

SPATIO-TEMPORAL ANALYSIS OF SEX RATIO IN SATARA DISTRICT OF MAHARASHTRA

Mr. B. B. Ghurake, Mr. Sagar P. Mali, and Dr. Ratankumar Hajare

Abstract

A study of sex ratio is important to measure the social and economic development of any region. The balance between the two sexes affects the social and economic relationship within a number of communities, (Chandana, 2009). Sex ratio is a term used to define number of females per thousand males. Sex ratio is mainly the outcome of the interplay of sex differentials in mortality, sex selective migration, sex ratio at birth and at the times of the sex differentials in population's enumeration.

In Maharashtra state some districts are having crucial sex ratio. The pattern of sex ratio within the district reflects the variation in emigrational trends between the rural and urban areas. The overall sex ratio of Satara district during census of India, 2011 is 988 and ranks 4th in terms of sex ratio in the state of Maharashtra.

The present study aims at revealing the Spatio-temporal pattern of Sex ratio in Satara district of western Maharashtra since 1971 to 2011.

Key-word: Sex ratio, Sex structure, Emigration, sex imbalance

Introduction

Sex ratio is one of the significant demographic development indices, which can determine the social status of population in a region or country. It is an index of socio-economic conditions of an area and an important tool for regional analysis. Sex ratio is a great source to find the numerical balance between males and females in a society at a given period of time. We can get information about the proportion of women and men in a population of a country by studying the sex ratio of that particular country. This proportion of men and women determines up to some extent the working force, marriage age, growth rate of the population and national income etc. of the country. In addition this, the future trend of labour force, expenditure on unproductive items, proper nutrition to the babies etc. also be very well known by knowing the sex ratio of the country at a particular time (Srivastava,1980).

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The Satara district of Maharashtra has been selected as an area for the present investigation. The tahsil wise overall sex ratio, rural urban sex ratio is computed. It is clearly showing that the sex ratio of Satara district has been declined from 1036 in 1971 to 986 in 2011. There are so many reasons such as migration of males, lack of medical facilities, some social norms, lack of measures of family planning, desire to have boy child, etc. are fundamentally responsible for this imbalance in sex ratio at various places in Satara district.

Study Area

In India, Maharashtra occupies a very important position which ranks third in area and second in population. In Maharashtra the Satara district has also a very significant position as regards to its area and population. Satara district lies in Southern Maharashtra, particularly at the western limit of Deccan table land. The district is situated in the river basins of the Bhima and Krishna river. However, the entire land of the district belongs to the drainage system of the Krishna River.

The latitudinal and longitudinal extent of Satara district is $17^{\circ} 52'$ to $18^{\circ} 11'$ north of equator and $73^{\circ} 33'$ to $74^{\circ} 54'$ east of Greenwich respectively. The district is divided into 11 tahsils, and the total population of the district constitutes 2.67 % of Maharashtra state's population. The district administers 10480 sq.km of area. The population density of the district is 287 people per. Sq.km, whereas sex ratio is 986. Average literacy rate of district is 84.20% (Census, 2011).

Mahabaleshwer, Wai, Patan and Jaoli tahsils prevail in hilly zone, Man, Khatav, Phaltan, Khandala tahsils are in dry zone, whereas Satara, Karad, Koregaon tahsils come under the basin area.

Objectives

The main objectives of the present research paper are;

1. To analysis the tehsil wise decadal variation of general sex ratio (1971-2011).
2. To analysis the tehsil wise rural-urban sex ratio.

Database and Methodology

The present research paper is based on only sources of secondary data. The data is collected from various sources, which include published and unpublished books, government publications, District census handbook of Satara district 1971-2011, and Socio-economic review of Satara district. Some information is also collected from unpublished Ph.D. theses which are submitted to various universities. The collected data is analyzed with the help of cartographic techniques and graphical presentation of statistical data. Computed sex ratio is categorized in three groups namely High, Moderate and Low.

Spatio-Temporal Pattern of General Sex Ratio (1971-2011)

The table no. 1 shows tehsilwise distribution of general sex ratio (excluding the population belong to 0-6 age group) in the district from 1971 to 2011. Satara district has always been recording high sex ratio than the states average during the period (1971 – 2011). However, there is a spatial difference from tahsil to tahsil.

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High Sex Ratio (1000 and above females per thousand males)

In this category Satara, Wai, Khandala, Koregaon, Man, Khatav, Patan, Jaoli tahsils have high sex ratio than district average during 1971 - 1981. As per the census of 1971 Jaoli tahsil had highest sex ratio (1188) and in Phaltan tahsil sex ratio was the lowest i.e.952. In 1981 Jaoli tahsil recorded high sex ratio i.e.1231 females per thousand males which was the highest during the study period. From 1991 to 2011 Satara district shows constant decline in sex ratio except Phaltan tahsil where it records 2 point increase. Satara, Wai, Khatav and Jaoli talukas have recorded excess of females over the males even in 2011. These tahsils have predominantly rural areas and socio-economic development is very low. Naturally high birth rate of females is responsible for high sex ratio in Jaoli, Patan, Khatav, Koregaon and Wai tahsil of Satara district. Low socio-economic development of these tahsils leads to outmigration of male population to other places for employment generation.

Moderate Sex Ratio (950 -999 females per thousand males)

During 1971 to 2001, moderate sex ratio registered in Phaltan, Karad tahsil and Man tahsil was found moderate sex ratio during 1991-2001. In 1971 Mahabaleshwar was with moderate sex ratio i.e.958 females per thousand males. Khandala tahsil also found moderate sex ratio during 1991-2001, because male migration is dominant feature in these tahsils.

Table No. 1.1 Satara: General Sex Ratio (Females Per Thousand Males)

Tahsil Name	1971	1981	1991	2001	2011
Satara	1032	1063	1013	972	1068
Wai	1098	1112	1076	1020	1005
Khandala	1043	1061	999	960	947
Koregaon	1055	1098	1050	1000	976
Phaltan	952	971	951	953	944
Man	1005	1038	996	994	976
Khatav	1073	1107	1064	1023	1068
Karad	977	967	985	960	988
Patan	1097	1176	1130	1088	972
Jaoli	1188	1231	1175	1099	1065
Mahabaleshwar	958	940	891	853	937
District	1036	1061	1028	994	988

Source: District Census Handbooks, Satara-1971-2011.

Low sex ratio (Below 950 females per thousand males)

Low sex ratio found in Mahabaleshwar tehsil during the period of 1981 to 2001, but it has registered lowest sex ratio in 2001 that is 853 and declined from 1971 (Table.No:1.1). Low sex ratio is also found in Khandala and Phaltan tahsils during 2011. Mahabaleshwar tahsil has the international tourist places and there are two urban centers Mahabaleshwar and Panchagani to which people migrate in search of occupation. Satara, Karad, Mahabaleshwar and Phaltan tahsils are recorded low sex ratio due to continuous immigration of people in search of jobs and better facilities as the areas have witnessed the development in infrastructural, industrial, transport as well as agricultural sectors.

Table No. 1.2 Satara: Rural - Urban Sex Ratio (Females per Thousand Males)

Tahsil Name	1971		1981		1991		2001		2011	
	R	U	R	U	R	U	R	U	R	U
Satara	1108	859	1139	895	1050	912	1004	922	993	955
Wai	1129	958	1142	977	1097	968	1033	957	1010	984
Khandala	1043	1059	1061	-	999	-	965	914	946	958
Koregaon	1071	955	1127	985	1074	953	1002	964	1005	973
Phaltan	965	873	982	914	954	938	952	958	937	980
Man	1006	996	1041	1012	998	978	995	984	975	979
Khatav	1073	-	1107	-	1064	-	1023	-	1012	-
Karad	999	869	984	872	991	937	963	941	974	965
Patan	1123	765	1176	-	1139	937	1095	940	1069	979
Jaoli	1188	-	1231	-	1175		1099	-	1070	1014
Mahabaleshwar	1039	875	1025	857	952	791	962	784	998	848
District	1061	885	1084	916	1044	926	1006	927	995	959

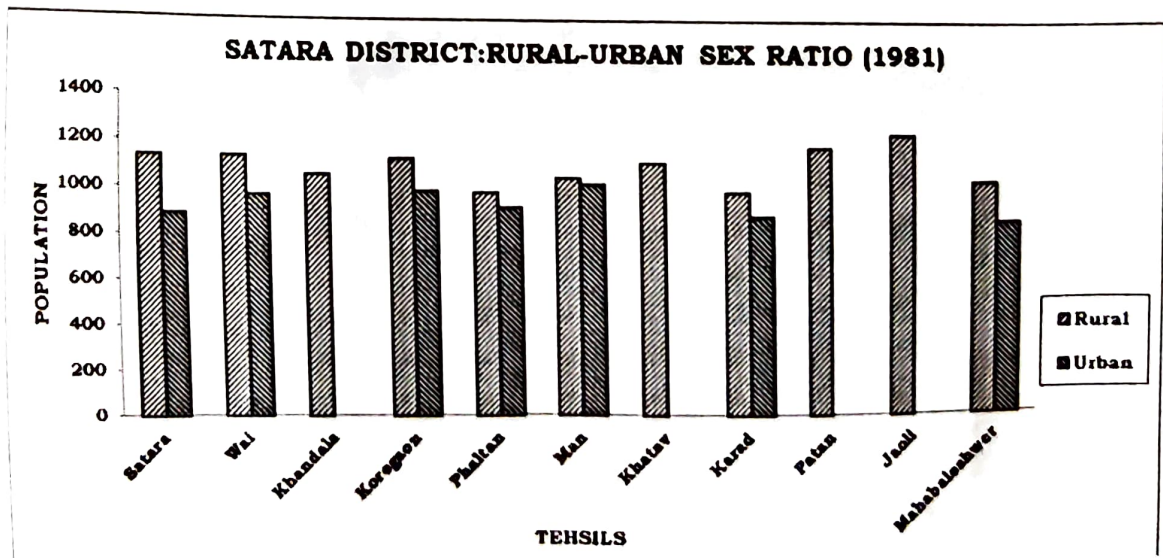
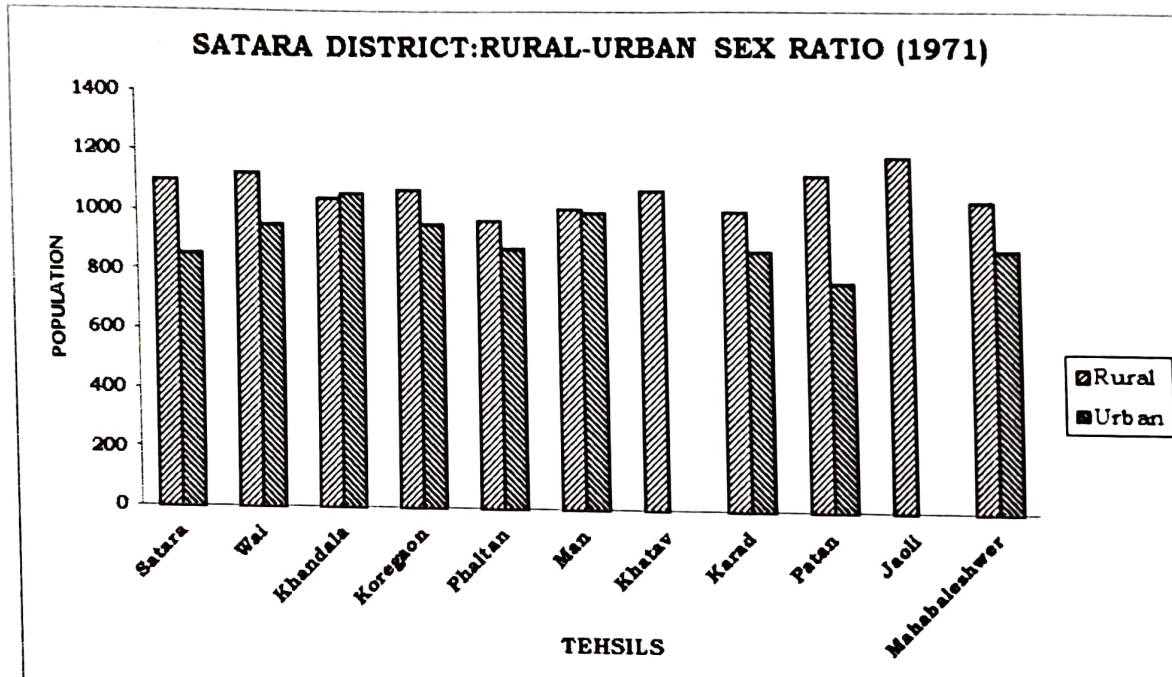
Source: 1) District Census Handbook Satara-1971-2011

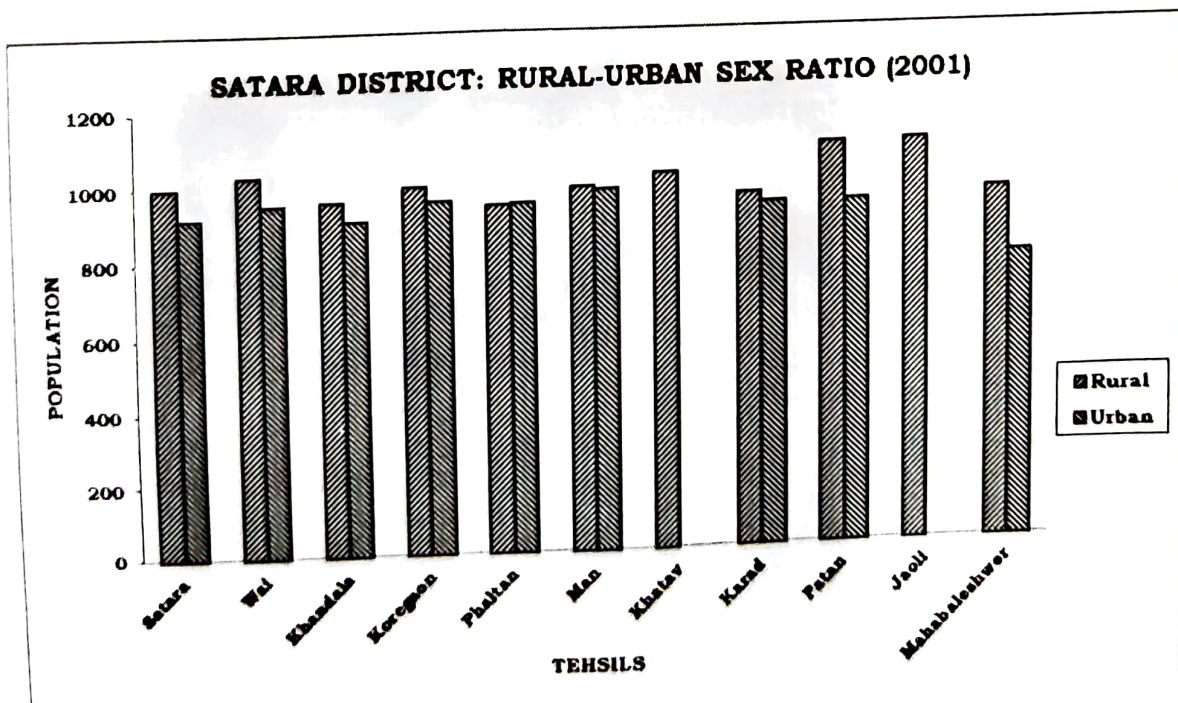
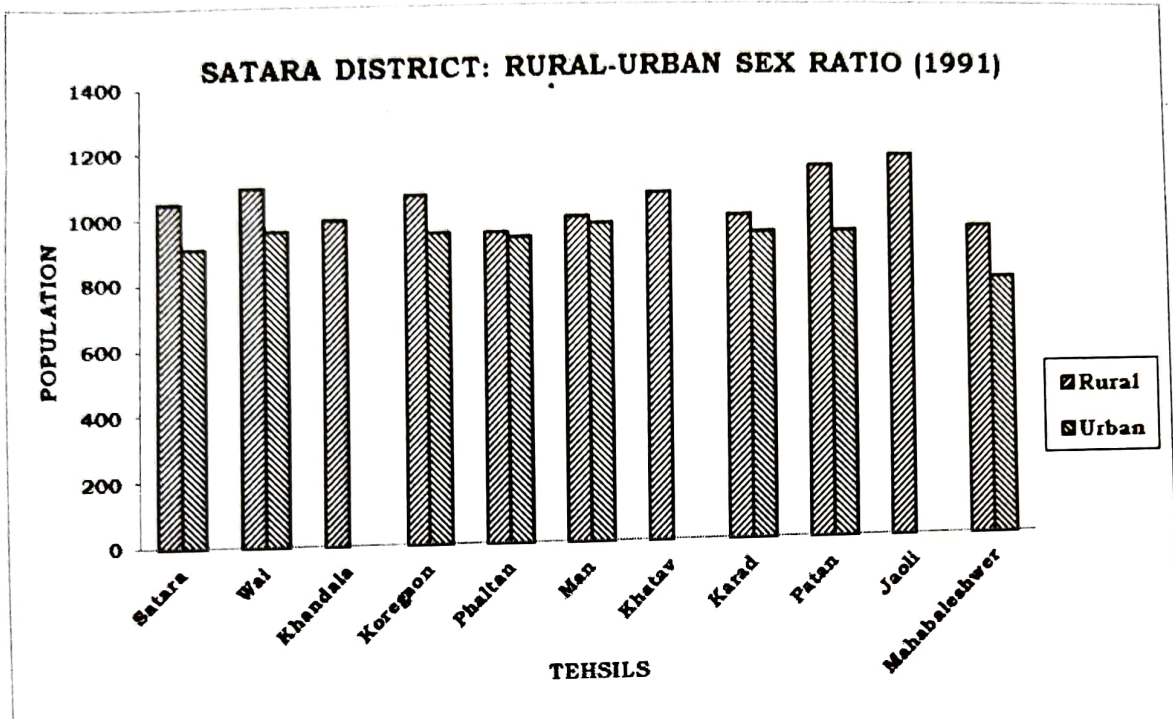
Distribution of Rural-Urban sex ratio

In Satara district basically rural areas are having high sex ratio than the urban areas. The variations in sex ratio have resulted due to difference in development of various socio-economic and cultural factors in rural and urban areas. During 1971-2011 mostly rural sex ratio remained high in most of the tahsils i.e. above 1000 females per thousand male. Wai, Koregaon, Khatav and Patan have recorded excess of females over the males in rural areas throughout the study period. In this rural areas natural growth of population is high due to various customs and old traditions and also lack of awareness about family planning programs due to lack of education and strong wish to have boy child. In 1971-1981 high urban sex ratios was found in Khandala and Man tahsil that is 1059 and 1012 females per thousand

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male respectively (Table.No:1.2). Following graphs shows the decadal changes in rural-urban sex ratio in the year 1971 to 2011. (Fig: 1.2, 1.3, 1.4, 1.5, and 1.6)





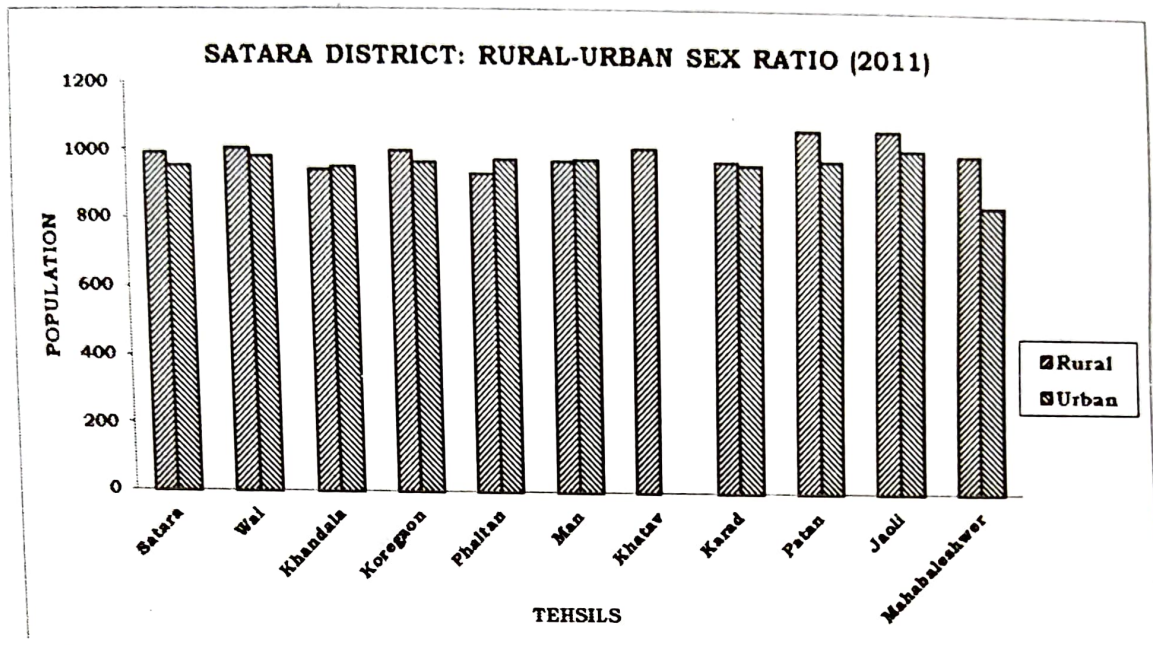


Figure 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6 Decadal Rural-Urban Sex Ratio (1971-2001)

Conclusion

The table no.1 shows the general sex ratio and table no. 2 shows rural urban sex ratio of Satara district. It is observed that the rural areas are having high sex ratio than urban areas. In rural areas proper family planning is not taken place due to scarcity of educational facilities and overburden of customs and traditions. But in urban areas are because more concern of people about the measures of family planning. According to census 2001-2011 Jaoli and Khatav tahsil are having only rural sex ratio as these tahsil are having only rural settlements. Patan, Wai, Satara and Koregaon tahsil are having high rural sex ratio than urban area. Finally concluded that the Satara district except Wai and Mahabaleshwar taluka all tahsil are showing continuous decrease in rural sex ratio.

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Declaration

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