GROWTH AND CHANGES OF LITERACY AND SEX RATIO IN SATARA DISTRICT, MAHARASHTRA.

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Abstract

The concept of literacy, that varies from country to country, generally refers to the minimum level of literacy skill. This minimum level of skills varies from ability to communicate orally, to make a check of variety of difficult arithmetical computations. However, the length of schooling has often been considered as a basis of distinguishing between a literate and illiterate according to Trewartha (1969). This paper is an attempt to analyze the relationship between literacy and sex ratio in Satara district. Literacy affected on various attributes of the population such as fertility, mortality, migration and also sex ratio. Literacy and education are reasonably vital indicators of development in society. Higher levels of education and literacy lead to a greater awareness and also contributes in development of economic conditions. A decline or low number of female population in the total population is strongly suggestive of the neglect of girl children, sex selective abortions and traditional attitudes of the society. Thus, the analysis of literacy and sex ratio is immense significant. Spearman's Rank order method is used for analyzes the correlation of literacy & sex ratio. In 1961 the correlation between literacy and sex ratio in Satara district is r= 0.018 it is low and positive correlation. In 2011 the correlation between literacy and sex ratio in Satara district is r= -0.18 it is low and negative correlation. It is reverse correlation between 1961 and 2011.

Key word: Sex Ratio, Literacy, Growth, Change.

Introduction

Literacy and education are reasonably vital indicators of development in society. Literacy is the significant signs of social development. Knowledge is linked with literacy and a formal education and economic growth is related to grade of literacy. It is essential for poverty reduction, mortality, curbing population growth, achieving gender equality and ensuring sustainable development, peace and democracy. 'Literacy has been defined as the ability both to read and write with understanding in any language of children who are above six years of age'. The gap between male and female literacy is a sensitive indicator of social discrimination. The gender gap in education occurs when there are systematic differences in schooling levels between men and women. It is a useful measure for providing evidence of the inequalities that exist between the sexes in terms of access to school. The construction of gender roles in any society is influenced by several factors, most of which are largely independent of the sources of poverty or growth. Indicators frequently used to measure gender equality include life expectancy, education, and earnings. India, like other developing countries, has always been characterized by its sharps inequalities, rooted in centuries by its evolution, of cast, gender and residence. The inequalities in literacy existing among male-female are most drastic in nature. The inequalities in literacy among male-female are result of our countries old discriminatory social order and there natural adaptations (M.B. Singh,2011).

Sex ratio means simply to the number of females per thousand male population The sex ratio is a function of three basic factors, i.e. sex ratio at birth, differentials in mortality between sexes at different stages of life and sex selective migration (Clarke, 1960). Sex Ratio is important indicator of development. It also describes the present situation 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. The sex ratio is also important demographic component for the human development. According to 2011 census, the sex ratio of Maharashtra is 925 female per thousand male among the districts. In Satara district, the sex ratio is higher than the state average, it was recorded sex ratio of 988 female per thousand male among the tehsils, the highest sex ratio found in Jaoli tehsil (1068) and lowest in Mahabaleshwar (937).

Study Region

Satara district is located in the western part of Maharashtra. It lies between the North latitudes of 17°.5' and 18°.11' and East longitude of 73°.33' and 74°.54'. It is bounded by the district of Pune in the North, Solapur district in the East, Sangli district in the South and Ratnagiri district in the West. Raigad district lies to its North-west. Satara district is situated in the river basins of the Bhima River and the Krishna River.

The growth of population of Satara district from 1430105 in 1961 to 3003922 during 2011. It has studied on the basis of District Census Handbook and Socio-economic Statistical Abstract. The district has an area of 10480.0 sq.kms and 15 towns , 11 tehsils and 1739 villages as per the 2011 census.
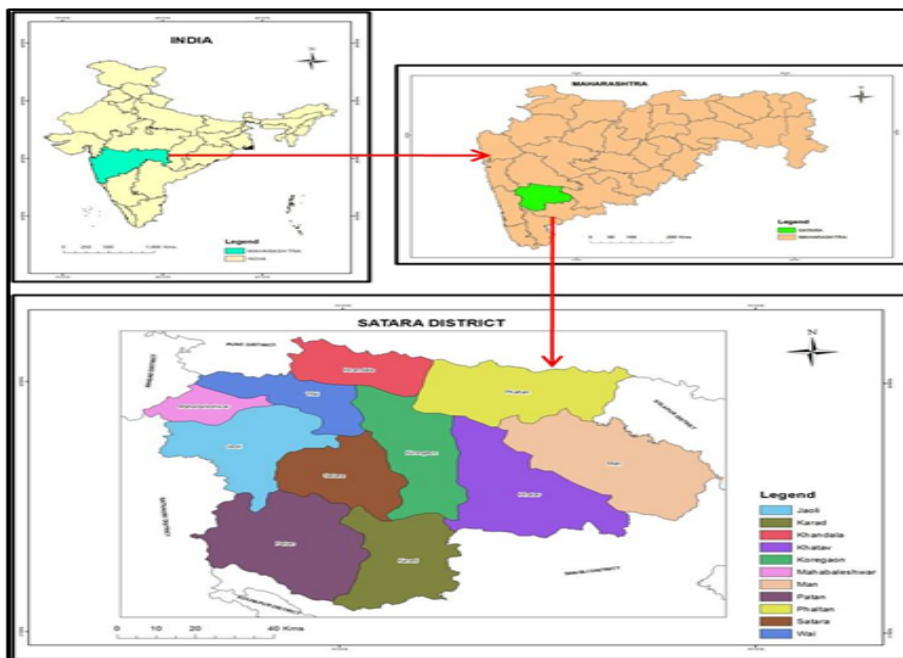

Figure 1. Location Map of Study Region

Objectives

To study the spatial pattern of literacy rate and   Sex   Ratio   in the study region. To analyze the correlation between spatial pattern of literacy and sex ratio in the study region.

Data and Methodology

Present study mostly relies on the secondary data collected through District Census Handbook and Socio-economic abstract of Satara District. For the present investigation, district is selected as in general and tehsils in particular. The collected data are processed to analyze the pattern of literacy rate and sex ratio in Satara District. The tehsils of Satara District are grouped into three categories i.e. high, medium and low literacy on the basis of simple statistical method. Growth and Changes in Literacy and Sex Ratio rate in spatial variation in Satara district. In order to assess, changing spatial pattern of Literacy rate growth and changes rate. The results of the studies are brought out through maps and diagrams. 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.

Rank Order Spearman's Method

Formula:- $r = 1 – σ \sum d2 / n2 – N$

Spatial pattern of Literacy

Literacy is an indispensable mean for acquiring skills and improving economic and general well-being. From demographic point of view, literacy is key variable affecting fertility, mortality and migration. Literacy supports for development and population control too (Singh, J.). In the following table explains the literacy rate and its growth rate by tehsil during the period from 1961 to 2011.

Table 1. Growth and Changes of Literacy and Sex Ratio in Satara District (1961 and 2011)

Sr. No.	Tehsils	Literacy in 1961	Literacy in 2011	Sex Ratio in 1961	Sex Ratio in 2011	Literacy Changes	Sex Ratio Changes
1	Mahabaleshwar	39.9	84.1	989	937	44.2	-52
2	Wai	38.7	86.6	1128	1005	47.9	-123
3	Khandala	33.0	86.3	1024	947	53.3	-77
4	Phaltan	27.3	80.9	982	944	53.6	-38
5	Man	21.6	74.2	1017	976	52.6	-41
6	Khatav	34.5	81.8	1042	1012	47.3	-30
7	Koregaon	39.4	87.4	1062	999	48	-63
8	Satara	42.6	89.9	1065	976	47.3	-89
9	Jaoli	24.7	81.7	1211	1068	57	-143
10	Patan	28.5	78.4	1072	1065	49.9	-7
11	Karad	37.3	85.9	994	972	48.6	-22
	Satara District	**34**	**84.2**	**1053**	**988**	**50.2**	**-65**

Source: District Census Handbook of Satara District 1961 and 2011.

Satara district as a whole has 34 percent literacy in 1961 and 84.2 percent literacy in 2011. All 11 tehsils of Satara district are divided into three categories as following:

High Literacy Rate

According to 1961 in the high literacy rate above 35.6 per cent recorded in Satara, Mahabaleshwar, Koregaon and Wai tehsils. In 2011 the tehsils have the literacy rate above 84.7 per cent are included in high category. High literacy rate was recorded in the tehsil of Satara, Koregaon, Wai, Khandala and Karad due to high number of educational institutions, availability of educational facilities, high urbanization, development of transport and communication.
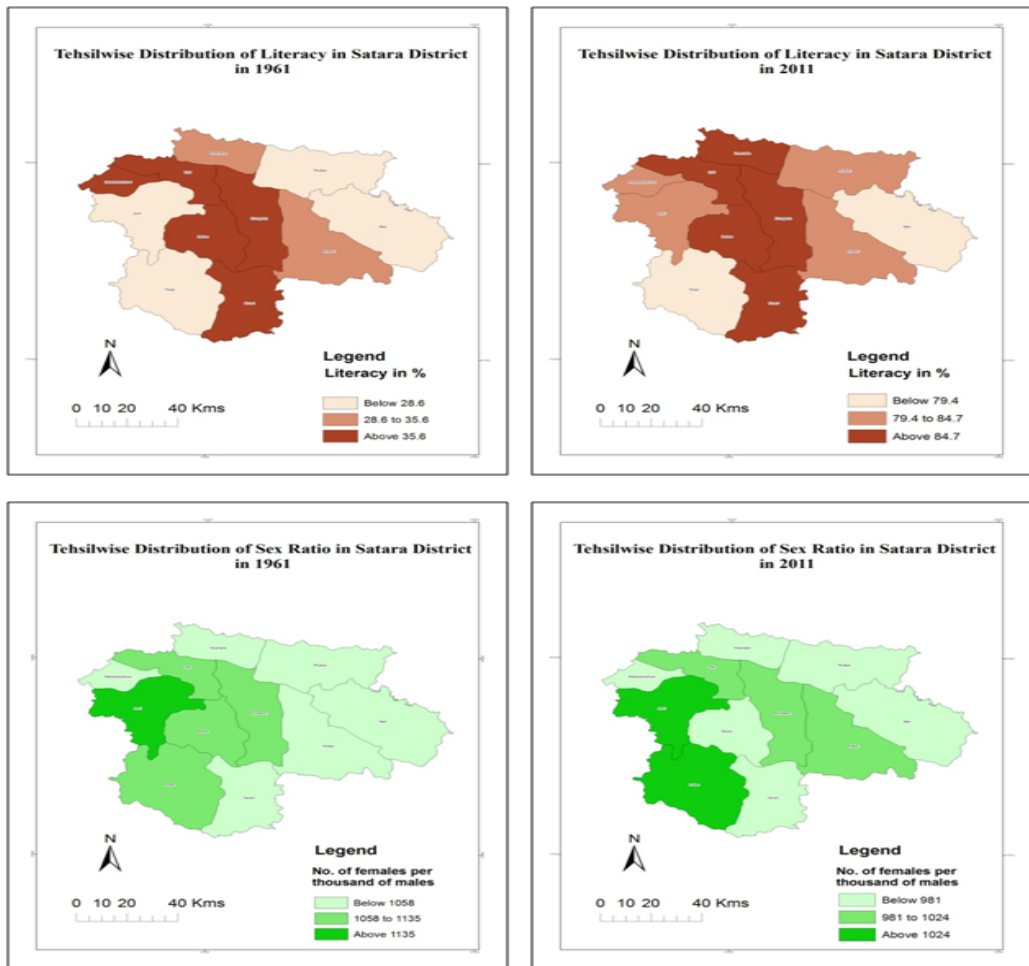

Figure 2. Tehsilwise distribution of Sex ratio

Moderate Literacy Rate

In 1961 the moderate literacy rate was between 28.6 to 35.6 percent in found in Karad, Khatav and Khandala. In 2011 the tehsils which have literacy rate ranges from 79.4 to 84.7 per cent are included in this category. Moderate literacy was recorded in the tehsils of Mahabaleshwar, Jaoli, Phaltan and Khatav tehsils.

Low Literacy Rate

According to 1961 low literacy rate was below 28.6 percent is recorded in Patan, Phaltan, Jaoli and Man tehsils. In 2011 the tehsils which have literacy rate below 79.4 per cent are

included in low category. Low literacy rate is found in the tehsils of Patan and Man. In this tehsil low literacy is recorded due to lack of educational institution, poverty, migration, drought prone area and hilly area.

Changes Literacy between 1961 and 2011

The whole Satara district changes are 50.2 percent. The changes of literacy between period of 1961 and 2011 the variation to changes tehsil to tehsils the high literacy changes is above 52.7 percent is recorded in Jaoli, Phaltan and Khandala tehsils due to governmental educational scheme available, increased public awareness. The moderate changes of literacy between 48.5 to 52.7 percent is found in Man, Patan and Karad. In low changes literacy below 48.5 percent is recorded in Koregaon, Wai, Satara, Khatav and Mahabaleshwar due to it is already high literacy rate in 1961 and not decadal growth high comparatively other tehsils.

Spatial Pattern of Sex Ratio

Satara District as a whole has 1053 number of females per thousand of males population in 1961 and 988 number of females per thousand of males population in 2011. All 11 tehsils are categorized into three groups as follows:

High Sex Ratio

According to 1961 In high sex ratio above 1135 number of females per thousand of males population recorded in Jaoli. In 2011 the tehsils which have the sex ratio above 1024 number of females per thousand of males are included into high category. High sex ratio was recorded in the districts of Jaoli and Patan due to better education level, maximum migration, less maternal mortality, best hospitality etc.

Moderate Sex Ratio

In 1961 the moderate sex ratio was 1058 to 1135 number of females per thousand of males population found in Wai, Patan, Satara and Koregaon. In 2011 the tehsils which have sex ratio ranges from 981 to 1024 number of females per thousand of males are included in the moderate category. Moderate sex ratio was recorded in the Khatav and Wai tehsils

Low Sex Ratio

According to 1961 it was low sex ratio is below 1058 number of females per thousand of males population recorded in Phaltan, Mahabaleshwar, Karad, Man, Khandala and Khatav tehsils . In 2011 the tehsils which have the sex ratio below 981 are included in this group. Low sex ratio was recorded in the tehsils of Koregaon, Man, Satara, Karad, Khandala, Phaltan and Mahabaleshwar due to neglected of girl child, high maternal mortality, sex selective, female infanticide, etc. With small family norms, many young couples do not for a second child happens to be a male. In Mahabaleshwar it is tourism place therefore male in migration is high compare female migration.

Changes in Sex Ratio between 1961 and 2011

Compare between 1961 and 2011 sex ratio variation in Satara district is -65, While tehsilwise comparison there are changes, High changes of sex ratio above -98, tehsils are Jaoli and Wai because of out migration of specially male, educational facilities are increased in 2011 peoples are not satisfied about birth of girls, misuse of hospitalization for birth rate determination, girls abortion, the term 'Nakushi' are used. Moderate changes is -52 to -98 recorded in Satara, Khandala, Koregaon and Mahabaleshwar, In Low sex ratio changes is

below -52, tehsils are Patan, Karad, Khatav, Phaltan and Man due to high educated peoples, agricultural facilities, industrial and transport developments.

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 Satara District In 1961 the correlation between literacy and sex ratio in Satara district is r= 0.018 it is low and positive correlation because of low literacy is recorded due to lack of educational institution, poverty, migration, drought prone area and hilly area. maximum migration, less maternal mortality, best hospitality. In 2011 the correlation between literacy and sex ratio in Satara district is r= -0.18 it is low and negative correlation. It is reverse correlation between 1961 and 2011 there are the some reasons for low and negative correlation in Satara District i. e. geographical disturbances for settlement- mountain area, valley area, drought prone area; neglected of girl child, high maternal mortality, sex selective, female infanticide, migration, better hospitality etc.

Conclusion
There are reverse correlation in literacy and sex ratio between 1961 and 2011 in Satara district. There are wide disparities in the literacy and sex ratio of Satara District in 1961 as well as 2011. In 1961 and 2011 the highest literacy was found in Satara tehsil and lowest in Man tehsil. In 1961 and 2011 the highest sex ratio is found in Jaoli tehsils whereas lowest in 1961 is Phaltan and in 2011 is Mahabaleshwar tehsil of Satara District. But in 1961 the correlation between literacy and sex ratio found in low degree and positive angle i.e. p= 0.018 it means low literacy and high sex ratio. It was observed lower the literacy rate higher the sex ratio i.e. Jaoli tehsil that tehsils has 24.7 percent literacy and sex ratio has 1211 females per thousand of males.
In 2011 the correlation between literacy and sex ratio found in low degree and negative angle i.e. p = - 0.18. It means high literacy rate, low sex ratio. It was observed higher the literacy rate lower the sex ratio i.e. Jaoli tehsil. That tehsil has 81.07 percent literacy and sex ratio has 1068 females per thousand of males.

References
Ashby A.W., 1939., "The effect of urban Growth on the country side" Sociological Review, 31, , pp.345-369.
Banerjee M., 1977., The Pattern of Sex Ratio in Singhbhum district, Bihar.
Geographical Review of India, Vol. 39, pp. 30-38.
Blecker C.P., 1947., "Stages in population growth" Engenics Review, Vol, 39 No.3,. pp. 88-102.
Chandna R. C., 1986 Geography of Population – Concept, Determinants and Patterns, Kalyani Publishers, New Delhi, p.100.
District Census Handbooks of Satara District – 1961,1971,1981,1991,2001,2011
Gosal GS., 1979., "Spatial Perspective on Literacy in India", , Vol.1 (1-2), pp41-67
Mukul Chand Patra., 2010., "The Pattern of Literacy – A Case Study of Kolkata,"
Indian Journal of Regional Science, Vol. XXXXII, No. 1, pp. 79-85.
Ramchandrudu G., and Prasada Rao, M., 2004., : Census 2001 and Human Development in India, Serials Publications, New Delhi.
Sharma P. R., 1978., "Spatio-Temporal Patterns of Population Growth and Distribution – A Regional Analysis", The Deccan Geographer, Vol. XVI, NO.1, p.373.