Urbanization in India:

Evidence on Agglomeration Economies

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1. Introduction

In the process of economic development urbanization and industrialization share a close nexus - not only industrialization leads to urbanization but also urbanization has productivity-augmenting effects on industry (Mills and Becker, 1986; Krugman, 1991; Fujita and Thisse, 2003; Kuchiki, 2005). As per Kuznets (1966), agriculture lost its share both in terms of value added and work force in the process of economic growth in the historical context of the present day developed nations. On the other hand, it is the industry which resulted in faster economic growth, and concentration of population and activities led to urbanization. When production was predominantly agricultural in pre-industrial society, it occurred outside the cities. This pattern got reversed as the industrial revolution progressed - manufacturing production emerged as the major activity occurring in inner city areas (Brotchie, Newton, Hall and Nijkamp, 1985). On the whole, economic development not only caused a shift in the composition of growth and occupational structure but also manifested itself in terms of locational shift of population. Thus upward income mobility involving locational (rural-urban), occupational and industrial shifts of the individuals and their incomes along with progressively better economic opportunities is considered to be one of the most important features of economic growth. It is the urban economy which is usually supposed to provide opportunities for raising productivity by generating employment in the high productivity industrial sector and contributing towards eradicating abject poverty (Mills and Becker,

1986). However, the economy wide consequences of excess supplies of labour in relation to demand are manifested in the form of open unemployment, underemployment and low productivity leading to abject poverty that is characteristic of a sizeable proportion of population in the cities. The rapid spread of slums resulting not merely from the shortage of housing but also from the low earnings of the workers engaged in low productivity activities has become an endemic feature of the urbanization process in developing countries.

In the backdrop of this perspective we examine the urbanization pattern in the Indian context. The organization of the paper is as follows. The following section deals with various demographic aspects of urbanization. Section 3 focuses on the two important strands of research on urbanization. The characteristics and the structure of class 1 cities which are considered to be the most dynamic component in the urban world are examined in section 4. Section 5 deciphers some of the findings on poverty and slums based on the micro surveys. Finally the policy issues are considered in section 6.

2. Urbanisation in India: Demographic Aspects

The level of urbanization in the Indian context unlike the historical experience of several developed countries at comparable levels of per capita income and growth has been quite low. It increased sluggishly from17.29 per cent in 1951 to 27.76 per cent in 2001 (Table 1). However, the rate of growth of urban population has been quite high notwithstanding a nominal increase in the per cent urban (Table 2). Demographers are quite concerned about this high rate of growth of urban population as it tends to create significant pressure on the infrastructure base. The number of cities and towns has also gone up considerably over the years.

Table 1: Urbanization Level and Urban Growth

Year	% Urban	No. of Cities or Towns	Rate of Growth of Pop in Urban Areas	Rate of Growth of Pop in All Areas
1951	17.29	3035		
1961	17.97	2657	2.37	1.97
1971	19.91	3081	3.29	2.24
1981	23.34	3981	3.87	2.23
1991	25.70	4615	3.16	2.16
2001	27.79	5161	2.75	1.97

Note: 1981 and 1991 figures include interpolated population estimates for Assam and Jammu and Kashmir respectively.
Source: Census of India, 2001. See Premi (2006).

Though the number of cities and towns went up steadily, urban population in India is concentrated in big cities. For example, the class 1 cities (each with a population of 100,000 and above) constituted around half of the total urban population and their share went up steadily to around 68 per cent in 2001. Further, 37.8 per cent of the total urban population lived in 35 metropolises (each with a population of I million and above). All this tends to suggest a highly unequal size distribution of urban population, i.e., large cities account for a large percentage of the urban population.

Components of Urban Growth

Population in the urban areas expands due to the following three factors: natural growth of population, rural to urban migration and reclassification of rural areas as urban in course of time. Around two-fifth of the total urban growth in the Third World is accounted by the rural-to-urban migration (Gugler, 1988). The process can be identified

as ‘over-urbanisation’ as long as (a) rural-urban migration leads to a misallocation of labour between rural and urban sectors in the sense that it raises urban unemployment, underemployment and poverty, and (b) rural-urban migration increases the social cost for providing for a country’s growing population (Gugler, 1988).

With a significant fall in the mortality rate, the natural growth of urban population has been high thus raising the long run supply of labour substantially. In fact, in developing countries the natural growth of urban population is not significantly lower than its rural counterpart although fertility rate declined considerably in most of the developed countries because of significant changes in the socio-economic life styles of the urban population. In the Indian case although the urban birth and death rates are found to be much lower than their rural counterparts for the periods 1971-80 and 1981-89, the urban rates of natural increase were only marginally lower than the rural rates. As can be seen from Table 2 much of the urban growth continues to be due to natural growth of population. Even during 1991-2001 natural growth played a major role in stepping up the urban growth though over time this component has shown signs of decline.

Around one-fifth of the urban growth is accounted by rural to urban net migration. There was a continuous rise in the contribution of net migration to total urban growth since the sixties though between 1991 and 2001 there has been a slight decline in the rate compared to the previous decade (Table 2).

Table 2: Decomposition of Urban Growth

Components of Urban Growth	1961-71	1971-81	1981-1991	1991-2001
1. Natural Increase	64.6	51.3	61.3	59.4
2. a. Population of new towns or less declassified towns	13.8	14.8	9.4	6.2

b. Increase due to expansion in urban areas and merging of towns	2.9	14.2	7.6	13.0
3. Net Migration	18.7	19.6	21.7	21.0

Source: Based on population census data; see Kundu (2007).

Rural to Urban Migration

The definition of migration based on the last residence concept of migration refers in our analysis to those who migrated in ten years (1991-2001) preceding the year of survey 2001. The gross decadal inflow of rural to urban migrants as a percentage of total urban population in 2001 turns out to be a little above 7 per cent at the all-India level (Table 3). However, it varies considerably across states (Table 3a). Both industrialized states like Gujarat and Maharashtra and the backward states like Orissa and Madhya Pradesh show high rates of migration. Similarly examples can be found from both the types of states which have recorded sluggish migration rate, e.g. industrialized states such as Tamil Nadu and West Bengal and backward states such as Uttar Pradesh, Bihar and Rajasthan Hence, it is not possible at this stage to draw any clear-cut conclusion regarding the magnitude of the migration rate in relation to the nature of the states.

Table 3: Total Gross Decadal Rural to Urban Migrants as a % of Total Urban Population in 2001

States	R-U Migrants (1991-2001) as a % of Urban Population
Andhra Pradesh	6.72
Assam	7.12
Bihar	6.28
Gujarat	10.63
Haryana	11.45
Karnataka	7.03
Kerala	6.99
Madhya Pradesh	9.50
Maharashtra	10.41
Orissa	10.97
Punjab	7.63
Rajasthan	6.18

Tamil Nadu	3.34
Utter Pradesh	4.44
West Bengal	4.83
All India	7.32

Note: Migration is defined as the gross decadal (1991-2001) inflow of intra- and inter-state rural to urban migration (based on the last residence concept) as a percentage of total urban population (2001). Bihar includes Jharkhand, Madhya Pradesh includes Chhattisgarh and Uttar Pradesh includes Uttaranchal.
Source: Census of India 2001, Migration Tables.

Table 3a: Gross Decadal Intra and Inter State Migration of Males and Females as a % of Total Male and Female Urban Population in 2001

State	Intra-State Male	Intra-State Female	Inter-State Male	Inter-State Female	Intra+Inter State Male	Intra+Inter State Female
ANDHRA PRADESH	6.11	6.59	0.39	0.34	6.5	6.93
ARUNACHAL PRADESH	13.39	14.82	7.67	7.17	21.06	21.99
ASSAM	5.75	6.22	1.25	0.93	7.01	7.15
BIHAR	4.14	6.83	0.42	0.7	4.56	7.53
CHHATTISGARH	6.58	8.64	2.22	2.38	8.8	11.02
GUJARAT	6.78	8.33	3.89	2.21	10.67	10.54
HARYANA	4.56	6.72	6.09	5.38	10.65	12.09
HIMACHAL PRADESH	13.37	14.48	8.09	4.65	21.46	19.13
JAMMU & KASHMIR	3.03	3.29	1.46	1.48	4.49	4.77
JHARKHAND	2.71	3.93	3.02	3.8	5.73	7.73
KARNATAKA	5.38	6.16	1.36	1.16	6.74	7.32
KERALA	4.81	8.06	0.6	0.4	5.41	8.46
MADHYA PRADESH	5.09	6.95	1.26	1.56	6.35	8.51
MAHARASHTRA	5.83	7.18	4.77	2.92	10.6	10.09
MEGHALAYA	2.26	2.51	2.08	1.47	4.34	3.98
MIZORAM	7.08	7.7	2.28	1.15	9.36	8.85
NAGALAND	4.11	3.91	3.34	2.53	7.45	6.44
ORISSA	9.44	10.31	1.1	1.1	10.54	11.41
PUNJAB	2.58	4.76	4.8	2.88	7.38	7.64
RAJASTHAN	4.17	5.92	1.15	1.18	5.32	7.1
SIKKIM	7.04	8.2	6.26	5.23	13.31	13.42
TAMIL NADU	2.78	3.44	0.22	0.22	2.99	3.66
TRIPURA	6.18	8.37	0.4	0.38	6.58	8.75
UTTAR PRADESH	2.66	4.33	0.59	0.64	3.25	4.97
UTTARANCHAL	5.43	6.04	4.24	4.18	9.67	10.22
WEST BENGAL	2.45	4.23	1.43	1.11	3.88	5.34
ANDAMAN & NICOBAR	4.43	4.89	8.81	6.75	13.24	11.65

CHANDIGARH	0.12	0.1	13.99	12.79	14.11	12.89
DADRA & NAGAR HAVELI	0.35	0.31	29.15	19.98	29.5	20.29
DAMAN & DIU	0.24	0.2	8.89	5.96	9.12	6.16
DELHI	0.09	0.14	11.25	9.43	11.34	9.57
GOA	4.4	6.67	6.7	5.46	11.1	12.13
LAKSHADWEEP	11.16	9.56	3.38	0.61	14.54	10.17
PONDICHERRY	1.68	1.86	4.88	6.2	6.55	8.06

Source: Based on Population Census, 2001.

3. Class I Cities in India: A Cross-sectional Profile

The definition of urban, particularly in the Indian context, seems to be quite broad and hence, it includes areas which still do not show any dynamism as the term urbanization would tend to imply. From Table 1 we observe that there are around 5161 cities and towns in India (2001 population census, Premi, 2006), and more than 190 towns were of population size less than 5000, accounting for less than 0.25 per cent of the total urban population (Kundu, 2007). On the other hand the class 1 cities, each with a population of 100,000 and above, were less than 10 per cent of the total urban centres in 2001 but constituted nearly 68 per cent of the total urban population (Kundu, 2007). One popular view which seems to be in circulation in the context of urbanization suggests that only class 1 cities be considered as representative of urban characteristics and dynamism. In this section we therefore carry out a detailed study of 380 class 1 cities/urban agglomerations (as per the 2001 population census) in order to comment on their characteristics and asses how vibrant Indian urbanization has been. In particular, we try to examine if large cities tend to offer higher well-being than the small and medium sized cities/towns. This is of course pursued in a very indirect manner by examining the

question whether large cities offer better employment opportunities and a better demographic profile.

Keeping in view the limitations of the data we focus here on a couple of variables which capture demographic, social and economic aspects. Among the class I cities population distribution again seems to be highly unequal: only six mega cities accounted for one-fifth of the total urban population (Premi, 2006). There is a clear cut positive relationship between the population size and the work participation rate, particularly that of males, possibly indicating that large cities offer greater work opportunities and hence, the worker to population ratio is higher in large cities than the rest (Tables 4a and 4b). Female literacy rate (among the population above six years) also indicates a positive relationship, mild though, with city size. On the other hand, household size tends to decline with city size. In terms of other demographic variables like female to male population ratio large cities, however, demonstrate a lower ratio which is possibly because of relatively higher magnitudes of single male in-migration to large cities compared to the small ones. The child-woman ratio however does not vary inversely with city size indicating the prevalence of high fertility behaviour of the Indian urban population (Table 4a).

The detailed information on employment structure is not available from the population census in the sense that several activities like non-household manufacturing, construction, trade and commerce, transport, storage and communication and community, social and personal services have been clubbed together. Only the activities like agriculture and household manufacturing have been reported separately. We may note that there is a positive association between city size and the relative size of the first group of activities,

which are expected to constitute more demand-induced employment than the others. Also, in response to literacy, this group of activities varies positively while household size tends to reduce it (Table 4b). All this would again tend to supplement the view that large cities possibly have more demand-induced employment than their small counterparts. The results of the factor analysis also corroborate these patterns (Table 5). Based on the cluster analysis which has been carried out on the data set for 380 class 1 cities/urban agglomerations around twenty groups can be identified. It is, however, quite difficult to decipher any pattern in relation to the geographic location of the cities.

Table 4a: City Size and Certain Key Variables

Indep. Var.	Dep Var: HHSZ	Dep Var: F/M Ratio	Dep Var: Child/ Woman	Dep Var: WPRM	Dep Var: WPRF	Dep Var: OTHACTM	Dep Var: OTHACTF	FLIT
POPSZ	-5.25e-08 (-1.78)[a]	-6.05e-06 (-2.67)*	-1.39e-09 (-0.79)	5.18e-07 (2.74)*	4.10e-08 (0.22)	5.31e-07 (2.33)*	1.20e-06 (2.46)*	5.42e-07 (1.69) [a]
Constant	5.36 (122.39)*	918.32 (272.51)*	0.272 (104.39)*	48.85 (173.72)*	10.67 (38.24)*	92.56 (271.93)*	82.57 (113.91)*	72.99 (153.1)*
R^2	0.01	0.02	0.001	0.02	0.0001	0.01	0.02	0.005

Note: No. of observation is 380. '* and a' stand for significance at 5 and 10 percent levels respectively. HHSZ is household size, F/M female-male ratio, Child/Woman is child-woman ratio, WPRM and WPRF are work participation rates among males and females respectively, POPSZ is population size of the city, MLIT and FLIT are literacy rates among the male and female population respectively, SCSTM and SCSTF are the percentage of scheduled caste population among males and females respectively, OTHACTM and OTHACTF are the percentage of male and female (respectively) work force engaged in activities other than agriculture and household manufacturing.
Source: Based on population census, 2001.

Table 4b: Determinants of Work Participation Rates and % of Work Force Engaged in Non-household Manufacturing, Trade and Commerce, Transport, Storage and Communication and Community, Social and Personal Services.

Indep. Var.	Dep Var: WPRM	Indep. Var.	Dep Var: OTHACTM	Indep. Var.	Dep Var: WPRF	Indep. Var.	Dep Var: OTHACTF
SCSTM	-0.064 (-1.85)	SCSTM	-0.03 (-0.81)	SCSTF	0.09 (3.31)*	SCSTF	0.16 (2.57)*

MLIT	0.199 (4.84)*		0.34 (6.05)*	FLIT	-0.002 (-0.06)	FLIT	0.67 (8.96)*
POPSZ	4.58e-07 (2.49)*	POPSZ	5.04e-07 (2.43)*	F/M	0.03 (6.59)*	F/M	-0.04 (-3.95)*
		HHSZ	-2.19 (-3.24)*	CHILD/ WOMAN	-33.05 (-4.83)*	CHILD/ WOMAN	-11.43 (-0.64)
		WPRM	-0.31 (-3.35)*			WPRF	-1.55 (-12.58)*
						POPSZ	4.09e-07 (1.15)
						HHSZ	-5.43 (-5.90)*
Constant	32.57 (9.22)*	Constant	90.85 (8.45)*	Constant	-6.32 (-1.02)	Constant	116.26 (7.97)*
R2	0.08		0.20		0.34		0.51

Note: No. of observation is 380. For variables' names and other notes see Table 4a.
Source: Based on population census, 2001.

Table 5: Results from Factor Analysis

Variables	**Factor 1**	**Factor 2**
HHSZ	-0.842	0.168
F/M	0.446	-0.378
CHILD/WOMAN	-0.813	0.186
MLIT	0.764	0.241
FLIT	0.825	0.176
WPRM	0.646	-0.386
WPRF	0.556	-0.465
OTHACTM	0.367	0.585
OTHACTF	0.327	0.659
SCSTM	0.178	0.563
SCSTF	0.193	0.570

Note: No. of observations: 380. % Explained: 54.09. For variables' names see Table 4a.
Source: Based on population census, 2001.

5. Poverty and Slums

The next issue relates to the well-being of the households. Whether urbanization helps reduce poverty or it is a manifestation of spill-over of rural poverty is a critical question. This prompted us to pursue research on two important aspects in the context of the low income households in the urban areas: one relates to poverty and well-being and the other

refers to change in the well-being of the low income households with a rise in the duration of migration.

On the aspect of poverty and well-being not much information is available at the city level from the secondary sources. Under the UNDP-sponsored project on urban poverty one survey was undertaken in four cities of different population size and economic activities (i.e. Jaipur, Ludhiana, Mathura and Ujjain)[1]. These cities were picked up from the list of sixty-four cities prepared specifically for the urban renewal mission (JNNURM). The primary survey enables us to comment on certain aspects of well-being of the slum dwellers in these four cities. While Jaipur and Ludhiana are two million plus cities Mathura and Ujjain are relatively small in size.

From the measurement point of view various dimensions of poverty rather than only income or consumption poverty need to be considered to assess well-being. However, we could consider only those dimensions which are quantifiable (Mitra, 2007). The following variables have been combined to construct the household specific well-being index: household size (HHSZ), child-woman ratio (CWR), per capita consumption expenditure[2] (PCE), proportion of persons in the household who reported illness (ILL), percentage of household members who acquired at least primary level education (PRIM), percentage of members in the age group 15 to 59, which is a proxy for adult potential earners (PER15-59), percentage of working individuals (WM), age of the household head/principal earner taken as a proxy for experience in the job market (AG), health expenditure per capita (HPC), and per capita household income (HHPCI). Variables such as household size, child-woman ratio, and the percentage of ill members in the

[1] This project and survey sponsored by UNDP-GOI were undertaken by the Institute of Economic Growth, Delhi.

[2] Excludes health expenditure.

household, are likely to reduce the well-being of the household. Health expenditure per capita on an *a priori* basis may raise the well-being of the household if it tends to enhance productivity. On the other, it may reduce well-being if it is incurred at the expense of consumption of essential items. On the other hand, other variables would be expected to enhance well-being. Since these variables are heterogeneous, it is difficult to combine them to indicate an overall living standard of the households. Hence, factor analysis was conducted, and using factor loadings as weights, variables were combined to generate a composite index of well-being, denoted as WELLINDEX(i). This was repeated for each of the significant factors (factors with eigenvalues greater than one):

$$WELLINDEX \quad (i) = \sum_{j=1}^{n} FLj\,(i)\,Xj$$

where, FL is the factor loading, j= 1…n corresponding to the number of variables, and i represents the ith significant factor.

In the second stage the composite indices generated on the basis of factor loadings for each of the significant factors were combined using the proportion of eigenvalues as weights:

$$WELLINDEX = \sum_{i=1}^{k}\left[\frac{EV(i)}{\sum EV(i)}\right] \quad WELLINDEX\,(i) \quad k \quad < \quad n$$

where, i ranges from 1 to k, the number of significant factors.

Using varimax rotation (in order to obtain statistically independent factors), results of the factor analysis suggest the presence of only one significant factor in each of the four cities (Table 8). The factor loading of household size takes a negative sign, which suggests that it reduces the well-being of the households. Household income per capita

and consumption expenditure per capita both take positive factor loadings though in terms of magnitude they are moderate like that of household size. On the higher side are child-woman ratio, percentage of household members in the age bracket 15 to 59 and proportion of the number of working members to the total household size. While the child-woman ratio reduces the well-being, the other two variables show a positive effect. Education, though highly moderate in terms of magnitude, shows a positive effect except in Jaipur. Health expenditure per capita also shows a positive effect though magnitude of the factor loadings is quite low.

Table 8 : Factor Loadings from the Significant Factor

Variables	Jaipur	Ludhiana	Mathura	Ujjain
HHSZ	-0.24249	-0.2870	-0.23875	-0.21306
PCE	0.31847	0.36047	0.39325	0.36662
PRIM	-0.09208	0.17426	0.14379	0.14023
HHPCI	0.34237	0.30792	0.28774	0.34142
HPC	0.04937	0.10	0.15056	0.10359
CWR	-0.65278	-0.84593	-0.81161	-0.79265
ILL	0.06632	0.0145	0.06734	0.03419
PER15-59	0.77230	0.78747	0.78868	0.77967
AG	0.16166	0.09205	0.20811	0.15901
WM	0.61494	0.43949	0.39971	0.32805
Eigenvalue	2.255 (22.55)	2.8278 (22.28)	2.484 (24.84)	2.4205 (24.205)

Note: Figures in parentheses represent the percentage of total variation explained by the significant factor.

The well-being index constructed on the basis of the factor loadings indicate that in Jaipur and Ludhiana 26 and 32 per cent of the slum households respectively are located in the bottom two size classes (Table 9). However, in Mathura and Ujjain, which are much smaller than the other two cities and also lack dynamism of growth, the corresponding figures are 57 and 61 per cent respectively. It is interesting to note that these figures are substantially lower than the incidence of consumption poverty, which is 66.8 per cent in Jaipur, 43.6 per cent in Ludhiana, 75 per cent in Mathura and 88.2 per cent in Ujjain. This would tend to suggest that even when consumption poverty is high

many other facilities which are available in the cities tend to improve the well-being of the population. Secondly, the well-being index even among the low income households seems to have a positive association with the city size and the nature of the city.

Table 9: Size Distribution of Households as per the Well-being Index

Size Class	Jaipur	Ludhiana	Mathura	Size Class	Ujjain
Upto 200	1.2	3.6	7.6	Upto 200	8
201-400	24.6	28.2	49.2	201-400	53
401-600	37.4	29.8	24	401-600	27.4
601-1000	27.8	25	14.2	601-800	8.8
1001-1500	6.6	9.2	3.6	800 and above	2.8
1501 and above	2.4	4.2	1.4		

The next issue is whether the well-being index improves with a rise in the duration of migration and whether the non-migrants or natives are better off compared to the migrants. In Jaipur, Ludhiana and Mathura migrants up to three years duration registered a high index of well-being – in fact, it is highest in Ludhiana and Mathura (Table 10). Excluding this group, the index tends to improve with the duration of migration in Jaipur, Ludhiana and Ujjain whereas in Mathura it shows a declining tendency after reaching a peak for those who have been staying for 7 to 10 years[3]. Thirdly, the well-being index of migrants of very long duration (15 years and above) is close to that of the non-migrants in Jaipur, Ludhiana and Mathura. It is only in Ujjain, the non-migrants show a lower index value compared to the migrants of 15 years duration and above. On the whole, over time migrants tend to improve their well-being at the place of destination. And hence, any attempt to stop migration to cities may turn out to be counter-productive other than being undemocratic. On the other hand, it is also clear that several of the long duration migrants

[3] The regression of well-being index on the duration of migration of the household head, carried out only for the migrant households excluding the non-migrants, shows that only in Ujjain there is a statistically significant and positive relationship between the two.

and the natives correspond to low level of well-being and high incidence of poverty. It is, therefore, essential to implement urban employment programmes without which urban poverty cannot be reduced. Since many of the urban poor are not fresh migrants it will not be sufficient to tackle this issue merely in terms of rural development programmes though anti-poverty programmes in the Indian context until recently recommended rural development programmes only.

Table 10: Well-being Index and Migration Status

Migration	**Jaipur**	**Ludhiana**	**Mathura**	**Ujjain**
Up to 3 years	616.23 (400.72)	1028.30 (456.20)	671.36 (335.79)	239.58 (10.19)
> 3 & up to 5 years	476.04 (115.03)	593.56 (354.30)	487.40 (381.04)	336.70 (121.08)
> 5 years & up to 7 years	733.80	469.30 (257.52)	342.80 (70.56)	358.24 (202.53)
> 7 year & up to 10 years	585.35 (585.35)	522.02 (285.25)	548.13 (424.32)	382.86 (205.65)
> 10 year & up to 15 years	561.10 (283.28)	576.04 (345.14)	324.34 (136.68)	401.33 (240.97)
Above 15 year	624.11 (300.81)	624.05 (414.63)	457.63 (280.03)	405.57 (174.65)
Non-migrants	598.19 (339.22)	622.01 (384.98)	449.92 (357.94)	364.47 (157.36)
Total	603.27 (323.72)	616.90 (395.27)	450.84 (306.64)	387.59 (173.89)

Figures in parentheses are standard deviations.

6. Urban Policy and JNNURM Cities

One of the most recent urban renewal mission known as Jawaharlal Nehru Urban Renewal Mission (JNNURM) which started in 2005-06 and will continue for seven years, has identified a group of sixty-three cities with the following objectives[4]: (a) focused

[4] Jawaharlal Nehru Urban Renewal Mission: Overview, Ministry of Urban Employment and Poverty Alleviation, Ministry of Urban Development, Government of India.

attention to integrated development of infrastructure services in cities covered under the Mission, (b) establishment of linkages between asset creation and asset management through a slew of reforms for long-term project sustainability, (c) ensuring adequate funds to meet the deficiencies in urban infrastructural services, (d) planned development of identified cities including peri-urban areas, outgrowths and urban corridors leading to dispersed urbanization (e) scale up delivery of civic amenities and provision of utilities with emphasis on universal access to the urban poor, (f) special focus on urban renewal programme for the old city areas to reduce congestion, and (g) provision of basic services to the urban poor including security of tenure at affordable prices, improved housing, water supply and sanitation, and ensuring delivery of other existing universal services of the government for education, health and social security. The programme aimed at providing housing to the urban poor near their place of occupation. Also, the basic services to the urban poor created in the cities are to be maintained efficiently and become self-sustaining over time by creating effective linkages between asset creation and asset management.

On the whole, JNNURM has two components: (a) sub-mission for urban infrastructure and governance and (b) sub-mission for basic services to the urban poor. The latter would include[5] integrated development of slums, i.e., housing and development of infrastructure projects in the slums in the identified cities; projects involving development/improvement/maintenance of basic services to the urban poor; slum improvement and rehabilitation projects; projects on water supply/sewerage/drainage, community toilets/baths etc.; houses at affordable costs for slum dwellers/ urban

[5] Modified Guidelines for JNNURM, Sub-Mission on Basic Services to the Urban Poor (BSUP), Jawaharlal Nehru Urban Renewal Mission: Overview, Ministry of Urban Employment and Poverty Alleviation, Ministry of Urban Development, Government of India.

poor/EWS/LIG categories; construction and improvements of drain/storm water drains; environmental improvement of slums and solid waste management; street lighting; civic amenities, like community halls, child care centers etc.; operation and maintenance of assets created under this component; and convergence of health, education and social security schemes for the urban poor.

The urban development ministry has recently prepared an agenda for action for urban local bodies for their better management[6]. The 21-point agenda includes suggestions for citizen charter, tips for improving basic services, assistance under central sector schemes, management of urban areas, revision of building bye-laws, use of IT, urban transport, financial system etc. As a step towards increasing own financial resources of ULBs the ministry has proposed that cities that meet specified criteria in terms of improving civic amenities will be given financial rewards under the JNNURM. More credit-worthy cities can tap the bond market directly whereas others could benefit from pooled finance.

JNNURM, however, does not include any specific programme on employment for the urban poor. Secondly, the number of cities to be included under the mission is extremely small. Though in the recent years urban employment schemes have been recommended under other programmes, its coverage is still quite limited while the national rural employment programmes have been debated and discussed in a major way in the country.

7. Conclusion

The urbanization level in India is quite moderate though the rate of urban growth has been rapid. The role of rural-to-urban migration in explaining urban growth is superceded by that of the natural growth of urban population. Sluggish increase in urbanization level does not seem to be contributing to development in a big way. However, the nexus

[6] Economic Times, June5, 2007.

between industry and urban is existent in the Indian context. Large cities seem to be more productive and industries in large urban centers are more efficient than in smaller centers of human habitation. More demand-induced employment opportunities are available in large cities which possibly grow in response to large quantum of investment undertaken therein. In terms of several socio-economic characteristics large cities seem to be better off. However, this does not mean that poor are able to access an easy entry to these cities. Land scarcity, legal restrictions on land, the politician-builder nexus and networks-based migration tend to reduce the accessibility of the poor to the labour market in large cities. As a result, urbanization in India does not seem to be inclusive in spite of the fact that the large cities account for a very large percentage of the total investment in all-urban areas.

Considerable overlaps exist between informal sector employment, poverty and slums which can be explained in excess-supply-limited-demand paradigm even when rural-to-urban migration is only moderate. This is because natural growth of population in the urban areas is very high. Though migrants in the very long run tend to improve their well-being in the place of destination, urban poor include not only fresh migrants but also residents who have spent considerable time in cities. All this points to the importance of urban employment programmes, though in reality they have not been implemented in any significant way. The recent urban renewal mission largely emphasizes the importance of basic amenities to the urban poor and infrastructure need of the cities. However, safety-net for the low productivity urban informal sector workers is essential for reducing the intensity and the incidence of urban poverty. Besides, improvement in health and educational support will tend to have long lasting effect on poverty.

References

Alonso, W. (1970), "The Economics of Urban Size", *Papers of the Regional Science Association 26.*

Banerjee, Biswajit, (1986), *Rural to Urban Migrationand the Urban Labour Market: A Case Study of Delhi***,** Himalaya Publishing House, Bombay.

Bhattacharya, B.B. and Arup Mitra (1991), Excess Growth of the Tertiary Sector: Issues and Implications, *Economic and Political Weekly*, No.3.

Bhattacharya and Mitra (1997), Changing Composition of Employment in Tertiary Sector: A Cross-Country Analysis, *Economic and Political Weekly***,** March 15.

Becker, C. and A. R. Morrison (1999), "Urbanisation in Transforming Economies", in P. Cheshire and E. S. Mills (eds.) *Handbook of Regional and Urban Economics*, Vol. 3 Applied Urban Economics, North-Holland.

Brotchie, J. P. Newton, P. Hall and P. Nijkamp, (1985), *The Future of Urban Form: The Impact of New Technology*, Routledge, London.

Carlino, G. A. (1979). Increasing returns to scale in metropolitan manufacturing. *Journal of Regional Science* 19, 363-373.

Carter, Thomas J.(1998), "Urban Productivity, Urban Unemployment, and Labour Market Policies", *Regional Science and Urban Economics* Vol. 28.

Cornwell, C. et al. (1990) "Production Frontiers with Cross-Sectional and Time Series Variation in Efficiency Levels", *Journal of Econometrics*, 46.

Dierx, A. H. (1990), "Intermetropolitan Transfer Costs and the Equilibrium Size of Metropolitan Areas," *Regional Science and Urban Economics*, 20.

Davis, K. and H. H. Golden, (1954), "Urbanisation and the Development of Pre-Industrial Areas", *Economic Development and Cultural Change*, Vol 3, No.1.

Fujita, M. and Thisse, J.-F. (2003). Does geographical agglomeration foster economic growth? And who gains and loses from it? *The Japanese Economic Review* 54, 121-145.

Futagami, K. and Ohkusa, Y. (2003). The quality ladder and product variety: Larger economies may not grow faster. *The Japanese Economic Review* 54, 336-351.

Gugler, J. (1988). "Over-Urbanisation Reconsidered" in J. Gugler (ed,) *The Urbanisation*

of Third World. Oxford University Press, Oxford.

Helsley, R.W. and W. C. Strange (1990), "Matching and Agglomeration Economies in a System of Cities," *Regional Science and Urban Economics*, 20.

Henderson, J. V. (1986). Efficiency of resource usage and city size. *Journal of Urban Economics* 19, 47-70.

Henderson, J. V. (1988). *Urban development: Theory, fact and illusion.* NY: Oxford University Press.

Henderson, J.V. (1974), "Sizes and Types of Cities", *American Economic Review*, Vol. 64.

Hermansen, T. (1972), "Development Poles and Related Theories: A Synoptic Review," in N. M. Hansen (ed.) *Growth Centers in Regional Economic Development*, The Free Press, New York.

Hoch, I. (1972), "Income and City Size", *Urban Studies* Vol. 9 (October).

Hoselitz, B. (1953) "The Role of Cities in the Economic Growth of Underdeveloped Countries", *Journal of Political Economy*, Vol. 61, No.3.

Kim, S. (1991), Heterogeneity of Labour Markets and City Size in an Open Spatial Economy, *Regional Science and Urban Economics*, Vol.21.

Kim, S. (1989), Labour Specialization and the Extent of the Market, Journal of Political Economy, Vol. Vol. 97.

Krugman, P. (1991), Increasing returns and economic geography. *Journal of Political Economy* 99, 483-499.

Kuchiki, A. (2005). Theory of a flowchart approach to industrial cluster policy. *Discussion Paper Series, Institute of Developing Economies-JETRO* No. 36.

Kundu, Amitabh (2006), Urbanisation and Urban Governance: Search for a Perspective Beyond Neo-Liberalism", in A. Shaw (ed.) Indian Cities in Transition, Orient Longman, Hyderabad.

Kuznets, S. (1966), *Modern Economic Growth: Rate, Structure and Spread*, New Haven, Yale University Press.

Meyer, D.R.(1998), "World Cities As Financial Centres", in F.-C. Lo and Y. M. Yeung (eds.) *Globalization and the World of Large Cities*, United Nations University Press, Tokyo.

Mills, E. S. (1967). An aggregate model of resource allocation in a metropolitan area. *American Economic Review* 57, 197-210.

Mills, E.S. and C.M. Becker (1986), *Studies in Indian Urban Development*, Oxford University Press, World Bank Research Publication

Mills, E. S. and B. W. Hamilton (1994**),** *Urban Economics*, 5th Ed. Glenview, IL: Scott Foresmen.

Mills, E. S. and Arup Mitra (1997), *Urban Development and Urban Ills*, Commonwealth Publishers, Delhi.

Mitra, Arup, (1994), *Urbanisation, Slums, Informal Sector Employment and Poverty: An Exploratory Study*, B. R. Publishing Corp.

Mitra, A. (1999). Agglomeration economies as manifested in technical efficiency at the firm level. *Journal of Urban Economics*, Vol. 45, 490-500.

Mitra, Arup (2000), "Total Factor Productivity Growth and Urbanization Economies: A Case of Indian Industries," *Review of Urban and Regional Development Studies*, Vol. 12.

Mitra, Arup, Aristomene Varoudakis and Marie-Ange Veganzones (2002), "Productivity and Technical Efficiency in Indian States' Manufacturing: The Role Infrastructure," *Economic Development and Cultural Change*, 50.

Mitra, Arup (2007), "Industry-Urban Nexus: The Role of Agglomeration Economies," in A. Shaw (ed.) Indian Cities in Transition, Orient Longman, Hyderabad.

Mohan, Rakesh, (1993), Industrial Location Policies and Their Implications for India, Paper No. 9, Ministry of Industry, Office of the Economic Adviser, Government of India.

Montogomery, M. R., Richard Stren, Barney Cohen and Holy E Reed (eds.) (2004), *Cities Transformed: Demographic Change and Its Implications in the Developing World*, Earthscan, London.

Moomaw, R. L. (1983). Is population scale a worthless surrogate for business agglomeration economies. *Regional Science and Urban Economics* 13, 525-545.

Mullen, J.K., M. Williams and R.L. Moomaw (1996), "Public Capital and Interstate Variations in Manufacturing Efficiency," *Journal of Policy Analysis and Management*, Vol. 15.

Nakamura, R. (1985). Agglomeration economies in urban manufacturing industries: A case of Japanese cities. *Journal of Urban Economics* 17, 108-124.

Papola, T. S. (1981). *Urban informal sector in a developing economy*. Vikas Publishing House.

Premi, M. K.(2006), *Population of India: In the New Millennium: Census 2001*, National Book Trust India, New Delhi.

Preston, S.H. (1988), "Urban Growth in Developing Countries: A Demographic Reappraisal," *Population and Development Review*, Vol.5.

Sachs, Jeffrey D., Nirupam Bajpai and Ananthi Ramiah (2002), "Understanding Regional Economic Growth in India," CID Working Paper No. 88, Center for International Development at Harvard University, March 2002.

Saith, A. (1981), "Production, Prices and Poverty in Rural India," *Journal of Development Studies*, Vol.17, No.2.

Segal, D. (1976). Are there returns of scale in city size. *Review of Economics and Statistics,* Vol. 58, 338-350.

Shefer, D. (1973), "Localization Economies in SMSAs: Production Function Analysis," *Journal of Regional Science,* 13.

Shukla, V. (1984). The productivity of Indian cities and some implications for development policy. Ph.D. dissertation: Department of Economics, Princeton University.

Sviekauskas, L. (1975). The productivity of cities. *Quarterly Journal of Economics,* Vol. 89, 393-413.

Sveikauskas, L., J. Gowdy and M. Funk (1988), "Urban Productivity: City Size or Industry Size," *Journal of Regional Science*, 28.

United Nations, (1994), *Population and Development*, Vol.1.

Willimason, J. (1988), "Migration and Urbanisation," in H. Chenery and T.N. Srinivasan (eds.) *Handbook of Development Economics*, Vol. I, Elsevier Science Publishers, B.V.