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## SPATIAL PATTERNS OF LITERACY IN SOUTH MAHARASHTRA (INDIA): A GEOGRAPHICAL PERSPECTIVE (1981-2011)



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**Abstract:**-Literacy acquisition is the stepping stone for any community in a region for its development without which no society can break the shackles of slavery. It builds the human capacity for better comprehension towards social and economic development. A literate person is he/she who can both read and write with understanding in any language. In this paper, it is intended to look into the literacy acquisition and its spatial pattern both at district and tahsil level in South Maharashtra for which the data is obtained from the census of India 1981-2011. It is found that Solapur district which is a drought-prone area of the state of Maharashtra have very low literacy rate and tahsils like Jat in Sangli district and Gagan-Bavda in Kolhapur district are also with very low literacy rate. Jat is drought-prone and Gagan-Bavda is hilly with quite higher rainfall. It is found that drought-prone and hilly areas having low literacy and urbanized and industrialized parts of the study areas having high literacy rate.

**Keywords:**Spatial Patterns , Geographical , economic development.

### INTRODUCTION

Literacy is one of the sensitive indicators of progress for empowerment of population. Literacy is essential for eradicating poverty and mental isolation for cultivating peaceful and friendly international relations and for permitting the free play of demographic process (Chandna, 1980). Literacy is an important indicator of the socio-economic development. A developing country like India is not only characterized by low level of literacy but also high disparity in literacy rates between male-female and rural-urban (Chandana, 1989).

Literacy is one of the important indicators of socio-economic development of population which gives information on human development. A higher level of literacy in a society means higher level of development and vice-versa. In census, a person who can both read and write with understanding in any language is treated as literate. For the census purpose all children below 7 years are treated as illiterate even though they may be going to school and can read and write to some extent.

Literacy is the precondition for any developing society for its advancement. In fact without literacy no society can break the shackles of poverty and backwardness (Ramotra, 2008). It brings awareness, improves social understanding and reduces the changes of social and economic exploitation. Improvement in literacy brings changes in working condition also. The analysis of literacy pattern and trends therein is of immense significance for a social and population geographer.

Literacy influences such attributes of population as fertility, mortality, occupations, etc. No wonder the trends in literacy are considered as an index of pace at which the socio-

economic transformation of a society is taking place (Chandana, 1989).

### OBJECTIVES

The main objective of the study is to look into the spatial patterns of literacy and changes in it during period of 1981-2011 at district and tahsil level during 1981 to 2001 as the data for tahsil level for 2011 has not so far been published by the census of India.

### STUDY OF AREA

South Maharashtra is one of the largest and most populous areas in Maharashtra located in the south western part of the state. It spreads over a large area, and the plateaus of the state are quite distinctly different from the high mountain area in the west. South Maharashtra consists of Kolhapur, Sangli, Satara, Solapur, Ratnagiri and Sindhudurg districts. The area undertaken for the present study is having socio-physical variations, which influences the educational development also. It causes very sharp regional imbalances in educational attainment and overall educational development. Most of the studies pertaining to the levels of literacy development are conducted at the state and national levels but hardly there is any study of this kind is conducted in South Maharashtra.

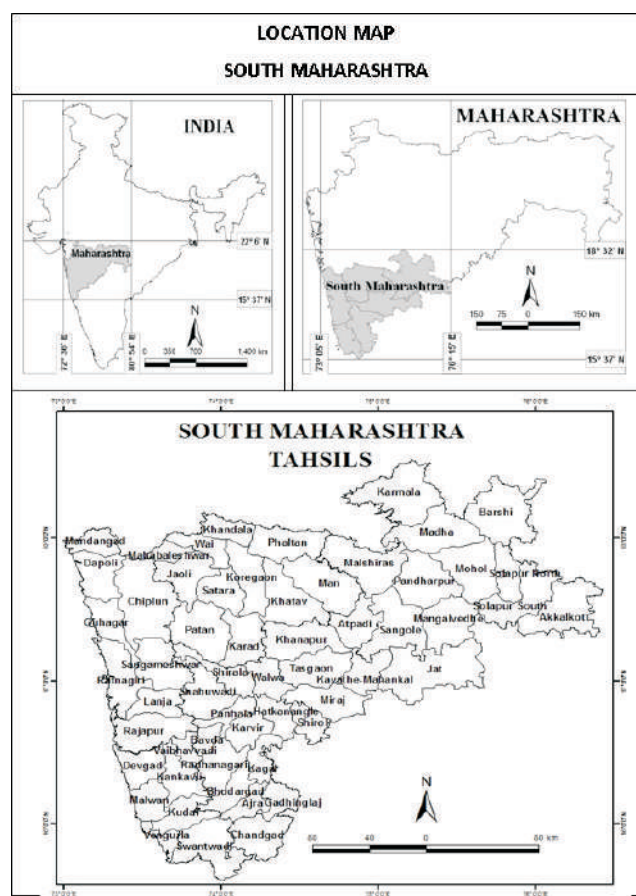


Fig 1.1

There are very sharp variations in the attainment of educational attainments despite the fact that Maharashtra is one of the most industrialized and urbanized states in India.

In South Maharashtra where right from Phule, Shahu Maharaj, Ambedkar to Karmaveer Bhaurao Patil have made the best social efforts to educate the illiterate and poor masses and down-trodden sections of the society. The present study attempts to investigate into the patterns of regional variations in literacy of South Maharashtra. The area selected for this study has been generally neglected by the researchers. An attempt is made to measure the inequalities in literacy in geographical space at district and tahsil levels.

The study area is on the South-Western part of Maharashtra state that lies between 15° 37' to 18° 32' North latitude and 73° 05' to 75 ° 15' East longitudes. The study area lies on the western limit of the Deccan table land. It is situated in the river basin of the Krishna, Koyana, Panchaganga, Warana, Bhima, Man, Yerala, Nira, Sina, Vashisthi, Shastri, Amba and Terekhol rivers, etc. From the point of view of the peninsular drainage, the most of the study area belongs to the drainage system of the Krishna River.

#### DATABASE AND METHODOLOGY

The present study is based on the secondary source of data obtained from census of India 1981-2011 for analysis at district level and 1981-2001 for tahsil level. On the basis of geographical condition and location of the district and tahsils the entire South Maharashtra study area has been stratified into three groups at district level and five groups at tahsil level. Literacy rate is computed for the population above six years old.

#### SPATIAL PATTERNS OF LITERACY RATE AT DISTRICT LEVEL 1981-2011

Table -1 explicitly vindicate that literacy acquisition in the state of Maharashtra is much better throughout 1981 to 2011, but South Maharashtra despite its augmentation in literacy is marginally trailing behind the state but certainly better than the country as a whole.

In 1981 south Maharashtra was having mass illiteracy (about 55%) and that has significantly come down to nearly 18 percent. Among all the five districts of South Maharashtra, Solapur district is identified with lowest literacy right from 1981 (40.68 %) to 2011 (77.72 %). Solapur ranks second in its progress in the entire region but still it lags behind as its position is last one in literacy in 2011 (77.72%) that means it has to accelerate its rate of progress to come at par with other advanced districts like Ratnagiri, Satara and Kolhapur. Not only the Solapur is having lowest literacy (77.72%) in 2011 but also it is 4.18 per cent less than the regional literacy rate (81.90 %).

**Table 1**  
**South Maharashtra: Literacy Rate at District Level, 1981-2011**

Sr. No	District	Literacy Rates(as percentage to above 0-6 age group population )				Difference 1981-2011
		1981	1991	2001	2011	
		Persons	Persons	Persons	Persons	Persons
1	2	3	4	5	6	7
1	Kolhapur	45.36	66.94	76.93	82.90	57.54
2	Sangli	46.87	62.61	76.62	82.62	35.75
3	Satara	48.15	66.67	78.22	84.20	36.05
4	Solapur	40.68	56.39	71.25	77.72	37.04
5	Ratnagiri	47.75	67.37	76.85	83.86	36.71
*	South Maharashtra	45.48	63.73	75.70	81.90	36.22
*	Maharashtra	47.18	64.87	76.88	82.91	35.73
*	India	43.56	52.11	64.84	74.04	30.48

Source: Census of India, Primary census Abstract- General Population Tables 1981, 1991, 2001 and 2011 series, Maharashtra.

The maps (Fig. 2 and 3) have also shown the increasing trend of literacy rate but Solapur throughout the period of 20-30 years remained behind. The South Maharashtra especially Kolhapur and Satara have remained under the influence of social movements and reforms of Shahu Maharaj and Bhahurao Patil who established educational institution in rural areas that has changed the entire scenario. If any region has to be developed, people

have to be literate and skilled to bring development in the region and in the state as a whole. The position of South Maharashtra in terms of literacy status (81.90% in 2011) is comparatively better than the country (74.04%). Not only this, all 5 individual districts have also shown better performance.

The Solapur district is identified as a depressed area in its acquisition of literacy, not only in 2001 or 2011 but also in 1981 and 1991.

Such a situation raises certain questions, how its status can be improved. It needs a focus to make provision of educational institutions; Solapur University has also been established in 2004 that provides facility for higher education. The infrastructural facilities like transport and communication, scholarship to poor students, irrigation facilities for agricultural development, pure drinking water facilities, employment, etc. are needed for healthy development of people in the region.

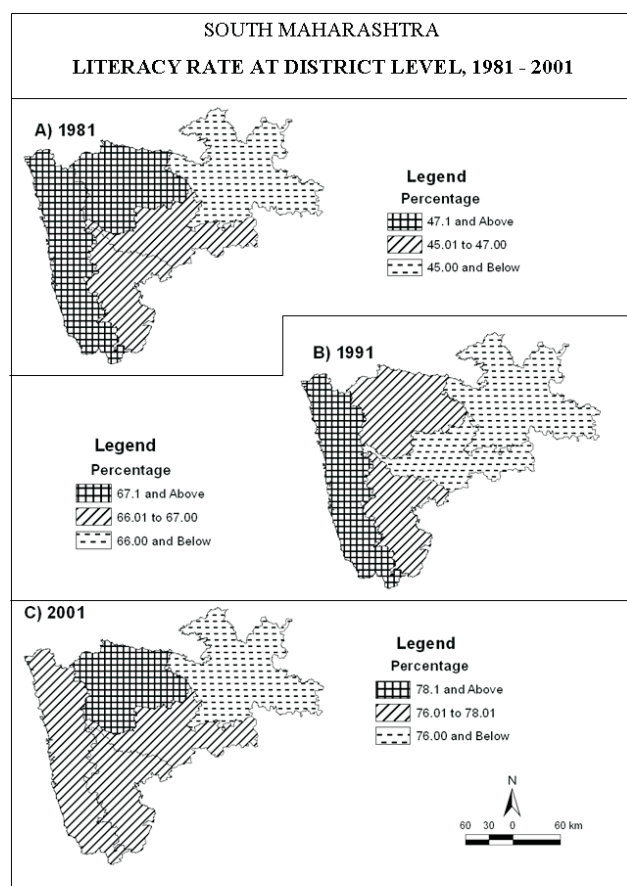
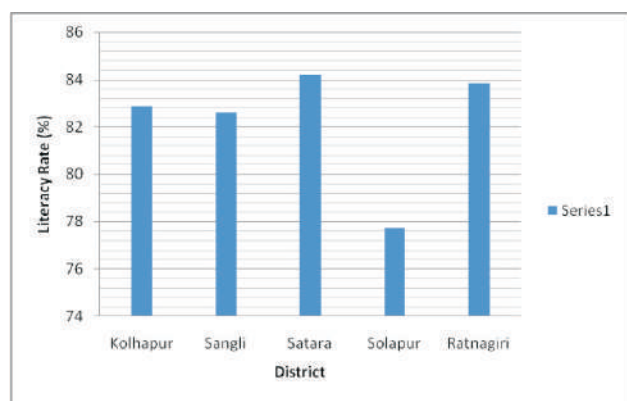


Fig.2



Source: Census of India; series, Maharashtra, 20 Fig 3

**SPATIAL PATTERNS OF LITERACY AT TAHSIL LEVEL, 1981-2001**

The literacy at tahsil level in the entire study area is categorized as low, medium and high in 1981, 1991 and 2001. The preceding discussion suggested that the literacy has increased significantly but the eastern part of the study area e.g. Solapur district occupied lowest position in literacy status. At tahsil level the sharp variation in literacy acquisition is the reflection of regional imbalances in the level of socio-economic development in the study area. In the study area, the literacy rate increased from 45.48 per cent in 1981 to 63.73 per cent in 1991 and 75.70 per cent in 2001. Whereas the state averages was 47.18 per cent in 1981, 64.87 in 1991 and 76.88 in 2001. It indicates that the literacy rate of the state was higher than the literacy rate of the study area. At the tahsil level, it is observed that there were wide variations (Fig. 4). The literacy rate at tahsil level has been grouped into five categories. It is evidenced from the fact that in 1981, the minimum literacy was 27.91 per cent in Jat tahsil of Sangli district and the maximum of 61.66 per cent in Malwan tahsil of Ratnagiri district.

**Table 2  
South Maharashtra: Literacy Rate at Tahsil Level  
1981- 2001**

Sr. No	Tahsils	District	Literacy Rates, 1981, 1991 and 2001		
			1981	1991	2001
			Persons	Persons	Persons
1	2	3	4	5	6
1	Karvir	Kolhapur	56.24	75.23	83.16
2	Panhala	Kolhapur	38.67	61.66	74.16
3	Hatkanangle	Kolhapur	51.70	70.33	80.25
4	Shirol	Kolhapur	51.61	71.49	80.15
5	Kagal	Kolhapur	40.63	67.36	73.58
6	Gadhinglaj	Kolhapur	40.59	61.29	71.81
7	Chandgad	Kolhapur	31.15	52.24	66.67
8	Ajra	Kolhapur	36.66	58.49	69.37
9	Bhudargad	Kolhapur	38.37	63.13	72.92
10	Radhanagari	Kolhapur	34.87	60.88	71.33
11	Gagan-Bavda	Kolhapur	33.11	57.69	63.37
12	Shahuwadi	Kolhapur	30.55	53.54	66.93
13	Miraj	Sangli	55.82	70.10	82.06
14	Tasgaon	Sangli	49.79	66.94	78.77
15	Khanapur	Sangli	45.86	63.75	75.89
16	Atpadi	Sangli	35.31	50.87	66.39
17	Jat	Sangli	27.91	42.21	63.04
18	Kavathe Mahankal	Sangli	42.03	59.97	72.97
19	Walawa	Sangli	50.96	65.25	79.37
20	Shirala	Sangli	36.86	57.24	73.27

*Spatial Patterns Of Literacy In South Maharashtra (india).....*

21	Satara	Satara	55.99	75.39	84.51
22	Wai	Satara	52.47	71.09	79.93
23	Khandala	Satara	49.89	68.53	79.87
24	Koregaon	Satara	53.86	71.48	81.35
1	2	3	4	5	6
25	Phaltan	Satara	46.13	63.99	75.79
26	Man	Satara	36.04	54.58	68.81
27	Khatav	Satara	46.66	65.13	77.08
28	Karad	Satara	51.79	68.64	78.92
29	Patan	Satara	37.34	57.50	72.29
30	Jaoli	Satara	40.72	61.14	75.73
31	Mahabaleshwar	Satara	55.75	72.54	84.64
32	North-Solapur	Solapur	50.67	65.64	76.09
33	Barshi	Solapur	44.17	61.97	74.09
34	Akkalkot	Solapur	34.98	46.41	67.74
35	South-Solapur	Solapur	34.62	49.45	67.37
36	Mohol	Solapur	37.03	52.06	69.54
37	Mangalvedhe	Solapur	32.65	51.04	66.67
38	Pandharpur	Solapur	39.68	54.7	69.78
39	Sangole	Solapur	33.73	49.73	66.28
40	Maishiras	Solapur	36.39	54.09	71.67
41	Karmala	Solapur	36.34	52.24	68.66
42	Madha	Solapur	40.64	57.02	70.14
43	Ratnagiri	Ratnagiri	50.13	68.69	79.63
44	Guhagar	Ratnagiri	37.81	56.57	72.61
45	Dapoli	Ratnagiri	42.65	61.43	74.62
46	Mandangad	Ratnagiri	41.01	62.27	74.25
47	Khed	Ratnagiri	45.49	63.68	76.04
48	Chiplun	Ratnagiri	47.24	66.77	79.48
49	Sangmeshwar	Ratnagiri	42.37	59.84	71.7
50	Lanja	Ratnagiri	36.4	56.59	69.15
51	Rajapur	Ratnagiri	42.25	60.13	69.77
52	Kankavali	Ratnagiri	52.43	74.58	78.29
53	Kudal	Ratnagiri	53.82	78.89	81.32
1	2	3	4	5	6
54	Sawantwadi	Ratnagiri	52.14	76.27	80.22
55	Vengurla	Ratnagiri	60.60	80.91	85.10
56	Malwan	Ratnagiri	61.66	78.68	83.10
57	Devgad	Ratnagiri	52.47	70.60	79.79
*	South.Maharashtra		45.48	63.73	75.70
*	Maharashtra		47.18	64.87	76.88

Source: Census of India 1981, 1991 and 2001

There are as many as 22 tahsils which fall in the lowest category of literacy of 30.10 and 40 per cent.

The northern part of South Maharashtra and adjoining tahsils of Kolhapur districts are characterized by medium level literacy that varied between 40.01 and 50.00 per cent. In about 16 tahsils the literacy varied between 50.10 and 60.00 per cent. There are only 2 tahsils with very high literacy of 60.10 per cent and above, these are Malwan and Vengurla (60.60%) tahsils of Ratnagiri district. This high literacy in this part in is due to well established tourism activity and educational infrastructure.

In 1991, the status of population in the attainment of literacy rate has significantly changed over 1981. The very

high literacy rate above 80 per cent was found in Vengurla (80.91 %) tahsil of Ratnagiri (including Sindhudurg) district and the lowest (45.00% and below) in Jat (42.21%) tahsil of Sangli district. The literacy rate in Jat tahsil was low as this part of the study area is drought-prone as it lacks agricultural and industrial development and educational facilities are also very scarce. As many as 12 of 57 tahsils especially in Solapur district are marked by low literacy rate between 45.01– 55 % even in 1991. No doubt, the progress in literacy in this dry agricultural economy region has been made but still it occupies the bottom position on literacy front. The medium literacy rate (55.01 to 65 %) was observed in as many as 21 tahsils in adjoining tahsils of Kolhapur, Sangli and Ratnagiri district (Fig.4). The high literacy rate (65.01 to 75%) was observed in as many as 17 tahsils in central part which is agriculturally developed and western Konkan region. The rest of the 6 tahsils are marked by very high literacy rate (75.01% and above).

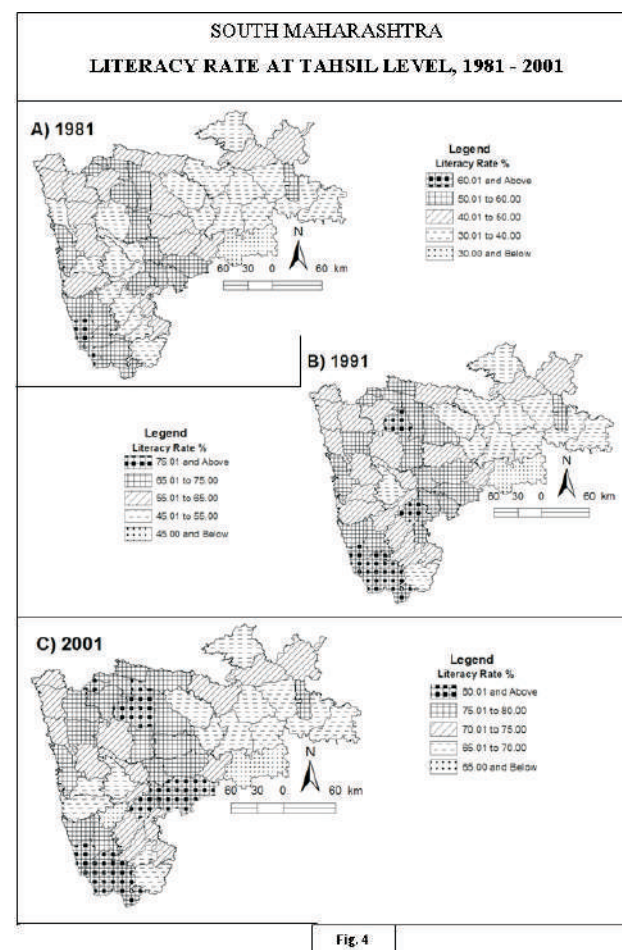


Fig. 4

In 2001 that is after 20 years the status of population in the attainment of literacy rate has significantly changed. Barring the tahsils of Jat and Gagan-Bavda with 63.04 and 63.37 per cent literacy nowhere it was below 65 per cent (Table 2). These tahsils were with low literacy rate that varied between 65.01 and 70 per cent, which were 14 in

number. The central and western parts of the study area are marked by medium and high literacy rates and ranged between 70.01 and 75 and 75.01 and 80 per cent. The very high literacy rate (80.01% and above) was noticed in as many as 11 tahsils, for instance, Karvir, Hatkanangle, Shirol, Miraj, Satara, Koregaon, Mahabaleshwar, Kudal, Sawantwadi, Vengurla and Malwan in central and Western Konkan region.

It has also been found that the regional variation in literacy rate at tashil level has reduced from 1981 to 2001. As far as change in literacy is concerned, on an average 30 per cent literacy has increased in the study area between 1981 and 2001.

#### **CONCLUSION**

It is inferred that the literacy at district as well as tahsil level has augmented. The district of Solapur is still trailing behind as compared to other districts despite its increase in literacy right from 1981 to 2011. The study area (81.90%) is slightly behind the Maharashtra state (82.91%) in its literacy acquisition even in 2011, but comparatively better than the country as a whole. The areas which are drought-prone, like Jat tahsil having very low literacy rate (63.04% in 2011) and hilly area with high rainfall have also shown low level of literacy attainment. For instance, Gagan-Bavda which was having 33.11 per cent literacy in 1981, it was having hardly 63.37 per cent in 2001.

Urbanized and industrialized areas are generally well facilitated with high infrastructural facilities and with high per capita income e.g. Karvir, Hatkanangale and Shirol in Kolhapur district; Satara, Koregaon and Mahabaleshwar tahsils in Satara district. Mahabaleshwar is the mini-Kashmir of Maharashtra being cool hill station and people get good exposure to different cultures. It shows that drier the area lesser is the literacy rate. Higher is the level of urbanization and industrialization higher is the literacy level. The backward drought-prone and hilly areas with poverty stricken should be given top priority in providing the basic facilities to bring them at par with advanced areas in South Maharashtra.

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