



A GEOGRAPHICAL STUDY OF SPATIO-TEMPORAL VARIATION IN SEX RATIO OF SOLAPUR DISTRICT (MS)

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Received: November 24, 2011; Accepted: January 05, 2012

Abstract- The sex ratio is essential indicator of population. The present paper deals with trend in sex ratio as well as sex differential in decadal viz 1901 to 2001. The present study is based on secondary source of data which is collected from District Statistical Abstract of Solapur District and censuses Hand Book of Solapur District. The sex ratio is found that continuous decreasing trend since in the beginning of the 1901 year. On the basis of sex ratio whole tahsils are divided in three categories. In North Solapur and Akkalkot tahsils are observed high sex ratio but it low compare to state and efficient sex ratio. It is need to create strong rules and regulation to extend of sex ratio. So this paper try to analyse the spatio-temporal sex ratio variation in Solapur District of Maharashtra State.

Keywords- Mortality rate, Sex ratio, Social indicator, Demographic elements, Variation, Temporal

Citation: Todkari G.U. and Barakade A.J. (2012) A Geographical Study of Spatio-Temporal Variation in Sex Ratio of Solapur District (MS). World Research Journal of Geoinformatics, ISSN: 2278-7003 & E-ISSN: 2278-7011, Volume 1, Issue 1, pp-08-10.

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Introduction

Sex ratio is an important social indicator which defined the number of females per thousand people. Sex ratio has great importance in the study of population because it is closely related to socio-economic condition of area. Sex ratio also influences the volume and nature of social need and employment and consumption pattern. Due to the considerable influence on many other demographic elements, the sex ratios are fundamental to geographical analysis of any region. Sex composition also influences fertility potential of the population, the labour participation and the types of jobs. The variations in sex ratio are to a large extent determined by three factors such as, sex ratio at birth, differentials in mortality rate in two sexes and sex selectivity among migrants.

Objective

In the present study is an attempt to look into the spatial variation in sex ratio of study region. Another purpose of this paper is to find out the reasons of declining sex ratio and to suggest some complementary suggestion for increasing sex ratio.

Study Area

Solapur district is an administrative district in the State of Maharashtra in India. The district headquarter are located at Solapur is bounded by 17° 10' to 18°32' north latitudes and 74° 42' to 76° 15' east longitudes. The total geographical area of Solapur district is 14,895 sq. km. divided into 11 tahsils and total population of 38,55,383 as per 2001 census. Within the region under study Karmala is the largest tahsil in area and the smallest is North Solapur tahsil. The Solapur district tentatively constitutes 4.88 percent area and 4.51 percent population of the Maharashtra state. In other words, the region under study ranks fourth in terms of area and seventh in term of population among the districts of Maharashtra.

Data Base and Methodology

Present study mostly relies on the secondary data collected through District statistical Department of Solapur, District socio-economic abstract of Solapur, District and censuses handbook of Solapur District. For the present investigation, District is selected as in general and tahsils in particular. The collected data are Analyzed by statistical and cartographic techniques. The actual

growth rate of specific decade is obtained by dividing the difference between sex ratio of two decades.

Explanation

The variations in sex ratio are to a large extent determined by two ways i.e. temporal change and spatial variation in sex ratio.

A) Temporal change in Sex ratio

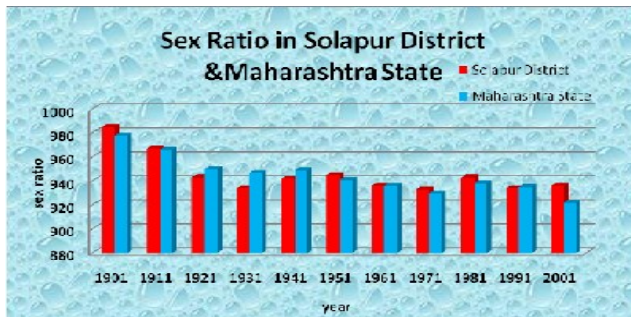
The temporal variations in sex ratios for the Solapur district as a whole have been taken into consideration for the last ten decades. Due to the influence of sex selective migration, the sex ratio for Solapur district as compared to the state of Maharashtra was significantly higher than that for state of Maharashtra in the year 2001.

Table 1- Sex Ratio in Solapur district and Maharashtra (1901-2001)

Sr.No.	Year	Solapur District	Decadal change	Maharashtra State	Compare to state
1	1901	985	-	978	+08
2	1911	967	-18	966	+01
3	1921	943	-24	950	-07
4	1931	934	-09	947	-13
5	1941	942	+08	949	-07
6	1951	945	+03	941	+04
7	1961	936	-09	936	00
8	1971	933	-03	930	+03
9	1981	943	+10	938	+05
10	1991	934	-09	935	-01
11	2001	936	+02	922	+14

Source- District censuses 2001.

In the year 1901 the sex ratio for Solapur district was estimated to 985, which was relatively higher than the state of Maharashtra. Same trend was also observed for the year 1911. For the next three decades particularly during 1921-1941, the sex ratio was recorded lower than the state of Maharashtra probably due to functioning of cotton textile mills in the Solapur city, which have attracted only male workers to the Solapur city. In 1951, after the independence of country, the rapid industrialization in other parts of the state resulted higher sex ratio for Solapur district than the state of Maharashtra. In the next decade of 1961 the sex-ratios were equal for the state of Maharashtra and Solapur district, though these were substantially lower than the balanced sex-ratios. In the year 1971, the sex ratio was 933, slightly higher than the Maharashtra state. For the year 1981, further, it increased and became 943 for the region under study, while for Maharashtra it was lower than the district average. In the year 1991, more or less the sex ratio was equal for the both regions.



In the year 2001, it slightly increased and became 936 as compared to Maharashtra when it was only 922 females per 1000 males.

B) Spatial Variation in Sex Ratio

The imbalance in sex ratio probably is due to relatively high mortality among the females and in migration of males on a large scale from other parts of the state of Maharashtra, which is generally dominated by males. Due to the influence of sex selective migration, the sex ratio for Solapur district as compared to the state of Maharashtra was significantly higher than that for state of Maharashtra in the year 2001. According to 2001 census, the population of Solapur district was, 3849543 out of this, 1989623 were males and 1859920 were females. The sex-ratio works out to 935 per thousand males. But the tahsilwise large variation is observed in study region. These sex ratio are classified in to three categories.

Table 2- Spatial variation in Sex ratio of Solapur District(2001)

Sr No	Sex ratio	No of tahsils	% to total	Name of tahsils
1	Low (below 930)	7	63.64	Karmala, Barshi, Madha, Mohol, Pandharpur, Malshiras, Mangalwedha
2	Medium (931-950)	2	18.18	Sangola, South Solapur
3	High (above 951)	2	18.18	North Solapur, Akkalkot
Total District		11	100	-

Source:- Compiled by Researcher

Low Sex Ratio Range

These tahsils are included in low sex ratio in which females are below 930 females to per 1000 males. A large no. of tahsils (63.64%) are include in this range. Among them Karmala, Barshi, Madha, Mohol, Pandharpur, Malshiras and Mangalwedha tahsils are included.

Medium Sex Ratio Range

Those tahsils having sex ratio between 930 to 950 females are include in these range. But only two tahsils are consist in this range and these are Sangola and South Solapur.

High Sex Ratio Range

This Pattern includes tahsils those having sex ratio range above 951 females per thousand male population. Out of total two tahsils are involved in this catagaries. These tashils are North Solapur and kkkalkot.

Finding

- No any one tahsil found in Solapur District in which sex ratio is balanced. It means sex ratio in all tahsil of Solapu
- District is low.
- Sex ratio is continuously decreasing in last ten decades in Solapur District.
- In high sex ratio range (above 950) only two tahsils involved i.e. North Solapur District.
- Out of total seven tahsils include in low range of sex ratio i.e. clearly represent that declining the sex ratio is dangerous to the society and would cause different social problem.

- This phenomenon mainly happen due to social tradition, more couples demand for male children in the home, inadequate medical facilities, relatives low literacy rate and major cause is pre sex determination.

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