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Progress of Urban Literacy in India: Focus on Metropolises

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ABSTRACT

The present paper is an attempt to analyse the progress and disparities in literacy rate in Indian urban areas and metropolises. After Independence, there has been a remarkable growth in literacy rate in urban areas and the differential gap in male-female literacy has continued to decrease from 23.3 percent to 9.7 percent in 2011 which is lowest in all time. Metropolises have recorded high literacy rate for both males and females. Even, disparity is found to be high in north India in comparison to south in both urban areas as well as in metropolises. Disparity in metropolises is directly related to their size, location, social composition and function. Their literacy rates also have a strong relationship with the literacy patterns of the areas in which they are situated. Low literacy rates in metropolises are characterised by the sizeable population of slums, Muslims and Scheduled Castes. General pattern and disparity of literacy rate reflect that, south Indian metropolises are distinguished by higher literacy rates than the north Indian.

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1. Introduction

Literacy and level of education are basic indicators of the level of development achieved by a society. Spread of literacy is generally associated with important traits of modern civilization such as modernization, urbanization, industrialization, communication and commerce (Census, 2001). Literacy has been considered one of the most important attributes for social development. It is seen as a prerequisite for economic growth, social mobility and political stability. Illiteracy, by contrast, has frequently been related to increased poverty, under development, political volatility and economic stagnation (Roberts, 2000). The human development index (HDI) developed by United Nations Development Programme (UNDP) is often regarded as an alternative to income-based measures of welfare. HDI has three indicators: longevity, education and standard of living. It shows

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that rising income is not the only central concern of human development, but education and literacy are also important for development of nation and society. Literacy creates the conditions for stimulating initiatives as well as human participation in creation of projects that act upon, transform the world and define the aims and objectives of an authentic human development (Anurag, 2001).

For the purpose of census, a person aged seven and above, who can both read and write with any understanding in any language, is treated as literate. In earlier Censuses up to 1981, it was customary to work out the literacy rate taking into account the total population. Since literacy rate is more meaningful if the sub-population in the age group 0-6 is excluded from the total population, it was decided in 1991 to calculate literacy rate for the population seven years and above. The same concept has been retained in all Censuses since 1991 (Census of India, 2011).

2. Study area

The study is conducted for Indian metropolises (a city with a population of one million) which are 52 according to census 2011. These are located in 16 states and one union territory.

Their combined population is 15,95,73,844 which is 42.3 percent of the total urban population of the country. The focus of present work is on the change of urban literacy and its gender disparity in Indian metropolises.

3. Data source and methodology

A systematic approach has been applied for the present research. The data for this study gathered from secondary sources mainly Census publications, brought out by Registrar General and Census Commissioner, Government of India. These are:

- Census of India, Primary Census Abstract 2011, (India/States).
- Census of India, Primary Census Abstract 2001, series -1, India (UAs/Town).
- Census of India 2001, Slums Data II, India (UAs/Town).
- Census of India, Primary Census Abstract 2011, (India/States).
- Census of India, Primary Census Abstract 2011, (UAs/Town).

Data obtained from different sources is processed using following techniques for the analysis purpose: *Literacy Rate*

Literacy rate of population is defined as the percentage of literates to the total population age 7 years and

above.

$$Literacy\ rate = \frac{Number\ of\ Literates}{Population\ aged\ 7\ +} \times 100$$

Literacy Disparity Index of Kundu and Rao (1985)

Gender disparity in literacy of metropolises is calculated using modified (Kundu and Rao, 1985) Sopher's disparity index.

Sopher's method
$$D_s = \log \frac{x_2}{x_1} + \log \frac{100 - x_1}{100 - x_2}$$

Kundu and Rao
$$D_s = \log \frac{x_2}{x_1} + \log \frac{200 - x_1}{200 - x_2}$$

where Ds is gender disparity index, x_1 denotes the percent of literate females where x_2 is the percentage of literate males.

Coefficient of variablity (cv)=
$$\frac{\sigma}{\overline{x}} \times 100$$

Progress of urban literacy in India: 1951-2011 After Independence, there has been a remarkable growth in literacy rate in urban areas. In 1951 only 34.6 percent urban population was literate. It had increased to 73 percent by 1991 and 84.1 percent at the current census of 2011. There has been significant progress in male literacy in urban areas during this period. It has improved from 45.6 percent in 1951 to 88.8 percent in 2011. The female literacy was just 22.3 percent in 1951, which increased to 64 percent in 1991 and 79.1 percent in 2011. After 1961, the rise in the female literacy was more than male literacy in percent point in each decade. In the entire period the differential gap in male-female literacy has continued to decrease and it is lowest in the current census that is only 9.7 percent point (Table 1).

Current status of literacy rate in urban areas: A state level analysis, 2011

In 2011 census, the urban areas of Mizoram had registered the highest literacy rate of 97.6 percent followed by Kerala (95.1%) and Tripura (93.5%). Uttar Pradesh with a literacy rate of 75.1 percent ranked last in the country that followed by Bihar (76.9%), Jammu & Kashmir (77.1%) and Rajasthan (79.7%). The rest of the states/union territories have recorded more than 80 percent literacy rate in the country. All the states and union territories have recorded more than 80 percent literacy. In female literacy too urban Mizoram holds the first rank in the country (97.3%) followed by the Kerala (93.4%). Jammu & Kashmir (69%) has recorded the lowest female literacy in the country closely followed by Uttar Pradesh (69.2%) state.

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Table 1: Urban literacy in India 1951-2011

Census Years -	L	iteracy Ra	Gender Gap	
	Total	Male	Female	(in percent point)
1951	34.6	45.6	22.3	23.3
1961	54.4	66.0	40.6	25.4
1971	60.2	69.3	48.8	20.5
1981	67.2	76.7	56.3	20.4
1991	73.1	81.1	64.0	17.1
2001	79.9	86.3	72.9	13.4
2011	84.1	88.8	79.1	9.7

(Source: Govinda and Biswal, 2005 and Final Population Totals, Census of India, New Delhi, 2011).

Table 2: Urban literacy rate in class-I cities, 2011

Cities population	No. of Cities		Literacy Rate				
Cities population		Total	Male	Female			
More than 10 million	3	88.0	91.4	84.2			
5-10 million	5	87.9	91.5	84.0			
2-5 million	11	86.8	90.3	83.0			
1-2 million	33	85.7	89.7	81.4			
Total Metropolises	52	87.1	90.7	83.1			
0.5 million to 1 million	44	84.0	88.3	79.2			
1 lakh to 5 lakh	372	83.6	88.4	78.6			
Total Class-I Cities	468	85.8	89.8	81.4			
	Urban India	84.1	88.8	79.1			

(Source: Computed from Final Population Totals, Census of India, New Delhi, 2011).

Similarly, the backward states have recorded literacy below the national average like Uttar Pradesh, Bihar, Andhra Pradesh, Jharkhand, Madhya Pradesh, Chhattisgarh and Arunachal Pradesh. In the present census, there has been relatively greater progress in the female literacy rate rather than male literacy rate. The reduction of male-female literacy gap is another positive point for the society.

Urban literacy rate in 2011: Class-I Cities classified

Literacy has become a condition to be able to eke out a living and bare minimum condition to thrive in mega cities. It opens up opportunities leading to both individual and group entitlements and facilitates social and economic progress. A positive relationship between the size of population and literacy rate in cities with million plus population is evident (Table 2).

Pattern and change of literacy rate in metropolises

Cities with million plus population are the reflection of modern society in terms of education and development. The overall literacy in million plus cities is 87.1 percent which was 82.9 in 2001. The literacy rate for males and females are 90.7 and 83.1 percent in 2011 and 88.1 and 77 percent in 2001 respectively. The increase in literacy rate in males and females are in the order of 4.2 and 6.1 percent points respectively. Metropolises have recorded high literacy rate for both males and females. Out of 52 metropolises, only six cities namely, Agra, Srinagar, Meerut, Asansol, Varanasi and Dhanbad have recorded less than 80% literacy whereas the corresponding number was 19 in 2011. These cities consist of a sizeable proportion of Muslim, scheduled caste and slum population which

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results in low literacy rate. All million plus cities in Kerala have recorded very high literacy rate, more than 93% which is comparatively high than the other cities. A majority of cities with million plus population with high literacy rate are located in the south India (Fig 1). It is attributed to a more sustained history of traditional learning, an early start in Western education, and the more vigorous efforts of Christian missionaries in this area (Krishan and Shyam, 1974). The excessive illiteracy among females brings down the percentage of literacy in million plus cities. The 2011 census shows that 35.8 million persons of the million cities are illiterate in which males are 16 million and females 19.8 million. This raises a number of questions: Why is a sizeable section of the population in the cities illiterate? How do the male literacy rates in cities differ from those of female literacy? How do cities differ in their literacy rates with regard to their location, function, population composition and size? The reasons for considerable illiteracy in million plus cities are to be under-stood in the context of the illiterate population as a whole. No doubt the migrant population to cities from rural areas as also from smaller urban places consists of a large number of illiterates. The industrial structure of many cities is dominated by labour intensive, large-scale industries which can absorb illiterate migrants like Asansol, Dhanbad, Jamshedpur and Durag-Bhilainagar. Besides, a considerable proportion of the population in million plus cities is engaged in household industries, general labour or in informal sector for which literacy is not an occupational must.

The differences in literacy rates of cities belonging to different regions are the outcome of various correlates. It is evident that the literacy rates of cities find a strong association with the literacy patterns of areas in which these are situated. The occupational structure of a city is also a strong factor in determining the literacy rate. Cities with a sophisticated industrial base requiring skilled labour like Bangalore and Pune

display higher literacy rates than those cities where a considerable proportion of the population is engaged in household industries, and informal sector like Varanasi and Agra etc. The population composition of cities is another determinant factor; cities with a relatively high proportion of Muslims and Scheduled Caste are marked by low literacy rates like Uttar Pradesh, Jammu and Kashmir and in Rajasthan million plus cities. Positive correlation exists between literacy of non-slum and slum population. Where general literacy is high, slum literacy is also high in million plus cities. Besides being, the disparities in literacy rates of cities in a particular size category, the bigger cities display higher literacy rates than the smaller ones. Because the bigger cities, by virtue of being greater centres of modern industry, administration and education, tend to attract a higher proportion of literate migrants from different parts of the country. It is also notable that the literacy rates of state capital cities are generally higher than other cities. The cities situated in the two most literate states of Kerala and Tamil Nadu are distinguished by high literacy rates of more than 90 percent. In contrast, low literacy rates are typical of cities in Uttar Pradesh, Rajasthan, Bihar and Andhra Pradesh. Almost invariably, city literacy rates are closely related to the various levels of socioeconomic development in different parts of the country. Thus, literacy rates of cities are related mainly to their location, function, population composition and size.

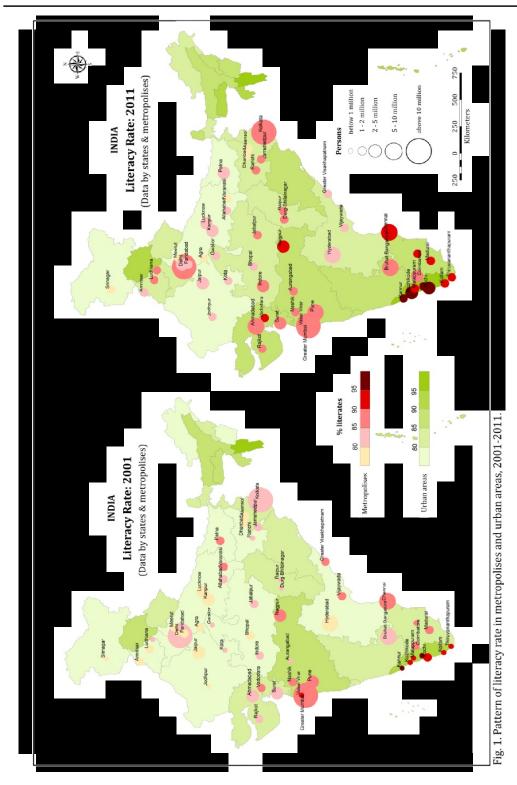
Gender Disparity in literacy rate in metropolises 2011 census in India reported 90.7 percent male literates and 83.1 percent female literates in metropolises. A positive development in the present decade is that the average gap of 11.0 percent points recorded between male and female literacy rate in 2001 census has got reduced to 7.6 percent in 2011. It is a notable feature that out of 52 million cities 51 has reduced the male female literacy gap. Only Ludhiana metropolis has increased the male female literacy gap in census 2011.

Table 3: Top five Muslim (in percent) dominated cities and their literacy rate in 2001

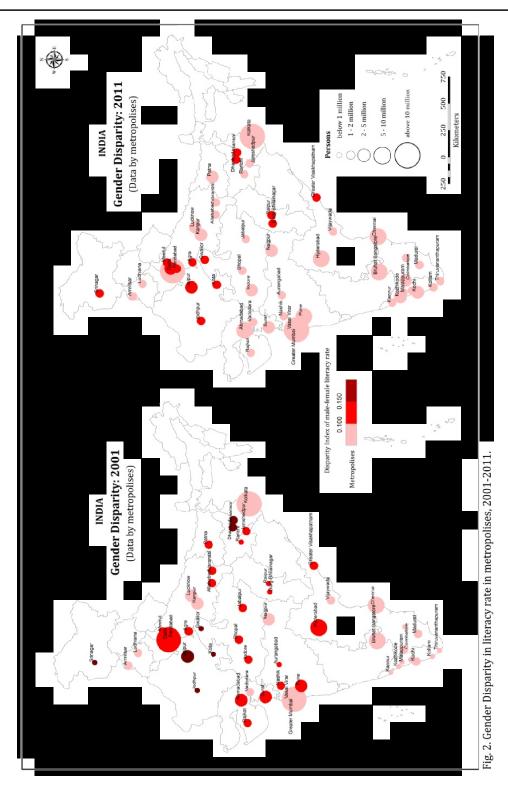
Name of UA/M.Corp	Percent Muslim population	Literacy rate		
Meerut UA	36	68.5		
Hyderabad UA	33	78.5		
Varanasi UA	31	72.4		
Bhopal UA	26	79.8		
Lucknow UA	26	77.3		

(Source: Computed from Census of India, PCA: 2001 (UA/Towns), Registrar General of India, New Delhi).

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Table 4: Literacy rate and Gender Disparity in metropolises, 2001-2011

	Literacy 2011			iteracy 2	2001	Gender Disparity Index		
Name of UA/City	Total	Male	Female	Total	Male	Female	2011	2001
Kochi UA	96.3	97.6	95.0	94.3	96.6	92.1	0.023	0.040
Thrissur UA	96.0	97.4	94.7	95.0	96.8	93.4	0.023	0.030
Kannur UA	95.9	97.7	94.3	95.1	97.1	93.4	0.029	0.032
Kozhikode UA	95.4	97.6	93.5	93.9	96.7	91.2	0.035	0.048
Thiruvananthapuram UA	94.2	96.0	92.6	92.2	94.7	89.9	0.030	0.042
Malappuram UA	94.1	96.3	92.2	93.8	96.0	91.8	0.035	0.037
Kollam UA	94.0	96.0	92.2	91.6	94.1	89.1	0.033	0.044
Nagpur UA	91.9	94.5	89.3	89.4	94.0	84.4	0.045	0.084
Tiruchirappalli UA	91.2	94.8	87.6	88.6	93.5	83.8	0.062	0.085
Madurai UA	90.5	94.5	86.6	86.7	92.1	81.3	0.069	0.083
Vadodara UA	90.4	93.7	86.7	86.8	91.9	81.2	0.061	0.095
Chennai UA	90.4	93.9	86.6	85.7	90.6	80.5	0.064	
								0.089
Nashik UA	89.9	93.5	85.9	86.4	92.2	79.7	0.034	0.111
Greater Mumbai UA	89.8	92.6	86.5	87.0	91.5	81.5	0.053	0.089
Pune UA	89.6	92.5	86.3	86.3	91.7	80.3	0.054	0.101
Coimbatore UA	88.9	92.8	85.0	86.4	91.7	80.7	0.070	0.097
Bruhat Bangalore UA	88.7	91.7	85.4	84.7	89.2	79.8	0.056	0.083
Vasai Virar City (M Corp.)	88.6	91.5	85.2	90.5	93.8	86.9	0.056	0.060
Ahmadabad UA	88.2	92.4	83.5	83.9	89.9	77.3	0.079	0.113
Surat UA	87.8	91.2	83.3	83.0	88.1	76.0	0.069	0.109
Jabalpur UA	87.6	91.3	83.7	84.9	90.4	78.7	0.067	0.104
Kolkata UA	87.5	90.2	84.7	82.6	86.5	78.1	0.048	0.076
Aurangabad UA	87.5	92.2	82.5	83.7	90.8	75.9	0.085	0.133
Ranchi UA	87.3	91.7	82.6	84.0	90.2	76.9	0.080	0.119
Rajkot UA	87.3	91.1	83.2	83.0	88.4	77.2	0.070	0.101
Durg-Bhilainagar UA	86.4	92.2	80.3	82.9	90.8	74.4	0.102	0.148
Delhi UA	86.3	91.0	81.0	82.0	87.4	75.3	0.090	0.109
Ludhiana (M Corp.)	85.8	88.9	82.1	79.8	82.0	77.0	0.060	0.045
Raipur UA	85.5	90.9	79.8	80.9	88.6	72.5	0.101	0.146
Indore UA	85.2	89.5	80.6	83.0	89.0	76.4	0.080	0.114
Jamshedpur UA	85.2	90.4	79.5	82.0	88.8	74.3	0.097	0.130
Allahabad UA	84.3	88.1	79.9	80.7	86.0	74.1	0.073	0.108
Gwalior UA	84.2	89.7	77.8	80.1	87.8	71.2	0.107	0.152
Faridabad (M Corp.)	83.8	89.5	77.3	79.6	86.9	70.7	0.109	0.148
Amritsar UA	83.6	86.3	80.5	78.7	81.9	75.1	0.052	0.062
Bhopal UA	83.5	87.5	79.2	79.8	85.5	73.3	0.074	0.111
Jaipur (M Corp.)	83.3	89.4	76.7	78.1	86.5	68.4	0.114	0.167
Hyderabad UA	82.9	87.1	78.5	78.5	83.9	72.6	0.077	0.103
Kota (M Corp.)	82.8	89.5	75.3	80.6	89.0	71.0	0.127	0.164
Patna UA	82.7	87.0	78.0	79.9	86.0	72.5	0.081	0.123
Lucknow UA	82.5	86.1	78.6	77.2	81.9	72.0	0.066	0.091
Kanpur UA	82.3	84.5	79.7	78.6	82.8	73.7	0.042	0.083
Ghaziabad UA	81.9	87.6	75.6	79.7	86.7	71.6	0.108	0.138
Greater Visakhapatnam	81.8	87.3	76.2	78.8	85.9	71.4	0.100	0.132
Vijayawada UA	80.6	84.6	76.6	77.8	83.0	72.6	0.072	0.095
Jodhpur UA	80.2	87.0	72.7	76.7	85.7	66.5	0.130	0.178
Dhanbad UA	79.3	86.1	71.7	74.9	83.9	64.1	0.131	0.186
Varanasi UA	79.3	83.9	74.2	72.4	79.3	64.4	0.088	0.141
Asansol UA	78.7	85.1	71.8	74.5	82.5	65.4	0.122	0.141
Meerut UA	76.7	81.6	70.4	68.5	75.0	61.1	0.104	0.135
Agra UA	70.3 73.1	78.1	67.4	70.3	76.6	62.9	0.104	0.133
Srinagar UA	69.6	76.1	62.1	65.1	74.3	53.9	0.100	0.131
Total	87.1	90.7	83.1	82.9	88.1	77.0	0.138 0.067	0.204
CV	6.5			7.9	6.1	77.0 11	0.007	0.033
	0.0	5.1	8.6	1.3	0.1	11		

(Source: Computed from Census of India, PCA: 2001 (UA/Towns) and Final Population Totals, 2011).

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The gender disparity has positively reduced from 0.099 in the 2001 to 0.067 in 2011 in all the cities with million plus population (Table 4). It is seen mostly in the Muslim dominated cities (Srinagar, Meerut, Jaipur and Gwalior) and tribal areas (Dhanbad, Asansol, Raipur and Durag-Bhilainagar). It is also found in Faridabad and Ghaziabad which shares the substantial population of Muslim and slums. The lowest gap is noted in the Kerala's million plus cities (Fig. 2). Broadly speaking, the gender gap of literacy is decrease in most of the metropolises during 2001-2011. It is noticed lowest in south India rather than north India. The above change is a clear indication of the fact that gender gap in literacy is shrinking in the cities with million plus population. This rising trend of female literacy in the cities will have a greater consequence on the development of the modern

In 2011, nearly 58 percent million cities have recorded female literacy higher than 80%. By comparison, more than 96% million cities have recorded more than 80% male literacy. Spatial disparity in literacy within males is less than females. It is high in north India in comparison to south India (Fig. 2). The spatial disparity between metropolises in total literacy rate and its configuration by gender has declined. The decade 2001-11 depicts decline variability from 7.9 percent to 6.5 percent in total literacy rate and 6.1 percent to 5.1 percent for males and 11.0 percent to 8.6 percent for female. There is more homogenisation in the country as far as literacy rate are concerned (Table 4).

4. Conclusion

After Independence, there has been a remarkable growth in literacy rate in urban areas in India. The census conducted after Independence in 1951 had revealed that more than 1/3rd of the urban population was literate. It had become more than 2/5th by 2011. Male and female literacy in urban areas has steadily increased during corresponding period and the gender differentials in literacy have declined. In the current census, it is less than 10 percent points, which is the lowest of all times. There has been relatively greater progress in the female literacy rate rather than male literacy rate and the difference has been consistently narrowing down in metropolises.

Cities with million plus population have shown enormous progress in the country as reflected in the average literacy figures i.e. 87.1 percent. It records a jump of 4.2 percent point in the last decade. The previous pattern of higher literacy rates in south Indian metropolises than in north Indian ones persists.

However, the metropolises in north have also improved considerably in there literacy rate. Million plus cities which have low literacy rate, is usually due to excessive illiteracy among females rather than males. Spatial disparity in literacy within males is less than females and it is high in north India in comparison to south India. Even, the female literacy rate rose faster than the male literacy rate in the current census and also reduced the male female literacy gap. This change is a clear indication of the fact that gender gap in literacy is shrinking in the cities with million plus population. This rising trend of female literacy in the cities will have a greater consequence on the development of the modern society. The differences in literacy rates of cities belonging to different regions are the outcome of various correlates. First, it is a notable feature that the literacy rates of million plus cities find a strong association with the literacy patterns of areas in which they are located. Second, the function of million plus cities is a strong factor in determining the literacy rate. Third, metropolitan areas which have higher proportion of slums, Muslims and SC/ST population have relatively low literacy rates. Fourth, the higher literacy rates in south India's cities are attributed to a more sustained history of traditional learning, an early start in western education, and the more vigorous efforts of Christian missionaries in this area.

References

Roberts, P. (2000). Knowledge, Information and Literacy, *International Review of Education*, 46(5), 433-453.

Anurag (2001). Regional Dimension of Inter-Cast and Gender Disparities in Literacy: A Case Study of Bihar, M.Phil Dissertation, CSRD, Jawaharlal Nehru University. New Delhi.

Sopher, D. E. (1980). An Exploration of India: Geographical Perspectives on Society and Culture; Longman Group Limited London.

Govinda, R. and Biswal, K. (2005). Mapping literacy in India: who are the illiterates and where do we find them?; Paper commissioned for the EFA Global Monitoring Report 2006, Literacy for Life, http://unesdoc.unesco.org/images/0014/001460/146016e.pdf.

Krishan, G. and Shyam, M. (1974). Pattern of City Literacy. *Economic & Political Weekly*, 9(20), 795-800. www.censusindia.gov.in