	3.20	0.14	6.25	10.62	14.26	8.85	2.07	51.71
Punjab	1.07	2.22	1.80	0.05	9.77	15.78	2.22	8.66	1.58	56.86
Rajasthan	5.76	2.21	2.50	0.38	12.91	14.72	7.65	7.97	1.95	43.95
Tamil Nadu	1.92	2.18	0.63	0.26	11.27	17.93	4.33	11.27	2.28	47.93
Uttar Pradesh	2.51	3.01	1.51	0.11	20.55	11.40	3.01	8.33	2.05	47.53
West Bengal	0.97	1.03	1.03	0.35	8.39	13.27	1.84	9.33	2.37	61.42

Source: Census of India 2001

Note: Industrial distribution of workers has been presented for common class I cities between 1991 and 2001

Appendix: 4.15

Industrial Distribution of Workers by Gender in Class I Cities Within UAs (2001)

(Male)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	0.74	1.54	1.31	1.37	2.61	14.64	10.98	25.04	12.73	29.04
Assam	0.52	0.32	2.23	1.01	1.22	10.42	6.88	26.92	13.05	37.43
Bihar	1.61	2.97	2.59	0.84	4.45	16.69	6.35	24.53	10.03	29.93
Gujarat	0.28	0.35	0.99	0.24	1.62	39.46	8.08	23.19	8.65	17.15
Haryana	0.82	0.89	1.37	0.31	3.70	24.27	9.00	27.00	7.67	24.97
Karnataka	0.48	0.38	0.71	0.28	1.76	21.48	10.57	24.69	11.68	27.97
Kerala	0.26	1.30	8.80	0.26	2.13	13.56	13.96	23.67	14.02	22.05
Madhya Pradesh	0.83	0.60	1.08	0.51	3.73	19.94	11.24	25.24	10.79	26.04
Maharashtra	0.45	0.32	0.79	0.29	2.02	29.22	9.03	22.84	12.34	22.70
Orissa	0.56	0.90	1.87	0.38	2.43	16.82	10.88	23.87	11.01	31.26
Punjab	0.85	1.92	0.82	0.07	3.70	22.40	8.36	27.13	8.30	26.46
Rajasthan	0.88	0.63	1.31	1.01	3.91	17.18	11.99	24.83	11.60	26.66
Tamil Nadu	0.64	0.87	0.97	0.67	3.08	21.26	8.39	23.95	9.75	30.43
Uttar Pradesh	1.09	1.39	1.10	0.34	7.92	19.47	7.53	24.47	8.44	28.25
West Bengal	0.33	0.42	0.75	0.71	2.29	24.72	5.42	26.81	11.26	27.29

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	2.01	4.92	1.08	0.64	10.53	9.96	9.46	12.58	2.39	46.42
Assam	1.15	0.78	1.39	0.32	4.43	4.86	2.84	9.11	4.55	70.56
Bihar	2.55	7.60	2.43	0.52	11.50	8.41	5.96	9.06	1.97	50.00
Gujarat	0.56	1.58	1.66	0.13	11.27	13.68	7.41	11.00	2.02	50.69
Haryana	1.12	2.26	3.74	0.04	9.70	18.53	3.95	6.07	1.17	53.43
Karnataka	0.78	0.94	0.64	0.13	10.67	21.84	4.75	9.32	2.74	48.18
Kerala	0.27	1.89	2.74	0.24	2.96	19.19	2.43	9.90	3.86	56.52
Madhya Pradesh	1.05	1.95	1.00	0.33	15.03	14.22	9.94	9.01	1.90	45.55
Maharashtra	1.07	1.62	0.93	0.18	7.90	13.58	6.39	10.60	3.52	54.23
Orissa	0.78	2.26	3.43	0.14	5.52	11.10	14.44	7.73	2.14	52.45
Punjab	0.96	2.48	1.69	0.02	9.48	14.67	2.26	8.17	1.55	58.72
Rajasthan	2.26	1.82	2.61	0.58	13.73	13.55	7.33	8.04	2.56	47.50
Tamil Nadu	2.04	1.86	0.56	0.27	11.05	18.00	4.35	11.25	2.35	48.27
Uttar Pradesh	2.43	2.43	1.28	0.14	17.73	11.90	3.37	9.23	2.11	49.39
West Bengal	0.97	0.70	0.81	0.31	6.52	13.33	1.53	9.49	2.50	63.84

Source: Census of India 2001

Note: Industrial distribution of workers has been presented for common class I cities between 1991 and 2001

Appendix: 4.16

State-Level Industrial Distribution of Male Total Workers in Class I Cities Outside UAs (2001)

(Male)

	Industrial Classification									
State	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
Andhra Pradesh	1.37	5.55	1.80	0.28	3.83	15.00	9.94	26.97	12.50	22.76
Bihar	2.11	4.94	3.14	0.20	5.23	12.24	5.61	29.45	8.93	28.16
Gujarat	0.30	0.65	1.18	0.30	0.70	14.02	13.56	18.17	14.44	36.67
Haryana	0.83	0.61	1.06	0.73	3.22	30.51	9.45	23.32	7.45	22.82
Karnataka	2.81	2.98	1.12	0.58	2.69	15.86	11.06	27.09	12.64	23.17
Madhya Pradesh	3.03	1.96	1.62	2.95	3.00	20.74	10.27	23.14	9.92	23.36
Maharashtra	1.04	1.72	2.12	0.91	2.04	20.44	11.15	25.47	11.62	23.49
Orissa	0.41	0.34	3.79	0.16	2.98	9.59	6.59	33.13	10.56	32.46
Punjab	0.73	1.82	0.82	0.44	4.93	37.34	6.66	21.72	6.61	18.95
Rajasthan	1.86	0.55	1.22	0.55	4.83	24.31	9.42	21.52	8.49	27.25
Tamil Nadu	0.81	2.41	2.55	0.34	3.34	18.12	9.24	28.16	8.61	26.41
Uttar Pradesh	1.83	2.07	1.39	0.20	7.15	22.15	7.58	23.08	8.78	25.78
West Bengal	1.00	2.26	1.36	0.79	4.18	18.86	8.01	26.53	12.46	24.56

(Female)

State	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
Andhra Pradesh	1.16	15.81	3.11	0.24	16.60	15.78	6.14	10.50	1.27	29.40
Bihar	3.92	9.50	3.52	0.04	19.28	9.55	1.32	11.45	1.04	40.38
Gujarat	0.35	1.86	3.50	0.22	4.58	7.54	9.41	10.35	4.73	57.45
Haryana	1.51	1.25	3.55	0.30	6.36	14.33	6.07	9.51	1.45	55.67
Karnataka	2.21	10.64	2.12	0.84	11.91	12.92	6.82	12.11	2.79	37.65
Madhya Pradesh	4.70	9.73	2.36	1.13	10.59	15.14	9.84	8.19	1.76	36.57
Maharashtra	0.81	6.02	1.34	0.28	25.45	14.33	6.65	8.28	1.33	35.51
Orissa	0.77	1.57	2.23	0.13	9.34	8.59	13.50	13.53	1.77	48.58
Punjab	1.21	1.89	1.93	0.08	10.13	17.21	2.16	9.29	1.62	54.47
Rajasthan	8.00	2.46	2.44	0.25	12.39	15.47	7.85	7.92	1.56	41.67
Tamil Nadu	0.62	5.78	1.38	0.20	13.78	17.15	4.09	11.59	1.38	44.02
Uttar Pradesh	2.65	3.97	1.88	0.05	25.17	10.57	2.42	6.86	1.96	44.48
West Bengal	0.97	2.86	2.22	0.58	18.84	12.97	3.60	8.43	1.65	47.87

Source: Census of India 2001

Note: Industrial distribution of workers has been presented for common class I cities between 1991 and 2001

Appendix: 4.17

State Level Industrial Distribution of Total Main Workers in Class I Cities within UAs (1991-2001)

(1991)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.23	3.74	1.22	1.47	1.69	17.54	6.97	24.47	12.75	28.92
Assam	1.15	0.93	2.61	0.46	0.64	10.97	5.66	27.52	13.92	36.14
Bihar	3.79	4.88	0.98	0.54	3.12	18.07	2.95	19.18	6.20	40.29
Gujarat	0.68	0.79	1.03	0.38	1.15	38.40	4.55	23.41	8.47	21.15
Haryana	2.22	3.20	1.66	0.01	2.75	20.62	5.12	25.87	7.29	31.26
Karnataka	1.38	0.73	0.98	0.19	1.56	27.93	6.92	25.50	9.38	25.44
Kerala	0.98	3.55	5.30	0.12	1.14	15.83	6.60	25.00	12.99	28.50
Madhya Pradesh	2.25	1.76	1.54	0.29	3.00	22.69	7.14	22.32	9.21	29.79
Maharashtra	0.87	0.78	0.73	0.25	1.58	34.28	6.07	22.74	10.47	22.25
Orissa	1.66	3.30	2.44	0.30	1.77	19.29	4.86	21.22	9.48	35.69
Punjab	2.25	4.83	0.78	0.01	1.96	23.54	3.75	28.56	7.80	26.53
Rajasthan	1.88	1.16	1.35	1.06	2.98	21.30	7.29	22.47	9.01	31.51
Tamil Nadu	0.62	0.68	0.68	0.70	2.77	27.49	5.76	25.79	9.36	26.17
Uttar Pradesh	2.31	2.43	1.28	0.06	5.44	20.36	3.51	25.27	7.47	31.88
West Bengal	0.54	0.75	0.84	0.33	1.04	31.62	3.38	26.37	10.63	24.51

(2001)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	0.94	1.61	1.25	1.29	3.55	14.01	10.02	23.20	11.41	32.72
Assam	0.60	0.26	2.14	0.93	1.37	9.63	6.01	24.19	12.00	42.88
Bihar	1.63	2.69	2.61	0.86	4.60	16.25	5.30	23.37	9.11	33.59
Gujarat	0.30	0.41	1.05	0.23	2.21	37.10	7.79	21.88	8.03	21.00
Haryana	0.87	0.72	1.72	0.28	3.99	23.45	7.16	24.40	6.87	30.55
Karnataka	0.53	0.35	0.67	0.25	3.28	21.90	8.86	21.80	10.02	32.33
Kerala	0.24	1.06	7.18	0.23	2.15	14.55	10.52	21.05	12.04	30.98
Madhya Pradesh	0.89	0.59	1.07	0.49	5.18	19.15	9.53	22.97	9.46	30.66
Maharashtra	0.51	0.40	0.81	0.28	2.45	27.14	8.03	21.18	11.25	27.94
Orissa	0.55	0.70	2.09	0.35	2.47	15.70	10.82	22.12	10.17	35.03
Punjab	0.85	1.63	0.92	0.06	4.18	21.29	6.91	25.13	7.53	31.50
Rajasthan	1.02	0.50	1.47	0.95	4.64	16.73	9.68	23.37	10.84	30.81
Tamil Nadu	0.88	0.92	0.89	0.60	4.51	20.90	7.22	21.65	8.45	33.99
Uttar Pradesh	1.25	1.04	1.13	0.34	8.28	18.72	5.91	23.55	7.92	31.86
West Bengal	0.38	0.33	0.74	0.68	2.40	23.27	4.42	24.67	10.33	32.78

Source: Census of India 1991-2001

Note: Industrial distribution of workers has been presented for common class I cities between 1991 and 2001

Appendix: 4.18

State Level Industrial Distribution of Total Main Workers in Class I Cities outside UAs (1991-2001)

(1991)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	3.22	13.67	1.19	0.07	5.17	15.94	4.36	22.50	11.20	22.70
Bihar	8.15	10.80	1.48	0.09	4.46	9.37	2.43	25.92	6.61	30.69
Gujarat	0.58	2.03	2.68	0.26	0.30	18.09	8.48	14.96	14.30	38.32
Haryana	2.00	2.04	0.90	0.83	1.36	37.52	5.35	20.47	5.48	24.05
Karnataka	4.90	6.38	1.33	0.75	2.56	19.73	6.74	25.00	9.65	22.96
Madhya Pradesh	7.12	5.00	2.38	0.71	2.36	21.97	5.39	19.66	8.35	27.05
Maharashtra	2.29	4.54	1.80	1.07	2.48	25.07	6.49	21.70	9.32	25.24
Orissa	2.12	2.38	4.13	0.15	3.96	9.13	2.82	30.62	10.00	34.69
Punjab	1.98	5.13	1.94	0.00	0.66	38.11	5.67	22.05	6.74	17.71
Rajasthan	4.45	2.38	1.45	0.86	2.64	22.87	7.60	21.36	8.28	28.12
Tamil Nadu	3.68	6.04	1.63	0.08	5.03	18.35	5.74	26.71	8.12	24.63
Uttar Pradesh	4.23	3.79	1.30	0.03	5.47	22.89	3.84	23.04	7.71	27.71
West Bengal	2.68	5.25	1.56	0.23	4.94	23.77	3.87	21.71	9.72	26.27

(2001)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.36	5.84	2.01	0.27	6.07	15.40	8.63	24.26	10.75	25.41
Bihar	2.24	4.06	3.11	0.19	6.10	12.21	4.57	28.54	8.21	30.77
Gujarat	0.31	0.61	1.43	0.29	0.75	13.31	12.74	17.15	13.37	40.04
Haryana	0.85	0.46	1.29	0.66	3.27	29.30	7.77	22.10	6.84	27.46
Karnataka	2.78	3.65	1.27	0.63	4.12	15.50	9.97	24.48	11.00	26.58
Madhya Pradesh	3.24	1.95	1.71	2.83	3.71	20.49	8.91	21.51	8.88	26.78
Maharashtra	1.02	2.00	2.03	0.83	5.64	19.74	9.75	22.79	10.06	26.14
Orissa	0.44	0.26	3.67	0.15	3.20	9.37	7.01	30.79	9.57	35.53
Punjab	0.78	1.60	0.92	0.41	5.28	35.51	5.78	20.58	6.17	22.98
Rajasthan	2.57	0.57	1.36	0.52	5.42	23.17	8.17	20.13	7.74	30.35
Tamil Nadu	0.78	2.62	2.23	0.32	5.06	18.10	8.16	25.25	7.37	30.12
Uttar Pradesh	1.95	1.58	1.40	0.19	8.52	21.11	6.08	21.94	8.19	29.02
West Bengal	0.88	1.25	1.44	0.79	6.12	18.54	6.50	24.41	11.21	28.86

Source: Census of India 1991 and 2001

Note: Industrial distribution of workers has been presented for common class I cities between 1991 and 2001

Punjab	0.84	6.84	1.37	0.23	4.30	7.57	4.24	15.63	3.54	45.89
Rajasthan	0.76	2.76	1.63	0.00	2.22	9.20	1.43	8.59	2.02	64.00
Tamil Nadu	6.09	3.45	1.16	0.74	5.85	14.21	4.64	8.59	1.92	71.49
Uttar Pradesh	0.64	2.61	0.33	0.26	7.43	20.69	4.10	7.24	1.68	54.93
West Bengal	2.33	3.86	1.08	0.06	12.58	10.24	1.52	14.32	3.08	46.53
	0.52	1.67	0.42	0.16	3.49	13.10	1.28	8.84	1.48	58.02
								8.77	2.85	67.75

Source: Census of India 1991 and 2001

Note: Industrial distribution of workers for common class I cities (1991-2001)

Appendix: 4.19

State-Level Industrial Distribution of Main Workers by Gender in Class I Cities (1991)

(Male)

	Industrial Classification									
State	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
Andhra Pradesh	1.65	3.99	1.32	1.33	1.27	18.35	6.67	25.97	14.27	25.18
Assam	1.20	0.93	2.59	0.45	0.44	11.80	6.17	29.87	14.90	31.65
Bihar	4.82	5.87	1.15	0.45	3.20	16.71	2.90	21.85	6.71	36.35
Gujarat	0.68	0.68	1.08	0.38	0.79	40.03	4.67	24.15	9.15	18.39
Haryana	2.20	2.61	1.35	0.35	2.12	30.07	5.50	24.85	6.91	24.03
Himachal Pradesh	1.54	0.88	2.37	0.03	0.39	5.52	10.88	18.67	8.03	51.69
Karnataka	2.49	1.72	1.13	0.33	1.31	25.77	7.47	27.64	10.74	21.41
Kerala	1.10	3.21	6.25	0.13	1.04	17.11	7.73	27.21	15.02	21.19
Madhya Pradesh	3.26	1.91	1.77	0.36	1.95	24.03	6.91	23.63	10.14	26.04
Maharashtra	0.98	0.92	0.90	0.38	1.31	35.28	6.25	23.76	11.44	18.78
Orissa	1.84	2.74	2.88	0.27	1.91	18.63	4.53	24.41	10.40	32.38
Punjab	2.22	5.12	1.30	0.01	1.30	31.75	4.86	26.74	7.69	19.01
Rajasthan	2.20	1.29	1.40	1.03	2.58	22.49	7.66	23.70	9.54	28.09
Tamil Nadu	0.96	0.97	0.84	0.70	2.27	27.56	6.03	27.75	10.24	22.69
Uttar Pradesh	2.97	2.80	1.31	0.05	4.96	21.93	3.76	25.62	7.96	28.65
West Bengal	0.82	1.24	0.97	0.33	1.31	32.37	3.65	27.44	11.25	20.63

(Female)

State	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
Andhra Pradesh	1.05	13.56	0.65	0.69	8.02	11.09	5.74	13.73	2.35	43.14
Assam	0.80	0.93	2.75	0.52	2.21	4.44	1.66	9.03	6.18	71.47
Bihar	4.53	10.79	0.42	0.26	6.25	8.25	1.96	7.07	1.19	59.27
Gujarat	0.63	2.24	1.08	0.28	4.51	15.78	4.48	13.33	3.42	54.25
Haryana	1.22	3.24	0.78	0.80	1.96	10.51	2.13	6.92	1.34	71.11
Karnataka	2.04	5.72	0.85	0.50	4.58	24.28	3.83	13.93	3.02	41.25
Kerala	0.48	4.98	1.23	0.04	1.57	10.38	1.80	15.62	4.34	59.56
Madhya Pradesh	2.96	5.80	1.25	0.52	9.07	12.59	6.04	9.40	1.67	50.70
Maharashtra	1.54	3.46	0.71	0.23	4.02	19.60	5.38	15.63	3.54	45.89
Orissa	0.84	6.84	1.37	0.23	4.30	7.57	4.24	8.59	2.02	64.00
Punjab	0.76	2.76	1.63	0.00	2.22	9.20	1.43	8.59	1.92	71.49
Rajasthan	6.09	3.45	1.16	0.74	5.85	14.21	4.64	7.24	1.68	54.93
Tamil Nadu	0.64	2.61	0.33	0.26	7.43	20.69	4.10	14.32	3.08	46.53
Uttar Pradesh	2.33	3.86	1.08	0.06	12.58	10.24	1.52	8.84	1.48	58.02
West Bengal	0.52	1.67	0.42	0.16	3.49	13.10	1.28	8.77	2.85	67.75

Source: Census of India 1991 and 2001

Note: Industrial distribution of workers for common class I cities (1991-2001)

Appendix: 4.20

State-Level Industrial Distribution of Main Workers by Gender in Class I Cities (2001)

(Male)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	0.83	1.72	1.35	1.24	2.58	14.83	10.10	25.53	13.02	28.81
Assam	0.49	0.22	2.25	1.03	1.05	10.47	6.60	26.96	13.25	37.69
Bihar	1.72	2.77	2.74	0.70	4.44	15.85	5.23	26.42	9.62	30.50
Gujarat	0.27	0.32	0.99	0.24	1.51	38.77	8.02	22.96	8.93	17.99
Haryana	0.84	0.55	1.21	0.52	3.39	27.86	7.91	25.50	7.61	24.62
Karnataka	1.12	0.90	0.80	0.36	1.93	20.26	10.15	25.50	12.04	26.95
Kerala	0.24	0.94	8.40	0.24	2.10	13.75	12.69	24.13	14.10	23.41
Madhya Pradesh	1.19	0.59	1.13	0.94	3.23	19.97	9.59	24.82	10.34	28.18
Maharashtra	0.51	0.41	0.96	0.37	1.91	28.43	8.62	23.30	12.42	23.06
Orissa	0.50	0.54	2.27	0.34	2.33	15.38	9.60	25.81	11.13	32.10
Punjab	0.79	1.60	0.82	0.25	4.27	29.90	6.91	24.77	7.53	23.16
Rajasthan	1.46	0.44	1.27	0.75	4.40	21.51	9.13	23.30	9.95	27.80
Tamil Nadu	0.64	0.89	1.10	0.65	3.09	21.22	8.04	24.50	9.76	30.12
Uttar Pradesh	1.41	1.21	1.21	0.30	7.43	20.61	6.35	24.46	8.63	28.38
West Bengal	0.37	0.43	0.82	0.74	2.33	24.25	5.16	27.03	11.65	27.21

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.89	5.05	1.44	0.59	10.95	11.09	8.28	12.17	2.49	46.05
Assam	1.18	0.47	1.47	0.35	3.21	4.90	2.67	8.67	5.03	72.04
Bihar	2.51	5.79	2.80	0.47	10.29	8.56	3.86	10.08	1.93	53.70
Gujarat	0.52	1.29	1.68	0.13	7.67	13.46	7.76	10.70	2.41	54.39
Haryana	1.02	0.95	3.67	0.09	5.41	15.03	4.23	7.62	1.49	60.49
Karnataka	1.09	2.51	0.97	0.32	10.05	20.13	4.97	9.98	2.91	47.08
Kerala	0.24	1.50	2.52	0.20	2.32	17.57	2.26	9.32	4.19	59.86
Madhya Pradesh	1.51	1.78	1.15	0.45	11.35	13.07	8.01	8.89	1.95	51.85
Maharashtra	0.94	1.64	0.95	0.20	8.18	13.66	6.05	10.30	3.55	54.54
Orissa	0.79	1.14	3.18	0.12	4.57	8.40	13.76	8.91	2.40	56.72
Punjab	1.00	1.73	1.68	0.05	8.19	14.51	2.14	8.70	1.78	60.22
Rajasthan	5.37	1.27	2.44	0.39	10.30	12.74	6.37	7.91	2.24	50.98
Tamil Nadu	1.83	1.79	0.63	0.28	10.79	18.30	4.15	11.17	2.41	48.67
Uttar Pradesh	2.55	1.66	1.48	0.13	17.12	10.74	2.52	8.65	2.39	52.76
West Bengal	0.91	0.57	0.90	0.37	6.44	12.54	1.68	9.35	2.71	64.52

Source: Census of India 1991 and 2001

Note: Industrial distribution of workers has been presented for common class I cities between 1991 and 2001

Appendix: 4.21

State-Level Industrial Distribution of Main Workers by Gender in Class I Cities Within UAs (1991)

(Male)

	Industrial Classification									
State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.29	2.79	1.32	1.57	1.00	18.66	7.01	26.05	14.40	25.92
Assam	1.20	0.93	2.59	0.45	0.44	11.80	6.17	29.87	14.90	31.65
Bihar	3.80	4.44	1.03	0.56	2.98	18.86	2.99	20.23	6.61	38.49
Gujarat	0.68	0.65	1.03	0.39	0.81	40.62	4.56	24.38	8.98	17.91
Haryana	2.29	3.20	1.74	0.01	2.79	21.91	5.51	27.80	7.86	26.89
Karnataka	1.45	0.57	1.03	0.20	1.12	27.99	7.56	27.79	10.62	21.66
Kerala	1.10	3.21	6.25	0.13	1.04	17.11	7.73	27.21	15.02	21.19
Madhya Pradesh	2.27	1.45	1.61	0.27	1.97	24.35	7.24	24.24	10.33	26.28
Maharashtra	0.76	0.53	0.74	0.25	1.29	36.97	6.15	23.69	11.55	18.07
Orissa	1.76	2.91	2.56	0.30	1.64	20.42	4.85	22.72	10.25	32.59
Punjab	2.38	4.96	0.79	0.01	1.88	24.94	3.94	30.18	8.27	22.65
Rajasthan	1.62	1.01	1.36	1.07	2.67	22.17	7.54	23.94	9.72	28.89
Tamil Nadu	0.63	0.55	0.74	0.77	2.14	28.48	6.01	27.56	10.33	22.80
Uttar Pradesh	0.55	0.73	0.88	0.34	0.91	33.36	3.59	27.98	11.33	20.32

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	0.81	9.50	0.64	0.87	5.93	10.71	6.73	14.88	2.72	47.21
Assam	0.80	0.93	2.75	0.52	2.21	4.44	1.66	9.03	6.18	71.47
Bihar	3.70	10.04	0.37	0.33	4.85	8.63	2.39	6.60	1.31	61.77
Gujarat	0.63	2.18	1.06	0.28	4.65	15.71	4.44	13.49	3.28	54.27
Haryana	1.53	3.16	0.91	0.00	2.34	7.76	1.21	6.60	1.64	74.84
Karnataka	1.04	1.55	0.73	0.12	3.69	27.59	3.77	14.26	3.27	43.99
Kerala	0.48	4.98	1.23	0.04	1.57	10.38	1.80	15.62	4.34	59.56
Madhya Pradesh	2.08	3.83	1.09	0.48	9.81	11.84	6.49	9.69	1.85	52.84
Maharashtra	1.49	2.30	0.64	0.21	3.33	17.97	5.59	16.92	3.94	47.62
Orissa	0.75	7.02	1.30	0.24	2.99	8.71	4.87	7.10	2.24	64.78
Punjab	0.78	3.27	0.75	0.00	2.88	6.79	1.42	9.11	2.07	72.91
Rajasthan	4.39	2.73	1.31	0.92	6.10	12.51	4.79	7.66	1.85	57.75
Tamil Nadu	0.54	1.44	0.30	0.29	6.70	21.29	4.21	14.72	3.29	47.22
Uttar Pradesh	0.41	0.89	0.39	0.15	2.35	13.05	1.20	9.09	3.07	69.41

Source: Census of India 1991 and 2001

Note: Industrial distribution of workers has been presented for common class I cities between 1991 and 2001

Appendix: 4.22

State-Level Industrial Distribution of Main Workers by Gender in Class I Cities Within UAs (2001)

(Male)

	Industrial Classification									
State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	0.73	1.25	1.28	1.41	2.38	14.76	10.24	25.19	13.04	29.72
Assam	0.49	0.22	2.25	1.03	1.05	10.47	6.60	26.96	13.25	37.69
Bihar	1.57	2.36	2.62	0.88	4.23	17.15	5.35	24.93	9.88	31.03
Gujarat	0.27	0.31	0.98	0.24	1.55	39.79	7.80	23.16	8.69	17.20
Haryana	0.84	0.65	1.37	0.32	3.64	24.66	7.74	27.31	7.74	25.71
Karnataka	0.49	0.30	0.69	0.28	1.69	21.77	9.98	24.89	11.77	28.14
Kerala	0.24	0.94	8.40	0.24	2.10	13.75	12.69	24.13	14.10	23.41
Madhya Pradesh	0.86	0.46	1.09	0.52	3.65	20.22	9.73	25.57	10.86	27.04
Maharashtra	0.43	0.26	0.80	0.30	1.91	29.47	8.38	22.99	12.52	22.95
Orissa	0.52	0.61	1.91	0.38	2.26	16.71	10.35	24.12	11.24	31.90
Punjab	0.84	1.60	0.82	0.07	3.66	22.47	7.57	27.53	8.35	27.09
Rajasthan	0.90	0.44	1.33	1.00	3.91	17.37	10.16	25.29	11.81	27.78
Tamil Nadu	0.62	0.77	0.97	0.68	3.07	21.50	7.94	24.14	9.86	30.45
Uttar Pradesh	1.10	1.01	1.11	0.35	7.71	19.54	6.25	25.05	8.51	29.37
West Bengal	0.30	0.32	0.74	0.73	2.04	24.94	4.88	27.02	11.48	27.55

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	2.05	3.54	1.08	0.66	9.79	9.97	8.82	12.52	2.70	48.87
Assam	1.18	0.47	1.47	0.35	3.21	4.90	2.67	8.67	5.03	72.04
Bihar	2.10	5.68	2.52	0.63	7.93	8.07	4.85	9.36	2.19	56.67
Gujarat	0.53	1.29	1.61	0.13	7.99	13.75	7.66	10.71	2.26	54.07
Haryana	1.07	1.16	3.89	0.04	6.11	15.87	3.48	6.20	1.42	60.76
Karnataka	0.72	0.56	0.61	0.13	9.76	22.42	4.31	9.24	2.86	49.39
Kerala	0.24	1.50	2.52	0.20	2.32	17.57	2.26	9.32	4.19	59.86
Madhya Pradesh	1.08	1.26	1.00	0.35	13.29	13.46	8.47	9.18	2.03	49.87
Maharashtra	0.96	1.18	0.89	0.18	5.62	13.54	6.03	10.62	3.87	57.10
Orissa	0.79	1.31	3.39	0.14	3.97	8.45	14.15	7.79	2.46	57.54
Punjab	0.91	1.91	1.61	0.02	7.90	12.95	2.20	8.18	1.74	62.58
Rajasthan	1.95	0.94	2.57	0.56	10.59	11.51	5.74	7.68	2.92	55.54
Tamil Nadu	1.94	1.51	0.56	0.28	10.62	18.39	4.16	11.13	2.50	48.90
Uttar Pradesh	2.63	1.31	1.32	0.17	13.54	11.17	2.80	9.66	2.48	54.92
West Bengal	0.91	0.44	0.72	0.34	4.70	12.46	1.43	9.45	2.83	66.71

Source: Census of India 1991 and 2001

Note: Industrial distribution of workers has been presented for common class I cities between 1991 and 2001

Appendix: 4.23

State-Level Industrial Distribution of Main Workers by Gender in Class I Cities Outside UAs (1991)

(Male)

	Industrial Classification									
State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	3.53	10.21	1.31	0.07	2.70	16.77	4.88	25.58	13.63	21.32
Bihar	8.19	10.60	1.55	0.09	3.94	9.56	2.58	27.21	7.06	29.23
Gujarat	0.59	1.81	2.81	0.27	0.25	18.15	8.87	15.76	15.26	36.23
Haryana	2.10	1.94	0.92	0.74	1.35	39.33	5.50	21.50	5.83	20.79
Karnataka	4.95	4.48	1.36	0.62	1.74	20.46	7.27	27.28	11.03	20.81
Madhya Pradesh	7.16	3.72	2.43	0.71	1.89	22.80	5.57	21.23	9.37	25.11
Maharashtra	2.38	3.50	1.93	1.20	1.47	24.30	6.91	24.17	10.79	23.37
Orissa	2.23	1.91	4.44	0.14	3.24	9.92	2.97	32.67	11.13	31.34
Punjab	2.05	5.31	1.88	0.00	0.64	39.46	5.90	22.84	7.02	14.90
Rajasthan	3.80	2.07	1.52	0.93	2.35	23.37	7.97	23.05	9.06	25.89
Tamil Nadu	4.10	4.89	1.83	0.09	3.46	18.80	6.22	29.65	9.39	21.57
Uttar Pradesh	4.32	3.61	1.33	0.03	4.73	23.71	3.98	24.13	8.16	25.98
West Bengal	2.83	5.07	1.65	0.23	4.29	24.88	4.09	23.32	10.61	23.03

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.89	28.20	0.67	0.04	15.54	12.44	2.17	9.57	1.01	28.48
Bihar	7.58	13.54	0.61	0.01	11.42	6.88	0.35	8.80	0.75	50.06
Gujarat	0.49	3.71	1.72	0.19	0.66	17.64	5.60	9.02	7.12	53.84
Haryana	0.76	3.35	0.59	1.95	1.40	14.49	3.47	7.39	0.91	65.69
Karnataka	4.61	16.32	1.17	1.45	6.83	15.86	3.99	13.09	2.40	34.27
Madhya Pradesh	6.82	14.44	1.94	0.70	5.82	15.88	4.07	8.12	0.89	41.31
Maharashtra	1.83	10.32	1.12	0.35	8.09	29.30	4.16	8.03	1.18	35.64
Orissa	1.23	6.09	1.67	0.19	9.57	2.97	1.71	14.58	1.17	60.84
Punjab	0.72	1.86	3.16	0.00	1.09	13.35	1.44	7.68	1.65	69.04
Rajasthan	10.26	5.23	0.80	0.28	5.24	18.38	4.28	6.23	1.28	48.03
Tamil Nadu	1.45	12.14	0.55	0.03	13.38	15.90	3.21	11.05	1.37	40.92
Uttar Pradesh	2.85	6.32	0.90	0.04	16.08	10.91	1.77	7.17	1.11	52.84
West Bengal	1.25	6.87	0.67	0.22	11.07	13.38	1.83	6.62	1.39	56.69

Source: Census of India 1991 and 2001

Note: Industrial distribution of workers has been presented for common class I cities between 1991 and 2001

Appendix: 4.24

State-Level Industrial Distribution of Main Workers by Gender in Class I Cities Outside UAs (2001)

(Male)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.40	4.41	1.77	0.28	3.68	15.21	9.29	27.46	12.91	23.59
Bihar	2.10	3.84	3.06	0.21	4.97	12.46	4.94	30.32	8.96	29.15
Gujarat	0.30	0.53	1.18	0.30	0.66	14.10	13.19	18.13	14.54	37.08
Haryana	0.84	0.44	1.04	0.72	3.12	31.17	8.08	23.63	7.48	23.48
Karnataka	2.90	2.57	1.09	0.57	2.60	16.05	10.64	27.21	12.77	23.60
Madhya Pradesh	3.06	1.40	1.62	3.08	2.91	21.26	8.89	23.50	9.95	24.32
Maharashtra	1.06	1.49	2.16	0.93	1.93	20.77	10.44	25.63	11.73	23.86
Orissa	0.39	0.24	3.87	0.16	2.63	9.53	6.29	33.24	10.64	33.00
Punjab	0.74	1.61	0.82	0.45	4.91	37.70	6.21	21.87	6.66	19.04
Rajasthan	1.86	0.44	1.22	0.56	4.75	24.54	8.37	21.85	8.58	27.82
Tamil Nadu	0.82	2.12	2.43	0.34	3.36	18.27	9.10	28.31	8.68	26.57
Uttar Pradesh	1.90	1.52	1.37	0.20	6.99	22.30	6.51	23.55	8.82	26.84
West Bengal	0.87	1.22	1.34	0.82	4.24	19.51	7.09	27.14	12.83	24.93

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.20	11.96	3.07	0.24	16.25	16.20	5.81	10.59	1.51	33.17
Bihar	3.61	6.11	3.55	0.06	16.61	9.87	1.21	12.01	1.22	45.76
Gujarat	0.35	1.22	3.12	0.24	1.42	7.86	9.63	10.41	5.30	60.46
Haryana	0.95	0.67	3.36	0.17	4.46	13.88	5.25	9.55	1.58	60.13
Karnataka	2.24	8.53	2.09	0.88	10.94	13.07	6.98	12.26	3.07	39.95
Madhya Pradesh	4.45	5.51	2.26	1.23	8.86	15.46	9.03	8.54	1.88	42.80
Maharashtra	0.77	4.63	1.33	0.30	24.78	14.42	6.22	8.19	1.45	37.90
Orissa	0.78	9.42	2.28	0.06	7.17	8.20	12.10	13.70	2.10	53.18
Punjab	1.12	1.50	1.78	0.07	8.57	16.53	2.07	9.36	1.84	57.16
Rajasthan	7.53	1.47	2.36	0.28	10.11	13.51	6.77	8.06	1.80	48.10
Tamil Nadu	0.60	4.85	1.34	0.21	12.67	17.31	3.97	11.52	1.49	46.04
Uttar Pradesh	2.42	2.22	1.73	0.06	22.78	10.05	2.08	7.05	2.26	49.36
West Bengal	0.90	1.38	2.00	0.60	16.88	13.04	3.15	8.74	1.95	51.37

Source: Census of India 1991 and 2001

Note: Industrial distribution of workers has been presented for common class I cities between 1991 and 2001

Appendix: 4.25

State-Level Industrial Distribution of Total Marginal Workers by Gender in Class I Cities (2001)

(Male)

	Industrial Classification									
State	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
Andhra Pradesh	0.88	8.22	1.81	0.66	5.92	12.85	21.21	22.42	8.00	18.02
Assam	1.11	2.47	1.81	0.62	4.92	9.30	13.07	26.13	8.89	31.66
Bihar	2.05	11.56	2.76	0.33	7.11	11.17	15.91	20.25	10.80	18.06
Gujarat	0.43	2.37	1.40	0.30	4.79	23.21	21.33	24.23	6.59	15.35
Haryana	0.67	3.53	1.30	0.52	4.57	20.23	27.49	20.76	6.82	14.12
Karnataka	0.64	4.40	1.24	0.39	3.60	14.58	21.68	21.83	9.79	21.87
Kerala	0.39	4.37	12.26	0.41	2.33	11.92	24.99	19.71	13.36	10.28
Madhya Pradesh	0.97	3.70	1.09	0.61	4.53	15.70	30.26	20.51	9.65	12.96
Maharashtra	0.72	2.06	0.78	0.27	4.28	22.61	23.00	20.20	8.71	17.38
Orissa	1.20	5.49	1.40	0.32	6.41	17.63	19.37	21.17	7.17	19.84
Punjab	0.83	7.92	0.79	0.08	4.92	23.91	21.52	18.50	6.44	15.08
Rajasthan	1.23	2.63	1.12	0.75	4.98	17.83	30.02	17.74	8.01	15.70
Tamil Nadu	0.96	3.24	1.30	0.44	3.25	16.39	16.92	20.37	7.63	29.51
Uttar Pradesh	1.00	5.99	1.24	0.23	9.48	19.43	19.21	18.73	7.99	16.70
West Bengal	1.08	4.29	0.97	0.47	5.96	19.27	15.22	22.67	7.68	22.39

(Female)

State	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
Andhra Pradesh	1.63	16.43	1.59	0.45	15.25	10.85	11.62	12.30	0.68	29.20
Assam	0.92	3.32	0.75	0.03	14.12	4.54	4.21	12.62	0.75	58.76
Bihar	4.24	15.65	2.47	0.13	24.35	9.24	7.47	8.48	1.04	26.93
Gujarat	0.74	3.22	2.09	0.16	28.56	12.94	6.18	12.46	0.76	32.89
Haryana	2.26	5.24	3.65	0.35	19.45	23.60	7.08	6.94	0.51	30.93
Karnataka	1.57	10.21	1.36	0.28	18.07	15.28	7.60	10.46	1.59	33.60
Kerala	0.41	4.03	3.99	0.47	6.45	28.11	3.36	13.11	2.00	38.07
Madhya Pradesh	1.93	9.16	1.45	0.36	21.30	16.90	15.47	8.11	1.27	24.05
Maharashtra	1.62	6.04	1.20	0.14	24.40	13.83	8.81	10.13	1.07	32.77
Orissa	0.71	6.94	3.26	0.20	14.40	21.39	16.69	8.54	0.48	27.39
Punjab	1.44	4.82	2.41	0.04	18.11	22.54	2.61	8.47	0.52	39.05
Rajasthan	7.15	5.55	2.74	0.33	22.22	21.78	12.19	8.17	0.95	18.93
Tamil Nadu	2.76	5.71	0.63	0.14	15.60	14.64	5.93	12.25	1.04	41.30
Uttar Pradesh	2.36	7.43	1.59	0.05	31.74	13.56	4.62	7.30	0.93	30.43
West Bengal	1.26	3.30	1.65	0.23	18.12	16.95	2.67	9.23	0.67	45.92

Source: Census of India 2001

Note: Industrial distribution of workers has been presented for common class I cities between 1991 and 2001

Appendix: 4.26

State-Level Industrial Distribution of Marginal Workers by Gender in Class I Cities Within UAs (2001)

(Male)

	Industrial Classification									
State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	0.86	5.82	1.74	0.74	5.94	12.97	21.75	22.78	8.18	19.22
Assam	1.11	2.47	1.81	0.62	4.92	9.30	13.07	26.13	8.89	31.66
Bihar	1.98	9.62	2.28	0.41	6.79	11.67	17.22	20.22	11.68	18.13
Gujarat	0.43	2.23	1.41	0.29	4.94	23.91	21.06	24.49	6.34	14.89
Haryana	0.55	4.36	1.38	0.15	4.60	18.34	27.81	22.35	6.57	13.89
Karnataka	0.45	1.92	1.10	0.28	3.28	15.47	22.75	20.63	9.66	24.47
Kerala	0.39	4.37	12.26	0.41	2.33	11.92	24.99	19.71	13.36	10.28
Madhya Pradesh	0.51	2.46	0.94	0.41	4.75	16.21	31.50	20.73	9.81	12.67
Maharashtra	0.72	1.46	0.67	0.23	4.34	23.94	22.98	19.74	8.54	17.39
Orissa	1.28	6.05	1.26	0.37	5.62	18.88	20.53	19.38	6.89	19.74
Punjab	1.03	8.42	0.87	0.02	4.49	20.87	23.92	19.07	7.31	14.00
Rajasthan	0.67	2.88	1.03	1.09	3.91	14.87	34.20	19.19	9.02	13.14
Tamil Nadu	0.98	2.75	0.98	0.47	3.28	16.55	17.19	20.09	7.68	30.03
Uttar Pradesh	0.95	4.95	1.01	0.24	9.84	18.80	19.51	19.04	7.82	17.84
West Bengal	0.80	2.18	0.85	0.47	6.49	20.96	14.46	23.36	7.59	22.86

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.82	12.18	1.09	0.51	14.45	9.87	12.87	12.94	0.78	33.49
Assam	0.92	3.32	0.75	0.03	14.12	4.54	4.21	12.62	0.75	58.76
Bihar	3.98	13.76	2.13	0.17	22.95	9.52	9.53	8.09	1.27	28.60
Gujarat	0.75	3.10	1.92	0.17	28.78	13.27	6.09	12.57	0.74	32.60
Haryana	1.29	6.00	3.21	0.03	21.94	27.61	5.59	5.63	0.29	28.40
Karnataka	1.34	4.19	0.91	0.13	18.42	16.85	8.43	10.05	1.77	37.91
Kerala	0.41	4.03	3.99	0.47	6.45	28.11	3.36	13.11	2.00	38.07
Madhya Pradesh	0.89	5.26	1.04	0.23	23.41	17.89	16.99	8.21	1.26	24.83
Maharashtra	1.76	4.59	1.16	0.13	23.47	13.81	8.83	10.44	1.14	34.68
Orissa	0.70	7.01	3.59	0.15	13.22	24.30	15.90	7.43	0.53	27.16
Punjab	1.23	5.54	2.14	0.00	18.00	23.94	2.59	8.10	0.57	37.89
Rajasthan	3.35	4.81	2.77	0.65	24.44	20.48	12.75	9.28	1.34	20.14
Tamil Nadu	2.92	4.97	0.54	0.14	14.87	14.56	5.99	12.24	1.10	42.66
Uttar Pradesh	1.79	5.86	1.15	0.05	30.59	14.15	5.12	7.91	0.96	32.43
West Bengal	1.26	2.10	1.31	0.15	16.21	17.98	2.04	9.70	0.70	48.55

Source: Census of India 2001

Note: Industrial distribution of workers for common class I cities between 1991 and 2001

Appendix: 4.27

State-Level Industrial Distribution of Marginal Workers by Gender in Class I Cities Outside UAs (2001)

(Male)

	Industrial Classification									
State	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
Andhra Pradesh	0.98	20.47	2.19	0.26	5.85	12.23	18.43	20.58	7.11	11.89
Bihar	2.22	16.43	3.97	0.15	7.89	9.92	12.63	20.31	8.58	17.88
Gujarat	0.30	4.63	1.28	0.53	2.26	11.44	25.89	19.72	10.84	23.11
Haryana	0.77	2.79	1.23	0.84	4.54	21.91	27.20	19.34	7.05	14.32
Karnataka	1.11	10.68	1.59	0.68	4.41	12.32	18.96	24.88	10.13	15.26
Madhya Pradesh	2.76	8.75	1.66	1.40	4.02	14.36	27.08	18.74	9.61	11.62
Maharashtra	0.71	5.58	1.41	0.48	3.93	14.87	23.13	22.88	9.68	17.33
Orissa	0.79	2.50	2.14	0.08	10.62	10.90	13.16	30.73	8.68	20.39
Punjab	0.56	7.24	0.68	0.16	5.52	28.07	18.24	17.72	5.25	16.56
Rajasthan	1.76	2.39	1.20	0.43	5.99	20.65	26.04	16.35	7.05	18.14
Tamil Nadu	0.77	10.00	5.78	0.12	2.79	14.06	13.07	24.28	6.87	22.27
Uttar Pradesh	1.10	7.82	1.64	0.21	8.85	20.54	18.67	18.18	8.29	14.70
West Bengal	2.44	14.36	1.53	0.50	3.46	11.25	18.82	19.40	8.07	20.18

(Female)

State	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
Andhra Pradesh	1.01	30.72	3.27	0.22	17.96	14.15	7.42	10.14	0.33	14.77
Bihar	4.97	20.98	3.44	0.00	28.30	8.45	1.67	9.58	0.40	22.20
Gujarat	0.38	5.74	5.84	0.10	23.83	5.65	8.04	10.05	1.24	39.14
Haryana	4.01	3.87	4.44	0.91	14.97	16.35	9.77	9.30	0.90	35.48
Karnataka	2.03	22.42	2.29	0.57	17.34	12.09	5.91	11.28	1.22	24.84
Madhya Pradesh	5.51	23.18	2.71	0.80	16.08	14.12	12.44	7.07	1.38	16.72
Maharashtra	0.96	12.62	1.39	0.15	28.64	13.93	8.70	8.74	0.77	24.10
Orissa	0.74	6.67	1.98	0.40	18.89	10.29	19.68	12.78	0.28	28.28
Punjab	1.69	3.92	2.74	0.09	18.25	20.79	2.63	8.92	0.46	40.49
Rajasthan	9.72	6.06	2.72	0.11	20.71	22.66	11.81	7.41	0.68	18.12
Tamil Nadu	0.86	14.45	1.72	0.16	24.21	15.62	5.14	12.29	0.38	25.16
Uttar Pradesh	3.46	10.38	2.42	0.05	33.92	12.43	3.67	6.15	0.87	26.65
West Bengal	1.24	8.25	3.04	0.53	25.97	12.73	5.25	7.29	0.55	35.15

Source: Census of India 2001

Note: Industrial distribution of workers has been presented for common class I cities between 1991 and 2001

Appendix: 4.28

State-Level Industrial distribution of main workers in cities demoted from Class I status (1991)

(Male)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	5.20	19.92	0.62	0.01	12.10	13.29	3.37	22.50	9.52	13.47
Assam	2.11	1.05	8.94	2.06	0.26	10.80	5.71	34.22	8.11	26.74
Gujarat	0.58	1.33	1.61	4.61	0.57	13.14	4.71	25.91	12.76	34.78
Kerala	0.78	2.77	10.30	0.19	1.13	18.73	5.88	34.00	12.28	13.94
Maharashtra	9.36	8.43	0.92	0.05	0.93	21.69	5.70	23.70	11.56	17.66
Tamil Nadu	0.20	0.59	28.54	0.16	0.52	19.67	4.19	20.55	11.28	14.29
West Bengal	3.12	3.69	1.50	2.98	0.86	35.00	6.32	18.96	12.77	14.79

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.59	43.65	0.50	0.00	24.42	4.92	1.06	9.89	0.39	13.60
Assam	6.12	1.29	27.36	0.52	1.78	3.20	1.63	5.30	1.80	50.99
Gujarat	3.23	5.94	1.47	0.92	5.66	6.42	2.89	10.90	2.81	59.75
Kerala	0.31	5.29	2.03	0.08	1.62	22.16	5.08	7.98	3.44	52.01
Maharashtra	9.18	25.57	0.29	0.00	2.45	10.83	1.21	10.59	1.70	38.17
Tamil Nadu	0.02	0.92	63.51	0.08	2.25	14.00	1.53	2.84	1.24	13.60
West Bengal	4.84	8.41	1.19	3.53	3.59	13.37	7.37	7.73	2.98	46.99

Source: Census of India 1991

Appendix: 4.29

State-Level Industrial Distribution of Main Workers by Gender in Cities Demoted from Class I Status Within UAs (1991)

(Male)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	5.2	19.92	0.62	0.01	12.1	13.29	3.37	22.5	9.52	13.47
Assam	2.11	1.05	8.94	2.06	0.26	10.8	5.71	34.22	8.11	26.74
Gujarat	0.58	1.33	1.61	4.61	0.57	13.14	4.71	25.91	12.76	34.78
Kerala	0.78	2.77	10.3	0.19	1.13	18.73	5.88	34	12.28	13.94
Maharashtra	9.36	8.43	0.92	0.05	0.93	21.69	5.7	23.7	11.56	17.66
Tamil Nadu	0.3	0.35	7.45	0.08	0.73	23.31	5.1	28.76	16.51	17.43
West Bengal	3.26	2.49	1.21	5.92	0.63	50.45	4.93	12.63	6.24	12.25

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.59	43.65	0.5	0	24.42	4.92	1.06	9.89	0.39	13.6
Assam	6.12	1.29	27.36	0.52	1.78	3.2	1.63	5.3	1.8	50.99
Gujarat	3.23	5.94	1.47	0.92	5.66	6.42	2.89	10.9	2.81	59.75
Kerala	0.31	5.29	2.03	0.08	1.62	22.16	5.08	7.98	3.44	52.01
Maharashtra	9.18	25.57	0.29	0	2.45	10.83	1.21	10.59	1.7	38.17
Tamil Nadu	0.11	0.18	0.5	0.06	10.41	17.86	4.95	11.53	5.63	48.76
West Bengal	6.99	8.71	0.28	8.18	1.5	18.29	5.31	3.43	1.43	45.87

Source: Census of India 1991

Appendix: 4.30

Industrial distribution of main workers in cities demoted from Class I status (1991)

(Male)

	Industrial Classification									
Class Size	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	2.46	4.09	9.21	1.79	1.69	21.03	5.11	23.67	11.57	19.38
Ia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ib	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ic	2.46	4.09	9.21	1.79	1.69	21.03	5.11	23.67	11.57	19.38

(Female)

Class Size	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	2.02	10.65	32.83	0.49	6.06	11.46	2.31	5.99	1.59	26.60
Ia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ib	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ic	2.02	10.65	32.83	0.49	6.06	11.46	2.31	5.99	1.59	26.60

Source: Census of India 1991

Note: Industrial distribution of workers has been presented for common class I cities considering their size class in base year

Appendix: 4.31

State-Level Industrial Distribution of Main Workers by Gender in Cities Demoted from Class I Status Outside UAs (1991)

(Male)

	Industrial Classification									
State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Tamil Nadu	0.02	1.04	66.58	0.30	0.14	13.11	2.56	5.75	1.86	8.64
West Bengal	2.98	4.90	1.79	0.02	1.09	19.40	7.73	25.36	19.37	17.35

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Tamil Nadu	0.00	1.12	80.78	0.08	0.02	12.94	0.59	0.46	0.04	3.96
West Bengal	3.21	8.19	1.88	0.00	5.17	9.64	8.93	10.99	4.16	47.84

Source: Census of India 1991

Appendix: 4.32

Industrial Distribution of Total Workers in Cities which have achieved Cass I status (2001)

(Male)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	1.42	1.87	1.65	0.92	3.45	21.43	8.89	24.41	9.26	26.71
Ib	1.61	1.97	0.79	0.22	10.51	9.89	6.06	23.01	6.66	39.28
Ic	1.41	1.87	1.69	0.96	3.11	21.98	9.02	24.48	9.38	26.10

(Female)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	2.15	4.76	2.44	0.46	9.85	15.92	5.81	9.39	1.82	47.39
Ib	3.09	1.43	1.02	0.02	37.40	8.46	0.56	3.87	0.75	43.40
Ic	2.11	4.92	2.51	0.48	8.53	16.28	6.06	9.65	1.87	47.58

Source: Census of India 2001

Appendix: 4.33

Industrial Distribution of Total Workers in Cities which have achieved Cass I status Within UAs (2001)

(Male)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	0.84	1.10	1.61	0.86	3.20	23.15	9.23	23.23	9.46	27.30
Ib	1.61	1.97	0.79	0.22	10.51	9.89	6.06	23.01	6.66	39.28
Ic	0.79	1.04	1.67	0.91	2.68	24.11	9.46	23.25	9.67	26.43

(Female)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Ib	3.09	1.43	1.02	0.02	37.40	8.46	0.56	3.87	0.75	43.40
Ic	1.37	2.86	2.32	0.53	7.05	18.89	6.86	10.07	2.02	48.03

Source: Census of India 2001

Appendix: 4.34

Industrial Distribution of Total Workers in Cities which have achieved Cass I status Outside UAs (2001)

(Male)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	2.64	3.52	1.73	1.05	3.97	17.73	8.15	26.94	8.82	25.45
Ic	2.64	3.52	1.73	1.05	3.97	17.73	8.15	26.94	8.82	25.45

(Female)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	3.62	9.13	2.91	0.37	11.58	10.93	4.43	8.79	1.56	46.67
Ic	3.62	9.13	2.91	0.37	11.58	10.93	4.43	8.79	1.56	46.67

Source: Census of India 2001

Appendix: 4.35

Industrial Distribution of Main Workers in Cities which have achieved Cass I status (2001)

(Male)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	0.95	4.76	1.54	0.40	5.50	18.04	21.63	20.46	8.50	18.22
Ia	0.57	1.44	0.61	0.22	4.74	20.29	22.07	20.79	8.59	20.67
Ib	0.99	4.54	1.98	0.42	6.35	17.66	22.71	19.57	8.70	17.10
Ic	1.19	7.20	2.00	0.51	5.65	16.64	20.82	20.62	8.35	17.00

(Female)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	2.08	7.48	1.87	0.21	20.84	15.46	7.84	10.12	0.97	33.13
Ia	1.71	2.49	0.87	0.11	17.03	15.69	8.57	10.91	1.15	41.46
Ib	2.36	6.82	1.38	0.20	22.44	14.70	8.29	10.16	0.98	32.67
Ic	2.20	10.72	2.65	0.27	22.53	15.59	7.24	9.63	0.85	28.32

Source: Census of India 2001

Appendix: 4.36

Industrial Distribution of Main Workers in Cities which have achieved Cass I status Within UAs (2001)

(Male)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	0.81	3.55	1.44	0.38	5.37	18.39	21.94	20.69	8.63	18.79
Ia	0.52	1.23	0.60	0.22	4.58	19.51	22.22	21.20	8.84	21.07
Ib	1.01	4.38	2.02	0.40	6.49	17.63	22.64	19.38	8.85	17.21
Ic	0.98	5.46	1.96	0.54	5.48	17.70	21.19	21.00	8.27	17.42

(Female)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	1.67	5.55	1.39	0.19	20.32	15.80	8.17	10.24	1.05	35.63
Ia	1.39	2.24	0.75	0.11	16.73	15.04	8.71	11.21	1.21	42.62
Ib	2.33	6.10	1.31	0.18	21.99	14.97	8.64	10.25	1.01	33.21
Ic	1.58	8.13	1.99	0.26	22.57	16.88	7.46	9.39	0.92	30.82

Source: Census of India 2001

Appendix: 4.37

Industrial Distribution of Main Workers in Cities which have achieved Cass I status Outside UAs (2001)

(Male)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	1.40	8.81	1.88	0.44	5.94	16.89	20.58	19.69	8.06	16.31
Ia	1.08	3.73	0.80	0.23	6.53	29.15	20.45	16.13	5.72	16.18
Ib	0.79	5.75	1.62	0.57	5.29	17.89	23.30	21.06	7.49	16.23
Ic	1.52	9.96	2.07	0.46	5.93	14.96	20.24	20.03	8.49	16.34

(Female)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	3.34	13.40	3.33	0.28	22.43	14.41	6.85	9.74	0.72	25.49
Ia	4.67	4.76	1.96	0.12	19.77	21.66	7.36	8.18	0.63	30.91
Ib	2.59	11.63	1.88	0.35	25.38	12.89	5.91	9.52	0.80	29.05
Ic	3.23	14.99	3.74	0.29	22.47	13.47	6.89	10.02	0.73	24.18

Source: Census of India 2001

Appendix: 4.38

Industrial Distribution of Main Workers in Cities which have achieved Cass I status (2001)

(Male)

	Industrial Classification									
Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	0.76	0.82	1.20	0.54	3.08	23.66	7.97	24.79	10.69	26.49
Ia	0.36	0.29	0.65	0.30	2.61	25.88	7.50	24.51	11.05	26.86
Ib	0.93	0.96	1.41	0.38	3.78	21.96	8.62	24.14	10.49	27.33
Ic	1.06	1.26	1.63	0.83	3.20	22.36	8.10	25.36	10.43	25.77

(Female)

Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	1.38	1.93	1.28	0.27	8.91	13.76	5.05	10.08	2.76	54.59
Ia	1.14	0.58	0.67	0.13	5.27	14.03	4.46	10.15	3.34	60.23
Ib	1.78	2.13	1.25	0.19	10.70	12.62	5.38	9.98	2.68	53.28
Ic	1.43	3.16	1.89	0.45	11.68	14.01	5.47	10.05	2.23	49.64

Source: Census of India 2001

Appendix: 4.39

Industrial Distribution of Main Workers in Cities which have achieved Cass I status Within UAs (2001)

(Male)

	Industrial Classification									
Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	0.57	0.61	1.12	0.51	2.82	23.97	7.94	24.83	10.94	26.70
Ia	0.30	0.22	0.64	0.29	2.34	24.84	7.56	24.90	11.44	27.48
Ib	0.92	0.96	1.46	0.38	3.96	21.66	8.60	24.32	10.57	27.16
Ic	0.71	0.90	1.53	0.88	2.76	24.25	8.02	25.04	10.51	25.40

(Female)

Size Class	**I**	**II**	**III**	**IV**	**Va**	**Vb**	**VI**	**VII**	**VIII**	**IX**
I	1.17	1.39	1.08	0.26	7.63	13.88	5.08	10.15	2.97	56.39
Ia	0.90	0.52	0.60	0.13	5.01	13.96	4.47	10.22	3.43	60.74
Ib	1.96	1.98	1.24	0.21	8.24	12.60	5.80	10.41	2.82	54.74
Ic	1.09	2.27	1.65	0.46	10.91	14.50	5.51	9.90	2.42	51.30

Source: Census of India 2001

Appendix: 4.40

Industrial Distribution of Main Workers in Cities which have achieved Cass I status Outside UAs (2001)

(Male)

	Industrial Classification									
Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	1.52	1.66	1.54	0.63	4.09	22.43	8.09	24.65	9.70	25.69
Ia	0.96	0.96	0.76	0.39	5.36	36.40	6.87	20.53	7.15	20.61
Ib	1.02	1.01	1.02	0.38	2.57	23.96	8.77	22.91	9.94	28.42
Ic	1.75	1.95	1.82	0.74	4.04	18.71	8.27	25.97	10.29	26.47

(Female)

Size Class	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
I	2.26	4.17	2.10	0.34	14.27	13.26	4.91	9.76	1.89	47.04
Ia	4.75	1.43	1.63	0.13	9.10	15.17	4.27	9.00	2.02	52.50
Ib	0.88	2.91	1.27	0.10	23.17	12.73	3.25	7.84	1.97	45.87
Ic	2.12	4.95	2.37	0.44	13.22	13.03	5.40	10.33	1.84	46.30

Source: Census of India 2001

Appendix: 4.41

State-Level Industrial Distribution of Total Workers by Gender in Cities which have achieved Cass I status (2001)

(Male)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	0.82	3.15	1.78	1.09	5.94	22.00	13.37	17.86	10.07	23.93
Assam	0.15	0.36	1.81	0.58	1.33	15.00	4.60	37.17	10.22	28.77
Bihar	3.29	6.63	3.59	0.48	4.12	13.39	6.26	28.76	8.55	24.94
Gujarat	1.45	1.00	3.77	0.25	1.18	28.31	8.72	26.11	8.77	20.45
Haryana	1.36	1.47	1.06	0.18	3.32	20.28	10.38	26.78	7.12	28.03
Karnataka	1.27	1.76	1.36	1.33	1.77	31.52	12.86	18.19	10.08	19.86
Kerala	0.57	1.33	4.77	0.33	3.43	17.79	9.89	26.10	12.57	23.22
Madhya Pradesh	4.09	1.79	1.58	5.76	2.59	15.59	11.17	24.41	9.76	23.26
Maharashtra	1.27	2.42	1.11	0.48	1.80	25.44	8.29	22.44	11.37	25.39
Punjab	1.96	2.18	1.09	0.20	2.95	23.65	7.50	24.77	6.38	29.34
Rajasthan	1.51	1.83	2.09	1.41	3.21	20.54	14.29	27.69	9.73	17.70
Tamil Nadu	0.37	0.39	7.23	1.51	1.69	19.61	6.23	25.26	11.04	26.67
Uttar Pradesh	1.50	1.09	0.93	0.26	3.82	20.48	6.60	27.45	8.58	29.29
West Bengal	0.68	1.02	1.21	1.86	3.09	22.25	8.60	24.63	10.85	25.83

Source: Census of India 2001

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.56	8.39	2.56	1.05	12.87	14.08	13.11	10.53	1.48	34.35
Assam	0.34	0.16	1.84	0.04	2.76	4.27	2.00	7.43	1.20	79.98
Bihar	4.53	19.67	4.78	0.14	11.11	6.65	3.71	9.18	1.21	39.01
Gujarat	2.73	5.28	7.21	0.08	8.87	12.30	6.66	13.42	1.85	41.60
Haryana	1.74	2.93	5.52	0.08	6.94	8.51	6.55	6.57	1.14	60.03
Karnataka	0.85	4.17	1.86	0.59	7.77	36.74	8.20	7.56	1.76	30.49
Kerala	0.46	3.80	4.74	0.42	2.92	12.11	4.01	8.31	3.04	60.19
Madhya Pradesh	9.20	7.73	2.06	1.07	6.06	10.30	11.12	10.65	1.78	40.02
Maharashtra	1.38	7.52	1.14	0.13	7.17	14.50	4.51	10.79	3.37	49.49
Punjab	2.47	3.20	2.95	0.02	6.90	12.45	2.03	5.49	1.42	63.07
Rajasthan	5.07	3.54	4.52	0.83	17.12	15.58	9.65	7.10	1.27	35.33
Tamil Nadu	0.88	0.96	2.91	1.88	11.18	15.09	4.14	11.72	3.27	47.96
Uttar Pradesh	3.09	2.73	1.47	0.07	9.86	11.53	4.35	11.85	1.66	53.40
West Bengal	1.11	1.45	1.35	0.83	7.99	13.48	2.30	10.52	2.02	58.95

Source: Census of India 2001

Appendix: 4.42

State-Level Industrial Distribution of Total Workers by Gender in Cities which have achieved Cass I status Within UAs (2001)

(Male)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	0.70	1.55	1.97	1.22	2.76	23.99	14.66	17.22	10.20	25.73
Assam	0.15	0.36	1.81	0.58	1.33	15.00	4.60	37.17	10.22	28.77
Bihar	2.55	5.96	4.21	0.73	3.71	17.11	7.05	24.48	8.92	25.28
Gujarat	0.98	0.81	4.63	0.30	1.21	21.67	9.64	27.83	9.47	23.47
Haryana	1.02	1.10	1.06	0.19	3.85	26.14	8.52	24.96	7.03	26.13
Jammu & Kashmir	1.21	1.42	0.70	0.18	7.45	9.29	6.97	23.71	6.86	42.19
Karnataka	0.55	0.51	1.15	1.59	1.31	34.51	13.77	16.47	10.02	20.14
Kerala	0.57	1.33	4.77	0.33	3.43	17.79	9.89	26.10	12.57	23.22
Madhya Pradesh	1.47	0.85	1.29	0.44	2.97	16.04	9.68	29.15	11.90	26.20
Maharashtra	0.27	0.34	0.57	0.47	1.42	31.42	7.96	19.20	11.12	27.23
Tamil Nadu	0.23	0.22	10.29	1.26	1.08	20.24	6.07	23.81	11.62	25.16
Uttar Pradesh	0.96	0.77	0.70	0.23	3.42	23.81	6.66	26.52	8.66	28.27
West Bengal	0.68	1.00	1.11	2.08	3.28	23.72	8.97	23.50	10.42	25.24

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.70	5.54	3.01	1.15	7.98	14.34	15.26	11.10	1.66	38.24
Assam	0.34	0.16	1.84	0.04	2.76	4.27	2.00	7.43	1.20	79.98
Bihar	2.87	17.28	4.76	0.13	9.20	7.13	6.87	8.12	1.70	41.94
Gujarat	1.51	3.97	8.43	0.09	8.22	8.03	6.27	14.35	2.12	47.02
Haryana	1.54	3.02	7.35	0.01	7.25	9.93	5.22	7.01	1.30	57.37
Jammu & Kashmir	2.32	1.16	0.79	0.02	26.27	7.36	3.34	4.09	1.01	53.64
Karnataka	0.65	1.11	1.27	0.66	6.05	42.67	8.93	7.40	1.86	29.40
Kerala	0.46	3.80	4.74	0.42	2.92	12.11	4.01	8.31	3.04	60.19
Madhya Pradesh	2.76	4.97	1.83	0.46	7.22	11.05	10.36	12.73	1.79	46.83
Maharashtra	0.79	1.13	0.84	0.20	4.76	17.70	4.61	11.02	4.20	54.75
Tamil Nadu	0.71	0.57	3.96	0.66	11.61	16.94	3.64	12.82	3.70	45.40
Uttar Pradesh	2.68	2.49	1.09	0.07	7.89	13.43	5.20	11.72	1.76	53.68
West Bengal	1.20	1.45	1.14	0.95	7.73	14.13	2.46	10.70	2.08	58.16

Source: Census of India 2001

Appendix: 4.43

State-Level Industrial Distribution of Total Workers by Gender in Cities which have achieved Cass I status Outside UAs (2001)

(Male)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.45	11.37	0.81	0.39	22.31	11.74	6.71	21.15	9.42	14.66
Bihar	3.76	7.04	3.20	0.33	4.38	11.07	5.76	31.43	8.31	24.73
Gujarat	2.85	1.56	1.21	0.10	1.11	47.92	6.01	21.04	6.69	11.50
Haryana	1.63	1.76	1.06	0.18	2.91	15.64	11.86	28.22	7.20	29.54
Karnataka	3.89	6.36	2.17	0.38	3.49	20.52	9.51	24.56	10.28	18.83
Madhya Pradesh	8.10	3.22	2.02	13.90	2.02	14.89	13.44	17.16	6.49	18.76
Maharashtra	1.72	3.35	1.35	0.49	1.97	22.74	8.44	23.89	11.48	24.57
Punjab	1.96	2.18	1.09	0.20	2.95	23.65	7.50	24.77	6.38	29.34
Rajasthan	1.51	1.83	2.09	1.41	3.21	20.54	14.29	27.69	9.73	17.70
Tamil Nadu	0.65	0.72	0.86	2.01	2.95	18.28	6.57	28.29	9.82	29.83
Uttar Pradesh	2.67	1.80	1.45	0.32	4.70	13.13	6.48	29.49	8.41	31.54
West Bengal	0.73	1.15	1.93	0.24	1.75	11.71	5.91	32.64	13.89	30.05

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.02	20.12	0.70	0.63	33.01	13.01	4.24	8.18	0.74	18.35
Bihar	5.68	21.34	4.80	0.15	12.45	6.31	1.51	9.91	0.87	36.97
Gujarat	6.84	9.69	3.10	0.05	11.07	26.69	7.97	10.31	0.95	23.33
Haryana	1.87	2.87	4.21	0.14	6.73	7.51	7.49	6.25	1.02	61.92
Karnataka	1.64	16.84	4.32	0.32	14.88	12.24	5.14	8.22	1.37	35.03
Madhya Pradesh	20.32	12.48	2.45	2.13	4.06	9.01	12.43	7.07	1.77	28.28
Maharashtra	1.67	10.58	1.29	0.10	8.32	12.97	4.46	10.68	2.97	46.98
Punjab	2.47	3.20	2.95	0.02	6.90	12.45	2.03	5.49	1.42	63.07
Rajasthan	5.07	3.54	4.52	0.83	17.12	15.58	9.65	7.10	1.27	35.33
Tamil Nadu	1.22	1.75	0.80	4.32	10.34	11.40	5.16	9.51	2.40	53.10
Uttar Pradesh	3.96	3.22	2.29	0.08	14.09	7.45	2.52	12.13	1.45	52.81
West Bengal	0.63	1.49	2.59	0.10	9.54	9.61	1.31	9.48	1.61	63.63

Source: Census of India 2001

Appendix: 4.44

State-Level Industrial Distribution of Main Workers by Gender in Cities which have achieved Cass I status (2001)

(Male)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	0.88	8.22	1.81	0.66	5.92	12.85	21.21	22.42	8.00	18.02
Assam	1.11	2.47	1.81	0.62	4.92	9.30	13.07	26.13	8.89	31.66
Bihar	2.05	11.56	2.76	0.33	7.11	11.17	15.91	20.25	10.80	18.06
Gujarat	0.43	2.37	1.40	0.30	4.79	23.21	21.33	24.23	6.59	15.35
Haryana	0.67	3.53	1.30	0.52	4.57	20.23	27.49	20.76	6.82	14.12
Karnataka	0.64	4.40	1.24	0.39	3.60	14.58	21.68	21.83	9.79	21.87
Kerala	0.39	4.37	12.26	0.41	2.33	11.92	24.99	19.71	13.36	10.28
Madhya Pradesh	0.97	3.70	1.09	0.61	4.53	15.70	30.26	20.51	9.65	12.96
Maharashtra	0.72	2.06	0.78	0.27	4.28	22.61	23.00	20.20	8.71	17.38
Orissa	1.20	5.49	1.40	0.32	6.41	17.63	19.37	21.17	7.17	19.84
Punjab	0.83	7.92	0.79	0.08	4.92	23.91	21.52	18.50	6.44	15.08
Rajasthan	1.23	2.63	1.12	0.75	4.98	17.83	30.02	17.74	8.01	15.70
Tamil Nadu	0.96	3.24	1.30	0.44	3.25	16.39	16.92	20.37	7.63	29.51
Uttar Pradesh	1.00	5.99	1.24	0.23	9.48	19.43	19.21	18.73	7.99	16.70
West Bengal	1.08	4.29	0.97	0.47	5.96	19.27	15.22	22.67	7.68	22.39

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.63	16.43	1.59	0.45	15.25	10.85	11.62	12.30	0.68	29.20
Assam	0.92	3.32	0.75	0.03	14.12	4.54	4.21	12.62	0.75	58.76
Bihar	4.24	15.65	2.47	0.13	24.35	9.24	7.47	8.48	1.04	26.93
Gujarat	0.74	3.22	2.09	0.16	28.56	12.94	6.18	12.46	0.76	32.89
Haryana	2.26	5.24	3.65	0.35	19.45	23.60	7.08	6.94	0.51	30.93
Karnataka	1.57	10.21	1.36	0.28	18.07	15.28	7.60	10.46	1.59	33.60
Kerala	0.41	4.03	3.99	0.47	6.45	28.11	3.36	13.11	2.00	38.07
Madhya Pradesh	1.93	9.16	1.45	0.36	21.30	16.90	15.47	8.11	1.27	24.05
Maharashtra	1.62	6.04	1.20	0.14	24.40	13.83	8.81	10.13	1.07	32.77
Orissa	0.71	6.94	3.26	0.20	14.40	21.39	16.69	8.54	0.48	27.39
Punjab	1.44	4.82	2.41	0.04	18.11	22.54	2.61	8.47	0.52	39.05
Rajasthan	7.15	5.55	2.74	0.33	22.22	21.78	12.19	8.17	0.95	18.93
Tamil Nadu	2.76	5.71	0.63	0.14	15.60	14.64	5.93	12.25	1.04	41.30
Uttar Pradesh	2.36	7.43	1.59	0.05	31.74	13.56	4.62	7.30	0.93	30.43
West Bengal	1.26	3.30	1.65	0.23	18.12	16.95	2.67	9.23	0.67	45.92

Source: Census of India 2001

Appendix: 4.45

State-Level Industrial Distribution of Main Workers by Gender in Cities which have achieved Class I status Within UAs (2001)

(Male)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Assam	1.11	2.47	1.81	0.62	4.92	9.30	13.07	26.13	8.89	31.66
Bihar	1.98	9.62	2.28	0.41	6.79	11.67	17.22	20.22	11.68	18.13
Gujarat	0.43	2.23	1.41	0.29	4.94	23.91	21.06	24.49	6.34	14.89
Haryana	0.55	4.36	1.38	0.15	4.60	18.34	27.81	22.35	6.57	13.89
Karnataka	0.45	1.92	1.10	0.28	3.28	15.47	22.75	20.63	9.66	24.47
Kerala	0.39	4.37	12.26	0.41	2.33	11.92	24.99	19.71	13.36	10.28
Madhya Pradesh	0.51	2.46	0.94	0.41	4.75	16.21	31.50	20.73	9.81	12.67
Maharashtra	0.72	1.46	0.67	0.23	4.34	23.94	22.98	19.74	8.54	17.39
Orissa	1.28	6.05	1.26	0.37	5.62	18.88	20.53	19.38	6.89	19.74
Punjab	1.03	8.42	0.87	0.02	4.49	20.87	23.92	19.07	7.31	14.00
Rajasthan	0.67	2.88	1.03	1.09	3.91	14.87	34.20	19.19	9.02	13.14
Tamil Nadu	0.98	2.75	0.98	0.47	3.28	16.55	17.19	20.09	7.68	30.03
Uttar Pradesh	0.95	4.95	1.01	0.24	9.84	18.80	19.51	19.04	7.82	17.84
West Bengal	0.80	2.18	0.85	0.47	6.49	20.96	14.46	23.36	7.59	22.86

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.82	12.18	1.09	0.51	14.45	9.87	12.87	12.94	0.78	33.49
Assam	0.92	3.32	0.75	0.03	14.12	4.54	4.21	12.62	0.75	58.76
Bihar	3.98	13.76	2.13	0.17	22.95	9.52	9.53	8.09	1.27	28.60
Gujarat	0.75	3.10	1.92	0.17	28.78	13.27	6.09	12.57	0.74	32.60
Haryana	1.29	6.00	3.21	0.03	21.94	27.61	5.59	5.63	0.29	28.40
Karnataka	1.34	4.19	0.91	0.13	18.42	16.85	8.43	10.05	1.77	37.91
Kerala	0.41	4.03	3.99	0.47	6.45	28.11	3.36	13.11	2.00	38.07
Madhya Pradesh	0.89	5.26	1.04	0.23	23.41	17.89	16.99	8.21	1.26	24.83
Maharashtra	1.76	4.59	1.16	0.13	23.47	13.81	8.83	10.44	1.14	34.68
Orissa	0.70	7.01	3.59	0.15	13.22	24.30	15.90	7.43	0.53	27.16
Punjab	1.23	5.54	2.14	0.00	18.00	23.94	2.59	8.10	0.57	37.89
Rajasthan	3.35	4.81	2.77	0.65	24.44	20.48	12.75	9.28	1.34	20.14
Tamil Nadu	2.92	4.97	0.54	0.14	14.87	14.56	5.99	12.24	1.10	42.66
Uttar Pradesh	1.79	5.86	1.15	0.05	30.59	14.15	5.12	7.91	0.96	32.43
West Bengal	1.26	2.10	1.31	0.15	16.21	17.98	2.04	9.70	0.70	48.55

Source: Census of India 2001

Appendix: 4.46

State-Level Industrial Distribution of Main Workers by Gender in Cities which have achieved Cass I status Outside UAs (2001)

(Male)

	Industrial Classification									
State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	0.98	20.47	2.19	0.26	5.85	12.23	18.43	20.58	7.11	11.89
Bihar	2.22	16.43	3.97	0.15	7.89	9.92	12.63	20.31	8.58	17.88
Gujarat	0.30	4.63	1.28	0.53	2.26	11.44	25.89	19.72	10.84	23.11
Haryana	0.77	2.79	1.23	0.84	4.54	21.91	27.20	19.34	7.05	14.32
Karnataka	1.11	10.68	1.59	0.68	4.41	12.32	18.96	24.88	10.13	15.26
Madhya Pradesh	2.76	8.75	1.66	1.40	4.02	14.36	27.08	18.74	9.61	11.62
Maharashtra	0.71	5.58	1.41	0.48	3.93	14.87	23.13	22.88	9.68	17.33
Orissa	0.79	2.50	2.14	0.08	10.62	10.90	13.16	30.73	8.68	20.39
Punjab	0.56	7.24	0.68	0.16	5.52	28.07	18.24	17.72	5.25	16.56
Rajasthan	1.76	2.39	1.20	0.43	5.99	20.65	26.04	16.35	7.05	18.14
Tamil Nadu	0.77	10.00	5.78	0.12	2.79	14.06	13.07	24.28	6.87	22.27
Uttar Pradesh	1.10	7.82	1.64	0.21	8.85	20.54	18.67	18.18	8.29	14.70
West Bengal	2.44	14.36	1.53	0.50	3.46	11.25	18.82	19.40	8.07	20.18

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.01	30.72	3.27	0.22	17.96	14.15	7.42	10.14	0.33	14.77
Bihar	4.97	20.98	3.44	0.00	28.30	8.45	1.67	9.58	0.40	22.20
Gujarat	0.38	5.74	5.84	0.10	23.83	5.65	8.04	10.05	1.24	39.14
Haryana	4.01	3.87	4.44	0.91	14.97	16.35	9.77	9.30	0.90	35.48
Karnataka	2.03	22.42	2.29	0.57	17.34	12.09	5.91	11.28	1.22	24.84
Madhya Pradesh	5.51	23.18	2.71	0.80	16.08	14.12	12.44	7.07	1.38	16.72
Maharashtra	0.96	12.62	1.39	0.15	28.64	13.93	8.70	8.74	0.77	24.10
Orissa	0.74	6.67	1.98	0.40	18.89	10.29	19.68	12.78	0.28	28.28
Punjab	1.69	3.92	2.74	0.09	18.25	20.79	2.63	8.92	0.46	40.49
Rajasthan	9.72	6.06	2.72	0.11	20.71	22.66	11.81	7.41	0.68	18.12
Tamil Nadu	0.86	14.45	1.72	0.16	24.21	15.62	5.14	12.29	0.38	25.16
Uttar Pradesh	3.46	10.38	2.42	0.05	33.92	12.43	3.67	6.15	0.87	26.65
West Bengal	1.24	8.25	3.04	0.53	25.97	12.73	5.25	7.29	0.55	35.15

Source: Census of India 2001

Appendix: 4.47

State-Level Industrial Distribution of Main Workers by Gender in Cities which have achieved Cass I status (2001)

(Male)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	0.83	1.72	1.35	1.24	2.58	14.83	10.10	25.53	13.02	28.81
Assam	0.49	0.22	2.25	1.03	1.05	10.47	6.60	26.96	13.25	37.69
Bihar	1.72	2.77	2.74	0.70	4.44	15.85	5.23	26.42	9.62	30.50
Gujarat	0.27	0.32	0.99	0.24	1.51	38.77	8.02	22.96	8.93	17.99
Haryana	0.84	0.55	1.21	0.52	3.39	27.86	7.91	25.50	7.61	24.62
Karnataka	1.12	0.90	0.80	0.36	1.93	20.26	10.15	25.50	12.04	26.95
Kerala	0.24	0.94	8.40	0.24	2.10	13.75	12.69	24.13	14.10	23.41
Madhya Pradesh	1.19	0.59	1.13	0.94	3.23	19.97	9.59	24.82	10.34	28.18
Maharashtra	0.51	0.41	0.96	0.37	1.91	28.43	8.62	23.30	12.42	23.06
Orissa	0.50	0.54	2.27	0.34	2.33	15.38	9.60	25.81	11.13	32.10
Punjab	0.79	1.60	0.82	0.25	4.27	29.90	6.91	24.77	7.53	23.16
Rajasthan	1.46	0.44	1.27	0.75	4.40	21.51	9.13	23.30	9.95	27.80
Tamil Nadu	0.64	0.89	1.10	0.65	3.09	21.22	8.04	24.50	9.76	30.12
Uttar Pradesh	1.41	1.21	1.21	0.30	7.43	20.61	6.35	24.46	8.63	28.38
West Bengal	0.37	0.43	0.82	0.74	2.33	24.25	5.16	27.03	11.65	27.21

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.89	5.05	1.44	0.59	10.95	11.09	8.28	12.17	2.49	46.05
Assam	1.18	0.47	1.47	0.35	3.21	4.90	2.67	8.67	5.03	72.04
Bihar	2.51	5.79	2.80	0.47	10.29	8.56	3.86	10.08	1.93	53.70
Gujarat	0.52	1.29	1.68	0.13	7.67	13.46	7.76	10.70	2.41	54.39
Haryana	1.02	0.95	3.67	0.09	5.41	15.03	4.23	7.62	1.49	60.49
Himachal Pradesh	0.81	0.11	0.60	0.02	0.92	2.43	4.54	4.79	1.49	84.30
Karnataka	1.09	2.51	0.97	0.32	10.05	20.13	4.97	9.98	2.91	47.08
Kerala	0.24	1.50	2.52	0.20	2.32	17.57	2.26	9.32	4.19	59.86
Madhya Pradesh	1.51	1.78	1.15	0.45	11.35	13.07	8.01	8.89	1.95	51.85
Maharashtra	0.94	1.64	0.95	0.20	8.18	13.66	6.05	10.30	3.55	54.54
Orissa	0.79	1.14	3.18	0.12	4.57	8.40	13.76	8.91	2.40	56.72
Punjab	1.00	1.73	1.68	0.05	8.19	14.51	2.14	8.70	1.78	60.22
Rajasthan	5.37	1.27	2.44	0.39	10.30	12.74	6.37	7.91	2.24	50.98
Tamil Nadu	1.83	1.79	0.63	0.28	10.79	18.30	4.15	11.17	2.41	48.67
Uttar Pradesh	2.55	1.66	1.48	0.13	17.12	10.74	2.52	8.65	2.39	52.76
West Bengal	0.91	0.57	0.90	0.37	6.44	12.54	1.68	9.35	2.71	64.52

Source: Census of India 2001

Appendix: 4.48

State-Level Industrial Distribution of Main Workers by Gender in Cities which have achieved Cass I status (2001)

(Male)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	0.83	1.72	1.35	1.24	2.58	14.83	10.10	25.53	13.02	28.81
Assam	0.49	0.22	2.25	1.03	1.05	10.47	6.60	26.96	13.25	37.69
Bihar	1.72	2.77	2.74	0.70	4.44	15.85	5.23	26.42	9.62	30.50
Gujarat	0.27	0.32	0.99	0.24	1.51	38.77	8.02	22.96	8.93	17.99
Haryana	0.84	0.55	1.21	0.52	3.39	27.86	7.91	25.50	7.61	24.62
Karnataka	1.12	0.90	0.80	0.36	1.93	20.26	10.15	25.50	12.04	26.95
Kerala	0.24	0.94	8.40	0.24	2.10	13.75	12.69	24.13	14.10	23.41
Madhya Pradesh	1.19	0.59	1.13	0.94	3.23	19.97	9.59	24.82	10.34	28.18
Maharashtra	0.51	0.41	0.96	0.37	1.91	28.43	8.62	23.30	12.42	23.06
Orissa	0.50	0.54	2.27	0.34	2.33	15.38	9.60	25.81	11.13	32.10
Punjab	0.79	1.60	0.82	0.25	4.27	29.90	6.91	24.77	7.53	23.16
Rajasthan	1.46	0.44	1.27	0.75	4.40	21.51	9.13	23.30	9.95	27.80
Tamil Nadu	0.64	0.89	1.10	0.65	3.09	21.22	8.04	24.50	9.76	30.12
Uttar Pradesh	1.41	1.21	1.21	0.30	7.43	20.61	6.35	24.46	8.63	28.38
West Bengal	0.37	0.43	0.82	0.74	2.33	24.25	5.16	27.03	11.65	27.21

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.89	5.05	1.44	0.59	10.95	11.09	8.28	12.17	2.49	46.05
Assam	1.18	0.47	1.47	0.35	3.21	4.90	2.67	8.67	5.03	72.04
Bihar	2.51	5.79	2.80	0.47	10.29	8.56	3.86	10.08	1.93	53.70
Gujarat	0.52	1.29	1.68	0.13	7.67	13.46	7.76	10.70	2.41	54.39
Haryana	1.02	0.95	3.67	0.09	5.41	15.03	4.23	7.62	1.49	60.49
Himachal Pradesh	0.81	0.11	0.60	0.02	0.92	2.43	4.54	4.79	1.49	84.30
Karnataka	1.09	2.51	0.97	0.32	10.05	20.13	4.97	9.98	2.91	47.08
Kerala	0.24	1.50	2.52	0.20	2.32	17.57	2.26	9.32	4.19	59.86
Madhya Pradesh	1.51	1.78	1.15	0.45	11.35	13.07	8.01	8.89	1.95	51.85
Maharashtra	0.94	1.64	0.95	0.20	8.18	13.66	6.05	10.30	3.55	54.54
Orissa	0.79	1.14	3.18	0.12	4.57	8.40	13.76	8.91	2.40	56.72
Punjab	1.00	1.73	1.68	0.05	8.19	14.51	2.14	8.70	1.78	60.22
Rajasthan	5.37	1.27	2.44	0.39	10.30	12.74	6.37	7.91	2.24	50.98
Tamil Nadu	1.83	1.79	0.63	0.28	10.79	18.30	4.15	11.17	2.41	48.67
Uttar Pradesh	2.55	1.66	1.48	0.13	17.12	10.74	2.52	8.65	2.39	52.76
West Bengal	0.91	0.57	0.90	0.37	6.44	12.54	1.68	9.35	2.71	64.52

Source: Census of India 2001

Appendix: 4.49

State-Level Industrial Distribution of Main Workers by Gender in Cities which have achieved Cass I status (2001)

(Male)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	0.83	1.72	1.35	1.24	2.58	14.83	10.10	25.53	13.02	28.81
Assam	0.49	0.22	2.25	1.03	1.05	10.47	6.60	26.96	13.25	37.69
Bihar	1.72	2.77	2.74	0.70	4.44	15.85	5.23	26.42	9.62	30.50
Gujarat	0.27	0.32	0.99	0.24	1.51	38.77	8.02	22.96	8.93	17.99
Haryana	0.84	0.55	1.21	0.52	3.39	27.86	7.91	25.50	7.61	24.62
Karnataka	1.12	0.90	0.80	0.36	1.93	20.26	10.15	25.50	12.04	26.95
Kerala	0.24	0.94	8.40	0.24	2.10	13.75	12.69	24.13	14.10	23.41
Madhya Pradesh	1.19	0.59	1.13	0.94	3.23	19.97	9.59	24.82	10.34	28.18
Maharashtra	0.51	0.41	0.96	0.37	1.91	28.43	8.62	23.30	12.42	23.06
Orissa	0.50	0.54	2.27	0.34	2.33	15.38	9.60	25.81	11.13	32.10
Punjab	0.79	1.60	0.82	0.25	4.27	29.90	6.91	24.77	7.53	23.16
Rajasthan	1.46	0.44	1.27	0.75	4.40	21.51	9.13	23.30	9.95	27.80
Tamil Nadu	0.64	0.89	1.10	0.65	3.09	21.22	8.04	24.50	9.76	30.12
Uttar Pradesh	1.41	1.21	1.21	0.30	7.43	20.61	6.35	24.46	8.63	28.38
West Bengal	0.37	0.43	0.82	0.74	2.33	24.25	5.16	27.03	11.65	27.21

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.89	5.05	1.44	0.59	10.95	11.09	8.28	12.17	2.49	46.05
Assam	1.18	0.47	1.47	0.35	3.21	4.90	2.67	8.67	5.03	72.04
Bihar	2.51	5.79	2.80	0.47	10.29	8.56	3.86	10.08	1.93	53.70
Gujarat	0 52	1.29	1.68	0.13	7.67	13.46	7.76	10.70	2.41	54.39
Haryana	1.02	0.95	3.67	0.09	5.41	15.03	4.23	7.62	1.49	60.49
Himachal Pradesh	0.81	0.11	0.60	0.02	0.92	2.43	4.54	4.79	1.49	84.30
Karnataka	1.09	2.51	0.97	0.32	10.05	20.13	4.97	9.98	2.91	47.08
Kerala	0.24	1.50	2.52	0.20	2.32	17.57	2.26	9.32	4.19	59.86
Madhya Pradesh	1.51	1.78	1.15	0.45	11.35	13.07	8.01	8.89	1.95	51.85
Maharashtra	0.94	1.64	0.95	0.20	8.18	13.66	6.05	10.30	3.55	54.54
Orissa	0.79	1.14	3.18	0.12	4.57	8.40	13.76	8.91	2.40	56.72
Punjab	1.00	1.73	1.68	0.05	8.19	14.51	2.14	8.70	1.78	60.22
Rajasthan	5.37	1.27	2.44	0.39	10.30	12.74	6.37	7.91	2.24	50.98
Tamil Nadu	1.83	1.79	0.63	0.28	10.79	18.30	4.15	11.17	2.41	48.67
Uttar Pradesh	2.55	1.66	1.48	0.13	17.12	10.74	2.52	8.65	2.39	52.76
West Bengal	0.91	0.57	0.90	0.37	6.44	12.54	1.68	9.35	2.71	64.52

Source: Census of India 2001

Appendix: 4.50

State-Level Industrial Distribution of Main Workers by Gender in Cities which have achieved Cass I status Within UAs (2001)

(Male)

State	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	0.73	1.25	1.28	1.41	2.38	14.76	10.24	25.19	13.04	29.72
Assam	0.49	0.22	2.25	1.03	1.05	10.47	6.60	26.96	13.25	37.69
Bihar	1.57	2.36	2.62	0.88	4.23	17.15	5.35	24.93	9.88	31.03
Gujarat	0.27	0.31	0.98	0.24	1.55	39.79	7.80	23.16	8.69	17.20
Haryana	0.84	0.65	1.37	0.32	3.64	24.66	7.74	27.31	7.74	25.71
Karnataka	0.49	0.30	0.69	0.28	1.69	21.77	9.98	24.89	11.77	28.14
Kerala	0.24	0.94	8.40	0.24	2.10	13.75	12.69	24.13	14.10	23.41
Madhya Pradesh	0.86	0.46	1.09	0.52	3.65	20.22	9.73	25.57	10.86	27.04
Maharashtra	0.43	0.26	0.80	0.30	1.91	29.47	8.38	22.99	12.52	22.95
Orissa	0.52	0.61	1.91	0.38	2.26	16.71	10.35	24.12	11.24	31.90
Punjab	0.84	1.60	0.82	0.07	3.66	22.47	7.57	27.53	8.35	27.09
Rajasthan	0.90	0.44	1.33	1.00	3.91	17.37	10.16	25.29	11.81	27.78
Tamil Nadu	0.62	0.77	0.97	0.68	3.07	21.50	7.94	24.14	9.86	30.45
Uttar Pradesh	1.10	1.01	1.11	0.35	7.71	19.54	6.25	25.05	8.51	29.37
West Bengal	0.30	0.32	0.74	0.73	2.04	24.94	4.88	27.02	11.48	27.55

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	2.05	3.54	1.08	0.66	9.79	9.97	8.82	12.52	2.70	48.87
Assam	1.18	0.47	1.47	0.35	3.21	4.90	2.67	8.67	5.03	72.04
Bihar	2.10	5.68	2.52	0.63	7.93	8.07	4.85	9.36	2.19	56.67
Gujarat	0.53	1.29	1.61	0.13	7.99	13.75	7.66	10.71	2.26	54.07
Haryana	1.07	1.16	3.89	0.04	6.11	15.87	3.48	6.20	1.42	60.76
Karnataka	0.72	0.56	0.61	0.13	9.76	22.42	4.31	9.24	2.86	49.39
Kerala	0.24	1.50	2.52	0.20	2.32	17.57	2.26	9.32	4.19	59.86
Madhya Pradesh	1.08	1.26	1.00	0.35	13.29	13.46	8.47	9.18	2.03	49.87
Maharashtra	0.96	1.18	0.89	0.18	5.62	13.54	6.03	10.62	3.87	57.10
Orissa	0.79	1.31	3.39	0.14	3.97	8.45	14.15	7.79	2.46	57.54
Punjab	0.91	1.91	1.61	0.02	7.90	12.95	2.20	8.18	1.74	62.58
Rajasthan	1.95	0.94	2.57	0.56	10.59	11.51	5.74	7.68	2.92	55.54
Tamil Nadu	1.94	1.51	0.56	0.28	10.62	18.39	4.16	11.13	2.50	48.90
Uttar Pradesh	2.63	1.31	1.32	0.17	13.54	11.17	2.80	9.66	2.48	54.92
West Bengal	0.91	0.44	0.72	0.34	4.70	12.46	1.43	9.45	2.83	66.71

Source: Census of India 2001

Appendix: 4.51

State-Level Industrial Distribution of Main Workers by Gender in Cities which have achieved Cass I status Outside UAs (2001)

(Male)

	Industrial Classification									
State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.40	4.41	1.77	0.28	3.68	15.21	9.29	27.46	12.91	23.59
Bihar	2.10	3.84	3.06	0.21	4.97	12.46	4.94	30.32	8.96	29.15
Gujarat	0.30	0.53	1.18	0.30	0.66	14.10	13.19	18.13	14.54	37.08
Haryana	0.84	0.44	1.04	0.72	3.12	31.17	8.08	23.63	7.48	23.48
Karnataka	2.90	2.57	1.09	0.57	2.60	16.05	10.64	27.21	12.77	23.60
Madhya Pradesh	3.06	1.40	1.62	3.08	2.91	21.26	8.89	23.50	9.95	24.32
Maharashtra	1.06	1.49	2.16	0.93	1.93	20.77	10.44	25.63	11.73	23.86
Orissa	0.39	0.24	3.87	0.16	2.63	9.53	6.29	33.24	10.64	33.00
Punjab	0.74	1.61	0.82	0.45	4.91	37.70	6.21	21.87	6.66	19.04
Rajasthan	1.86	0.44	1.22	0.56	4.75	24.54	8.37	21.85	8.58	27.82
Tamil Nadu	0.82	2.12	2.43	0.34	3.36	18.27	9.10	28.31	8.68	26.57
Uttar Pradesh	1.90	1.52	1.37	0.20	6.99	22.30	6.51	23.55	8.82	26.84
West Bengal	0.87	1.22	1.34	0.82	4.24	19.51	7.09	27.14	12.83	24.93

(Female)

State	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Andhra Pradesh	1.20	11.96	3.07	0.24	16.25	16.20	5.81	10.59	1.51	33.17
Bihar	3.61	6.11	3.55	0.06	16.61	9.87	1.21	12.01	1.22	45.76
Gujarat	0.35	1.22	3.12	0.24	1.42	7.86	9.63	10.41	5.30	60.46
Haryana	0.95	0.67	3.36	0.17	4.46	13.88	5.25	9.55	1.58	60.13
Karnataka	2.24	8.53	2.09	0.88	10.94	13.07	6.98	12.26	3.07	39.95
Madhya Pradesh	4.45	5.51	2.26	1.23	8.86	15.46	9.03	8.54	1.88	42.80
Maharashtra	0.77	4.63	1.33	0.30	24.78	14.42	6.22	8.19	1.45	37.90
Orissa	0.78	0.42	2.28	0.06	7.17	8.20	12.10	13.70	2.10	53.18
Punjab	1.12	1.50	1.78	0.07	8.57	16.53	2.07	9.36	1.84	57.16
Rajasthan	7.53	1.47	2.36	0.28	10.11	13.51	6.77	8.06	1.80	48.10
Tamil Nadu	0.60	4.85	1.34	0.21	12.67	17.31	3.97	11.52	1.49	46.04
Uttar Pradesh	2.42	2.22	1.73	0.06	22.78	10.05	2.08	7.05	2.26	49.36
West Bengal	0.90	1.38	2.00	0.60	16.88	13.04	3.15	8.74	1.95	51.37

Source: Census of India 2001

Appendix: 5.1

Workforce Participation Rate in Metro Cities (1991-2001)

Mero Cities	Workforce Participation Rate (in percentage)					
	Total		Male		Female	
	1991	2001	1991	2001	1991	2001
Greater Mumbai	34.60	36.30	54.32	55.47	10.49	12.68
DMC(U)	31.97	33.69	52.28	53.29	7.61	9.93
Kolkata	32.84	37.53	53.64	57.89	6.82	12.94
Chennai	30.50	37.91	51.14	57.41	8.41	16.61
Hyderabad	26.61	35.33	45.23	55.50	6.80	14.10
Ahmedabad	28.90	39.10	49.60	64.43	5.61	10.61
Bangalore	32.65	30.81	52.07	50.29	11.39	10.20
Kanpur	25.59	33.89	44.62	50.94	2.51	15.28
Nagpur	28.00	24.81	45.65	38.27	8.78	9.33
Lucknow	26.67	38.14	45.56	61.02	4.88	8.55
Pune	30.83	30.49	48.03	49.01	12.30	9.33
Surat	33.95	27.15	57.55	45.23	5.83	6.92
Jaipur	28.18	30.62	48.15	48.96	5.18	11.06
Indore	29.64	29.72	49.51	47.38	7.58	10.13
Bhopal	28.76	29.85	46.85	47.30	8.51	10.40
Ludhiana	32.93	73.50	56.47	116.17	3.32	17.80
Vadodara	29.77	50.73	50.30	83.35	6.92	11.73
Kalyan-Dombivali	33.07	32.29	52.55	52.54	10.83	10.01

Source: Census of India 1991 and 2001

Note: only commom cities bween 1991 and 2001 are considered

Appendix: 5.2

Workforce Participation Rate in Cities which have achieved million plus population during 1991 and 2001

	Workforce Participation Rate (in percentage)					
	Total		Male		Female	
Mero Cities	1991	2001	1991	2001	1991	2001
Patna	0.00*	33.13	0.00*	52.09	0.00*	11.34
Thane	0.00*	25.93	0.00*	43.55	0.00*	5.60
Agra	0.00*	34.04	0.00*	53.15	0.00*	12.42
Varanasi	0.00*	27.95	0.00*	44.99	0.00*	8.65
Nashik	0.00*	34.40	0.00*	52.09	0.00*	13.79
Meerut	0.00*	25.75	0.00*	44.37	0.00*	4.62
Faridabad	0.00*	31.15	0.00*	49.93	0.00*	8.17
Haora	0.00*	33.88	0.00*	56.24	0.00*	7.30
Pimpri Chinchwad	0.00*	35.20	0.00*	54.58	0.00*	12.45

Source: Census of India 1991 and 2001

Appendix: 5.3

Cities which have achieved million plus population between 1991 and 2001

	Percentage share of Workers			
	Main		Marginal	
Mero Cities	1991	2001	1991	2001
Patna	0.00*	93.76	0.00*	6.24
Thane	0.00*	87.54	0.00*	12.46
Agra	0.00*	94.51	0.00*	5.49
Varanasi	0.00*	89.37	0.00*	10.63
Nashik	0.00*	93.32	0.00*	6.68
Meerut	0.00*	90.11	0.00*	9.89
Faridabad	0.00*	91.58	0.00*	8.42
Haora	0.00*	95.22	0.00*	4.78
Pimpri Chinchwad	0.00*	93.27	0.00*	6.73

Source: Census of India 1991 and 2001

Appendix: 5.4

Share of Main and Marginal Workers in cities which have achieved million plus population between (1991-2001)

	Percentage share of Workers			
	Main		Marginal	
Mero Cities	**1991**	**2001**	**1991**	**2001**
Greater Mumbai	98.15	94.50	1.85	5.50
DMC(U)	99.72	95.57	0.28	4.43
Kolkata	99.49	94.50	0.51	5.50
Chennai	99.89	94.41	0.11	5.59
Hyderabad	98.80	92.82	1.20	7.18
Ahmedabad	98.80	95.21	1.20	4.79
Bangalore	99.37	92.13	0.63	7.87
Kanpur	99.99	93.66	0.01	6.34
Nagpur	97.97	90.35	2.03	9.65
Lucknow	99.44	97.92	0.56	2.08
Pune	97.39	92.69	2.61	7.31
Surat	99.32	89.57	0.68	10.43
Jaipur	99.29	90.35	0.71	9.65
Indore	99.00	92.58	1.00	7.42
Bhopal	98.76	90.08	1.24	9.92
Ludhiana	100.00	95.03	0.00	4.97
Vadodara	99.27	93.11	0.73	6.89
Kalyan-Dombivali	98.01	96.48	1.99	3.52

Source: Census of India 1991 and 2001

Appendix: 5.5

Industrial Distribution of Total Main Workers in Metro Cities (1991)

Metro Cities	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Greater Bombay	0.10	0.07	0.50	0.17	1.48	35.31	4.24	24.90	11.32	21.91
D.M.C.(U)	0.21	0.25	0.47	0.05	1.32	24.75	7.40	26.62	8.27	30.65
Calcutta	0.15	0.21	0.51	0.19	0.49	26.02	3.39	29.68	11.39	27.97
Madras	0.08	0.02	0.85	0.11	0.66	23.55	6.39	25.68	10.74	31.93
Hyderabad (AP)	0.24	0.27	0.30	0.08	0.52	18.88	7.52	29.66	12.51	30.00
Ahmadabad	0.32	0.23	0.65	0.23	0.78	37.07	4.59	25.50	9.07	21.55
Bangalore	0.22	0.09	0.55	0.14	1.43	30.98	6.96	25.89	8.98	24.77
Kanpur	1.80	1.60	0.68	0.02	0.70	28.25	2.02	28.65	6.61	29.68
Nagpur	0.83	0.80	1.40	0.84	3.09	20.07	9.59	23.36	12.65	27.36
Lucknow	2.55	2.59	2.17	0.09	2.78	13.44	5.04	23.14	7.89	40.32
Pune	0.65	0.68	0.61	0.08	1.75	25.70	11.56	22.36	8.45	28.15
Surat	0.49	0.83	0.53	0.17	2.23	55.73	3.36	18.83	4.53	13.30
Jaipur*	0.94	0.38	1.00	0.60	3.83	22.00	6.22	24.41	8.29	32.33
Indore	1.22	0.86	0.47	0.03	1.30	26.59	5.57	26.50	9.36	28.11
Bhopal	1.54	1.42	1.73	0.37	1.05	18.42	11.00	20.27	8.88	35.32
Ludhiana *	1.32	4.88	1.98	0.00	0.19	44.50	6.32	20.47	6.23	14.12
Vadodara	0.88	0.88	0.95	1.19	0.60	30.77	5.85	21.00	9.15	28.74
Kalyan	2.58	1.27	0.44	0.30	1.44	36.47	5.38	18.87	11.68	21.57

Source: Census of India 1991

*Note: * represent million city located outside UA*

Appendix: 5.6

Industrial Distribution of Male Main Workers in Metro Cities (1991)

Metro Cities	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Greater Bombay	0.09	0.06	0.51	0.17	1.31	37.55	4.50	25.80	12.36	17.65
D.M.C.(U)	0.23	0.24	0.49	0.05	1.31	26.51	7.60	28.18	8.87	26.52
Calcutta	0.15	0.21	0.54	0.20	0.48	27.59	3.63	31.67	12.22	23.31
Madras	0.08	0.02	0.97	0.12	0.46	24.71	6.82	27.03	11.74	28.06
Hyderabad (AP)	0.26	0.25	0.31	0.08	0.35	20.08	7.50	31.57	13.75	25.86
Ahmadabad	0.30	0.20	0.65	0.24	0.47	39.28	4.66	26.47	9.52	18.20
Bangalore	0.25	0.09	0.56	0.15	0.87	32.30	7.52	27.90	9.96	20.41
Kanpur	1.78	1.53	0.69	0.02	0.64	29.10	2.07	29.42	6.84	27.90
Nagpur	0.86	0.56	1.49	0.92	2.27	22.02	9.32	24.98	14.35	23.23
Lucknow	2.60	2.55	2.21	0.09	2.72	14.09	5.28	24.34	8.38	37.75
Pune	0.66	0.46	0.64	0.09	1.33	28.89	11.88	23.72	9.88	22.46
Surat	0.48	0.55	0.52	0.16	1.59	58.55	3.34	19.37	4.82	10.63
Jaipur*	0.77	0.35	0.99	0.57	3.74	23.22	6.26	25.73	8.91	29.47
Indore	1.18	0.66	0.49	0.03	0.96	27.95	5.67	28.64	10.44	23.98
Bhopal	1.60	1.29	1.74	0.28	0.71	20.09	11.02	22.22	9.98	31.09
Ludhiana*	1.37	5.05	1.88	0.00	0.18	45.83	6.53	21.06	6.44	11.67
Vadodara	0.95	0.76	0.96	1.26	0.47	33.36	6.01	22.01	9.90	24.32
Kalyan	2.20	0.94	0.44	0.28	1.20	40.12	5.63	19.47	12.59	17.14

Source: Census of India 1991

*Note: * represent million city located outside UA*

Appendix: 5.7

Industrial Distribution of Female Main Workers in Metro Cities (1991)

Metro Cities	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Greater Bombay	0.13	0.16	0.45	0.12	2.58	21.16	2.60	19.19	4.75	48.84
D.M.C.(U)	0.09	0.34	0.33	0.09	1.42	10.26	5.77	13.77	3.32	64.62
Calcutta	0.09	0.19	0.24	0.10	0.58	10.52	1.03	10.09	3.24	73.91
Madras	0.02	0.01	0.07	0.04	1.95	15.99	3.60	16.93	4.25	57.14
Hyderabad (AP)	0.16	0.43	0.23	0.09	1.74	10.36	7.68	16.20	3.78	59.34
Ahmadabad	0.48	0.49	0.72	0.12	3.80	15.03	3.95	15.91	4.61	54.89
Bangalore	0.10	0.09	0.53	0.10	4.23	24.35	4.13	15.82	4.06	46.59
Kanpur	2.16	3.15	0.42	0.00	1.83	9.77	0.94	12.15	1.58	67.99
Nagpur	0.69	2.17	0.87	0.42	7.73	9.03	11.14	14.18	3.00	50.76
Lucknow	2.06	2.96	1.75	0.03	3.41	6.42	2.45	10.29	2.56	68.07
Pune	0.58	1.62	0.48	0.07	3.53	12.31	10.20	16.65	2.44	52.12
Surat	0.60	4.20	0.72	0.32	9.71	22.57	3.63	12.50	1.07	44.67
Jaipur *	2.68	0.72	1.08	0.97	4.84	8.88	5.83	10.36	1.71	62.93
Indore	1.53	2.24	0.34	0.03	3.74	16.70	4.82	10.97	1.50	58.13
Bhopal	1.20	2.24	1.65	0.95	3.15	8.13	10.87	8.29	2.12	61.39
Ludhiana*	0.40	1.27	4.00	0.00	0.49	15.82	1.66	7.88	1.78	66.71
Vadodara	0.34	1.81	0.83	0.57	1.59	9.87	4.59	12.80	3.08	64.52
Kalyan	4.69	3.12	0.43	0.37	2.79	16.23	4.01	15.59	6.66	46.12

Source: Census of India 1991

*Note: * represent million city located outside UA*

Appendix: 5.8

Industrial Distribution of Total Marginal Workers in Metro Cities (2001)

Metro Cities	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Common Milllion Cities between 1991 and 2001										
Greater Mumbai	0.20	0.30	0.83	0.21	9.42	24.60	15.75	17.09	6.68	24.91
DMC(U)	0.20	0.49	0.46	0.22	5.53	21.39	22.82	18.36	6.69	23.85
Kolkata	0.61	0.68	0.39	0.15	11.01	16.04	8.30	20.31	5.91	36.61
Chennai	0.58	0.98	0.26	0.11	6.80	18.72	17.54	15.62	6.39	33.00
Hyderabad	1.89	1.15	0.71	0.13	4.36	13.17	13.86	18.69	6.47	39.57
Ahmedabad	1.58	5.01	1.16	0.00	23.37	14.34	14.89	16.68	2.93	20.04
Bangalore	1.64	1.85	0.29	0.24	7.36	10.61	16.24	23.45	6.21	32.11
Kanpur	0.83	4.10	0.71	0.09	10.47	12.59	22.52	15.25	5.93	27.50
Nagpur	5.49	1.52	0.83	0.06	7.56	18.48	11.69	18.31	6.51	29.56
Lucknow	0.39	1.55	1.00	0.22	25.26	22.13	9.29	16.41	2.15	21.60
Pune	3.82	3.56	1.96	0.20	11.29	23.73	20.19	13.16	4.35	17.75
Surat	0.76	5.25	1.31	0.24	9.58	15.60	19.15	17.73	7.76	22.63
Jaipur	0.27	1.58	0.91	0.17	9.95	12.89	25.67	18.28	7.33	22.96
Indore	0.43	1.84	0.36	0.11	7.81	22.55	24.03	16.88	7.10	18.88
Bhopal	0.26	3.77	0.83	0.45	4.67	14.51	32.83	17.74	7.08	17.85
Ludhiana	0.92	4.66	0.46	0.18	11.39	29.17	11.12	13.33	3.39	25.37
Vadodara	2.38	9.04	1.94	0.21	9.08	10.39	12.57	19.28	8.32	26.79
Kalyan-Dombivali	0.48	3.20	0.67	0.11	9.84	13.12	18.08	19.23	4.60	30.68
Cities which have acheived million plus population during 1991 and 2001										
Patna	3.66	1.30	0.56	0.15	7.14	19.78	19.60	15.72	6.58	25.51
Thane	2.10	4.37	0.37	0.08	16.97	26.45	8.37	14.61	3.18	23.49
Agra	6.86	5.07	0.29	0.14	9.63	20.96	15.96	15.11	5.04	20.94
Varanasi	1.11	3.26	0.72	0.08	40.58	10.34	7.43	13.53	3.27	19.68
Nashik	3.54	9.81	0.96	0.01	9.13	14.45	17.10	14.60	4.20	26.20
Meerut	0.69	8.97	1.75	0.03	5.85	17.14	29.52	14.32	6.67	15.06
Faridabad	1.78	2.80	1.89	1.23	6.94	22.17	22.05	15.97	5.06	20.10
Haora	0.42	0.47	0.60	0.15	6.62	26.23	6.68	20.74	5 26	32.84
Pimpri Chinchwad	2.74	5.99	0.54	0.58	7.68	29.62	21.79	11.94	5.11	14.02

Source: Census of India 2001

Appendix: 5.9

Industrial Distribution of Male Marginal Workers in Metro Cities (2001)

Metro Cities	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Common Milllion Cities between 1991 and 2001										
Greater Mumbai	0.15	0.25	0.66	0.23	4.51	27.69	19.85	19.74	8.91	17.99
DMC(U)	0.15	0.43	0.34	0.28	3.24	21.25	27.57	20.84	8.63	17.26
Kolkata	0.48	0.54	0.38	0.21	9.05	18.05	11.83	24.12	8.40	26.94
Chennai	0.36	0.87	0.32	0.15	2.84	17.53	22.51	18.54	9.09	27.80
Hyderabad	0.99	1.07	0.89	0.17	2.77	13.76	17.57	20.98	8.80	32.98
Ahmedabad	0.89	3.12	1.10	0.00	4.50	20.61	22.68	25.69	4.96	16.45
Bangaiore	0.99	1.49	0.36	0.26	5.07	12.12	17.60	27.76	8.59	25.75
Kanpur	0.46	2.19	0.60	0.09	4.17	15.57	30.11	18.94	9.13	18.76
Nagpur	4.52	1.58	0.69	0.08	3.63	19.38	15.91	21.39	8.65	24.17
Lucknow	0.21	1.48	0.66	0.29	6.67	34.94	16.79	22.29	4.48	12.19
Pune	1.52	1.49	1.14	0.24	6.87	25.12	24.48	16.39	6.38	16.36
Surat	0.75	5.02	1.45	0.29	7.75	15.93	21.01	20.17	9.30	18.32
Jaipur	0.21	0.83	0.56	0.19	4.72	13.49	30.20	22.40	10.02	17.38
Indore	0.33	1.55	0.36	0.09	4.88	21.90	27.19	19.70	9.66	14.34
Bhopal	0.19	2.95	0.77	0.42	2.21	13.85	36.96	21.59	9.68	11.40
Ludhiana	0.63	6.04	0.45	0.22	6.18	33.29	16.30	15.86	5.04	16.00
Vadodara	1.54	7.97	1.71	0.27	6.68	9.72	15.24	21.83	10.56	24.48
Kalyan-Dombivali	0.51	2.72	0.61	0.19	4.29	15.13	27.60	22.70	7.40	18.85
Cities which have acheived million plus population during 1991 and 2001										
Patna	2.66	1.02	0.44	0.19	3.11	22.94	23.21	18.38	8.98	19.07
Thane	1.65	3.71	0.35	0.09	13.61	31.99	10.14	16.11	4.02	18.32
Agra	5.16	3.59	0.34	0.21	3.64	23.94	21.08	18.28	7.29	16.47
Varanasi	1.10	3.10	0.64	0.12	26.19	11.96	12.24	19.51	5.78	19.36
Nashik	1.40	4.37	1.14	0.01	2.65	18.73	22.05	17.62	6.76	25.28
Meerut	0.41	6.29	1.46	0.04	2.97	18.43	35.03	16.11	8.01	11.26
Faridabad	0.72	2.55	1.13	1.21	4.00	24.32	26.44	18.05	6.63	14.94
Haora	0.27	0.54	0.73	0.19	4.43	28.28	8.76	25.45	7.12	24.23
Pimpri Chinchwad	1.74	2.47	0.54	0.77	2.73	37.15	23.14	13.75	6.99	10.71

Source: Census of India 2001

Appendix: 5.10

Industrial Distribution of Female Marginal Workers in Metro Cities (2001)

Metro Cities	Industrial Classification									
	I	II	III	IV	Va	Vb	VI	VII	VIII	IX
Common Million Cities between 1991 and 2001										
Greater Mumbai	0.30	0.42	1.27	0.16	21.37	17.08	5.76	10.64	1.26	41.73
DMC(U)	0.34	0.66	0.78	0.05	12.11	21.80	9.19	11.22	1.09	42.76
Kolkata	0.89	0.95	0.39	0.03	15.02	11.90	1.06	12.51	0.79	56.45
Chennai	0.97	1.17	0.15	0.05	13.73	20.81	8.82	10.52	1.66	42.11
Hyderabad	3.91	1.33	0.32	0.05	7.92	11.82	5.51	13.56	1.21	54.37
Ahmedabad	2.27	6.92	1.22	0.00	42.38	8.02	7.03	7.62	0.87	23.66
Bangalore	3.03	2.62	0.16	0.20	12.29	7.35	13.32	14.16	1.08	45.78
Kanpur	1.44	7.17	0.91	0.10	20.55	7.83	10.36	9.34	0.81	41.50
Nagpur	7.92	1.35	1.16	0.00	17.37	16.22	1.16	10.62	1.16	43.05
Lucknow	0.52	1.60	1.26	0.16	39.00	12.66	3.74	12.07	0.43	28.56
Pune	7.92	7.24	3.43	0.13	19.16	21.25	12.53	7.39	0.72	20.23
Surat	0.79	6.09	0.79	0.03	16.39	14.35	12.24	8.67	2.01	38.63
Jaipur	0.38	3.14	1.64	0.15	20.84	11.64	16.23	9.68	1.71	34.59
Indore	0.66	2.42	0.36	0.16	13.78	23.89	17.58	11.14	1.88	28.12
Bhopal	0.46	5.81	1.00	0.52	10.74	16.14	22.62	8.23	0.65	33.82
Ludhiana	1.43	2.29	0.49	0.11	20.37	22.06	2.20	8.97	0.53	41.54
Vadodara	5.23	12.68	2.72	0.00	17.18	12.64	3.56	10.68	0.76	34.54
Kalyan-Dombivali	0.45	3.83	0.75	0.00	17.21	10.44	5.42	14.61	0.88	46.40
Cities which have acheived million plus population during 1991 and 2001										
Patna	5.99	1.95	0.85	0.05	16.57	12.39	11.17	9.50	0.97	40.56
Thane	3.54	6.49	0.46	0.04	27.81	8.58	2.67	9.79	0.48	40.15
Agra	9.71	7.55	0.19	0.02	19.68	15.96	7.37	9.79	1.27	28.44
Varanasi	1.13	3.46	0.81	0.03	57.95	8.40	1.63	6.30	0.23	20.06
Nashik	6.28	16.78	0.74	0.00	17.43	8.96	10.77	10.73	0.92	27.39
Meerut	1.87	20.43	2.96	0.00	18.14	11.67	5.97	6.70	0.96	31.31
Faridabad	4.71	3.49	3.98	1.27	14.98	16.28	10.01	10.25	0.78	34.26
Haora	0.77	0.31	0.29	0.04	11.83	21.35	1.74	9.52	0.83	53.33
Pimpri Chinchwad	4.70	12.95	0.52	0.20	17.46	14.74	19.11	8.37	1.40	20.56

Source: Census of India 2001

Appendix: 5.11

Percentage of Usually Employed males and females aged 15 and above acording to principal and subsidiary status taken together (1993-94 to 2004-05)

	Percentage of Usually Employed males and females					
	1993-94		1991-2000		2004-05	
Million plus Cities	Male	Female	Male	Female	Male	Female
Ahmedabad	76.4	19.6	77.70	20.40	79.50	21.40
Bangalore	76.3	16.2	74.70	23.20	84.10	20.20
Bhopal	68.5	17.6	72.20	15.10	78.20	15.10
Chennai	77.3	22.7	76.40	26.00	74.90	16.80
Delhi	79.6	13.2	74.30	14.70	71.40	11.20
Hyderabad	75	16.4	68.20	15.50	77.00	19.00
Indore	75.3	23.5	76.10	19.90	83.50	28.30
Jaipur	72	12.8	70.10	10.80	76.60	37.70
Kalyan-Dombivili (Thane)	74.2	16.5	71.50	16.70	73.00	20.30
Kanpur	55.8	13.1	69.90	15.40	77.60	7.70
Kolkata	80.3	18.3	78.00	18.70	75.10	19.00
Lucknow	75.9	8.2	77.20	14.90	69.50	9.30
Ludhiana	88.3	10.4	84.10	13.90	83.40	12.80
Mumbai	77.3	22.1	75.30	17.40	78.60	26.70
Nagpur	72.7	21.2	69.70	15.40	72.00	28.90
Pune	69.9	26.1	72.60	22.00	71.20	29.10
Surat	77.3	23.1	76.50	5.50	87.60	18.20
Vadodara	87.9	11.6	73.60	24.60	71.70	19.70

Compiled from various Reports of National Sample Survey

Appendix: 5.12

Percentage Distribution of Usually Employed (ps+ss) Male and Female aged 15 years and above by Stats of Employment (1993-94)

	Status of Employment					
	Male			Female		
Million plus Cities	Self Employed	Regular/Wage / Salaried	Casual Labourers	Self Employed	Regular/Wage / Salaried	Casual Labourers
Ahmedabad	35.6	51.3	13.1	43.9	27.0	29.1
Bangalore	31.8	53.5	14.7	29.6	62.3	8.1
Bhopal	27.6	59.3	13.1	20.5	50.9	28.6
Chennai	29.0	46.4	24.6	13.3	63.7	23.0
Delhi	44.1	45.2	10.7	24.2	57.6	18.2
Hyderabad	31.3	55.5	13.2	21.2	47.9	30.9
Indore	42.1	39.6	18.3	49.8	26.0	24.2
Jaipur	36.4	60.7	2.9	46.9	53.1	0.0
Kalyan-Dombivili (Thane)	24.7	65.9	9.4	16.4	69.7	13.9
Kanpur	47.0	48.2	4.8	36.6	58.0	5.4
Kolkata	33.9	54.4	11.7	28.4	62.3	9.3
Lucknow	44.3	48.9	6.8	40.2	40.2	19.6
Ludhiana	38.6	43.4	18.0	51.9	37.5	10.6
Mumbai	35.2	65.4	2.1	27.6	69.2	3.2
Nagpur	38.8	44.8	16.4	38.5	36.2	25.3
Pune	33.3	61.3	5.4	27.7	60.0	12.3
Surat	31.6	53.7	14.7	42.9	33.3	13.8
Vadodara	22.1	72.2	5.7	24.1	40.4	34.5

Source: National Sample Survey Report 50th round, 1993-94

Appendix: 5.13

Percentage Distribution of Usually Employed (ps+ss) Male and Female aged 15 years and above by Stats of Employment (1999-2000)

	Status of Employment					
	Male			Female		
Million plusCities	Self Employed	Regular/Wage / Salaried	Casual Labourers	Self Employed	Regular/Wage / Salaried	Casual Labourers
Ahmedabad	36.9	34.0	29.1	62.7	22.5	14.7
Bangalore	27.2	58.2	14.6	25.0	58.6	16.8
Bhopal	37.7	45.4	17.0	47.0	27.8	25.8
Chennai	29.3	49.1	21.5	27.3	61.9	11.2
Delhi	43.5	54.0	2.6	31.3	64.6	4.1
Hyderabad	35.8	49.9	14.5	21.9	39.4	38.7
Indore	42.8	41.4	15.8	33.2	52.3	14.6
Jaipur	38.5	55.6	5.8	38.0	54.6	7.4
Kalyan-Dombiviii (Thane)	28.1	64.9	7.0	41.9	44.9	13.8
Kanpur	39.6	46.2	14.2	51.3	46.8	2.6
Kolkata	44.4	40.6	15.0	29.9	54.5	15.0
Lucknow	46.0	35.9	18.3	68.5	13.4	18.1
Ludhiana	35.0	49.7	15.3	6.5	86.3	7.2
Mumbai	29.2	67.9	3.1	25.9	69.0	5.2
Nagpur	37.9	39.6	22.5	38.3	31.8	29.2
Pune	46.1	46.8	7.2	44.1	49.1	6.8
Surat	44.4	29.7	26.0	5.5	41.8	52.7
Vadodara	22.0	62.6	15.4	27.6	23.2	49.2

Source: National Sample Survey Report 50th round, 1999-2000

Appendix: 5.14

Percentage Distribution of Usually Employed (ps+ss) Male and Female aged 15 years and above by Stats of Employment (2004-05)

	Status of Employment					
	Male			Female		
Million plusCities	Self Employed	Regular/Wage / Salaried	Casual Labourers	Self Employed	Regular/Wage / Salaried	Casual Labourers
Ahmedabad	37	53	11	39	30	31
Bangalore	35	46	19	24	67	9
Bhopal	53	41	5	27	74	0
Chennai	35	55	10	23	76	1
Delhi	37	59	4	16	80	4
Hyderabad	45	43	13	32	54	14
Indore	52	39	9	58	34	8
Jaipur	52	47	8	80	17	3
Kalyan-Dombiviii (Thane)	31	68	1	34	57	9
Kanpur	44	43	13	39	52	9
Kolkata	37	44	20	52	44	4
Lucknow	41	53	6	15	81	4
Ludhiana	35	60	5	40	51	9
Mumbai	40	52	8	29	69	2
Nagpur	42	42	16	38	37	26
Pune	29	60	11	24	63	13
Surat	29	68	2	33	37	30
Vadodara	41	57	2	36	59	5

Source: National Sample Survey Report 50th round, 1999-2000

Appendix: 5.15

Distribution of Usually 'working' (ps+ss) Persons of age 15 and above by Broad Industry Division (NIC-98 code) (1999-2000)

(in percentage)

	Industrial Categories									
Million plus cites	(01-05)	(10-14)	(15-37)	(40,41)	45	(50-55)	(60-64)	(65-93)	95	99
Agra	0.4	0	44.7	1.7	3.1	27.9	4.9	14.9	2.4	0
Ahmedabad	1.7	0.4	32.1	0	6.2	33.3	9.6	16.3	0.3	0
Bangalore	1.1	0	32.3	0.4	11.4	20.3	7.3	26.5	0.7	0
Bhopal	3.8	0	13.1	0	16.8	28.1	15.2	21.1	2	0
Chennai	0.9	0	25.9	0.4	8.5	21.9	11.9	22	8.4	0
Delhi	1.2	0	24.4	0.4	3.7	29.7	6.4	30.2	3.6	0.3
Howrah	0	0	38.9	1.5	1.4	31.4	8	17.4	1.5	0
Hyderabad	0.4	0.1	11.8	0.7	14.9	29.8	12.3	28.8	1.2	0
Indore	7.8	0.2	25.2	0.5	6.3	23.2	9.1	27.6	0.1	0
Jaipur	3.2	0	19.1	0.5	5.8	19.1	5.3	45.1	1.8	0
Kalyan-Dombivili	0.2	0	31	0.5	10.9	18.7	15.1	22.5	1	0
Kanpur	0.3	0	27.9	0.1	2.4	28.6	12.6	26.2	1.9	0
Kolkata	0.3	0.1	21.7	0.4	4.1	28.3	13.2	24.5	7.3	0
Lucknow	4.9	0	14.1	0.4	4.6	31.3	12.6	31.1	1.1	0
Ludhiana	0.1	0	49.5	0.2	5.3	21.5	9.8	12.1	1.4	0
Mumbai	1.2	0	25.3	0.3	6.1	25.3	11.7	24.6	5.4	0
Nagpur	0.6	0.8	15.4	0.3	10.6	36.3	17.6	18.2	0.2	0
Patna	3.1	0	35.9	0.6	3.4	18.5	1.7	31.2	5.6	0
Pune	1.8	0	21.4	0	5.2	24.6	11.3	31.7	3.9	0
Surat	0	0	53.5	0	7.1	24.1	4.6	10.5	0.1	0
Thane	0	0	40.3	0	6.9	18.2	7.7	25.2	1.6	0
Vadodara	0	0	31.4	1.9	4.7	20.7	4.2	37.1	0	0
Varanasi	0.8	0	42.1	0	3.1	32.9	5.1	16	0	0

Source: National Sample Survey Report, 61st Round, 1999-2000

Appendix: 5.16

Distribution of Usually 'working' (ps+ss) Males of age 15 and above by Broad Industry Division (NIC-98 code) (1999-2000)

(in percentage)

	Industrial Categories									
Million plus cites	(01-05)	(10-14)	(15-37)	(40,41)	45	(50-55)	(60-64)	(65-93)	95	99
Agra	0.3	0	46.7	1.9	3.4	29.1	5.5	13.1	0	0
Ahmedabad	1.3	0.5	32.3	0.1	7.5	34.2	10.4	13.2	0.4	0
Bangalore	1.2	0	29.8	0.6	12.8	23.7	9.3	22.8	0	0
Bhopal	2.7	0	12.9	0	16.4	29.1	18.2	20.4	0.4	0
Chennai	1	0	25.1	0.4	10.3	24.3	14.5	20.2	4	0
Delhi	0.6	0	25.3	0.3	4.3	33.3	7.3	25.3	3.3	0.4
Howrah	0	0	40.5	1.6	1.3	31.5	8.4	16.3	0.5	0
Hyderabad	0.5	0.1	12.5	0.8	13.1	32.2	14.2	25.8	0.8	0
Indore	8	0.3	23.7	0.6	6.8	25.1	10.6	25	0	0
Jaipur	0.7	0	20.6	0.6	6.2	20.8	5.8	43.2	2	0
Kalyan-Dombivili	0.3	0	32.4	0.6	12.7	16.6	15.6	21.2	0.5	0
Kanpur	0.2	0	31.9	0.1	2.7	32.9	14.6	16.4	1.3	0
Kolkata	0.3	0.1	23.8	0.5	5	30.4	15.6	21.2	3	0
Lucknow	3.2	0	12.3	0.5	5.4	35	13.8	28.8	0.9	0
Ludhiana	0.1	0	48.6	0.2	5.8	23	10.8	10.1	1.4	0
Mumbai	1.2	0	26.5	0.4	7	27	13.2	21.8	2.9	0
Nagpur	0.7	0.9	16.5	0.4	11.8	36.2	20.3	13.2	0	0
Patna	3	0	37.9	0.6	3.2	19.9	1.9	33.4	0.1	0
Pune	1.4	0	22.6	0	6.8	24.6	13.9	30.3	0.5	0
Surat	0	0	55.2	0	7	25.4	4.6	7.7	0	0
Thane	0	0	45.2	0	8.7	17.6	9	19	0.5	0
Vadodara	0	0	40.9	2.5	6.2	21.2	4.9	24.4	0	0
Varanasi	0.7	0	39.4	0	3	37.4	6.3	13.2	0	0

Source: National Sample Survey Report, 61st Round, 1999-2000

Appendix: 5.17

Distribution of Usually 'working' (ps+ss) Female of age 15 and above by Broad Industry Division (NIC-98 code) (1999-2000)

(in percentage)

	Industrial Categories									
Million plus cites	(01-05)	(10-14)	(15-37)	(40,41)	45	(50-55)	(60-64)	(65-93)	95	99
Agra	1.3	0	29.7	0	1.3	18.9	0	28.4	20.3	0
Ahmedabad	3.4	0	31.2	0	0.3	29	6.1	30	0	0
Bangalore	0.9	0	39.9	0	7.3	10.1	1.1	37.8	2.8	0
Bhopal	9.5	0	14.1	0	18.4	23	0	24.6	10.4	0
Chennai	0.7	0	28.5	0.2	2.9	14.2	3.3	27.6	22.5	0
Delhi	5.1	0	18.9	1	0	8.7	1.6	59.4	5.3	0
Howrah	0	0	18.2	0	3	29.4	3.4	31.7	14.3	0
Hyderabad	0	0	8.7	0	23.5	18.4	3.3	43	3	0
Indore	7	0	31	0	4.7	16.1	3.2	37.5	0.4	0
Jaipur	24	0	6.7	0	2.2	4.7	1.4	61	0	0
Kalyan-Dombivili	0	0	23.6	0	1.3	29.8	12.5	29.5	3.2	0
Kanpur	0.8	0	6.7	0	0.7	5.5	2.2	78.6	5.6	0
Kolkata	0	0	11.7	0	0.2	18.1	1.9	40.4	27.7	0
Lucknow	14.5	0	24.9	0	0	9.3	5.3	44.2	1.9	0
Ludhiana	0	0	58.6	0.7	0.6	7.3	0.4	30.6	2	0
Mumbai	0.9	0.3	18.6	0	1.7	16.7	3.8	39.4	18.7	0
Nagpur	0.5	0	10.1	0	5.5	36.5	5.3	40.9	1.1	0
Patna	4.2	0	21.4	0	4.5	8.2	0	15.4	46.4	0
Pune	3.2	0	17.5	0	0	24.5	2.7	36.5	15.5	0
Surat	0	0	28.2	0	7.8	4.2	5.2	52.4	2.3	0
Thane	0	0	21.5	0	0	20.4	3.1	49	6.1	0
Vadodara	0	0	1.3	0	0	19.4	2	77.3	0	0
Varanasi	1.5	0	53.9	0	3.5	12.9	0	28.2	0	0

Source: National Sample Survey Report, 61st Round, 1999-2000

Appendix: 5.18

Distribution of Usually 'working' (ps+ss) Person of age 15 and above by Broad Industry Division (NIC-98 code) (2004-05)

(in percentage)

	Industrial Categories									
Million plus cites	(01-05)	(10-14)	(15-37)	(40,41)	45	(50-55)	(60-64)	(65-93)	95	99
Agra	0	0	31	0	9	27	4	29	0	0
Ahmedabad	0	0	40	1	10	20	9	17	2	0
Bangalore	1	0	21	1	12	29	9	23	5	0
Bhopal	3	0	15	1	3	33	10	28	7	0
Chennai	0	0	25	1	6	21	9	33	4	0
Delhi	0	0	24	0	5	29	8	30	3	0
Howrah	0	0	30	2	3	22	14	23	5	0
Hyderabad	6	0	17	0	9	24	15	21	8	0
Indore	5	0	30	0	7	27	7	24	0	0
Jaipur	16	0	28	4	13	9	8	22	0	0
Kalyan-Dombivili	0	0	28	0	7	16	15	33	1	0
Kanpur	0	0	32	0	3	32	10	24	1	0
Kolkata	1	0	24	1	7	22	9	27	9	0
Lucknow	0	0	12	2	9	27	11	39	1	0
Ludhiana	2	0	51	0	5	23	6	11	2	0
Mumbai	0	0	28	0	6	24	11	24	7	0
Nagpur	2	3	25	3	8	23	6	24	5	0
Patna	7	0	9	0	10	38	10	22	4	0
Pune	2	0	21	0	12	21	12	24	9	0
Surat	1	0	54	0	6	25	3	8	3	0
Thane	0	0	20	1	5	25	11	32	6	0
Vadodara	1	1	26	0	11	19	11	27	6	0
Varanasi	0	0	69	0	2	19	4	6	0	0

Source: National Sample Survey Report, 61st Round, 2004-05

Appendix: 5.19

Distribution of Usually 'working' (ps+ss) Males of age 15 and above by Broad Industry Division (NIC-98 code) (2004-05)

(in percentage)

	Industrial Categories									
Million plus cites	(01-05)	(10-14)	(15-37)	(40,41)	45	(50-55)	(60-64)	(65-93)	95	99
Agra	0	0	32	0	8	30	5	25	0	0
Ahmedabad	0	0	40	1	8	23	11	15	1	0
Bangalore	1	0	19	1	14	31	10	23	1	0
Bhopal	1	0	15	1	4	39	12	27	2	0
Chennai	0	0	28	1	7	22	11	29	1	0
Delhi	0	0	26	0	5	32	9	27	1	0
Howrah	0	0	33	3	3	24	16	21	0	0
Hyderabad	7	0	19	0	11	25	17	19	2	0
Indore	4	0	28	0	8	31	9	20	0	0
Jaipur	10	0	16	5	17	14	12	25	1	0
Kalyan-Dombivili	0	0	26	0	8	18	18	30	0	0
Kanpur	0	1	34	0	3	31	10	22	0	0
Kolkata	1	0	24	1	9	24	11	24	7	0
Lucknow	0	0	12	2	10	30	12	35	0	0
Ludhiana	2	0	51	0	5	25	6	11	1	0
Mumbai	0	0	28	0	7	29	13	20	3	0
Nagpur	3	4	22	4	10	28	7	20	1	0
Patna	8	0	9	0	10	39	10	20	5	0
Pune	1	0	22	0	12	24	16	24	2	0
Surat	1	0	55	0	7	25	4	8	0	0
Thane	0	0	22	1	6	30	14	25	3	0
Vadodara	0	1	31	0	11	19	12	26	0	0
Varanasi	0	0	62	0	3	23	5	8	0	0

Source: National Sample Survey Report, 61st Round, 2004-05

Appendix: 5.20

Distribution of Usually 'working' (ps+ss) Females of age 15 and above by Broad Industry Division (NIC-98 code) (2004-05)

(in percentage)

	Industrial Categories									
Million plus cites	(01-05)	(10-14)	(15-37)	(40,41)	45	(50-55)	(60-64)	(65-93)	95	99
Agra	0	0	20	0	13	11	0	55	1	0
Ahmedabad	0	0	40	0	18	11	0	25	6	0
Bangalore	0	0	30	0	2	16	6	22	26	0
Bhopal	9	0	18	0	0	0	0	39	35	0
Chennai	0	0	12	0	0	16	0	51	20	0
Delhi	0	0	11	0	3	8	3	56	20	0
Howrah	0	0	19	0	0	17	3	32	30	0
Hyderabad	3	0	10	0	4	17	8	29	29	0
Indore	8	0	37	0	3	17	0	34	1	0
Jaipur	29	0	52	1	3	0	0	15	0	0
Kalyan-Dombivili	0	0	35	0	6	9	1	44	6	0
Kanpur	0	0	13	0	0	36	0	46	5	0
Kolkata	2	0	24	0	0	9	0	45	21	0
Lucknow	0	0	15	0	0	4	0	75	6	0
Ludhiana	1	0	55	0	0	12	2	16	15	0
Mumbai	0	0	30	0	1	7	5	36	21	0
Nagpur	0	1	35	0	5	10	3	34	14	0
Patna	0	0	20	0	0	0	0	80	0	0
Pune	3	0	20	0	11	12	1	25	28	0
Surat	1	0	44	0	0	24	0	6	25	0
Thane	0	0	10	0	0	9	0	61	20	0
Vadodara	2	0	9	0	12	16	5	32	24	0
Varanasi	0	0	88	0	0	10	0	2	1	0

Source: National Sample Survey Report, 61st Round, 2004-05

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