



## Sex Composition of Population

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The sex ratio is of particular interest to anthropologists and demographers. An attempt has been made here to give some highlights of the data mainly from two points of view: firstly, the sex ratio of population of all ages and secondly, the sex ratio among children below age seven years.

The sex ratio is usually defined as the number of females per thousand males. The sex ratio may vary widely from one area to another and one age-group to another depending upon the age-specific mortality rates and sex-specific net migration rate. Hence it is frequently desirable to consider separately the sex ratios of each group in detailed analysis of the sex composition of a population group.

It may be cautioned here that these figures of sex differentials are simply related with the size of surviving males and females in certain area. Therefore, while interpreting the data, these should not be taken as indicative of survival rates in any State or Union territory. Further while referring to the figures of child sex ratio in the subsequent paras, it must be borne in mind that these are provisional figures and one should not jump to any quick conclusion on any aspect of these figures to assign any reason to attribute these figures to any factors.

### Levels of Sex ratio of population in 2011

The data on sex ratios for the total population as a whole and for children in the age group less than seven years for different districts are presented in Table -5.1.

At state level the sex ratio has increased from 922 to 925, showing an incremental of 3 females per 1000 males during 2001-11. There are three critical districts with sex ratio below 900 in 2011 viz. Mumbai, Mumbai (Suburban) and Thane where the sex ratio is 838, 857 and 880 respectively. However, as compared to 2001 census, in these district also there is some improvement in sex ratio. It is up by 61 in Mumbai, 35 in Mumbai (Suburban) and 22 in Thane. There are six districts where the sex ratio is above 900 but less than 925. These are Pune (910), Bid (912), Aurangabad (917), Osmanabad (920), Jalgaon (922), and Latur (924). But the trend indicate that the sex ratio in all these districts has decreased during 2001-11 ranging from 24 points in Bid to 8 points in Aurangabad.

**Table – 5.1**  
**Sex ratio of population, children in age less than 7 years : 2001-11**

State/ District Code	State/District Name	Sex ratio of total Population		Sex ratio of 0-6 age		Difference in sex ratio	
		2001	2011	2001	2011	Total popula tion	0 to 6 age population
1	2	3	4	5	6	7	8
27	MAHARASHTRA	922	925	913	883	3	-30
1	Nandurbar	977	972	961	932	-5	-29
2	Dhule	944	941	907	876	-3	-31
3	Jalgaon	933	922	880	829	-11	-51
4	Buldana	946	928	908	842	-18	-66
5	Akola	938	942	933	900	4	-33
6	Washim	939	926	918	859	-13	-59
7	Amravati	938	947	941	927	9	-14
8	Wardha	935	946	928	916	11	-12
9	Nagpur	932	948	942	926	16	-16
10	Bhandara	981	984	956	939	3	-17
11	Gondiya	1005	996	958	944	-9	-14
12	Gadchiroli	976	975	966	956	-1	-10
13	Chandrapur	948	959	939	945	11	6
14	Yavatmal	942	947	933	915	5	-18
15	Nanded	942	937	929	897	-5	-32
16	Hingoli	953	935	927	868	-18	-59
17	Parbhani	958	940	923	866	-18	-57
18	Jalna	951	929	903	847	-22	-56
19	Aurangabad	925	917	890	848	-8	-42
20	Nashik	927	931	920	882	4	-38
21	Thane	858	880	931	918	22	-13
22	Mumbai (Suburban)	822	857	923	910	35	-13
23	Mumbai	777	838	922	874	61	-48
24	Raigarh	976	955	939	924	-21	-15
25	Pune	919	910	902	873	-9	-29
26	Ahmadnagar	940	934	884	839	-6	-45
27	Bid	936	912	894	801	-24	-93
28	Latur	935	924	918	872	-11	-46
29	Osmanabad	932	920	894	853	-12	-41
30	Solapur	935	932	895	872	-3	-23
31	Satara	995	986	878	881	-9	3
32	Ratnagiri	1136	1123	952	940	-13	-12
33	Sindhudurg	1079	1037	944	910	-42	-34
34	Kolhapur	949	953	839	845	4	6
35	Sangli	957	964	851	862	7	11

On the higher side of sex ratio as it is seen in the Table, there are two districts viz., Ratnagiri (1123) and Sindhudurg (1037) with sex ratio above 1000 mark despite the fact that both have shown a decline in sex ratio during 2001-11 by 13 and 42 respectively. There are 9 district within the range of sex ratio below 1000 and above 950, Gondiya (996) and Satara (986) on the above and Kolhapur (953) and Raigarh (955) on the below, but in these 9 districts, it has decreased in five districts and the decrease is very sharp (by 21) in Raigarh.

All the districts of the state are classified into six categories on the basis of their sex ratio in 2011 and shown in the following chart.

Worst sex ratio		Low sex ratio		Medium low sex ratio	
(below 900)		(900 to 925)		(926 to 940)	
District	Sex ratio	District	Sex ratio	District	Sex ratio
Mumbai	838	Pune	910	Washim	926
Mumbai (Suburban)	857	Bid	912	Buldana	928
Thane	880	Aurangabad	917	Jalna	929
		Osmanabad	920	Nashik	931
		Jalgaon	922	Solapur	932
		Latur	924	Ahmadnagar	934
				Hingoli	935
				Nanded	937
				Parbhani	940
Medium sex ratio		Medium High sex ratio		High sex ratio	
(941 to 950)		(951 to 970)		(Above 970)	
District	Sex ratio	District	Sex ratio	District	Sex ratio
Dhule	941	Kolhapur	953	Nandurbar	972
Akola	942	Raigarh	955	Gadchiroli	975
Wardha	946	Chandrapur	959	Bhandara	984
Amravati	947	Sangli	964	Satara	986
Yavatmal	947			Gondiya	996
Nagpur	948			Sindhudurg	1037
				Ratnagiri	1123

## Trends in sex ratio

Trends in sex ratio explain the movement of sex ratios over a period of time. With the help of the movement of these trends one can forecast these ratios for the future if left free.

In Nandurbar the sex ratio mostly stable over a period of time and Solapur, Kolhapur and Sangli also have a generally a stable sex ratio. There are many ups and downs in sex ratio over a period of time since 1901 in Akola, Amravati, Nagpur, Bid, Latur and to some extent in Osmanabad. Raigarh and Satara though they have a relatively higher sex ratio but there are frequent and sharp

fluctuations. There is a steady decline in sex ratio in Jalgaon, Buldana, Wardha, Jalna, Aurangabad, Nashik, Thane, Pune and Ahmadnagar. Though Bhandara, and Chandrapur always have a better sex ratio but there is a declining trend in these two districts over a period of time.

## Child Sex Ratio

The sex ratio worked out for the population of all ages is not indicative of any clear picture to know whether it is favourable to females or otherwise. The sex composition at different ages of population is affected by number of factors. Differential mortality rates for each sex and sex specific migration are the two important factors to distort the natural sex ratio in any area. When the net migration rate for both males and females is equal but still it is in a distorted order, then there is a cause for concern to see whether there is any interference with the natural sex ratio or the differential mortality rates are overriding. However, with limited data available now, here an attempt is made to know the crude sex ratio at birth for children below 7 years of age. Though, the differential infant and child mortality rate are prevalent, at least the sex ratio in this age group is not affected by migration and hence assumed to be close to sex ratio at birth. Any variation in these two shall be equal to the net effects of differential child mortality rates and extent of medical interference with pregnancies in the form of sex selective abortion or frequently called as female feticide. Hence child sex ratio is always considered as the best indicator to understand the sex ratio at birth when the data on births by sex are not easily available.

The sex ratio of Indian population has always been of topical interest for the demographers, social scientists, women's groups, research scholars and various planners and policy makers. Why is it that India has such uneven composition of population as compared to most of the developed countries in the world? Several reasons are adduced to explain the consistently low levels of sex ratio and their further decline in the country. Some of the important reasons commonly put forward are listed below:

- Neglect of the girl child resulting in their higher mortality at younger ages
- High maternal mortality
- Sex selective abortions
- Female infanticide

The imbalance in the number of males and females begins in the beginning. It is now a well established law of nature that the males exceed females at the time of birth. It is believed that generally 943-952 female births take place for every 1000 male births, which in effect would mean that there is a deficiency of about 50 females per 1000 males in every birth cohort. Many demographers believe that left on its own, this is an unalterable constant.

For analysis of data on sex ratio among children in age less than 7 years one has to go back to the previous Table where these figures are presented in col 5, 6 and 8. Looking at these figure in these columns, the whole range of data reveals that the sex ratio is unfavourable for females the extent damage and trends since 2001, appears to be quite alarming in the entire State except one district i.e., Gadchiroli which has a child sex ratio 956. Three districts viz., Chandrapur, Gondiya and Ratnagiri in the descending order fall in the range child sex ratio 945 to 940. In all the remaining 31 districts, the child sex ratio is below 940.



Worst Child sex ratio			Worse child sex ratio		
(below 850)			(850 to 900)		
District	2001	2011	District	2001	2011
Bid	894	<b>801</b>	Osmanabad	894	<b>853</b>
Jalgaon	880	<b>829</b>	Washim	918	<b>859</b>
Ahmadnagar	884	<b>839</b>	Sangli	851	<b>862</b>
Buldana	908	<b>842</b>	Parbhani	923	<b>866</b>
Kolhapur	839	<b>845</b>	Hingoli	927	<b>868</b>
Jalna	903	<b>847</b>	Solapur	895	<b>872</b>
Aurangabad	890	<b>848</b>	Latur	918	<b>872</b>
			Pune	902	<b>873</b>
			Mumbai	922	<b>874</b>
			Dhule	907	<b>876</b>
			Satara	878	<b>881</b>
			Nashik	920	<b>882</b>
			Nanded	929	<b>897</b>
Medium low Child sex ratio			Medium child sex ratio		
(900 to 925)			(above 925)		
District	2001	2011	District	2001	2011
Akola	933	<b>900</b>	Nagpur	942	<b>926</b>
Mumbai (Suburban)	923	<b>910</b>	Amravati	941	<b>927</b>
Sindhudurg	944	<b>910</b>	Nandurbar	961	<b>932</b>
Yavatmal	933	<b>915</b>	Bhandara	956	<b>939</b>
Wardha	928	<b>916</b>	Ratnagiri	952	<b>940</b>
Thane	931	<b>918</b>	Gondiya	958	<b>944</b>
Raigarh	939	<b>924</b>	Chandrapur	939	<b>945</b>
			Gadchiroli	966	<b>956</b>

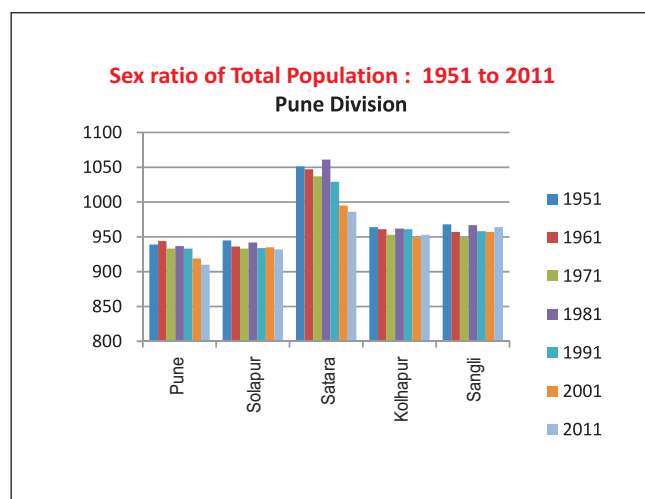
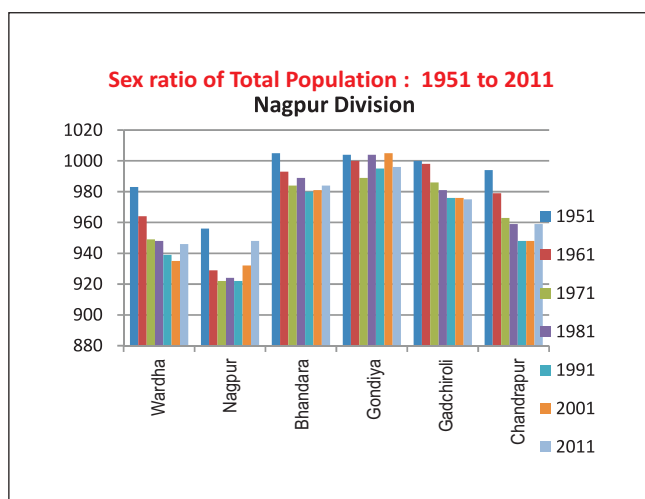
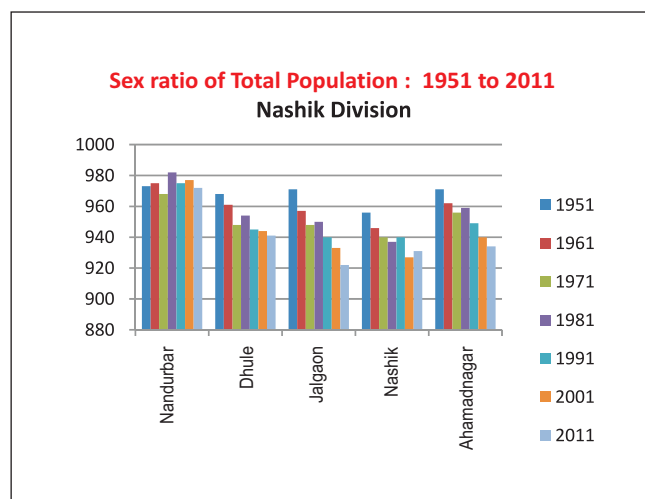
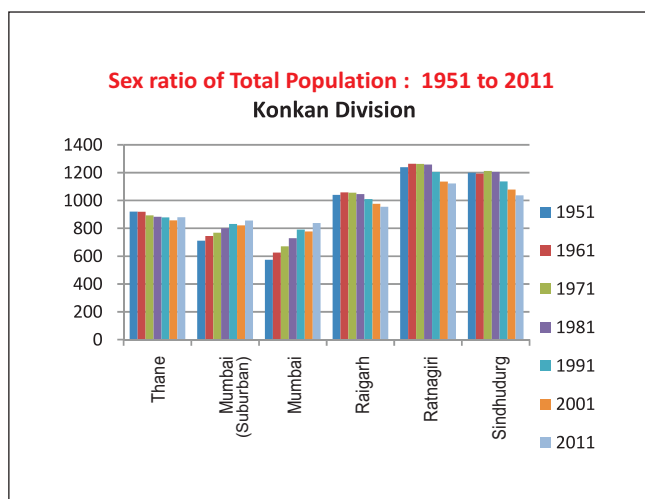
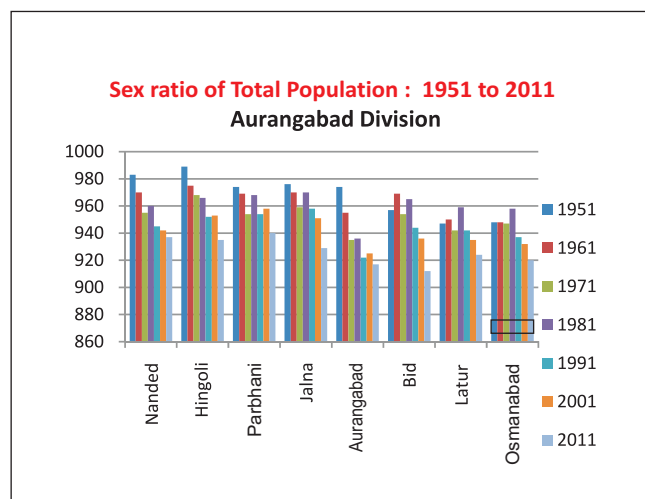
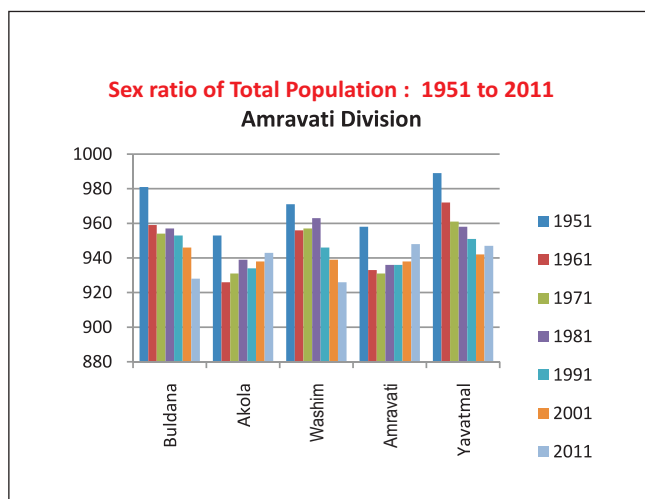
Bid district is in the bottom of child sex ratio (801) followed by Jalgaon (829), Ahmadnagar (839), Buldana (842), Kolhapur (845), Jalna (847) and Aurangabad (848) all these have child sex ratio below 850. In addition there are 13 districts where the child sex ratio is above 850 but less than 900.

As presented earlier, the grouping of the districts according to their child sex ratio are presented in the following chart under four groups along with their child sex ratio during 2001 Census.

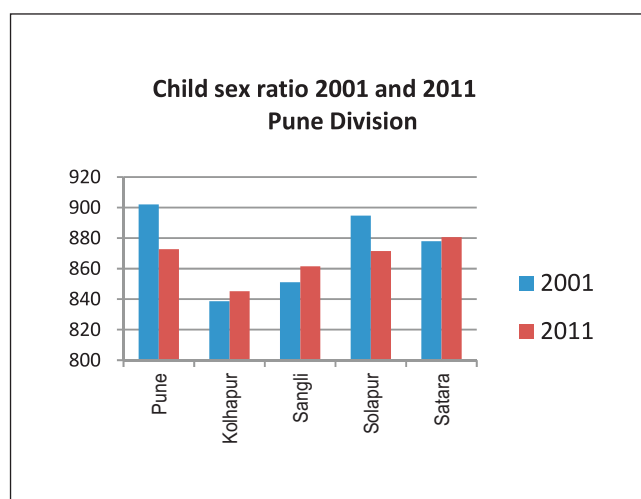
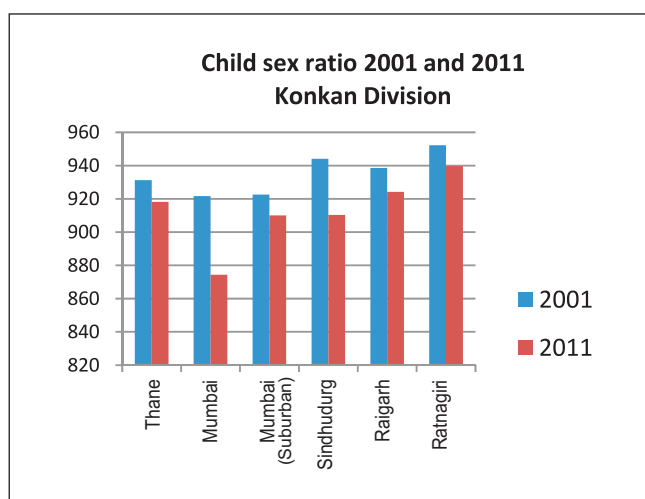
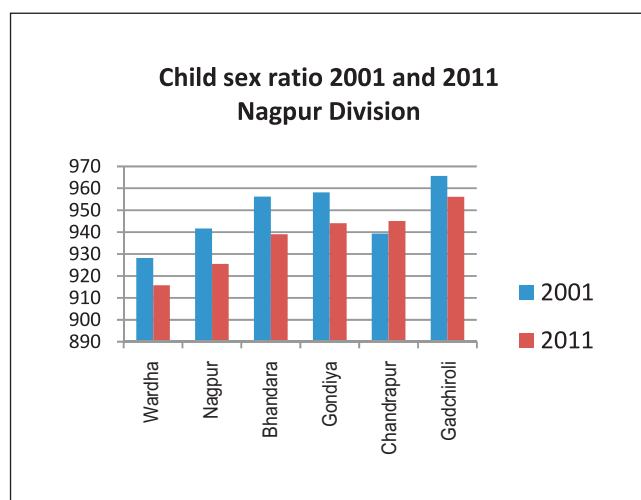
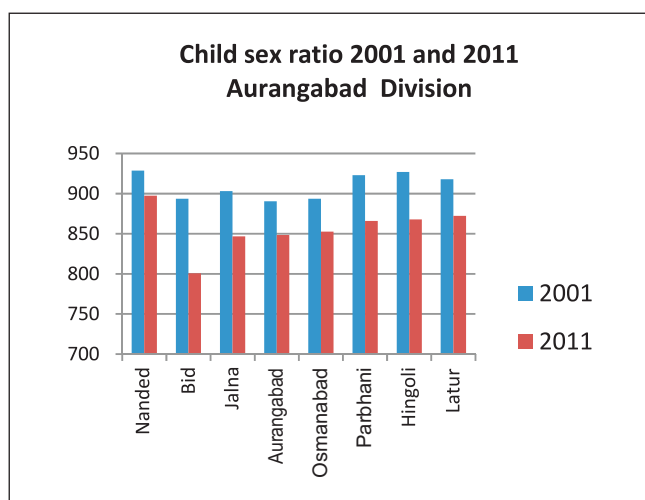
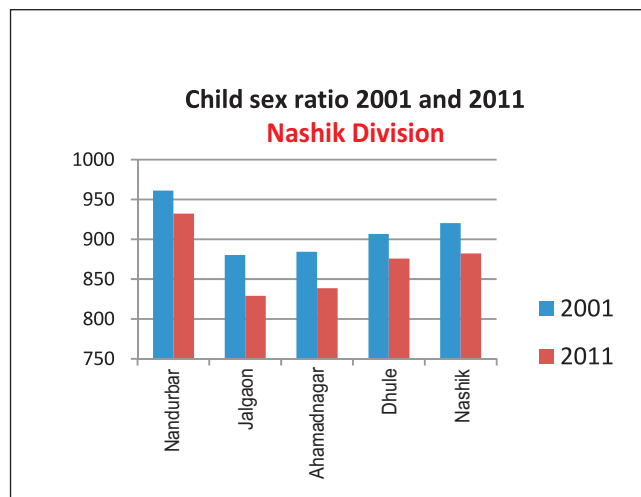
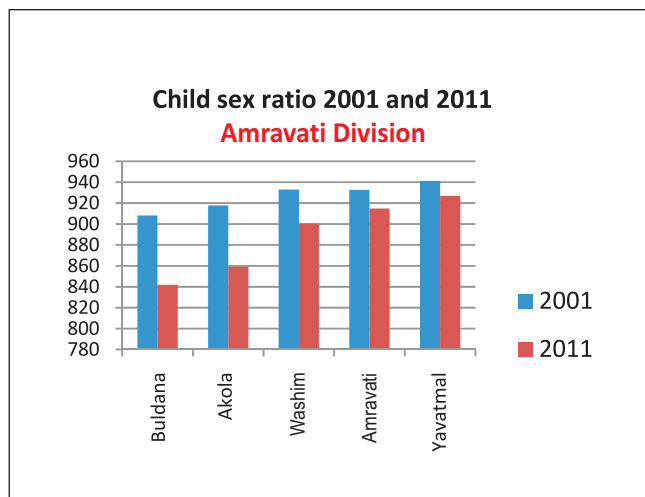
### Trend in child sex ratio

Overall in Maharashtra, in spite of the worst scenario of child sex ratio in many districts, the decline in child sex ratio from 913 to 883, shows another reduction of 30 girls per 1000 boys during the decade 2001-11. This in other words, there is increase the shortage of girls per 1000 boys, from 87 in 2001 to 117 in 2011. The highest reduction of about 93 is found in Bid, and such steep fall is also noticed in Buldana (66), Hingoli (59), Washim (59), Parabhani (57), Jalna (56) and Jalgaon (51). The reduction in sex ratio is found in 31 districts ranging from 50 to 93 in seven districts, 30 to 50 in ten districts, 9 to 30 in 13 districts. Only in four districts viz., Satara, Chandrapur, Kolhapur and Sangli there is a nominal increase (from 3 to 11 only).

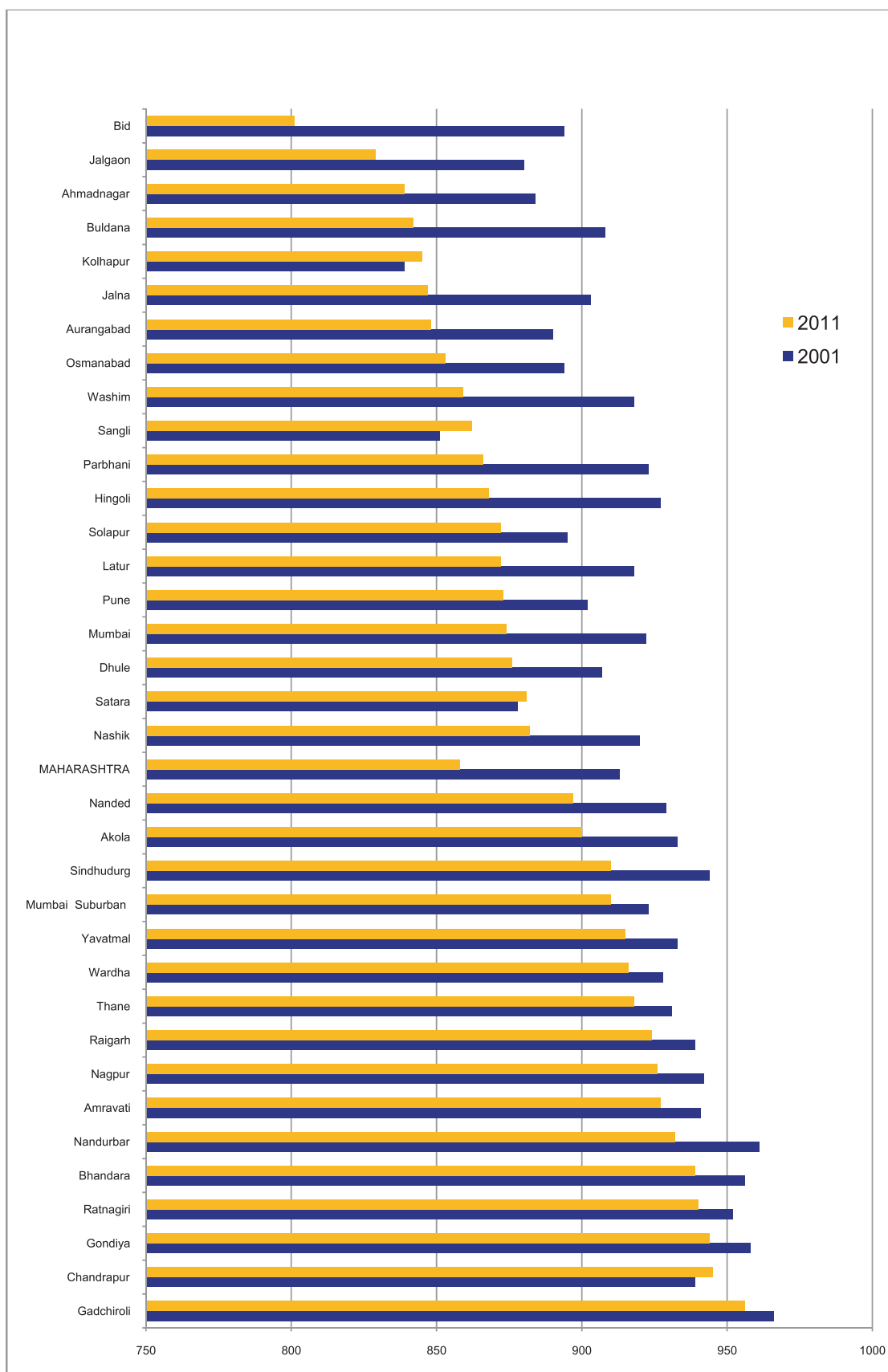
**Graph - 5**  
**Division Wise Sex Ratio of Population, 1951 - 2011**



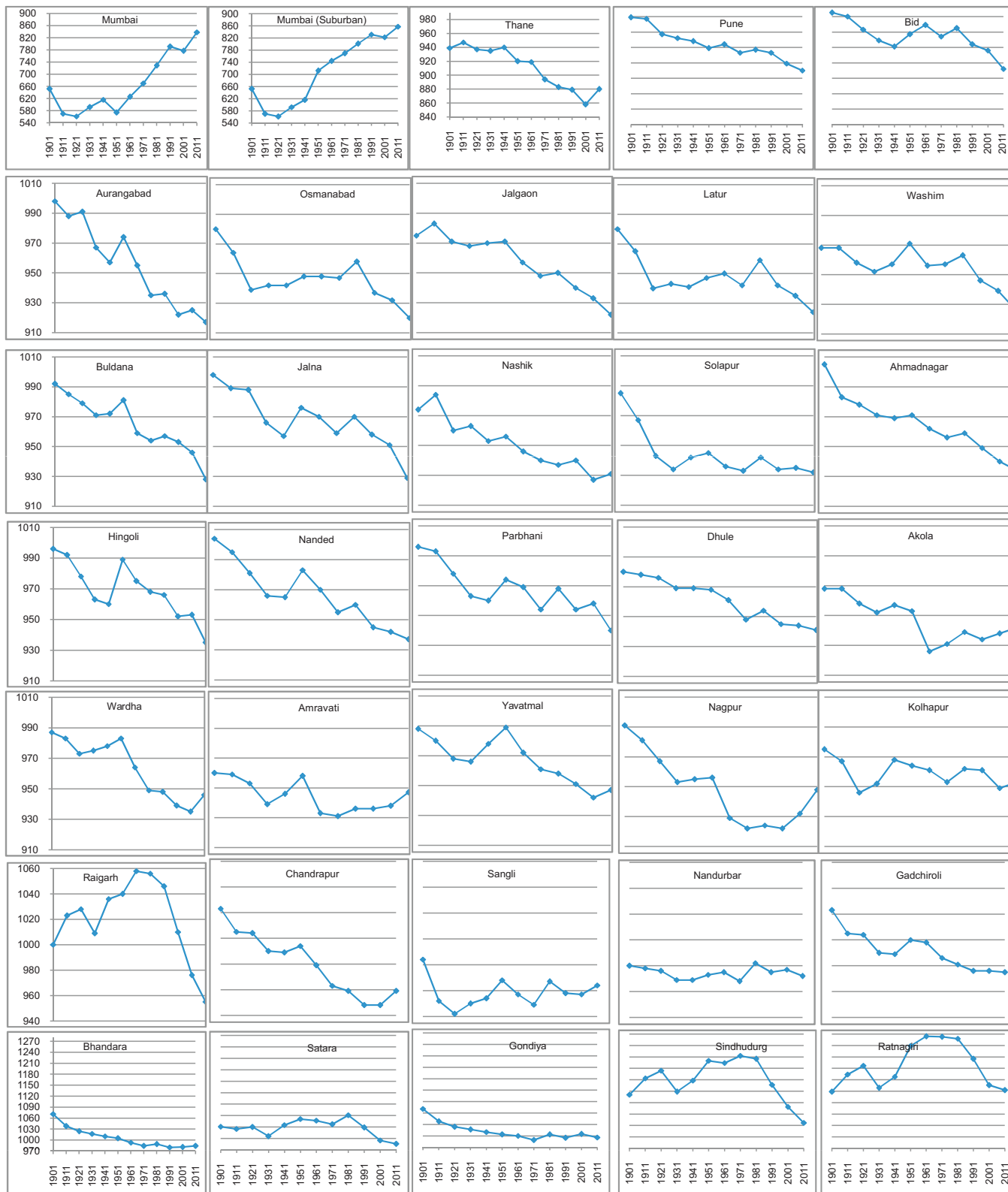
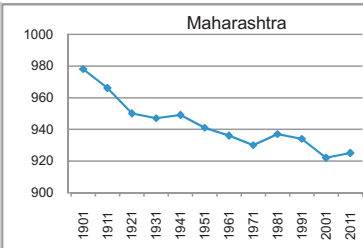
**Graph - 6**  
**Division Wise Child Sex Ratio, 2001 - 2011**



Graph - 7  
Child Sex Ratio (0-6 Age Group) - 2001 - 2011 Maharashtra



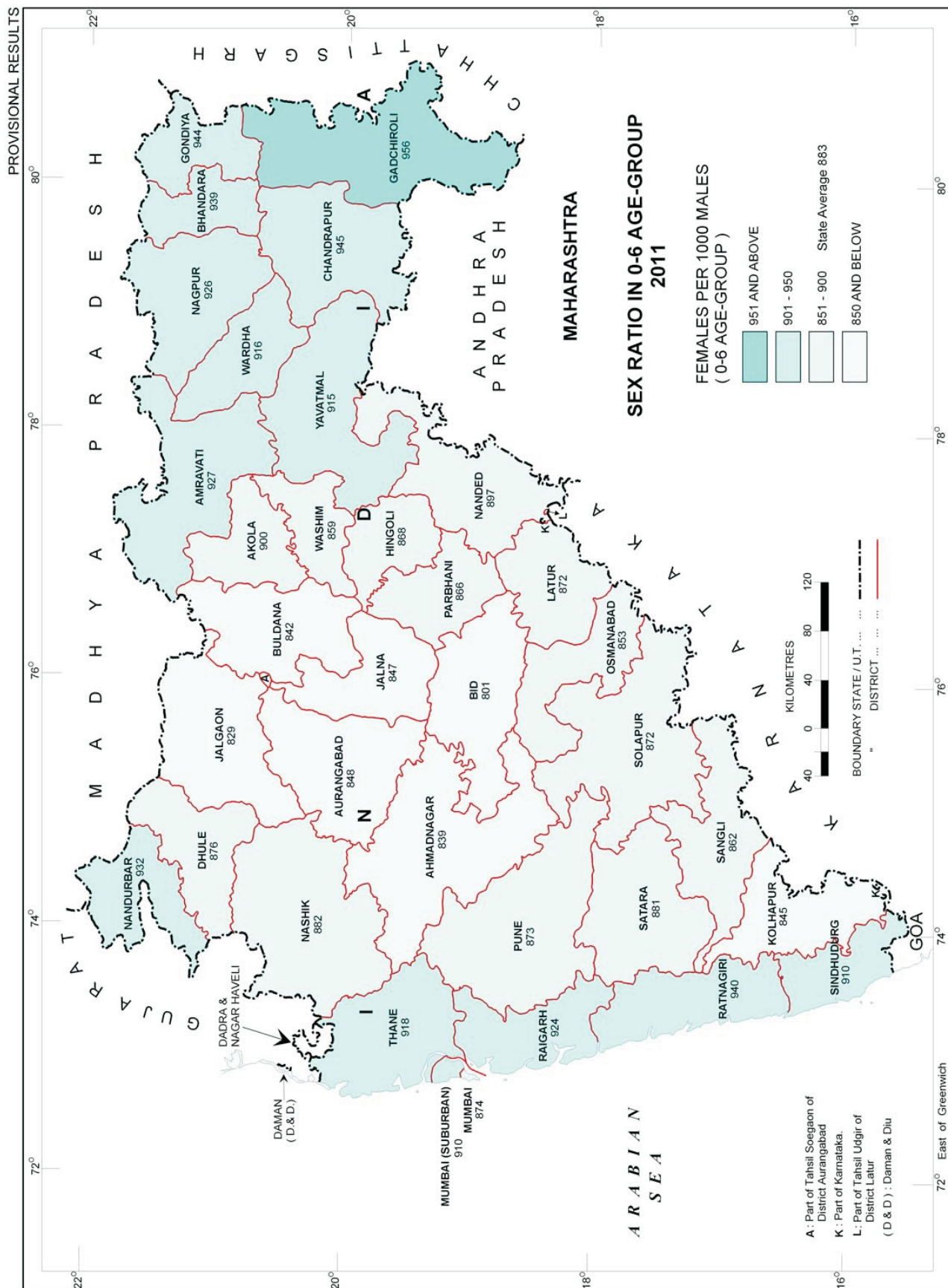
Graph - 8  
Trends in Sex-ratio for Districts 1901-2011  
Maharashtra



## PROVISIONAL RESULTS



Map - 7





Map - 8

