



## Decadal Variation in Sex Ratio in Maharashtra (1901-2011)

Dr. Arjun H. Musmade

### Abstract:

*In Maharashtra, many districts shows the in balance in the general sex ratio as well as child sex ratio. In the study area we see the evidence female birth is the burden on the family, Many districts of Maharashtra, represent the declining and in balance in child sex ratio and there are many reason behind the decline, the most significant reasons is the son preferences in the study area and sex select abortion. Latest census data shows that the child sex ratios have decreased compared to data from the last years in study area. Increasing son preference and ignore of daughters in many districts in Maharashtra. General sex ratio (GSR) in the India 927, 933 and 940 in census 1991, 2001 and 2011. In Maharashtra General sex ratio (GSR) 934, 922 and 925 in same time scale. As compare to child sex ratio (CSR), in the India child sex ratio 945, 927 and 914 in census 1991, 2001 and 2011, in Maharashtra 946, 913 and 883 in the same time interval.*

**Keywords:** General Sex Ratio

### 1 Introduction:

Sex ratio is one of the most important parameters for studying the demographic, socio-cultural and economic status of an area. An understanding of the sex ratio of a population in the spatial context is of fundamental importance for a proper consideration of the various demographic characteristics of any region. It is the mirror of the socio-economic condition of an area, (Gill, 1981). Sex ratio is an index of the socio-economic condition of an area and an important device for the regional analysis. Many scholars from different disciplines like Bimal (2002), Lakshmana (2006), Singh (2007), Zodade (2008), Roy (2008), Arute (2009), Nayak (2010), used this mirror for observing the socio economic status of different regions of rural India. During the present study, an attempt has been made to analyse the human resource development. While doing so, the demographic parameter has to be taken into account. All over the world, sex ratio is given an important place in the study of human development. The regions where the sex ratio is low, have posed an unpleasant

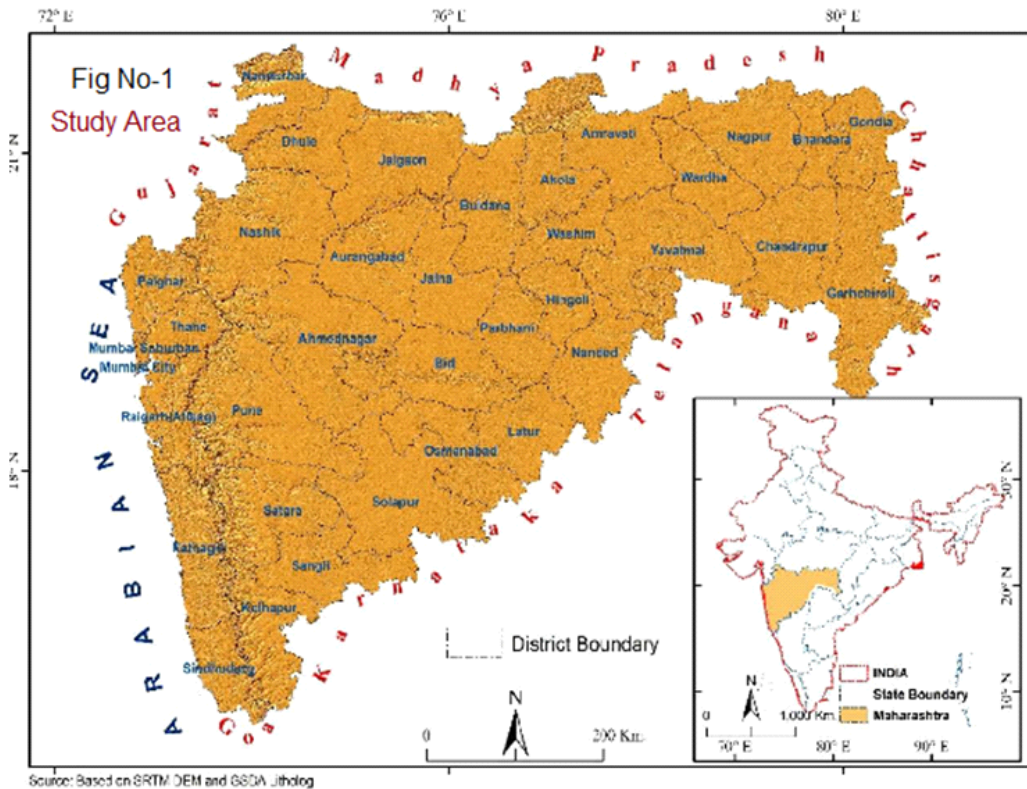
### 2. Objective

The present study focuses on find out the District wise Sex Ratio in Maharashtra from 1901 to 2011 variation in Sex Ratio.

### 3. About Study Area

Maharashtra is located in the western part of India. The capital of the state of Maharashtra is Mumbai. The state also has a winter capital, Nagpur. Maharashtra is one of the richest states in India and contributes the highest share in the country's Gross Domestic Product, i.e. national income. Mumbai is also considered as the financial capital of the country. Mumbai is also the entertainment hub of India by virtue of it being the home to Bollywood- the Hindi film industry. The official language of Maharashtra is Marathi. Maharashtra is one the leading states of India.

As per the census carried out by the government of India in 2011, the population totals of Maharashtra is 112,372,972 compared to 96,878,627 in the 2001 census. In this decade the state of Maharashtra has registered a growth of 15.99% in total population. Maharashtra accounts for 9.29% of the total population of India. Maharashtra is divided into 35 districts which act as the administrative divisions. Thane is the largest district of Maharashtra by population, while the least populated district of Maharashtra is Sindhudurg.



#### 4. Physical and Socio-economic Background of the Region:

Maharashtra is one of the peninsular states of the Indian Union. It is situated on the western side of India between 16.40 and 22.10 north latitude and between 72.60 and 80.90 east longitude. It has a geographical area of 3,07,690 km<sup>2</sup>, with a coast line of 720 km. It has two physiographic divisions, namely, Konkan and the Plateau. Konkan coastal lowland accounts for roughly one fifth of the area on the east. The Konkan coastal lowland is a narrow strip along the coast with undulating relief and is traversed by numerous low plateaus and small hill ranges. This region enjoys maritime climate with moderately high temperatures and receives heavy rainfall of more than 2000 mm per year. The plateau Maharashtra has an altitude between 1000 to 3000 feet. It slopes towards south east. It has four major valleys namely Tapi, Godavari, Bhima and Krishna, separated by major divides namely Ajantha, Balaghat and Mahadeo hills. It enjoys slightly continental type of climate with the both extremes of temperature. The rainfall is received during five months from June to October which is scanty, that is, between 500 to 1000 mm; in the western half of the plateau and moderate between 1000 and 1500 mm in the eastern half of the plateau.

Among all the states of Indian Union, Maharashtra is economically better developed state with the stress on Industrialization. However, agriculture sector in Maharashtra is relatively backward. The pockets of agriculture prosperity have been developed in the valleys where irrigation led to development of commercial agriculture. But, only 32 per cent of the total area is irrigated in the state. The remaining 88 per cent area under un-irrigated agriculture mainly grows Jowar, Bajra and Rice. Fortunately, to compensate for relative agricultural backwardness, Maharashtra has given stress on Industrialization. Existence of the port of Bombay and railway network, connecting various parts of

Indian with Bombay helped this effort. This was further supplemented by Highways radiating from Bombay. The textile mills first came up in the 19th century during the British period. To this, were added engineering chemical, electrical electronics etc. units after Independence. Since 1969, efforts are being made to decentralize industries by establishing industrial estates in various districts of Maharashtra. Out of these, only a few have picked up like those near Thane, Pune, Nashik, Kolhapur, Aurangabad and Nagpur. In addition to Bombay, only these centers have experienced considerable industrialization while rest of Maharashtra is industrially still backward.

With 9.3 per cent of India's area, Maharashtra accounts for 9.29 per cent of India's population. The rapid urbanization is making Maharashtra the second most urbanized state in the Indian Union. According to the 2011 Census, of the total population of Maharashtra, 45.2 per cent people lived in the urban areas. This proportion increased more than double during the last 8 decades.

#### **5. Data base:**

This study is based on the reliable and accurate census data. The required secondary data will be collected from the following sources. Census of Maharashtra and District census handbook (1901 to 2011). Published records of the Government like Socio-economic Review. District Statistical Abstract and vital statistics from health department of Maharashtra.

#### **6. Interpretation :**

##### **Sex-Ratio:**

In 1901, the sex-ratio within Maharashtra varied enormously from as low as 652 females for 1000 males for Greater Bombay to 1119 females for 1000 males for Ratnagiri. Economically backward districts such as Ratnagiri, Satara, Ahmadnagar, Nanded, Bhandara and Chandrapur, from where males had moved out recorded high sex-ratio. For the rest of Maharashtra, except Thane and Greater Bombay, the sex-ratios varied between 950 and 1000 females per 1000 males. Thane and Greater Bombay, because of industrialization and consequent immigration of males, recorded lower sex-ratios of 939 and 652, respectively.

In 1911, the pattern virtually remained the same, except that the sex-ratios for Ahmadnagar and Nanded declined. This may be due to increase in female mortality and decline in out-migration of males. Another change was, increase in sex-ratio for Raigad. This may be due to out-migration of males to Bombay.

In 1921, broadly, the pattern remained the same as it was in 1911. The only major change has been the lowering of sex-ratio for the districts of Kolhapur, Solapur and Sangli. This may probably be due to increase in female mortality.

In 1931, as the epidemic diseases were brought under control, sex-ratio for Kolhapur and Sangli increased. For Amaravati, Osmanabad and Chandrapur, the sex-ratio declined due to increase in mortality in females. The sex-ratio for Thane declined due to in-migrations of males. For the rest of Maharashtra, the pattern remained unchanged.

In 1941, sex-ratios for Kolhapur, Pune and Beed declined. This may be partly due to in-migration of males and partly due to increase in female mortality. For the rest of Maharashtra, the pattern remained unchanged.

In 1951, sex ratios for Beed and Nagpur increased due to decline in female death rate, while for Bhandara, the sex-ratio declined as a result of increase in female death rate. For rest of Maharashtra, the pattern remained as it was in a 1941.

In 1961, sex-ratios for Nashik, Amaravati, Nagpur and Akola declined. This may be probably partly due to increase in female mortality and in-migration of males. The pattern remained unchanged for the rest of Maharashtra.

**(Table No: 1) Social and Temporal Variations in Sex-Ratio Duration 1901 - 2011**

Districts	Decades											
	1901	1911	1921	1931	1941	1951	1961	1971	1981	1991	2001	2011
G. Bombay	652	570	561	592	616	603	663	716	772	819	777	832
Thane	939	947	937	935	940	920	919	894	883	880	858	886
Raigad	1000	1023	1028	1009	1036	1040	1058	1056	1046	1012	976	959
Ratnagiri	1119	1164	1187	1129	1158	1224	1237	1244	1238	1211	1136	1122
Nasik	974	984	960	963	953	956	946	940	937	941	927	935
Dhule	980	978	976	969	969	970	967	956	966	959	944	946
Jalgaon	975	983	971	968	970	971	957	948	950	942	933	925
A. Nagar	1005	983	978	971	969	971	962	956	959	952	940	939
Pune	979	977	957	952	948	939	944	933	937	936	919	915
Satara	1031	1025	1030	1006	1035	1051	1047	1037	1061	1035	995	988
Sangli	984	951	942	950	954	968	957	949	967	966	957	966
Solapur	985	967	943	934	942	945	936	933	942	936	935	938
Kolhapur	975	967	946	952	968	970	967	959	967	966	949	957
A.bad	998	988	991	967	956	974	960	943	947	924	925	923
Parbhani	996	993	978	963	960	980	972	960	968	952	958	947
Beed	985	980	963	949	947	957	968	954	966	947	936	916
Nanded	1004	995	981	966	965	983	970	955	960	947	942	943
Osmanabad	980	964	939	942	941	947	949	944	958	943	932	924
Buldhana	992	985	979	971	972	981	959	954	957	955	981	982
Akola	968	968	958	952	957	960	938	941	948	940	938	946
Amravati	960	959	953	939	946	958	933	931	936	938	938	951
Yeotmal	988	980	968	966	978	989	972	961	958	949	942	952
Wardha	987	983	973	975	978	983	964	949	948	941	935	946
Nagpur	991	981	967	953	955	956	929	922	924	989	932	951
Bhandara	1071	1039	1025	1017	1010	1005	997	987	997	989	946	934
Chandrap	1023	1005	1004	990	989	996	985	970	966	948	948	961
Latur	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	935	928
Jalna	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	951	937
Nandurbar	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	977	978
Gondiya	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	1005	999
Wasim	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	939	930
Hingoli	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	953	935
Gadchiroli	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	976	982
Shindudurg	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	1079	1036
Mumbai (Suburban)	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	822	880
<b>STATE</b>	<b>938</b>	<b>966</b>	<b>950</b>	<b>947</b>	<b>949</b>	<b>941</b>	<b>936</b>	<b>930</b>	<b>937</b>	<b>935</b>	<b>922</b>	<b>929</b>

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As the benefits of the development were cornered by males, the sex-ratios for the districts of Sangli, Aurangabad, Jalgaon, Buldhana and Wardha declined, because of in-migration of males, as a result of industrialization. Sex-ratio for thane district declined in 1971. For the remaining districts of Maharashtra, the sex-ratios remained unchanged

In 1981, with the improvement in medical facilities, female mortality declined in Sangli, Jalgaon and Buldhana districts, resulting in an increased sex-ratio. The rest of the picture remained unchanged.

Because of unequal treatment given to women, the sex-ratio for several districts of Maharashtra declined during 1981-91. These districts were Ahmednagar, Beed, Osmanabad, Nanded, Yavatmal and Chandrapur. Because of the improvement in medical facilities, the sex-ratio of Nagpur increased. Because of out-migration of males, sex-ratios for Raigad, Ratnagiri and Satara continued to remain high, while, because of in-migration of males, sex-ratios for Greater Bombay and Thane continued to remain low..

In 2001 and 2011, The general sex ratio low in Mumbai (suburban), Mumbai, Thane, Pune and Bid. The child sex ratio has, however, declined from 913 in 2001 to 894 in 2011. In census 2011 the highest child sex ratio in Gadchiroli (961), Gondiya (956), Chandrapur (953), Bhandara (950) and Nundurbar (944) Districts are recorded. The lowest child sex ratio are found in Bid (807), Jalgaon (842), Ahmadnagar (852), Buldhana (855) and Aurangabad (858) Districts of Maharashtra. In these ratios, top five and bottom five districts in the state shown in table no-2

**Table No-2 Highest Sex Ratio and Lowest Sex Ratio Districts in last three decades**

<b>Districts</b>	<b>1991</b>	<b>Districts</b>	<b>2001</b>	<b>Districts</b>	<b>2011</b>
<b>Lowest Sex Ratio</b>					
Mumbai (City)	<b>791</b>	Mumbai (City)	<b>777</b>	Mumbai (City)	<b>938</b>
Mumbai (Sub)	<b>931</b>	Mumbai (Sub)	<b>822</b>	Mumbai (Sub)	<b>857</b>
Palghar	<b>879</b>	Palghar	<b>858</b>	Palghar	<b>880</b>
Thane	<b>879</b>	Thane	<b>858</b>	Thane	<b>880</b>
Aurangabad	<b>922</b>	Aurangabad	<b>919</b>	Aurangabad	<b>910</b>
<b>Highest Sex Ratio</b>					
<b>Ratnagiri</b>	<b>1205</b>	<b>Ratnagiri</b>	<b>1136</b>	<b>Ratnagiri</b>	<b>1123</b>
<b>Sindhudurg</b>	<b>1137</b>	<b>Sindhudurg</b>	<b>1079</b>	<b>Sindhudurg</b>	<b>1037</b>
<b>Satara</b>	<b>1029</b>	<b>Gondiya</b>	<b>1005</b>	<b>Gondiya</b>	<b>996</b>
<b>Raigarh</b>	<b>1010</b>	<b>Satara</b>	<b>995</b>	<b>Satara</b>	<b>986</b>
<b>Gondiya</b>	<b>995</b>	<b>Bhandara</b>	<b>9814</b>	<b>Bhandara</b>	<b>984</b>

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**\*Dr. Arjun Haribhau Musmade**

Department of Geography,  
Tikaram Jagannath Arts, Science and Commerce College,  
491, Elphinston Road, Khadki, Pune-411003