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# Socio Economic Condition of Chandigarh: A Geographical Analysis

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**Abstract:** In present paper, an attempt has made to analyse the socio-economic correlates (indicators) of Chandigarh. In this study the sex ratio, percentage of female literacy, percentage of working female population, percentage of SC population correlates are used. To draw the socio-economic profile of Chandigarh we use map with the help of Arc GIS 9.3 and correlation with the help of SPSS 16. Moreover, tables used to show the data. The findings are shows that sex ratio, percentage of female literacy and percentage of female working population are positively associated with percentage of SC population in Chandigarh. **Keywords:** Sex Ratio, Percentage of Female Literacy, Percentage of Working Female Population, Percentage of SC Population.

## I. INTRODUCTION

The socio economic conditions are the indicators of health scenario of any country. Socio economic indicators provides data on education, gender, poverty, employment, housing and amenities etc. here in this study we have taken four indicators. These indicators are female literacy rate, sex ratio, female work percentage and proportion of SC population. These indicators provide us the linkages between socio economic indicators and attainment of goals. The present study tries to understand the pattern and correlation of these indicators in the Chandigarh

### A. Study Area

Chandigarh is a city and a union territory of India that serves as the capital of the Indian states of Punjab and Haryana. As a union territory, the city is governed directly by the Union Government and is not part of either state.

The city tops the list of Indian States and Union Territories by per capita income followed by Haryana and Delhi respectively in the country. The metropolitan of Chandigarh-Mohali-Panchkula collectively forms a Tri-city, with a combined population of over 2 million. Chandigarh is the first smoke-free city in India.

As of 2011 India census, Chandigarh had a population of 1,055,450, making for a density of about 9,252 (7,900 in 2001) persons per square kilometer. Males constitute 55% of the population and females 45%. The sex ratio is 818 females for every 1,000 males, which is the third lowest in the country, up from 773 in 2001. The child sex ratio is 880 females per thousand males, up from 819 in 2001.

Chandigarh has an average literacy rate of 86.77%, higher than the national average; with male literacy of 90.81% and female literacy of 81.88%. 10.8% of the population is under 6 years of age.

There has been a substantial decline in the population growth rate in Chandigarh, with just 17.10% growth 2001-2011. Since, 1951-1961 the rate has decreased from 394.13% to 17.10%. This is probably because of rapid urbanization and development in neighboring cities.

The urban population constitutes of as high as 97.25% of the total and the rural population makes up 2.75% as there are only few villages within Chandigarh on its Western and South-Eastern border and majority of people live in the heart of Chandigarh. Hinduism and Sikhism are the prominent religions of Chandigarh followed by 80.77% and 13.10% people respectively. Minorities are Muslims 4.87%, Christians 0.82%, Buddhists 0.15% and Jains 0.18%, while others are 0.11%.

### B. Objectives

The objectives of present study are to analyze the socio- economic indicators of Chandigarh, (Female Literacy, Female Worker, Higher Sex Ratio, Higher Percentage of SC Population.) their spatial distribution and their correlation with each other.

### C. Data And Methodology

1) *Data*: The study area of present study is Chandigarh. The ward is chosen as the unit of study. The data used in present study used from Censuses of India 2011. From the census data information on female literacy, female worker, higher sex ratio, higher percentage of sc population on ward level.

2) *Methodology*: Description of variables Source

Female Literacy

Female Worker

Sex Ratio

Percentage of SC Population

After collecting the data, it is arranged, tabulated, calculated and analyzed. Sex ratio is computed for every individual wards; results occurred from this calculation is further represented by maps which are prepared by Arc-GIS 9.3 and quartile method is used. Correlations between all these four variables have calculated with the help of SPSS 16 software.

## II. RESULTS AND DISCUSSION

### A. Geographical Analysis of Female Literacy in Chandigarh

The literacy rate of any region, whether it is an urban or rural, is backbone of its socio economic development. The literacy rate defined as the percentage of population above seven years in an area who can read and write with understanding. The literacy rate of India is 74.04% according to census 2011. The literacy rate is not same in all parts of the country; it varies from one state to another. There are some factors which affect the literacy rate of any country these factors may be social, cultural, economical and political. The Chandigarh is a hub of academic and professional educational institutions. That is why the students from not only Punjab and Haryana but also from Himachal Pradesh, Uttarakhand and Jammu and Kashmir come here for the purpose of education. The literacy rate of Chandigarh is 86.05% according to 2011 census. The rate of literacy is varying from ward to ward. There are also variations in the male and female literacy rates in Chandigarh. Female literacy rate is an indicator of socio-economic structure of any region. It also varies in different wards of Chandigarh. The above map is showing the female literacy rate of Chandigarh according to census 2011. It reveals that the female literacy rate in Chandigarh varies from 43% to 87%.

In the outer wards of Chandigarh like, ward 6,7,13,19,23,24,26,30,31,32,34 and 38 the literacy rate is very low as compare to inner wards. Here in these wards the average rate of female literacy is 53%. In these wards, the highest rate of female literacy is 63% and lowest is 43%. These wards are located in outer areas of Chandigarh so the facilities are not as good as in inner wards that is why the literacy rate is low in these wards. The second reason of low literacy rate in these wards is unemployment and third is slums in these wards. The slum dwellers do not pay attention to take good education they just only work to meet their daily needs.

The wards, which are near to outer wards, are also having low female literacy rate. However, here in these wards the female literacy rate is little high than outer wards. In the ward 5, 11,12,28,29,33,35,36 and 37 the female literacy rate is varies from 64% to 71%. The average rate of female literacy is 67.2%. This rate is better as compare to some outer wards but not good as compare to inner wards. In the ward 1,4,8,10,14,16,17,18,20,21,22,25 and 27 the female literacy rate is higher than outer wards. Here female literacy varies from 72% to 85%. The average literacy of female is 78.5 in these wards. Here the most of the educational institutions are located and high-class families. So here, the female literacy is much better.

The highest female literacy rate founds in ward 2, 3, 9 and 15. The female literacy rate of these wards is varies from 86% to 87%. Hence, with the analysis of geographic study we can say that the pattern of literacy rate of female in Chandigarh is increasing from outer areas to core areas.

### B. Geographical Analysis of Sex Ratio in Chandigarh

The sex ratio is also a parameter of socio economic conditions of any area. The sex ratio defined as the number of females to per 1000 males in a given population in an area within a particular period. The sex ratio of India is 940 as per the 2011 census. In the northern states of India, the sex ratio is not in respectable condition. That is why some scholars say that the Punjab, Haryana and Himachal Pradesh are Bermuda triangle of women feticide. It is a very shameful to all of us. It is good news that these states are now doing some efforts to increase sex ratio. The Chandigarh has also not well in the area of sex ratio. The sex ratio of Chandigarh according to 2011 census is 818 that is slightly high than the 777 according to sex ratio of 2001 census. Still it is not in respectable situation. The above map is showing the distribution of sex ratio in Chandigarh. Here we can see that the sex ratio in Chandigarh is varies from 586 to 927. In ward 14, 23, 27,30,31,32,35,36,37 and 38 have very low sex ratio, which is from 580 to 717. In other wards, as if 3,11,12,13,19,20,26,28,29,33 and 34 have the sex ratio varies from 718 to 826. In ward 1,2,5,6,7,10,16,18,24 and 25 have the sex ratio of 827 to 878. There are some wards, which have the sex ratio of more than 900. In ward 4, 8, 9,15,17,21 and 22

have maximum sex ratio of 879 to 927. The northern and southern and southern wards of Chandigarh have less sex ratio, which varies from 586 to 878. The sex ratio is very less in ward 3, 14,23,27,30,31,3,35,36,37 and 38. The pattern of sex ratio is in increasing order toward central wards from all directions. The maximum sex ratio founded in central wards of the UT, these are ward 4, 8, 9,15,17,21 and 22

**C. Geographical Analysis of Working Female in Chandigarh**

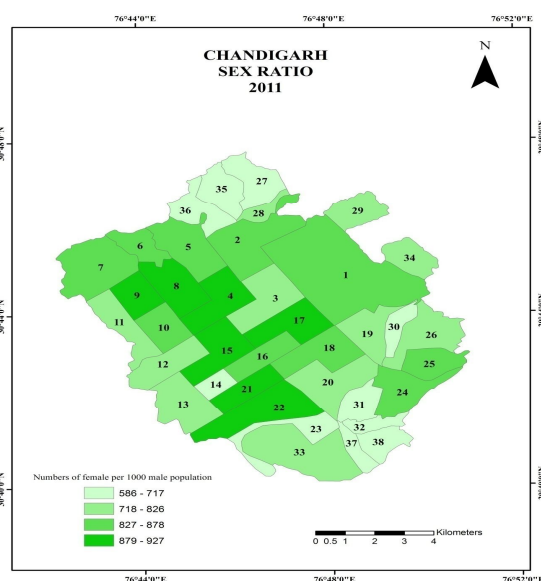
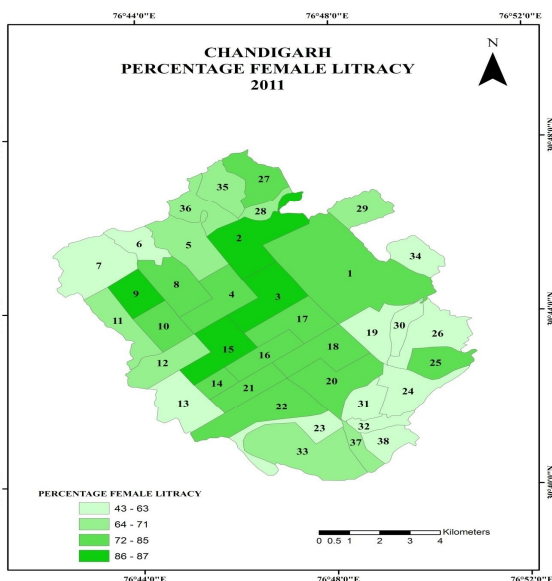
Women lack of access to higher education has excluded them from take part in well-paid jobs. Economic dependency on men led to the poor socio-economic status of women. In India, more women work in rural areas than cities. Chandigarh also shows the same pattern. The percentage of working women in Chandigarh is very low which shows that the male is still dominant in economic activities. In the wards 6, 7, 19, 20,23,24,31,32,33,35, and 37 the percentage of working women is only 7 to 11 percent. In addition, in the other wards like 11,18,22,25,26,29,36 and 37 have the percentage of 12 to 16 of working females. In ward 5, 10, 12,13,16,21,28,30,34 and 38 the 17 to 20% females are working. In ward 1, 2,3,4,8,9,15 and 17 shows the little better condition of working females. Here the percentage of working female is 21 to 23%.

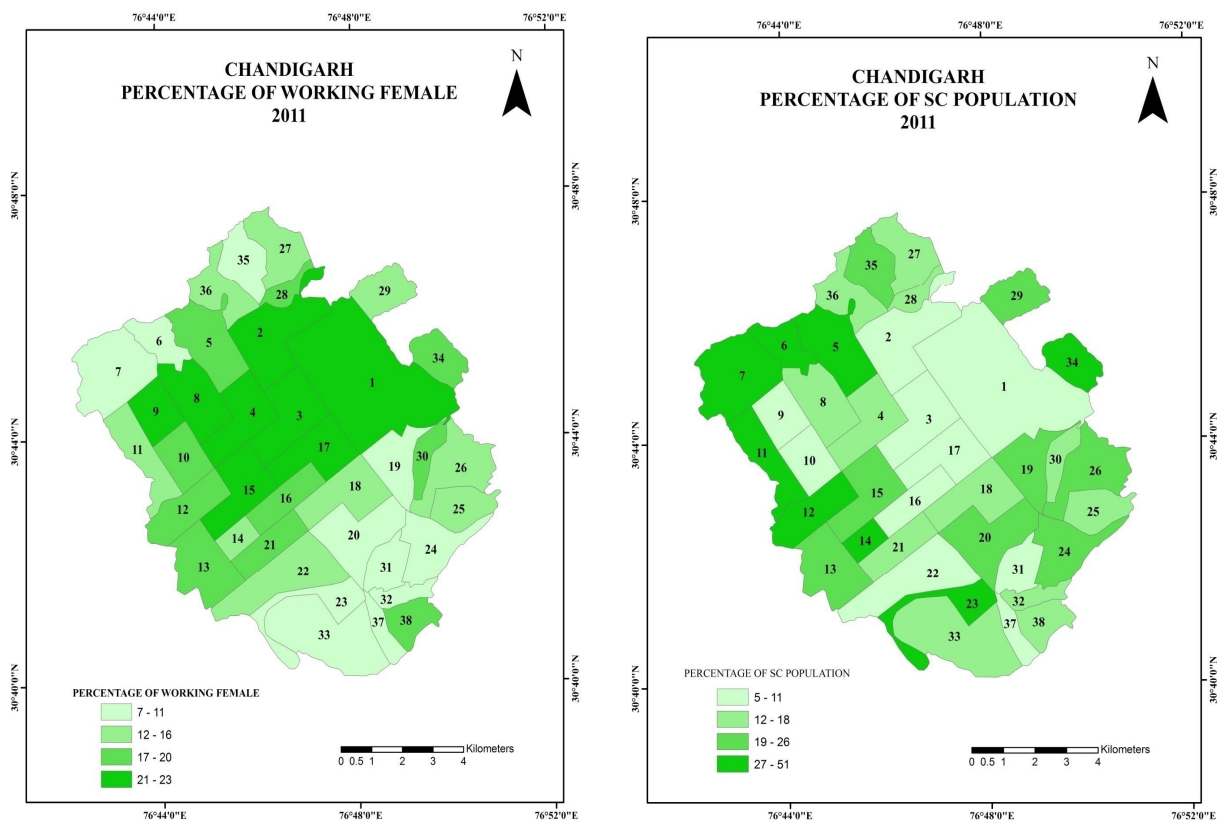
In the wards 6, 7, 19, 20,23,24,31,32,33,35, and 37 the percentage of working women is only 7 to 11 percent. In addition, in the other wards like 11,18,22,25,26,29,36 and 37 have the percentage of 12 to 16 of working females. In ward 5, 10, 12,13,16,21,28,30,34 and 38 the 17 to 20% females are working. In ward 1, 2,3,4,8,9,15 and 17 shows the little better condition of working females. Here the percentage of working female is 21 to 23%.

In southern wards, the number of working female is very less as compare to central Chandigarh. Here also the pattern of working females is declining toward outside from core part of the city. Eastern and western wards have much higher percentage of working females as compare to southern wards. Here in the city maximum percentage of working female founded in ward 1, 2,3,4,8,9,15 and 17. Here the percentage of working female is 21 to 23. It is not very well situation. Except these wards, all other wards have less than 20 % of working female. The worst percentage of working females is in southern wards where the percentage of working females is 7 to 11%.

**D. Geographical Analysis of Scheduled Caste Population in Chandigarh**

As per the census 2011, the total population of Scheduled caste is 16.6%, which was 16.2% in 2001 census. In Chandigarh the total percentage of Scheduled Caste, population is 19.1%. This population varies within wards. In ward 1, 2, 3,9,10,16,22,31 and 37 have the 5 to 11 percentage SC population. And in ward 4,8,18,21,25,27,28,30,32,33,36 and 38 have the 12 to 18 percent SC population. In ward 13,15,19,20,24,26,29 and 35 have the SC population of 19 to 26 percent. In ward 5, 6,7,11,12,14,23 and 34 have maximum number of SC population with 27 to 51 percent. Western Chandigarh has maximum number of SC population with the percentage of 27 to 51%. The lowest percentage of SC population founds in middle and southern parts of Chandigarh. There have unequally distribution of SC population in Chandigarh.





**E. Correlation**

Sex ratio is positively and significantly correlated with percentage of female literacy (.635\*\*) and percentage of female working population (.429\*\*). However, r it negatively correlated with percentage of SC population. (-0.048).

In case of percentage SC population it was negatively and significantly correlated with percentage female literacy (-.542\*\*) and percentage of working female population (-.380\*).

In case of female literacy, it is significantly and positively correlated with percentage of female working population (.566\*\*).

CORRELATION MATRIX					
		Sex Ratio	% SC Population	% Female Literacy	% Total Working Female Population
Sex Ratio		1	-0.048	.635**	.429**
% SC Population			1	-.542**	-.380*
% Female Literacy				1	.566**
% Working Female Population					1

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**III. CONCLUSION**

The study indicates that the socio economic conditions of Chandigarh are improving. The literacy rate of females in Chandigarh has also increased. However, this rate is uneven in wards. In the on hand the literacy is very low in ward no. 6, 7, 13, 19, 23, 24, 26, 30, 31, 32, 34 and 38, on the other hand ward no. 2, 3, 9 and 15 recorded with high literacy rate among females. Sex ratio is also varies in the wards with low sex ratio in outer wards and high sex ratio in core city wards. The working women percentage is very low in Chandigarh on an average, but it is slightly dwindling in all wards. It shows that the place of women in economic activities is still negligible. These percentages have increased within upcoming years. The scheduled caste population is also uneven in all wards.

Western Chandigarh has maximum number of scheduled caste population and southern part with lowest concentration of scheduled caste population.

All these issues have managed by the government and have not ignored. NGO and other social welfare agencies should make a descriptive study on these issues. There are some more issues also available which are still not comes into light, we can enlightened these issues to make our society more joyful, healthy and just.

Table 1, Socio- Economic Indicators of Chandigarh, 2011

Wards Numbers	Sex Ratio	% SC population	% Female Literacy	% Working Female Population
1	854	7	85	23.3
2	866	10.5	87.3	21.6
3	816	6.6	86.8	22.7
4	914	17.5	84.3	22.8
5	860	43.8	65.9	16.5
6	850	50.6	63.3	11.3
7	854	27	62.7	9.8
8	927	13.7	83.6	22.4
9	920	11	87	22.1
10	836	10.9	82.7	19.9
11	813	29.5	63.6	16.3
12	763	26.8	65.6	16.6
13	823	19.1	61.8	19.2
14	687	10.2	72.3	14.9
15	916	5.3	87.1	21.6
16	878	10.8	85.4	19.6
17	890	4.8	84.6	22.2
18	878	13.4	82.6	15.7
19	820	19.4	57.2	11.2
20	791	24.1	58.5	9.8
21	900	14.2	84.3	16.9
22	924	5.3	85.1	16
23	695	29.9	61.6	10.5
24	834	23.4	57.1	10.1
25	859	13.4	76.4	14
26	825	19.4	62.9	11.5
27	673	13.6	72.8	14.6
28	642	14.9	66.8	17
29	826	25.8	70	11.5
30	683	13.3	53.1	16.5
31	703	11	62.1	7.4
32	709	18.1	54.6	11
34	758	12.8	71.3	9.3
35	802	26.5	50.6	19.1
36	717	21.4	68.7	11
37	666	15	66.6	13.2
38	690	9.2	71.2	9.6

Sources: Census of India, 2011

## REFERENCES

- [1] Alamtar Ali. (2009); "Sex Composition in Uttar Pradesh: A Spatial Analysis", Panjab Geographer, Vol.5, pp.79-92.
- [2] Agnihotri, Satish Balram (2000); "Sex Ratio Pattern in the Indian Population: A Fresh Exploration", Sage Publication, New Delhi, pp.380.
- [3] Bhutani, Smita (1999); "Spatial Patterns of Change in Indian Sex Ratio: 1981-1991", Asian Profile, Vol.27, no.2 pp.157-168.
- [4] Census of India (2011); "Primary Census Abstract Censuses of India 2011"
- [5] Census of India (2011); "Primary Census Abstract Censuses of India 2011" .HH- Tables.
- [6] Gosal, G.S. (1961); "The Regionalism of Sex Composition of India's Population", Rural Sociology, Vol.26,pp.122-137.
- [7] Gosal, G.S. (1961); "The Regionalism of Sex Composition of India's Population", Rural Sociology, Vol.26,pp.122-137.
- [8] Hussan, M.I. (1999); "Sex Ratio in Haryana", The Geographer, Vol.46, No.2, pp.104-116.
- [9] Krishan, G. and Chandna, R.C.(1973); "Sex Composition of Haryana's Population", Geographical Review of India, Vol. XXV, No.2, pp.113-125.
- [10] Raman, R. et al (2014), "GIS and spatial analysis of housing and household amenities and assets in Haryana", Indian Cartographer, Vol. XXXIV, 2014.
- [11] Khan, J.S. et al (2013), "A geographical analysis of availability of amenities in scheduled caste households in India", American International Journals of Research in Humanities, Arts and Social Sciences, 2013, Vol.13-329, pp. 56-65.
- [12] Mehta, S. and Kaur, G.(1983); "Rural-Urban Differences in Sex Ratio of Rajasthan", The Indian Geographical Journal, Vol.58, No.2, pp.152-161.
- [13] Siddiqui and Siddiqui (1993); "Change in Sex Composition of Population in District Deoria, Uttar Pradesh", The Geographer, Vol.XI, No.1, pp.61-66.
- [14] Virender Chhachhiya, "Spatial Analysis of Household Amenities in Rajasthan", International Journal of Science and Research (IJSR), Volume 5 Issue 11, November 2016, 1063 – 1066. <https://www.ijsr.net/archive/v5i11/v5i11.php>
- [15] Suman Chauhan & Chhachhiya Virender (2016) "Spatial Pattern of Sex Composition in Haryana, 2011" International Journal of Interdisciplinary Research in Science Society and Culture(IJRSSC) Vol: 2, Issue:1, pp. 424 – 432 (June Issue), 2016 ISSN: (P) 2395-4345, (O) 2455-2909 © IJRSSC [www.ijrssc.in](http://www.ijrssc.in), .
- [16] [Virender Chhachhiya. (2017); IMPACT OF HOUSEHOLD AMENITIES ON CHILD HEALTH IN RAJASTHAN: AN ANALYSIS. *Int. J. of Adv. Res.* 5 (6). 1587-1600] (ISSN 2320-5407). [www.journalijar.com](http://www.journalijar.com)
- [17] [Virender Chhachhiya. (2016); MAPPING OF AVAILABILITY OF HOUSEHOLD AMENITIES TO MEASURE SOCIAL EXCLUSION IN HARYANA. *Int. J. of Adv. Res.* 4 (10). 1118-1124] (ISSN 2320-5407). [www.journalijar.com](http://www.journalijar.com)
- [18] [Virender Chhachhiya. (2016); CRIME IN CHANDIGARH: GEOGRAPHICAL ANALYSIS. *Int. J. of Adv. Res.* 4 (10). 1330-1343] (ISSN 2320-5407). [www.journalijar.com](http://www.journalijar.com)
- [19] [Virender Chhachhiya. (2016); CHILD HEALTH IN INDIA: A STUDY OF RAJASHTHAN. *Int. J. of Adv. Res.* 4 (10). 1369-1380] (ISSN 2320-5407). [www.journalijar.com](http://www.journalijar.com)



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