# DISPARITY IN LITERACY AND SEX RATIO OF CHIKKODI TALUKA, BELAGAVI DISTRICT, KARNATAKA STATE

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**Abstract**:

This paper is an attempts to analyze the correlation between literacy and sex ratio of Chikkodi Taluka. Literacy is one of the most important indicators of social development. Literacy and education are universally recognized as a major component of human development. As such, certain minimum level of literacy seems to be essential for a population to a break out the vicious of poverty. Literacy affected by migration and sex ratio. The knowledge of literacy and sex ratio is essential for the understanding the condition of women in society. The main cause of the decline of the sex ratio in India is due to the biased attitude which is meted out to the women. The main cause of this gender bias is inadequate education. In this town, sex ratio is high because of economic conditions. Thus, the analysis of literacy and sex ratio is immensely significant. This paper revealed that there is a negative correlation between literacy and sex ratio in Chikkodi Taluka.

**Key Words:** Literacy, sex ratio, correlation method.

## Introduction:

Literacy refers to the capability to read for knowledge, write articulately, and think critically regarding the written word. The population commission of United States defines "the capability of both read and writes an easy message with indulgent in any language enough foundation for classifying a person as literate". According to the census of India, "a person aged more than 6 years and who can both read and write with understanding in any language has taken as a literate." The census of India defines the literacy rate as a percentage of literates to total population in the age group 7 years and above. Literacy is essential for eradicating poverty and mental segregation for enlightening peaceful and pleasant worldwide relationships and promoting the free play of demographic processes sex ratio is the ratio of males to females in a population. A significant social indicator to determine the extent of prevailing impartiality between males and females in a society at a given point in time. This has much to do with the interplay of sex disparity in mortality, sex-selective migration, sex ratio at birth and at the time the sex disparity in abortion and in population enumeration. It is also manipulated marital status, manpower, the gross national product, planning concerning educational and medical services, housing etc. as well as socio-cultural factors mutually manipulate the overall demographic composition of the population.

**Review of Literature:**

The knowledge is a most important tool for development of the society this is the main cause for the equality between male and female. Jadhav, Santosh, Ratnaparbha ( 2014 ) set up that there were wide disparities in literacy rate and sex ratio of Pune district. Correlation flanked by literacy and sex ratio found in low quantity and optimistic angle. Sugana (2011) found so as to the education of women is the mainly influential tool of change of arrangement in society as well as education brought cutback inequality and purpose as a means of recuperating their status with the family. kumar, Monu(2013) publicized that correlation among female literacy and child sex ratio (r=-0.46) initiate in moderate degree and unconstructive correlation. Sule and Barkade (2012) concluded that there were wide disparities in literacy and sex ratio of Solapur district. Correlation between literacy and sex ratio found in moderate degree and positive angle i.e. p=0.33. It means high literacy rate and high sex ratio. Singh, Sandeep et . al (2013) exposed that after independence, the literacy rate of India is improved but there are wide disparities between male and female literacy rate and sex ratio is decreased from 1901 to 2011. Correlation between male literacy and sex ratio, female literacy rate and sex ratio found in a negative correlation.

**Study Area:**

The study area is located in the northwestern part of the Karnataka state. The Belagavi District of Chikkodi Taluka extends between$16^0$15' to $16^0$40' north latitude and $75^0$ 1 5' to $75^0$50' east longitude. For administrative convenience, Chikkodi taluka is considered as educational District of Chikkodi, comprising of 4 revenue circles, 131 villages, and 65 gram panchayats. The total geographical area of the taluka1269.74 sq km. The total population of the taluka was about 5,03,838 persons. The important rivers flow in the taluka are mainly Krishna River and its tributaries. The water used for Agricultural and drinking water purpose for local people living in the surrounding villages.

**Objectives:**

1. To study the Village Wise Distribution of literacy rate in Chikkodi Taluka .
2. To study the Village Wise Distribution of sex ratio in Chikkodi Taluka.
3. To analyse the correlation between Ward Wise Distribution of literacy and sex ratio in the study.

**Database and Methodology:**

The current study is based on the secondary sources of data. To execute the objectives data about literacy and sex ratio of Chikkodi is obtained from a census of India, Statistical abstract of Chikkodi. The composed data are processed to analyse the spatial pattern of literacy rate and sex ratio in Chikkodi. Arc GIS 10.2 software used intended for preparing the map with to demonstrate the spatial pattern of sex ratio and literacy in Chikkodi. The wards of Chikkodi are grouped into five categories Very Low, Low, Moderate, High, Very High based on simple statistical method. The Spearman's rank order method is used for analyzing the correlation between literacy and sex ratio.
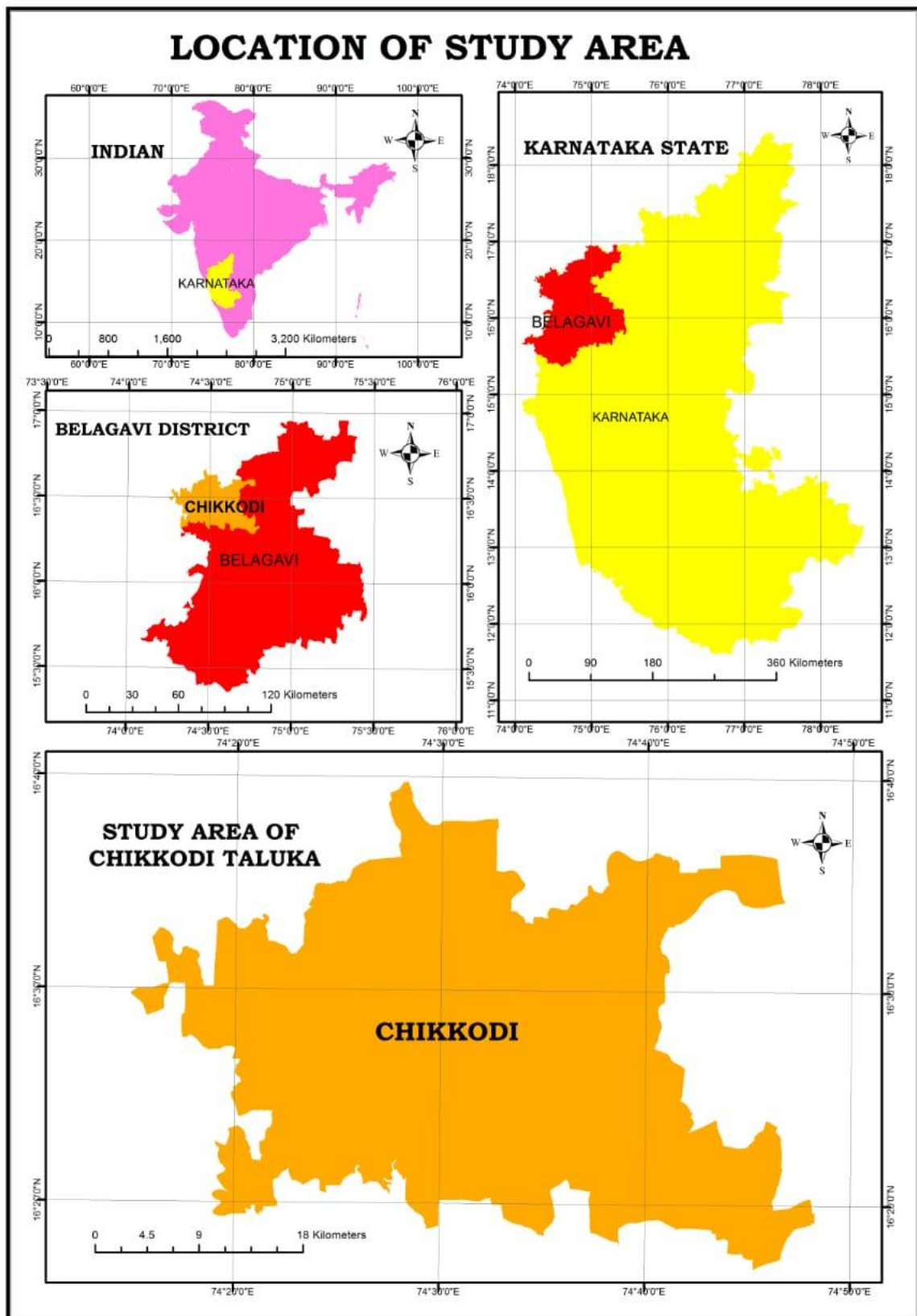
*Raghavendra S Gouri & S. M. Hurakadli*

Figure 1

**Table No. 1: Correlation between literacy and sex ratio of Chikkodi Taluka**

| SI.NO VILLAGES | LITERACY RATE(X) | SEX RATIO(Y) | $X_{Ra}$ | $X_{Ra} - M_x$ | $Y_{Ra}$ | $Y_{Ra} - M_y$ | Sum Diffs |
|---|---|---|---|---|---|---|---|
| 1 | 54.79 | 112 | 45 | -21 | 97 | 31 | -651 |
| 2 | 58.64 | 52 | 73 | 7 | 56.5 | -9.5 | -66.5 |
| 3 | 51.8 | 8 | 33 | -33 | 16 | -50 | 1650 |
| 4 | 58.74 | -19 | 74 | 8 | 3 | -63 | -504 |
| 5 | 63.05 | 61 | 107 | 41 | 66 | 0 | 0 |
| 6 | 56.74 | 98 | 53 | -13 | 87.5 | 21.5 | -279.5 |
| 7 | 57.82 | 56 | 64 | -2 | 61.5 | -4.5 | 9 |
| 8 | 52.25 | 71 | 34 | -32 | 74 | 8 | -256 |
| 9 | 57.22 | 66 | 58 | -8 | 71 | 5 | -40 |
| 10 | 60.88 | 178 | 91 | 25 | 113 | 47 | 1175 |
| 11 | 61.07 | 20 | 93 | 27 | 27.5 | -38.5 | -1039.5 |
| 12 | 58.75 | 42 | 75.5 | 9.5 | 45.5 | -20.5 | -194.75 |
| 13 | 63.52 | -5 | 112 | 46 | 8.5 | -57.5 | -2645 |
| 14 | 54.28 | 61 | 43 | -23 | 66 | 0 | 0 |
| 15 | 58.03 | 7 | 67 | 1 | 15 | -51 | -51 |
| 16 | 60.38 | 110 | 87 | 21 | 95.5 | 29.5 | 619.5 |
| 17 | 64.95 | 93 | 121 | 55 | 84 | 18 | 990 |
| 18 | 57.69 | 14 | 62 | -4 | 21.5 | -44.5 | 178 |
| 19 | 60.95 | 441 | 92 | 26 | 128 | 62 | 1612 |
| 20 | 58.31 | 103 | 71 | 5 | 91 | 25 | 125 |
| 21 | 67.86 | 91 | 130 | 64 | 81 | 15 | 960 |
| 22 | 57.67 | 134 | 61 | -5 | 108 | 42 | -210 |
| 23 | 58.02 | 14 | 66 | 0 | 21.5 | -44.5 | 0 |
| 24 | 58.28 | 100 | 70 | 4 | 89 | 23 | 92 |
| 25 | 54.35 | 56 | 44 | -22 | 61.5 | -4.5 | 99 |
| 26 | 57.56 | 27 | 60 | -6 | 36 | -30 | 180 |
| 27 | 52.62 | -5 | 37 | -29 | 8.5 | -57.5 | 1667.5 |
| 28 | 57.3 | -83 | 59 | -7 | 1 | -65 | 455 |
| 29 | 59.54 | 49 | 82 | 16 | 53 | -13 | -208 |
| 30 | 48.8 | 11 | 24 | -42 | 19.5 | -46.5 | 1953 |
| 31 | 50.97 | 9 | 32 | -34 | 17.5 | -48.5 | 1649 |
| 32 | 62.94 | 319 | 104 | 38 | 122 | 56 | 2128 |
| 33 | 57.1 | -71 | 57 | -9 | 2 | -64 | 576 |
| 34 | 65.2 | 326 | 122 | 56 | 124 | 58 | 3248 |
| 35 | 62.7 | 25 | 102 | 36 | 32 | -34 | -1224 |
| 36 | 58.46 | 102 | 72 | 6 | 90 | 24 | 144 |
| 37 | 63.3 | 505 | 111 | 45 | 130 | 64 | 2880 |
| 38 | 59.93 | 32 | 85 | 19 | 39.5 | -26.5 | -503.5 |
| 39 | 59.52 | 0 | 81 | 15 | 12.5 | -53.5 | -802.5 |
| 40 | 56.83 | 59 | 54 | -12 | 64 | -2 | 24 |
| 41 | 67.66 | 35 | 128 | 62 | 41 | -25 | -1550 |
| 42 | 63.06 | 263 | 108 | 42 | 119 | 53 | 2226 |
| 43 | 64.7 | -17 | 119 | 53 | 4.5 | -61.5 | -3259.5 |

*Raghavendra S Gouri & S. M. Hurakadli*

| 44 | 65.62 | 171 | 124 | 58 | 111 | 45 | 2610 |
|---|---|---|---|---|---|---|---|
| 45 | 63.23 | 67 | 109 | 43 | 72.5 | 6.5 | 279.5 |
| 46 | 60.06 | 19 | 86 | 20 | 25.5 | -40.5 | -810 |
| 47 | 64.59 | 0 | 118 | 52 | 12.5 | -53.5 | -2782 |
| 48 | 62.29 | 139 | 100 | 34 | 109 | 43 | 1462 |
| 49 | 62.36 | 25 | 101 | 35 | 32 | -34 | -1190 |
| 50 | 63.94 | -6 | 113 | 47 | 7 | -59 | -2773 |
| 51 | 65.92 | 25 | 125 | 59 | 32 | -34 | -2006 |
| 52 | 64.4 | 29 | 116 | 50 | 37 | -29 | -1450 |
| 53 | 59.18 | 244 | 79 | 13 | 116 | 50 | 650 |
| 54 | 60.54 | 370 | 88 | 22 | 127 | 61 | 1342 |
| 55 | 64.56 | 132 | 117 | 51 | 107 | 41 | 2091 |
| 56 | 50.36 | 5 | 30 | -36 | 14 | -52 | 1872 |
| 57 | 55.45 | 282 | 49 | -17 | 120 | 54 | -918 |
| 58 | 45.33 | 95 | 17 | -49 | 86 | 20 | -980 |
| 59 | 56.91 | -2 | 55 | -11 | 10.5 | -55.5 | 610.5 |
| 60 | 60.67 | 175 | 90 | 24 | 112 | 46 | 1104 |
| 61 | 62.87 | 56 | 103 | 37 | 61.5 | -4.5 | -166.5 |
| 62 | 62.21 | 480 | 99 | 33 | 129 | 63 | 2079 |
| 63 | 61.88 | 260 | 98 | 32 | 118 | 52 | 1664 |
| 64 | 64.82 | -9 | 120 | 54 | 6 | -60 | -3240 |
| 65 | 63.01 | 110 | 105 | 39 | 95.5 | 29.5 | 1150.5 |
| 66 | 63.24 | 124 | 110 | 44 | 102.5 | 36.5 | 1606 |
| 67 | 67.89 | 55 | 131 | 65 | 59 | -7 | -455 |
| 68 | 64.15 | 113 | 115 | 49 | 98 | 32 | 1568 |
| 69 | 59 | 81 | 78 | 12 | 77 | 11 | 132 |
| 70 | 61.25 | 360 | 95 | 29 | 126 | 60 | 1740 |
| 71 | 60.59 | 221 | 89 | 23 | 115 | 49 | 1127 |
| 72 | 61.17 | 325 | 94 | 28 | 123 | 57 | 1596 |
| 73 | 63.02 | 32 | 106 | 40 | 39.5 | -26.5 | -1060 |
| 74 | 52.82 | 125 | 39 | -27 | 104.5 | 38.5 | -1039.5 |
| 75 | 24.15 | 26 | 1 | -65 | 35 | -31 | 2015 |
| 76 | 43.73 | 731 | 12 | -54 | 131 | 65 | -3510 |
| 77 | 57.92 | 129 | 65 | -1 | 106 | 40 | -40 |
| 78 | 56.08 | 315 | 51 | -15 | 121 | 55 | -825 |
| 79 | 52.36 | 16 | 35 | -31 | 24 | -42 | 1302 |
| 80 | 66.37 | 11 | 126 | 60 | 19.5 | -46.5 | -2790 |
| 81 | 58.16 | 44 | 69 | 3 | 47.5 | -18.5 | -55.5 |
| 82 | 52.44 | 46 | 36 | -30 | 49.5 | -16.5 | 495 |
| 83 | 61.82 | 63 | 97 | 31 | 69.5 | 3.5 | 108.5 |
| 84 | 57.76 | 114 | 63 | -3 | 99 | 33 | -99 |
| 85 | 56.21 | 9 | 52 | -14 | 17.5 | -48.5 | 679 |
| 86 | 67.8 | 20 | 129 | 63 | 27.5 | -38.5 | -2425.5 |
| 87 | 59.6 | 54 | 83.5 | 17.5 | 58 | -8 | -140 |
| 88 | 58.85 | -17 | 77 | 11 | 4.5 | -61.5 | -676.5 |
| 89 | 65.43 | 25 | 123 | 57 | 32 | -34 | -1938 |

*Raghavendra S Gouri & S. M. Hurakadli*

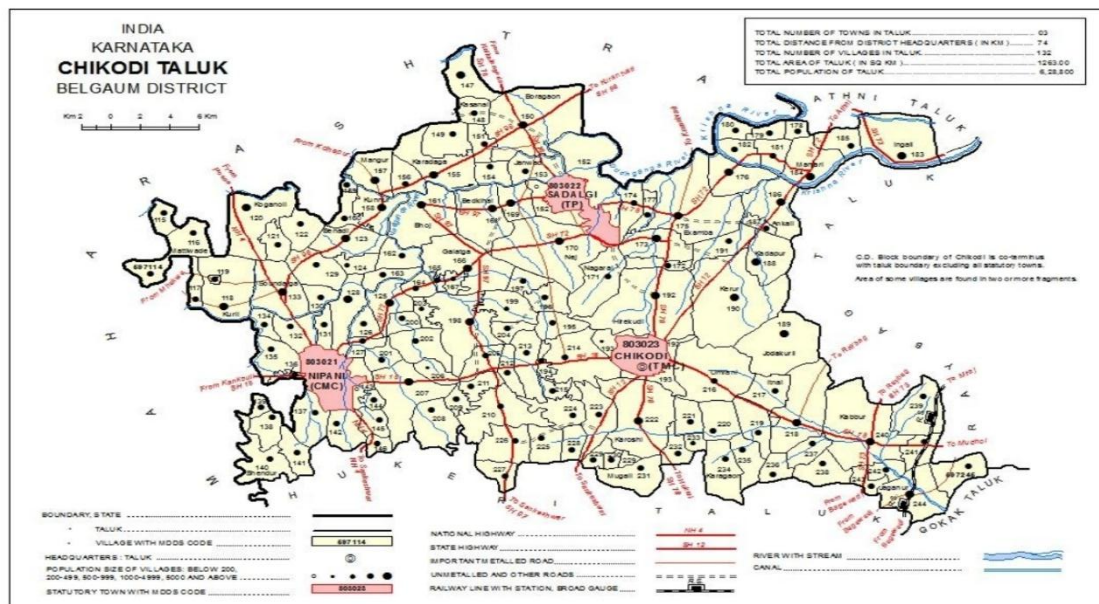| 90 | 64.01 | 25 | 114 | 48 | 32 | -34 | -1632 |
|---|---|---|---|---|---|---|---|
| 91 | 61.75 | 115 | 96 | 30 | 100 | 34 | 1020 |
| 92 | 55.43 | 15 | 48 | -18 | 23 | -43 | 774 |
| 93 | 55.26 | 109 | 47 | -19 | 93.5 | 27.5 | -522.5 |
| 94 | 53.73 | 88 | 41 | -25 | 80 | 14 | -350 |
| 95 | 49.69 | 117 | 26 | -40 | 101 | 35 | -1400 |
| 96 | 44.52 | 77 | 13 | -53 | 75 | 9 | -477 |
| 97 | 58.13 | -2 | 68 | 2 | 10.5 | -55.5 | -111 |
| 98 | 59.3 | 42 | 80 | 14 | 45.5 | -20.5 | -287 |
| 99 | 67.38 | 333 | 127 | 61 | 125 | 59 | 3599 |
| 100 | 58.75 | 109 | 75.5 | 9.5 | 93.5 | 27.5 | 261.25 |
| 101 | 48.51 | 63 | 22 | -44 | 69.5 | 3.5 | -154 |
| 102 | 45 | 124 | 15 | -51 | 102.5 | 36.5 | -1861.5 |
| 103 | 34.01 | 52 | 3 | -63 | 56.5 | -9.5 | 598.5 |
| 104 | 39.12 | 67 | 7 | -59 | 72.5 | 6.5 | -383.5 |
| 105 | 49.3 | 93 | 25 | -41 | 84 | 18 | -738 |
| 106 | 45.47 | 106 | 18 | -48 | 92 | 26 | -1248 |
| 107 | 49.8 | 84 | 27 | -39 | 79 | 13 | -507 |
| 108 | 56.92 | 44 | 56 | -10 | 47.5 | -18.5 | 185 |
| 109 | 48.77 | 62 | 23 | -43 | 68 | 2 | -86 |
| 110 | 31.2 | 92 | 2 | -64 | 82 | 16 | -1024 |
| 111 | 42.67 | 39 | 10 | -56 | 43 | -23 | 1288 |
| 112 | 50.27 | 48 | 29 | -37 | 51.5 | -14.5 | 536.5 |
| 113 | 50.73 | 51 | 31 | -35 | 55 | -11 | 385 |
| 114 | 37.2 | 98 | 5 | -61 | 87.5 | 21.5 | -1311.5 |
| 115 | 59.6 | 196 | 83.5 | 17.5 | 114 | 48 | 840 |
| 116 | 40.39 | 46 | 8 | -58 | 49.5 | -16.5 | 957 |
| 117 | 56.04 | 125 | 50 | -16 | 104.5 | 38.5 | -616 |
| 118 | 53.85 | 83 | 42 | -24 | 78 | 12 | -288 |
| 119 | 55.25 | 19 | 46 | -20 | 25.5 | -40.5 | 810 |
| 120 | 49.93 | 38 | 28 | -38 | 42 | -24 | 912 |
| 121 | 52.71 | 93 | 38 | -28 | 84 | 18 | -504 |
| 122 | 43.06 | 41 | 11 | -55 | 44 | -22 | 1210 |
| 123 | 47.84 | 56 | 21 | -45 | 61.5 | -4.5 | 202.5 |
| 124 | 38.14 | 61 | 6 | -60 | 66 | 0 | 0 |
| 125 | 46.1 | 79 | 19 | -47 | 76 | 10 | -470 |
| 126 | 45.32 | 252 | 16 | -50 | 117 | 51 | -2550 |
| 127 | 44.89 | 31 | 14 | -52 | 38 | -28 | 1456 |
| 128 | 47.33 | 48 | 20 | -46 | 51.5 | -14.5 | 667 |
| 129 | 53.21 | 50 | 40 | -26 | 54 | -12 | 312 |
| 130 | 41.81 | 169 | 9 | -57 | 110 | 44 | -2508 |
| 131 | 34.34 | 22 | 4 | -62 | 29 | -37 | 2294 |
| Total | 55.97 | 12699 | 8646 | 0 | 8646 | 0 | 8347.5 |

*Source: Census of India 2001*

*Raghavendra S Gouri & S. M. Hurakadli*

**Distribution of literacy rate(X) and sex ratio (Y) of Chikkodi Villages:**

Chikodi Taluka has ultimately 131 villages, results about the explanation literacy rate and sex ratio of every villages according to the census data of 2011. There is a vast variations of disparities in literacy and sex ratio of Chikkodi Taluka wise villages.

Chikkodi as a whole percentage is 55.97% literacy rate in 2001. However, the village level literacy differs from village to village(table no.I). the lower literacy population of Jodakurli village have literacy is 24.15% percentage and the sex ratio is 26 persons. the higher disparity literacy and sex ratio is identical Chandur tek village is the literacy rate 67.89% percentage with the 55 person were fall in sex ratio. When comparison between literacy and sex ratio in chikkodi tolukas sex ratio is 12699 persons of total population is 456495 according to 2001.

**Village wise map of Chikkodi Taluka -2011**



Sources: Belgaum district census handbook censuses data 2011

**Result Details:**

In the Chikkodi Taluka is having in Spearman's Rho Method is X ranks mean is 66 and with standard Deviation is 37.96 and this is same reflect in Y ranks with combination is covariance is 8347.5 / 130=64.21, and R = 64.21/ (37.96 X 37.96)= 0.045 in chikkodi taluka.

**Conclusion:**

As you can no doubt see we have provided quite a lot of data below. Most of it is self-explanatory, but it is worth noting that this calculator reports the R value of the spearman test, not a derived P value. Rs=0.04, p (2-tailed)= 0.61   Convenient were wide disparities in the literacy and sex ratio in Nippani in 2011. The highest literacy was found in Ward No.12 (87.07%) as well as lowest literacy in Ward No.23 (63.77%). The highest sex ratio is initiate in Ward No.30 (1097) and lowest in Ward No.2 (954). Nevertheless, the correlation between literacy and sex ratio bring into being in low degree and

negative angle i.e. p= -0.35. It means high literacy and low sex ratio.

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