

# Female literacy a human development indicator and its correlation with child sex ratio: A geographical Assessment in Rajasthan

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**Abstract** - literacy is meant to be a progressive indicator for a state or country. The Human Development Index also includes literacy as an indicator of development. This paper explains the spatial pattern of female literacy and child sex ratio in Rajasthan at district level. Paper find out the correlation between female literacy and child sex ratio in Rajasthan and result shows a negative correlation in both the indicators. Female literacy is an indicator which shows the empowerment of female, it is supposed that a literate woman can take her decisions by herself and this will lead less feticide and help in improving child sex ratio. Indian govt. started “Beti Bachao, Beti Padhao yojna” for the empowerment of female statistics in India. This paper has analyzed that conventional set up of society is dominant for the gender scenario of Rajasthan.

**Index Terms** - female literacy; child sex ratio; conventional set up; correlation; female empowerment.

## I. INTRODUCTION

Female Literacy and Child Sex Ratio are two important demographic characteristics of population. Female literacy plays a very important role in upliftment of the sex ratio. (Keshwa,2013). Literacy is considered as one of the most important social aspects of any society's development, especially of rural area and it denotes essential criterion of human development. It indicates the socio-cultural status of any society, in any geographical unit and change in literacy reflects the socio-cultural and economic transformation of the society. Literacy is a essential for eradicating poverty and mental isolation for cultivating peaceful and friendly international relations and for permitting the play of demographic process (Chandna,1980&Krishan, 1978). In the present paper an attempt has been made to bring out the correlation of Female Literacy and Child Sex Ratio in Rajasthan at district level. The study is based on primary and secondary data.

## II. REVIEW OF LITERATURE

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## III. STUDY AREA

Rajasthan, situated at the northwestern part of India is the biggest state in the country of India and lies between 23°30' and 30° 11' North latitude and 69° 29' and 78° 17' East longitude It is the largest State in India by area constituting 10.4 percent of the total geographical area of India and it accounts for 5.67 percent of population of India. In Rajasthan, literacy doesn't mean better sex ratio. Despite a literacy rate of 66.1%, the child sex ratio in 0-6years category in Rajasthan is a shocking 888.Rajasthan is one of those states which has worst sex ratio among all Indian states. Some of districts like Jhunjhunu is showing a great hype in literacy rate whereas it shows a sharp fall in child sex ratio from last two decade.

## IV. OBJECTIVES

- 1.To explain the Spatial pattern of female literacy and child sex ratio in the Rajasthan.
2. To analyze the correlation between spatial pattern of female literacy and child sex ratio of study region.

## V. Database and Methodology

The present study is based on the secondary data. The Secondary data obtained from the census of India (2011) and Socio-economic abstract of Rajasthan. The spatial Pattern of sex ratio and literacy in Rajasthan at district level is shown by different graphs and maps. Analysis of the correlation of female literacy and child ratio is done by spearman's correlation method.

## Spatial Pattern of child sex ratio in Rajasthan:

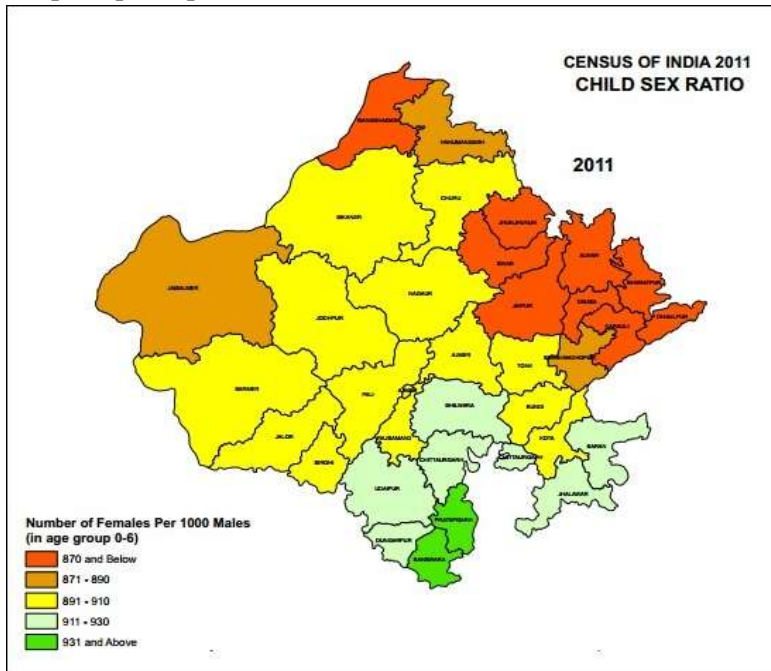
**Very High Child Sex Ratio:** High level of Child Sex Ratio (931& above) includes in the districts namely Banswara and Pratapgarh due to discrimination against girl child is not strong in the scheduled tribes. These districts have maximum

schedule tribe population of the state and the literacy rate is low in these districts, due to that lesser accessibility, less availability of medical facilities and awareness about scanning centers may be the main reasons, which are responsible for high child sex ratio. Literacy rate (children under 6 are excluded) of Banswara is 56%. 69% of male and 43% of the female population are literate here. Overall literacy rate in the district has increased by 11%. Male literacy has gone up by 9% and female literacy rate has gone up by 15%.

**High Child Sex Ratio:** High child Sex Ratio (910-930) has recorded in the districts of Jhalawar, Baran, Bhilwara, Chittorgarh, Udaipur.

**Moderate Child Sex Ratio:** The districts which have the child sex ratio ranges 891 to 910 are included into moderate category. Moderate sex ratio was recorded in the districts of Churu, Bikaner, Nagaur, Jodhpur, Barmer, Jali, Jalor, Sirohi, Kota, Bundi, Ajmer, Rajsamand, tonk.

**Map 1: Spatial pattern of sex ratio and child sex ratio**



*Census of India, 2011*

**Low child sex ratio:** The districts which have the child sex ratio ranges 871 to 890 are included into low category. This range is recorded in Jaisalmer, Hanumangarh and Sawai Madhopur district.

**Very low sex ratio:** The districts which have the sex ratio ranges 870 and below are included in a low category. low sex ratio was recorded in the districts of Alwar, Bharatpur, Dhaulpur, Karauli, Jhunjhunu, Sikar, Jaipur, Dausa, Ganganagar.

**Spatial Pattern of female literacy rate in Rajasthan:**

**Very High female literacy rate:** very High literacy rate was recorded in the districts of Kota, Jaipur, Jhunjhunu, Sikar, Due to the high number of educational facilities, high urbanization, development of transport and communication and so on. Here we can see that in Jhunjhunu where Kota has a high ratio of literacy rate (57.32%) falls in very low child sex ratio (836.66) category. It is also observed the same in Sikar, Alwar, Bharatpur, and Jaipur as well.

**High female literacy rate:** High literacy rate was recorded in the districts of Hanumangarh (48.59%), Ajmer (47.69%), Alwar (47.41%), churu, Bharatpur. Here we can see that in Hanumangarh (48.59%) and Alwar (47.41%) has a high ratio of literacy rate falls in low child sex ratio category (877.71) and (864.94) respectively.

**Moderate Literacy Rate -** Moderate female literacy was recorded in the districts of Nagaur, Pali, Rajsamnd, Udaipur Chittorgarh, Bhilwara, Jhalawar, Bundi, Tonk.

**Low Literacy Rate-** Low literacy was recorded in the districts of Jaisalmer, Barmer, Sirohi, Partapgarh, Banswara, Dungarpur

**Correlation between female Literacy and Sex ratio-**

The child sex ratio and female literacy have moved opposite direction in Rajasthan. The child sex ratio in districts of Banswara

and Pratapgarh has been found highest whereas female literacy has been found the lowest here.

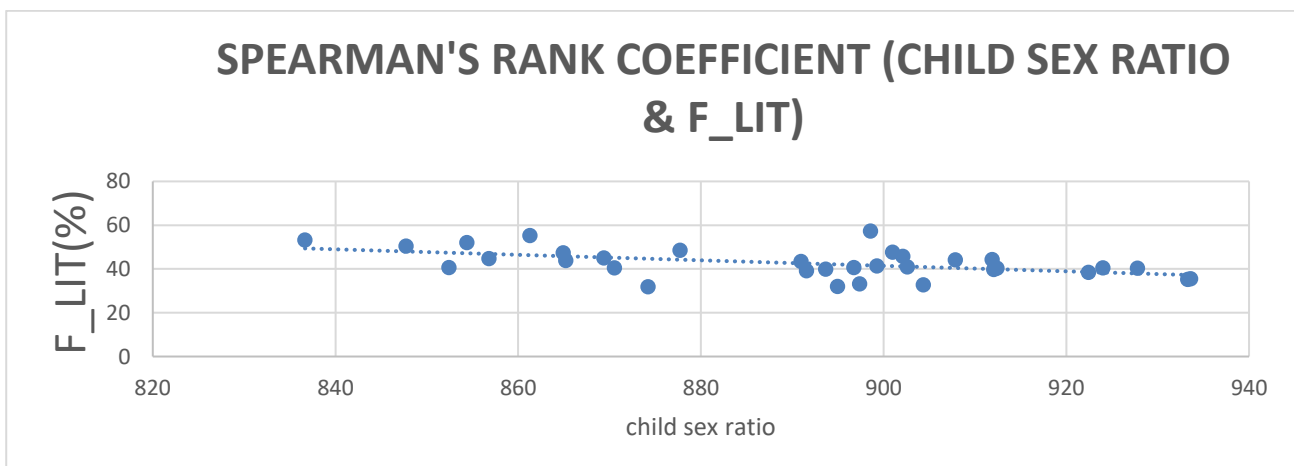
**Table 5.1: District-wise correlation between female literacy and child sex ratio**

S No.	District	Child Sex Ratio	F_LIT (%)	Rank(X):F_LIT	Rank (Y): CSR	d	d <sup>2</sup>
1	Ganganagar	854.39	52.11	4	30	-26	676
2	Hanumangarh	877.71	48.59	6	22	-16	256
3	Bikaner	907.84	44.20	13	9	4	16

4	Churu	902.12	45.80	9	12	-3	9
5	Jhunjhunun	836.66	53.26	3	33	-30	900
6	Alwar	864.94	47.41	8	27	-19	361
7	Bharatpur	869.36	45.02	10	25	-15	225
8	Dhaulpur	856.80	44.74	11	29	-18	324
9	Karauli	852.40	40.61	19	31	-12	144
10	Sawai Madhopur	870.52	40.47	21	24	-3	9
11	Dausa	865.20	43.92	14	26	-12	144
12	Jaipur	861.27	55.30	2	28	-26	676
13	Sikar	847.74	50.44	5	32	-27	729
14	Nagaur	896.76	40.70	18	17	1	1
15	Jodhpur	890.96	43.43	15	21	-6	36
16	Jaisalmer	874.20	31.87	33	23	10	100
17	Barmer	904.35	32.79	31	10	21	441
18	Jalor	894.95	32.02	32	18	14	196
19	Sirohi	897.38	33.24	30	16	14	196
20	Pali	899.25	41.33	16	14	2	4
21	Ajmer	900.98	47.69	7	13	-6	36
22	Tonk	891.55	39.14	26	20	6	36
23	Bundi	893.66	39.97	24	19	5	25
24	Bhilwara	927.77	40.29	23	3	20	400
25	Rajsamand	902.59	40.99	17	11	6	36
26	Dungarpur	922.41	38.41	27	5	22	484
27	Banswara	933.62	35.46	28	1	27	729
28	Chittaurgarh	912.41	40.33	22	6	16	256
29	Kota	898.57	57.32	1	15	-14	196
30	Baran	911.88	44.28	12	8	4	16
31	Jhalawar	912.07	39.79	25	7	18	324
32	Udaipur	923.99	40.57	20	4	16	256
33	Pratapgarh	933.29	35.20	29	2	27	729

$\Sigma d^2$	8966
$r_s$	-0.49833S

Source: census 2011



The correlation between child sex ratio and female literacy is -0.49833. It is a negative correlation. The child sex ratio and female literacy have moved opposite direction in Rajasthan. The child sex ratio in districts of Banswara and Pratapgarh has been found highest whereas female literacy has been found the lowest her.

## VI. CONCLUSION

Present study found that there are regional disparities in distribution of the child sex ratio and Jhunjhunu disstrict ranks third in female literacy rate of 84% followed by Sikar and Ganganagar. Due to people are matured and discrimination against girl child is not Strong in these districts. It is clear from the pattern of literacy that districts adjoining to district place have recorded high Literacy rate. It is because of better education facilities and awareness of peoples towards education. The study reveals that correlation between child sex ratio and female literacy is -0.49833. It is a moderate negative correlation. The child sex ratio and female literacy have moved opposite direction in Rajasthan. In 2011 census data shows correlation between child sex ratio and female literacy in tehsil the sex ratio has been found to be highest is districts, which have low female literacy. Most back word region of Rajasthan, it suggests that decline in child sex ratio are contributed more female literacy and economically better of segment of population. It requires stringent action from the state authorities and mass movement to change the mindset and equal order of the patriarchal society

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