



THE STUDY OF CORRELATION BETWEEN LITERACY AND SEX RATIO IN KHATAV TAHSIL (DISTRICT SATARA)

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ABSTRACT

The sex ratio and literacy are the two vital demographic characteristics of population. Among these, literacy plays important role to raise the sex ratio. This paper is an attempt to analyze the correlation between literacy and sex ratio in Khatav tahsil. The education is one of the ways of accepted as a major component of human development. It makes responsible and understandable society. It is also, affected on various elements of the population such as fertility, mortality, migration and also sex ratio. The information of sex ratio is necessary for the knowing the situation of women in society. A less sex ratio is powerfully indicative of avoid of girl children, sex selective abortions and traditional thoughts of the society. Thus, the correlation between literacy and sex ratio is immense significant. Spearman's Rank order method is applied for analyzes the correlation of literacy & sex ratio. The correlation between literacy and sex ratio in Khatav tahsil is $r = -0.32$. It is low and negative correlation.

Key words: Literacy, Sex Ratio, Fertility, Correlation, Khatav

INTRODUCTION

Human Population is vital resource of nation, becomes from the number of people. The education is the qualitative indicators of human population development. It creates the people socially and economically additional careful and awaked and helps bringing a change in the mental attitudes towards socially responsibilities. The well educated people aware for all things. Hence, education or Literacy are determined the sex ratio.

The ability to read for knowledge, write coherently and think critically about the written word is known as literacy. It also, defined as the ability both to read and write with understanding in any language of children who are above six years of age'. According to 2011 census, the literacy of Satara District is 74.10 percent, among the tahsils Satara records the highest literacy of 79.69 percent and Man tahsil has the lowest literacy of 64.02 percent. In Khatav tahsil, the literacy is measured about 71.29 percent, among the circles, the highest literacy found in Vaduj circle and lowest in Pusesawali circle respectively.

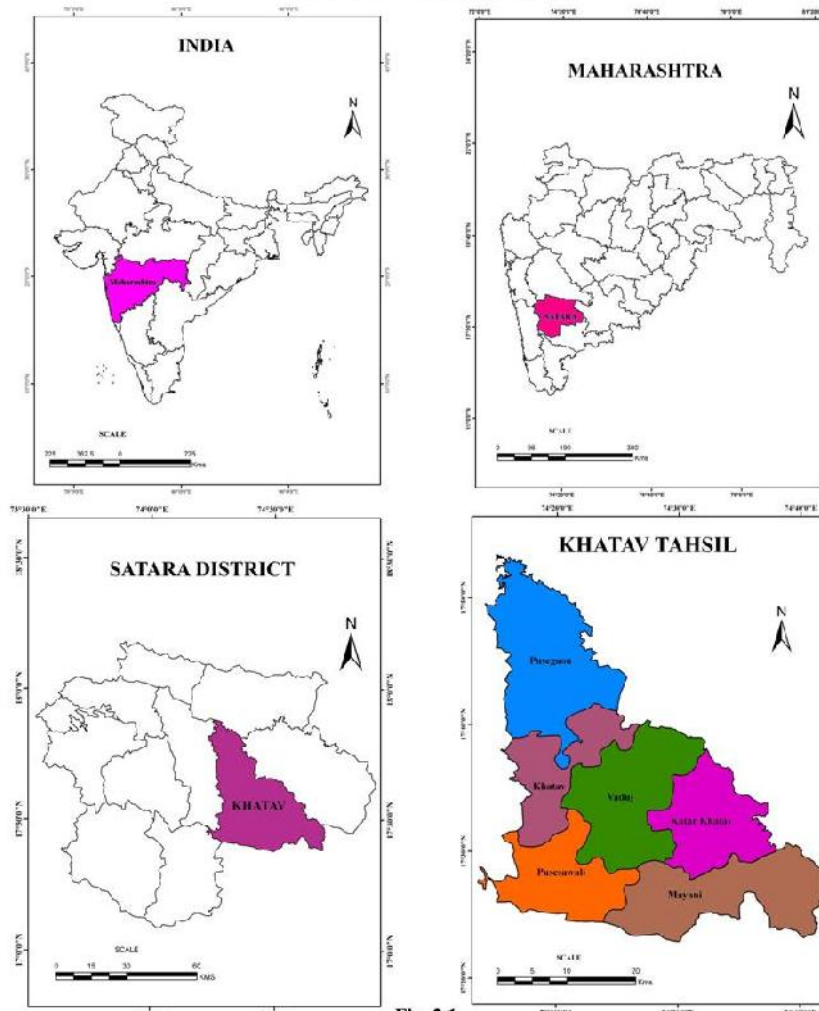
The sex composition of a population is generally stated in terms of sex ratio i.e. number of female per thousand of males. It depicts the current condition with respect to status of girl child, gender discrimination, infanticides and feticides. Present sex composition of child population determines the future vital events such as marriage rate, labour force, age structure, birth and death, migration, etc. According to 2011 census, the sex ratio of Satara District is 988 female per thousand male among the tahsils, Javali records the highest sex ratio of 1068 female per thousand male and Mahabaleswar has the lowest sex ratio of 937 female per thousand male. In Khatav tahsil, the sex ratio is higher than the district average, it was recorded sex ratio of 1012 female per thousand male among the circles, the highest sex

ratio found in Pusesawali circle and lowest in Pusegaon i.e. 1031 female per thousand male and 1005 female per thousand male respectively.

STUDY AREA

Khatav tahsil is located in the south eastern part of Satara district, lies between 17°39' to 18°11' North latitude and 73°33' to 74°54' East longitude. It surrounded by to the East-Man tahsil of Satara District, to the South- Sangli District, to the West-Karad and Koregaon tahsil in Satara District, to the North- Phaltan tahsil in Satara District. As per 2011 census of India, there are settled about 2,73,351 population totally, among these, about 1,35,876 persons male population and 1,37,475 persons female population. The Khatav tahsil is Draught- Prone, hilly and rain Shadow area, east part of Satara District. In west to east rainfall is decreases Vaduj yearly average rainfall 512.2mm. In this region Vaduj, Pusegaon, Aundh, Pusesawali, Mayani, Khatav, Kaledhon, is big villages. Yerala is main non-perineal river in the tahsil (length 120 km.). These tahsil is rain shadow area; the rainless crops are the

LOCATION MAP



major crops such as Bajara, Kharif Jowar, Rabbi Jowar, potato, fruit farming and pulses.

The area under study is one of the drought-prone comprises regions of the state of Maharashtra.

Agricultural is the main land use in the tahsil with more than 70% of the total area being used for agricultural activities.

OBJECTIVES

The major objectives of this research paper are

as under:

1. To study the spatial pattern of literacy rate in the study region.
2. To study the spatial pattern of sex ratio in the study region.
3. To examine the correlation between literacy and sex ratio in the study region.

DATABASE AND METHODOLOGY

The paper is principally based on the secondary data sources. To complete the objectives data regarding literacy and sex ratio of Khatav tahsil is obtained from census of Maharashtra (2011), statistical abstract of Satara District. The collected data are processed to analyze the pattern of literacy rate and sex ratio in Khatav tahsil. Arc GIS 9.3 software used for preparing the map and to show the spatial pattern of sex ratio and literacy in Khatav tahsil. The circles of Khatav tahsil are grouped into three categories i.e. high, moderate and low literacy on the basis of simple statistical method. To analyze spatial pattern of sex ratio, the same technique is applied for calculation. The Spearman's Rank Order method is used for analyzes the correlation between literacy and sex ratio.

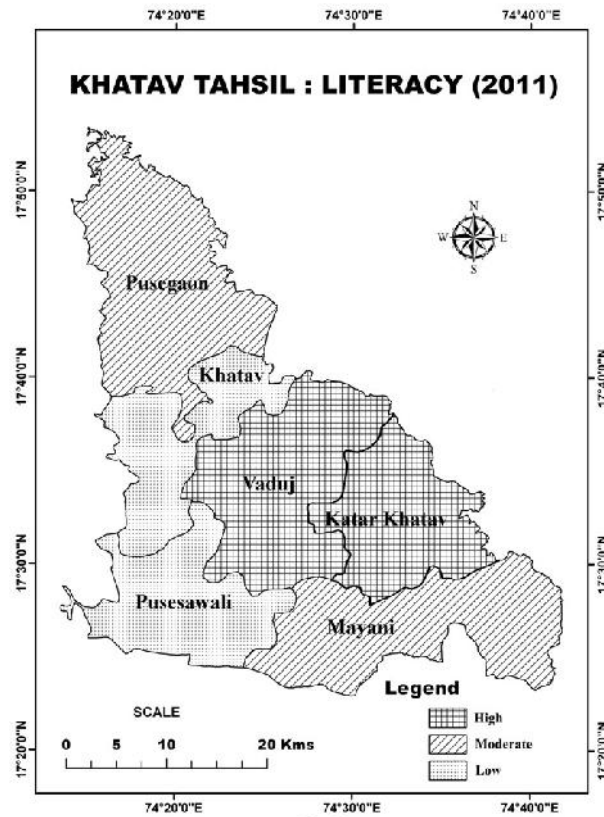


Fig. 2

Formula:-

Rank Order Spearman's Method

$$r = 1 - \frac{d^2}{n^2 - N}$$

SPATIAL PATTERN OF LITERACY RATE

Khatav tahsil as a whole has 71.29 percent literacy in 2011. But the circle level literacy differs from circle to circle it ranges from 63.98 per cent to 75.60 per cent. All five circles of Khatav tahsil are divided into three categories as following: (in Fig. 2)

High Literacy Rate

The circles have the literacy rate above 75 per cent are included in high category. High literacy rate was recorded in the circles of Vaduj and Katar Khatav due to high number of educational institutions, availability of educational facilities, development of transport and communication and so on.

Moderate Literacy Rate

The tahsils which have literacy rate ranges from 70 to 75 per cent are included in this category. Moderate literacy was recorded in the circles of Mayani and Pusegaon circles. In these circles, moderate literacy was found due to lack of educational infrastructure and lack of transport facilities .

Low Literacy Rate

The tahsils which have literacy rate below 70 per cent are included in low category. Low literacy rate is found in the circle of Khatav and Pusesawali. In this tahsil low literacy is recorded due to lack of educational institution, poverty, migration, drought area and low student teacher ratio.

LITERACY RATE AND SEX RATIO IN KHATAV TAHSIL, 2011

Sr. No.	Name of Circle	Literacy	Sex Ratio
1	Pusegaon	73.41	1005
2	Khatav	65.44	1007
3	Pusesawali	63.98	1031
4	Vaduj	75.60	1008
5	Katar Khatav	75.02	1026
6	Mayani	71.47	1009
Khatav Tahsil		71.29	1012

Source: Census of India, 2011

SPATIAL PATTERN OF SEX RATIO

Khatav tahsil as a whole has 1012 number of females per thousand of males population in 2011. But the circles level sex ratio is varies from tahsils to tahsils ranges from 1007 to 1031. All 5 circles are categorized into three groups as follows: (in Fig. 3)

High Sex Ratio

The circles which have the sex ratio above 1020 number of females per thousand of males are included into high category. High sex ratio was recorded in the circle of Pusesawali and Katar Khatav. There are the some reasons for high sex ratio in Khatav tahsil i. e. maximum migration and less maternal mortality.

Moderate Sex Ratio

The tahsils which have sex ratio ranges from 1008 to 1020 number of females per thousand of males are included in the moderate category. Moderate sex ratio was recorded in the Vaduj and Mayani circles. There are the some reasons for moderate sex ratio in these tahsils like high education level, minimum migration etc.

Low Sex Ratio

The circles which have the sex ratio below 1008 are included in this group. Low sex ratio was recorded in the circles of Pusegaon and Khatav circles. There are the some reasons for low sex

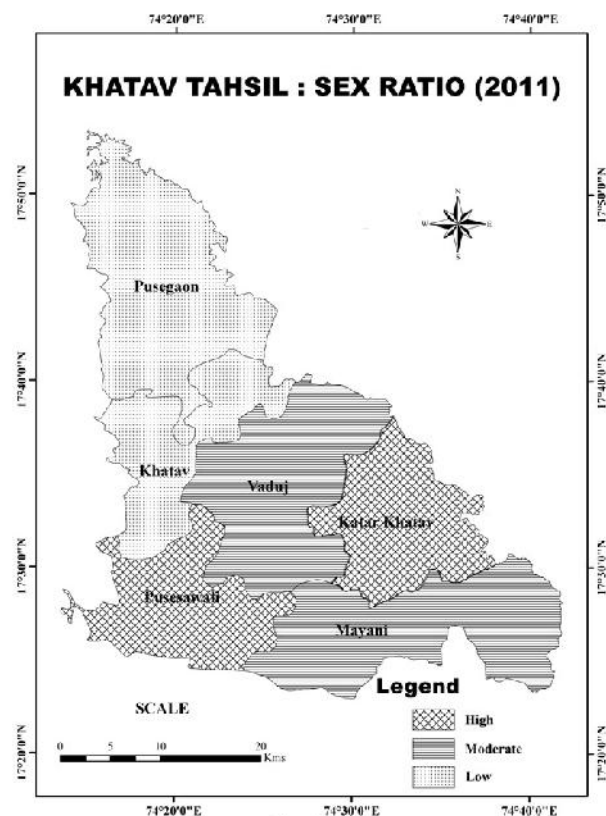
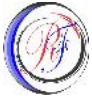


Fig. 3



ratio in these circles i. e. neglected of girl child, high immigration, sex selective, etc. With small family norms, many young couples do not for a second child happens to be a male. Higher female life expectancy is likely to initiate a new trend and tilt the scale of low sex ratio.

CORRELATION BETWEEN LITERACY AND SEX RATIO

The Spearman's Rank Order method is used for the calculation of the correlation of literacy and sex ratio in Khatav tahsil. It is observed that there is rather low and negative correlation i.e. $p=-0.32$ between the literacy and sex ratio in Khatav tahsil. There are the some reasons for low and negative correlation in Khatav tahsil i. e. geographical disturbances for settlement- drought prone area, neglected of girl child, sex selective, female infanticide, high migration, better hospitality etc.

CONCLUSION

There are wide disparities in the literacy and sex ratio of Khatav tahsil in 2011. The highest literacy was found in Vaduj circle and lowest in Pusesawali circle. The highest sex ratio is found in Katar Khatav circle whereas lowest in Pusegaon circle of Khatav tahsil. But the correlation between literacy and sex ratio found in low degree and negative angle i.e. $p = - 0.32$. It means high literacy rate, low sex ratio. It was observed higher the literacy rate lower the sex ratio i.e. Vaduj circle. That circle has 75.60 percent literacy and sex ratio has 1007 females per thousand of males.

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