

# Maharashtra: A Socio-spatial Analysis of Literacy Trends With Special Reference to 2001 Census

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## Introduction

The liberating potential of education has been widely discussed by numerous researchers in the recent years. Indeed, a large body of empirical evidences demonstrates how female literacy can be a powerful social indicator. In this context, India's progress in literacy has been tremendous during the last five decades. However, a feature that remains consistent in the literacy situations in India is the existence of large disparities in literacy achievements between different sections of populations, based on gender and residence. Moreover, despite changing absolute levels in literacy, the relative positioning of various states has remained remarkably unchanged.<sup>1</sup> The present study attempts to explore, even if in a relatively advanced locale such as Maharashtra, this stability continues to prevail. We are particularly interested in interrogating the historical embeddedness of the phenomena and the space and gender interface in sex disparities in literacy.

For the first time after independence, the absolute number of the illiterates has gone down in 2001. It declined from 328.16 lakh to 296.20 lakh. The rate of literacy in India increased from 17 per cent in 1951 to 65 per cent in 2001. This increase has been even more dramatic for the female literacy that increased from 8 per cent to 54 per cent during the same period. Female literacy for 2001 is comparable to 1991 level for males. Three-fourth of the male and more than half of the female population aged 7+ are literate in the country today. With the faster growth of female literacy rate, the gap between the male and female literacy is fast becoming narrower (Table 1).

TABLE 1  
Growth of Literacy in India 1951-2001

Year	Total	Male	Female	Sex Disparity
1951	16.67	24.95	7.93	0.54
1961	24.02	34.44	12.95	0.48
1971	29.45	39.45	18.69	0.38
1981	36.23	46.89	24.82	0.33
1991	42.49	52.68	32.52	0.27
2001	65.38	75.85	54.16	0.22

Note: Literacy rate for 1951, 1961, 1971 and 1981 related to population aged 5 and above. Literacy rate of 1991 and 2001 related to population aged 7 and above.

## The Regional Scene

The country level data masks large variations across states and locations. The proverbial BIMARU states of Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh still stand out clearly as the region with literacy levels lower than the national average accompanied with high sex disparities. This pattern remains uniform for rural and urban areas. Also, despite an overall increase in literacy over the decades, the relative positions of the states have not shifted much. Among the major Indian states, Kerala is ahead of all the states throughout the period from 1981-2001 in terms of both male and female literacy and declining sex disparity. Goa and Maharashtra maintained their second and third positions respectively, whereas the backward states of Bihar, Uttar Pradesh and Orissa have moved downward. (Tables 2 and 3).

TABLE 2  
Major States Ranked According to Male Literacy in India 1981-2001

States	1981		1991		2001	
	Male	Rank	Male	Rank	Male	Rank
Kerala	87.73	1	93.62	1	94.2	1
Goa	76.01	2	83.64	2	88.88	2
Maharashtra	69.65	3	76.56	3	86.27	3
Tamil Nadu	68.05	4	73.75	5	82.33	5
Gujarat	65.14	5	73.13	6	80.5	6
Himachal	64.27	6	75.36	4	86.02	4
West Bengal	59.93	7	67.81	9	77.58	8
Karnataka	58.73	8	67.26	8	76.29	11
Haryana	58.51	9	69.1	7	79.25	7
Orissa	56.45	10	63.09	11	75.95	12
Punjab	55.56	11	65.66	10	75.63	13
M. P.	48.42	12	58.42	12	77.33	9
U. P.	47.45	13	55.73	13	70.23	15
A. P.	46.83	14	55.13	14	70.85	14
Bihar	46.6	15	52.49	16	64.13	16
Rajasthan	44.77	16	54.99	15	76.46	10

TABLE 3  
Major States Ranked According to Female Literacy in India 1981-2001

States	1981		1991		2001	
	Female	Rank	Female	Rank	Female	Rank
Kerala	75.65	1	86.17	1	87.86	1
Goa	55.17	2	67.09	2	75.51	2
Maharashtra	41.01	3	52.32	3	67.51	4
Tamil Nadu	40.43	4	51.33	5	64.55	5
Punjab	39.70	5	50.41	6	63.55	6
Gujarat	38.46	6	48.64	7	58.60	8
Himachal	37.72	7	52.13	4	68.08	3
West Bengal	36.07	8	46.56	8	60.22	7
Karnataka	33.17	9	44.34	9	57.45	9
Haryana	26.93	10	40.47	10	56.31	10
Orissa	25.14	11	34.68	11	50.97	13
A. P.	24.16	12	32.72	12	51.17	13
M. P.	19.00	13	28.85	13	50.28	11
U. P.	17.19	14	25.31	14	42.98	15
Bihar	16.52	15	22.89	15	36.47	16
Rajasthan	14.00	16	20.44	16	44.34	14

Source: Census of India, 1981, 1991; Primary Census Abstract. Census of India, 2001, Provisional Population Totals.

Bihar continues to occupy the bottom-most position in terms of male literacy over the last decade. Although, female literacy of Rajasthan was lower than Bihar in 1991, its position has been taken over by Bihar once again in 2001 with lowest female literacy rate of 33.55 per cent. In fact, the maximum increase in number of female illiterates over the decade has taken place in Bihar. The rank correlations for both male and female literacy rates show an overall temporal stability over the decades ( $r = 0.97$  and  $r = 0.89$  respectively over the period 1981-91 and 1991-2000 for male literacy rate, the corresponding values for female literacy rate being 0.94 and 0.93 respectively). Sex disparities between male and female literacy rates over the period also show very high positive correlation. The correlation coefficients for the period 1981-1991 and 1991-2000 are 0.99 and 0.98 respectively. What is being demonstrated is the persistent disparate relation between the male and the female literates. Although Rajasthan improved in terms of female literacy in 2001, it still occupies dismal position among all the states in case of sex disparity over the decades (Table 4).

TABLE 4  
Sex Disparity in Literacy Rate in India, 1981-2001

States	1981	1991	2001
India	0.35		
Andhra Pradesh		0.29	0.22
Bihar	-0.35	0.29	0.20
Goa	0.53	0.44	0.33
Gujarat	0.21	0.15	0.12
Haryana	0.31	0.25	0.21
Himachal Pradesh	0.42	0.32	0.22
Karnataka	0.31	0.23	0.17
Kerala	0.32	0.25	0.18
Madhya Pradesh	0.11	0.07	0.06
Maharashtra	0.48	0.39	0.27
Orissa	0.32	0.24	0.17
Punjab	0.44	0.34	0.25
Rajasthan	0.19	0.16	0.12
Tamil Nadu	0.58	0.52	0.34
Uttar Pradesh	0.31	0.23	0.17
West Bengal	0.52	0.43	0.30
	0.29	0.23	0.17

Source: Based on 1981, 1991 Primary Census Abstract and 2001 Provisional Population Totals, Census of India.

With this information as a backdrop, the following analysis is confined to the progress of literacy in rural and urban locations along with gender disparities in Maharashtra. The state is characterized by disparate regional performance in literacy achievement and provides a classical example of social and cultural embeddedness of literacy as a social variable as reflected through persistent historical patterns.

#### In Focus: Maharashtra

Among the major states, Maharashtra occupies the second position after Kerala, with total literacy rate of 77.27 per cent. The state has experienced maximum increase in literacy in the last decade, which is described as the 'Literacy decade'. Despite an overall higher level of urban literacy, the increase in rural literacy is even more impressive, with the gap between rural and urban literacy rate declining. The rural literacy increased by 15.32 per cent points and the urban literacy by 6.56 per cent points. Rural Maharashtra witnessed relatively rapid socio-economic and demographic changes during the past two decades (Jeejebhoy 1993: 28). Another important feature worth noticing is that the total number of literates is increasing much faster than the total population with an increasing share of females

in total literate compared to the male counterpart. This trend is faster in the rural areas than the urban areas (Table 5).

TABLE 5  
Male-Female Share (%) in Total Literate in Maharashtra

		Persons		
		Persons	Males	Females
1991	Total	100.00	61.12	38.88
	Rural	100.00	63.54	36.66
	Urban	100.00	58.52	41.48
2001	Total	100.00	58.06	41.94
	Rural	100.00	59.00	41.00
	Urban	100.00	57.03	42.97

Source: Census of India, 2001, Provisional Population Totals.

Also, the temporally reducing values for the coefficient of variation for districts over the decades both for male and female literacy rates reveal closing of inter-district disparities in literacy (Table 6).

TABLE 6  
Male and Female Literacy Rate in Rural Maharashtra 1991-2001

	Male 1991	Female 1991	Male 2001	Female 2001
Coefficient of variation (Rural)	21.6	33.14	19.98	22.49
Coefficient of variation (Urban)	4.15	11.78	2.67	7.07

Source: Census of India District Profile Maharashtra, 1991; Provisional Population Totals, 2001.

However, sex disparities exist both in rural as well as urban locations and the two exhibit significant spatial variation ( $r = 0.87$  in urban areas and  $r = 0.90$  in rural areas in 2001).

In Maharashtra in terms of male literacy, as high as 25 out of a total of 30 districts fall in the percentage range of 70 to 90 per cent, whereas in 2001 as many as 29 districts fall in the percentage range of 80 to 100 per cent. In case of corresponding female literacy, no district has reached such a high percent of literate females. However, as compared to 1991 (18 districts in the highest category of 30-50 per cent, 2001 witnessed 23 districts reaching 50-70 per cent of female literacy. 27 urban districts in 1991 reached male literacy of 70 to 90 per cent. In 2001, all the 30 districts fall in the range of 80 to 100 per cent. In case of female literacy, 29 districts were in the range of 50 to 80 per cent in 1991; in 2001 26 districts have literacy rate ranging between 70 to 90 per cent (Table 7).

TABLE 7  
Frequency Distribution of the Districts of Maharashtra According to M/F Literacy

M/F Literacy Range	Number of Districts							
	Rural				Urban			
	1991		2001		1991		2001	
	M	F	M	F	M	F	M	F
20-30	-	6	-	-	-	-	-	-
30-40	-	8	-	-	-	-	-	-
40-50	-	10	-	4	-	-	-	-
50-60	3	4	-	10	-	8	-	-
60-70	11	1	1	13	-	11	-	4
70-80	14	-	8	2	3	10	-	13
80-90	1	-	21	-	24	1	7	13
90-100	-	-	-	-	3	-	23	-

Source: Based on 1981, 1991 Primary Census Abstract and 2001 Provisional Population Totals, Census of India.

### Embedded Literacy: Some Observations

In literacy, persistent regional patterns have been historically common (Sopher 1980). It can be noted here that despite increase in the literacy rate, the relative position of the districts in Maharashtra remained more or less same for the last two decades. Tables A1 and A4 (in Appendix) show ranking of the districts of male and female literacy. The high and positive rank correlation over the decade 1991-2001 shows temporal stability of the position of the districts both for male and female literacy ( $r = 0.86$  in urban and  $r = 0.95$  in rural areas for male,  $r = 0.97$  in urban and  $r = 0.94$  in rural areas for female). Moreover, the districts having higher literacy rate are mainly located in the western and northeastern part of Maharashtra while the districts having lower literacy rate over the decade are mainly located in the central part of Maharashtra, mainly the Marathwada region.

A probe into the nature of sex disparity between male and female literacy also reveals interesting regional patterns. Sex disparity registered considerable decline in the state as well as in all the districts with the consequent rise of both male and female literacy over the decade. It has reduced from 0.32 in 1981 to 0.17 in 2001 for the State as a whole. However, regional disparities continue to exist. We find that sex disparities are more marked in the rural areas than in urban areas although narrowing down of the sex disparity is more pronounced in the rural areas during the years 1991-2001. It declined from 0.32 in 1991 to 0.22 in 2001 in rural areas. The corresponding decline in urban areas is from 0.14 to 0.11 over the decade (Table 8).

### Plausible 'Explanations'

The districts which exhibit disparities more than the State average are concentrated in a belt located in the central part of Maharashtra extending to the north-western part. It includes the Marathwada region and part of Deccan plateau. The regional pattern is replicated both in rural and urban areas and strikingly the relative position of the regions seems to be essentially the same over the decade. The correlation of the sex disparity between rural and urban areas over the periods is high and positive ( $r = 0.89$  in 1991 and  $r = 0.74$  in 2001).

It is worth noting that the sex disparities in Marathwada region and parts of Deccan plateau did not decline vis-à-vis the decline in the sex disparity for the State as a whole. It can be argued that the persistence of the high sex disparity in literacy in these districts is not the question of rural and urban locations. Instead, as social indicator, literacy is an outcome of long-standing historical context in which the districts are located – space as a mediator enacting the interface between gender and literacy. To elaborate, in his study of 1986 of regional patterns in literacy, Nuna had identified districts that have consistently been above/below the national average in terms of female literacy ever since the turn of the century i. e., 1901. Despite changes in absolute levels, the Marathwada region and the districts of Chandrapur and Gadchiroli showed exactly the same pattern even in 1991. By 2001, however, there is slight change and some of these districts have attained literacy levels above the national average of 54.28 per cent. But the increase is not very much and the values are only within 2-4 percentage points above the national average. Also, the region still lags vis-à-vis rest of Maharashtra. The increase in the level of literacy in the last decade can be attributed to the special focus that has been given for the spread of meaningful literacy, particularly in DPEP (District Primary Education Program) districts.<sup>2</sup>

TABLE 8  
Male-Female Disparity in Literacy, 1991-2001

District	1991		2001	
	Rural	Urban	Rural	Urban
<b>Maharashtra</b>	<b>0.32</b>	<b>0.14</b>	<b>0.22</b>	<b>0.11</b>
Dhule	0.40	0.21	0.23	0.13
Jalgaon	0.31	0.19	0.23	0.13
Buldana	0.35	0.20	0.23	0.14
Akola	0.29	0.14	0.21	0.11
Amaravati	0.19	0.11	0.14	0.07
Wardha	0.19	0.11	0.15	0.09
Nagpur	0.22	0.13	0.16	0.09
Bhandara	0.30	0.17	0.21	0.12
Chandrapur	0.30	0.17	0.22	0.15
Gadchiroli	0.40	0.22	0.20	0.11
Yavatmal	0.31	0.16	0.23	0.11
Parbhani	0.53	0.26	0.32	0.17
Aurangabad	0.48	0.22	0.28	0.14
Jalna	0.56	0.24	0.33	0.16
Nashik	0.32	0.15	0.25	0.08
Thane	0.29	0.11	0.14	0.08
Mumbai	0.00	0.07	0.00	0.08
Raigarh	0.26	0.14	0.19	0.09
Pune	0.30	0.13	0.21	0.10
Ahmadnagar	0.33	0.19	0.22	0.13
Bid	0.46	0.25	0.27	0.16
Osmanabad	0.35	0.23	0.26	0.17
Latur	0.37	0.24	0.34	0.15
Solapur	0.35	0.24	0.23	0.18
Satara	0.29	0.16	0.19	0.10
Ratnagiri	0.26	0.17	0.20	0.08
Sindhudurg	0.18	0.09	0.18	0.07
Kolhapur	0.30	0.25	0.23	0.12
Sangli	0.28	0.17	0.19	0.13
Nanded	0.49	0.25	0.29	0.17

Source: Based on 1981, 1991 Primary Census Abstract and 2001 Provisional Population Totals, Census of India.

Our limited analysis, based essentially on published research, shows that the most industrialized and socio-political regions of the western Maharashtra and the Nagpur-Vidharba region in the northeast experienced the emergence of the *Dalit* movement under the leadership based on the Mahar caste in 1920s. These regions thus recorded growth in literacy rate under the increasing demands of the people (Omvedt 1994: 142). In contrast, the Marathwada region was a part of princely Hyderabad State where the predominantly Muslim population made the general literacy including that of women levels low (Sopher 1980: 149). Besides, social movements spearheaded by the *Dalits* did not take off in the rural areas. As a result, scheduled caste population in this region, by virtue of their socially, economically and deprived status could not possibly attain much literacy. The 'feudal' backwardness of Hyderabad State may have further contributed or even worsened their low caste deprivation (Omvedt 1994: 80) particularly that of their women.<sup>3</sup> The motivation and the demand for education among the Muslims in

general and Muslim women in particular are less. This region also had low urbanization and the situation has not changed. Even 2001 census data show that the Aurangabad division that roughly coincides with the Marathwada region continues to remain most and least urbanized.<sup>4</sup> This may have affected literacy scenario further as urbanization and literacy development seem to have been moving concomitantly in India.<sup>5</sup>

Along with historical and social parameters, regional specificities may be attributed to the socio-economic development, beginning with the colonial rule. While the western part and Vidharbha region in the northeast had experienced industrialization, urbanization and good transport facilities, the central part was least favoured in terms of transport and remained economically backward. Historically, it had limited agricultural productivity and industries and other parameters.

TABLE 9  
Development Index in Maharashtra, 1991

District	Fertilizer per Hectare	Share of Irrigation to Gross Cropped Area	Cropping Intensity	Urbanization	Total Non Agricultural Workers.	Electricity	Toilet Facilities	Cumulative Value
Mumbai								
Thane	0.87	0.14	0.03	3.63	1.71	1.34	7.50	14.18
Raigarh	1.50	0.45	0.94	27.52	0.92	1.18	4.49	35.15
Rainagiri	0.55	0.12	1.04	13.19	0.66	1.24	1.80	19.87
Sindhudurg	0.82	1.68	0.94	0.32	0.67	1.30	1.40	5.40
Nashik	0.82	1.38	1.02	0.28	0.80	1.25	1.55	7.32
Dhule	0.99	0.78	0.96	1.29	0.56	1.41	2.25	8.73
Jalgaon	0.94	0.93	0.96	0.75	0.64	1.31	1.05	6.48
Ahmadnagar	1.85	1.40	1.11	0.99	0.64	1.08	1.60	7.14
Pune	1.29	0.91	1.05	0.57	1.35	1.05	1.30	8.63
Satara	0.97	1.45	1.06	1.84	0.85	1.03	3.95	10.97
Sangli	0.88	1.40	0.96	0.47	0.12	1.02	0.63	5.72
Solapur	1.37	0.82	1.11	0.83	0.80	1.19	10.1	16.16
Kolhapur	2.03	0.83	1.50	1.04	0.92	0.62	1.58	7.46
Aurangabad	3.68	0.56	1.00	0.95	0.07	0.98	1.96	8.32
Jalna	0.65	1.62	1.14	1.19	0.44	1.03	2.25	10.15
Parbhani	0.86	0.43	0.14	0.61	0.99	1.16	1.03	7.20
Bid	0.51	1.17	1.26	0.82	0.47	0.99	1.12	4.83
Nanded	0.40	0.46	0.24	0.64	0.54	0.63	0.95	5.70
Osmanabad	1.35	0.18	0.07	0.78	0.45	0.75	1.32	4.40
Latur	0.84	0.21	1.14	0.55	0.53	0.75	0.84	4.27
Buldana	0.74	0.64	0.28	0.74	0.42	0.88	1.05	5.28
Akola	0.73	0.35	1.07	0.75	0.57	0.69	1.17	4.84
Amaravati	0.79	0.52	1.04	1.04	0.65	0.92	1.97	6.73
Wardha	0.93	1.10	1.03	1.19	0.48	0.86	2.59	7.32
Nagpur	0.92	4.10	0.95	0.63	1.43	0.81	1.12	7.61
Bhandara	0.73	1.60	0.92	0.96	0.67	1.12	1.71	10.09
Chandrapur	0.49	1.90	1.12	2.24	0.79	0.77	4.13	9.90
Gadchiroli	0.52	1.10	0.99	0.47	0.37	1.13	1.33	8.58
					0.27	1.11	1.49	5.95

Nail Charlesworth, in his study of the Deccan regions, shows that while the advanced regions began establishing strong rural-urban linkages, the depressed areas tended to increase rural polarization and reverse 'centripetal tendencies'. The explanation is in accordance with the conventional theory of regional polarization in the process of development.<sup>6</sup> This process of development tends to accentuate the regional differences within the same state. We have tried to look at this aspect by using a development index based on the 1991 data on social, economic and infrastructure indicators such as

share of total workers in non-agricultural sector, urbanization, consumption of fertilizer in kg/hectare cropping intensity, share of gross irrigated to total cropped areas, availability of electricity, toilet facilities etc. The districts were ranked accordingly to scale-free composite indicators. The districts having high cumulative value are more developed and those with low value are less developed (Table 9). It has been found that the value of the districts in the Marathwada region and Gadchiroli are less.

### In Sum

In Maharashtra, certain broad pattern emerges in female literacy and sex disparities between male and female literacy. Our exploratory analysis brings forth the significance of historically embedded patterns in literacy that seem to continue persistently in even an otherwise enhanced literacy environment.

### Notes

1. Sex Disparity is measured by Sopher's Disparity Index (1980) as modified by Kundu (1986).
2. See Yash Agarwal, 2001.
3. Sopher in his study pointed that the coastal areas in India have historically been areas of high literacy. Also the sex disparity is low in the geographical peripheral localities.
4. Kundu notes that urbanisation helps in reducing the disparity in male and female literacy rates in all segments of Indian Population.
5. See Provisional Population Totals, Census of India; 2001, Maharashtra.
6. H.M. Desarda (1996) argued that Marthwada's backwardness is not only because of sheer neglect but also because the growth model of Western Maharashtra has been foisted in this region having different agro- climatic and socio- political features.

### References

- Census of India, (2001). Provisional Population Totals, Maharashtra.
- Desarda, H.M. (1996). The other side of Development: Maharashtra's backward Regions', *Economic and Political Weekly*, Dec. 14, p. 3233- 3234.
- F. Duncan B. (1970), 'Subregionalism in India: the case of Telengana', *Pacific Affair*, vol. 43 (1) Spring.
- Fiske, A. (1972); 'Scheduled caste Buddhist organization' in the *Untouchables in contemporary India* ed. J. Michael Mahar; University of Arizona Press; Tuscon; Arizona.
- Nuna, S.C. (1986); Spread of female literacy in India 1901- 1981; National Institute of Educational Planning and Administration.
- Omvedt, G. (1994); *Dalits and the Democratic revolution; Dr. Ambedkar and the Dalit Movement in colonial India*; New Delhi: Sage Publications.
- Raju, S. (1998); Female literacy in India: The Urban Dimensions; *Economic and Political Weekly*, p. WS-57 to WS-64.
- Rao, S.A. (2000); *Social Movement in India; Studies in Peasant, Backward classes, Sectarian, Tribal and Women's Movement*; New Delhi: Manohar.
- Shariff A. (1995) 'Socio- Economic and Demographic Differentials between Hindus and Muslims in India', *Economic and Political Weekly*, Nov. 18, p. 2942-53.
- Sopher, (1980); *An Exploration of India; Geographical Perspectives on Society and Culture*; Cornell; New York.

TABLE A1  
 Ranking of the Districts of Rural Maharashtra : Male

District	1991		2001	
	Male	Rank	Male	Rank
Sindhudurg	85.6	1	89.8	1
Satara	79.3	2	87.8	3
Bhandara	76.9	3	88.3	2
Ratnagiri	75.0	4	85.1	9
Akolo	74.9	5.5	86.7	5
Kolhapur	74.9	5.5	85.5	8
Pune	74.8	7	83.7	15
Wardha	74.6	8	85.5	7
Amaravati	74.4	9	87.1	4
Buldana	74.2	10.5	86.0	6
Jalgaon	74.2	10.5	84.7	11
Raigarh	73.4	12	84.4	13
Ahmadnagar	72.9	13	84.8	10
Sangli	72.3	14	84.6	12
Nagpur	72.1	15	84.2	14
Latur	67.2	16	81.8	17
Yavatmal	67.1	17	82.5	16
Nashik	67.0	18	81.6	19
Aurangabad	66.1	19	81.7	18
Chandrapur	66.0	20	78.9	24
Solapur	65.6	21	79.8	21
Osmanabad	63.8	22	80.6	20
Bid	62.5	23	78.8	25
Thane	62.1	24	71.3	27
Jalna	61.5	25	78.0	26
Parbhani	60.9	26	79.0	23
Nanded	59.8	27	79.1	22
Dhule	58.8	28	70.2	28
Gadchiroli	54.0	29	68.1	29
Mumbai	0.0	30	0.0	30

TABLE A2  
Ranking of the Districts of Rural Maharashtra : Female

District	1991		2001	
	Female	Rank	Female	Rank
Sindhudurg	65.7	1	70.3	2
Wardha	55.6	2	69.0	3
Amaravati	54.9	3	71.6	1
Satara	50.8	4	66.8	4
Nagpur	50.4	5	66.7	5
Ratnagiri	49.3	6	63.7	9
Chandrapur	39.6	7	56.4	19
Raigarh	48.2	7	64.0	8
Bhandara	47.3	8	65.7	6
Akola	46.9	9	64.0	7
Kolhapur	46.5	10	61.1	13
Pune	46.3	11	61.0	14
Sangli	45.7	12	63.7	10
Jalgaon	44.6	13	60.2	15
Ahmadnagar	42.0	14	61.8	11
Buldana	41.4	15	61.5	12
Yavatmal	39.7	16	58.9	16
Nashik	38.9	18	56.4	20
Thane	37.7	19	57.8	17
Osmanabad	35.8	20	54.9	22
Solapur	35.6	21	56.2	21
Latur	35.3	22	56.6	18
Aurangabad	28.4	23	53.2	23
Dhule	28.3	24	48.2	28
Bid	27.0	25	51.8	24
Gadchiroli	26.0	26	48.8	26
Nanded	24.3	27	50.7	25
Parbhani	22.8	28	47.6	27
Jalna	21.9	29	45.2	29
Mumbai	0.0	30	0.0	30

TABLE A3  
 Ranking of the Districts of Urban Maharashtra : Male

District	1991		2001	
	Male	Rank	Male	Rank
Sindhudurg	93.2	1	93.8	3
Bhandara	90.9	2	95.6	1
Ratnagiri	90.5	3	94.2	2
Satara	88.8	4	92.2	9
Wardha	88.4	5	93.7	4
Pune	87.7	6	91.9	12
Nagpur	87.6	7	93.6	5
Ahmadnagar	87.3	8	91.7	13
Raigarh	86.6	9	92.1	10
Amravati	86.4	10.5	93.3	6
Aurangabad	86.4	10.5	90.8	20
Nashik	86.2	12	91.1	17.5
Jalgaon	85.9	14	91.0	19
Kolhapur	85.6	15	92.7	7
Thane	85.3	16	91.1	17.5
Yavatmal	86.0	16	92.6	8
Buldana	85.2	17	91.5	14
Akola	84.3	18	90.3	22
Chandrapur	84.2	19	92.0	11
Mumbai	83.5	20	91.3	16
Bid	83.1	21.5	89.4	26
Sangli	83.1	21.5	91.4	15
Latur	82.8	24	89.6	24
Osmanabad	82.5	25	89.6	25
Dhule	82.4	26	89.6	23
Gadchiroli	81.4	27	90.6	21
Solapur	81.0	27	87.6	27
Jalna	78.5	29	84.2	30
Nanded	79.9	29	87.3	28
Parbhani	78.1	30	86.4	29

TABLE A4  
Ranking of the Districts of Urban Maharashtra : Female

District	1991		2001	
	Female	Rank	Female	Rank
Sindhudurg	82.4	1	85.5	1
Ratnagiri	77.3	2	85.4	2
Mumbai	75.9	3	81.6	9
Wardha	75.8	4	83.2	5
Amaravati	73.8	5	84.9	3
Nagpur	73.6	6	83.6	4
Thane	73.3	7	81.7	7.5
Pune	73.0	8	80.6	12
Bhandara	71.6	9	82.4	6
Satara	71.5	10	80.6	11
Raigarh	71.3	11	81.5	10
Nashik	69.8	12	81.7	7.5
Akola	69.1	13	77.7	15
Yavatmal	68.9	14	80.3	13
Kolhapur	67.2	15	79.1	14
Ahmadnagar	67.0	16	77.7	16
Chandrapur	66.1	17	75.1	22
Jalgaon	65.6	18	76.7	18
Sangli	64.6	19	76.7	17
Buldana	64.1	20	76.0	19
Aurangabad	63.1	21	75.1	23
Dhule	60.3	22	75.4	20
Gadchiroli	58.9	23	75.3	21
Osmanabad	58.3	24	71.7	25
Latur	57.4	25	72.3	24
Bid	57.3	26	71.6	26
Solapur	56.3	27	67.8	28
Nanded	54.9	28	69.2	27
Jalna	54.1	29	66.8	30
Parbhani	52.3	30	67.4	29

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1100

1115

1300

## Annexures

### Annexure - I PROGRAMME SCHEDULE

1000 hrs.

#### OPENING SESSION

(Rapporteur: Dr. S. M. I. A Zaidi)

#### Welcome and Introduction to Seminar

Dr. Arun C. Mehta  
Fellow, NIEPA

#### Opening Address

Prof. Ashish Bose  
Honorary Professor  
Institute of Economic Growth, Delhi

#### Chairman's Observation

Prof. B. P. Khandelwal  
Director, NIEPA, New Delhi

1100 hrs.

Tea Break

15 hrs.

#### Session I: Chairperson: Prof. Satya Bhushan

(Rapporteur: Dr. K. K. Biswal)

#### India's Literacy Panorama

Speaker: Prof. M. K. Premi  
Formerly Professor of Demography  
J. N. U., New Delhi

#### Impact of Primary Education on Literacy: An Analysis of Census 2001 Preliminary Data

Speaker: Dr. Arun C. Mehta  
NIEPA, New Delhi

1300 hrs.

Lunch

1345 hrs.

**Session II: Chairperson: Dr. Y. P. Aggarwal**  
(Rapporteurs: Dr. R. S. Tyagi and Dr. Neeru Snehi)

**Some Significant Features of Literacy Data of the 2001 Census and  
Projection of Literacy Rate for the Population of Age Group 15+**

Speaker: Dr. A. B. L. Srivastava  
Ed.CIL, New Delhi

**Changes in Gender Disparity in Literacy Rate During 1991-2001: District-wise  
Analysis**

Speaker: Dr. P. K. Bhargava  
NIAE, New Delhi

**Maharashtra: A Socio-spatial Analysis of Literacy Trends With Special  
Reference to 2001 Census**

Speaker: Ms. Barnali Biswas and Prof. Saraswati Raju  
CSR D, J. N. U, New Delhi

1545 hrs.

**Concluding Remarks**  
Prof. B. P. Khandelwal  
Director, NIEPA, New Delhi

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