

## DECLINE TREND OF CHILD SEX RATIO 0-6 YEARS AGE GROUP IN MAHARASHTRA

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### **Abstract**

*The Maharashtra state is Second largest state in country regarding Demographic aspect. The given study attempt on the basis of Census of India (1961-2011). The Child sex ratio (0-6 yrs.) is a particularly interesting part of the study in the world. In this study analyses the data of sex ratio among children less than 7 years. Demographically the Overall Sex Ratio (OSR) of state is 925 in 2011 have been improved by up to 922 in 2001. But the Child Sex Ratio (CSR) is 913 in 2001 and it decreased up to 883 in 2011. However this ratio is rapidly decreasing. In the state the ratio of female child was 978 in 1961, 972 in 1971, 956 in 1981, 917 in 1991, 913 in 2001 and 883 in 2011. The provisional data of 2011 census showing the sharpest decline rate of child sex ratio. If the trend continues like this the child sex ratio can be decline up to 808 in 2051. Rapid decline in child sex ratio is serious problem of gender imbalance in the state. In this paper examine the trend, nature and spatial distribution of Child sex ratio (0-6 yrs.) in the state and some concluding remark are important for Child sex ratio policy making.*

**Keywords:-** Child sex ratio, Census, Infant and Child mortality, Sonography, Trend, Decline Sex Ratio, Forecasting.

### **Introduction**

The child sex ratio (number of female children per 1000 male children in the age group of 0-6 yrs.) is a particular interesting study part of Demographers, anthropologist, women and society in the world. The child sex ratio is various from region to region in Maharashtra. The child sex ratio is the important demographic element of the society. The child sex composition play a vital role in the marriage, labour force, fertility, mortality, crime, migration and social indicator. However the Child sex ratio in the country as well as in Maharashtra has shown a declining trend since Census 1981. In the Maharashtra (73) the decreasing rate of sex is high from 1981- 2011 as compare to the Kerala (10) Andaman & Nicobar (12), Mizoram (14), Tripura (19). During the period 1961 the child sex ratio in state is 978 and now it is 883 in 2011. So this is decreasing 73. Therefore the efforts are required to solve the problem of gender imbalance regarding girl child. A decline child sex ratio in the population is also suggesting the neglect of girl children in the society. The medical services, ultrasonography centers are responsible for decline rate of female child. The Maharashtra is the first state in the country who takes the action against the natal test & ultrasonography centers.

## Objectives

The followings are major objective of the study:-

1. The present study analyses the trend and nature of district wise Child sex Ratio in Maharashtra.
2. To find out declining pattern of child sex ratio and over all sex ratio during 1961 - 2011.
3. To examine the impact of decline child sex ratio over the society.
4. To analyses the causes for decline girls in the state.

## Database and Methodology

The study is depend on secondary data collected from Census report, Human development report, Health and Healthcare report of Maharashtra and Family Welfare Statistics In India.

The data have been analyses with the help of various statistical and graphical methods. The comparative change of child sex ratio (0-6 yrs.) is analyses according to district. The main limitation of study is that the census data of 2011 is provisional because this census is not fully released.

## Trend of Child Sex Ratio

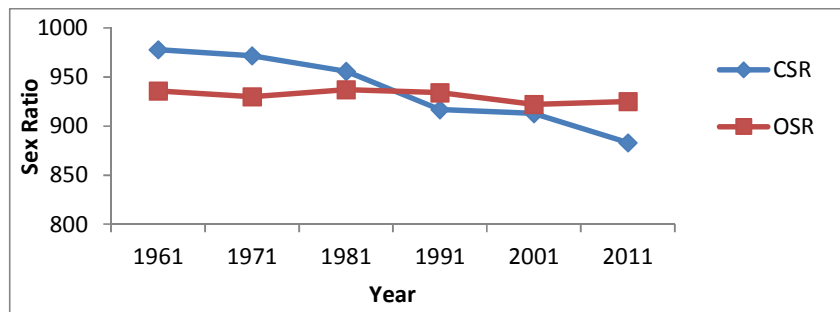
The trend of the given study explains the movements of child sex ratio over period of time. The child sex ratio (CSR) has been decline faster than the overall sex ratio (OSR). The OSR was 936 in 1961 and 925 in 2011 it means the OSR decrease only 11, whereas the decline CSR from 978 (1961) to 883 (2011), showing the reduction of 95 girls per thousand boys during six decade. Child sex ratio (0-6 years) at country level was 945 in 1991, 927 in 2001 and has now declined to 914 in Census 2011. In case of Maharashtra, it was 934 in 1991, 922 in 2001 and now stands at 883 in 2011. Figure no.1 shows the trends of sex ratio and child sex ratio (0-6 years) of Maharashtra for 1961-2011. It is seen that sex ratio of Maharashtra exceeded child sex ratio (0-6years) during the decade 1991-2001.

**Table No:-01 Trend of Child Sex Ratio and Overall Sex Ratio 1961 to 2011**

Year	Census Year						Forecasting Year			
	1961	1971	1981	1991	2001	2011	2021	2031	2041	2051
CSR	978	972 (-6)	956 (-16)	917(-73)	913 (-34)	883 (-30)	867(-16)	847(-20)	827(-20)	808(-19)
OSR	936	930 (-6)	937 (+7)	934(-12)	922 (-9)	925( +3)	922(-3)	920 (-2)	917(-3)	915(-2)

Source: Census Report of Maharashtra (1981, 1991, 2001, and 2011) and Complained by researcher.

**Trend of child sex ratio.**

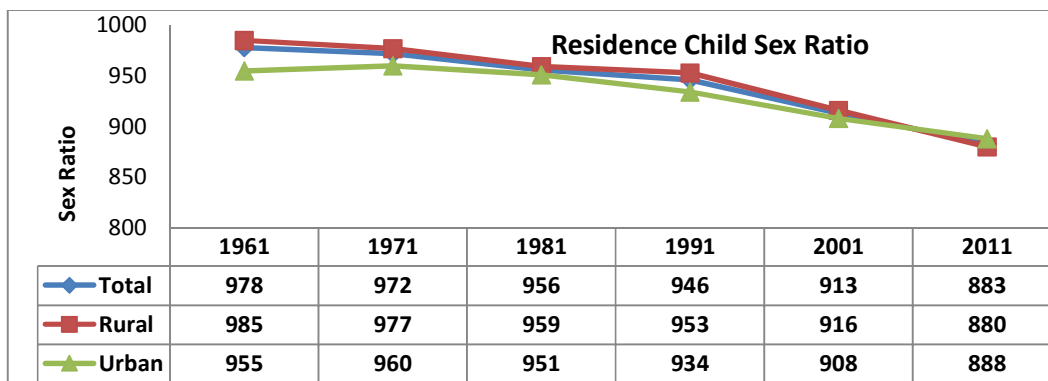


**Fig. 01.**

**Rural –Urban Analysis of child sex ratio**

The rural urban changing structures of child sex ratio are showing in the Fig.no- 2. In Maharashtra the child sex ratio is higher in rural area than urban up to 2001 but the urban child sex ratio has been increased in 2011. The loss of female child in rural area is 95 from 1961 -2011, whereas it is only 67 in urban area. The overall magnitude of Rural- Urban sex ratio has been rapidly decreases.

**Child Sex Ratio by Residence (1961 to 2011)**



**Fig. 2**

Source: Provisional Population Census, 2011

**Concentration of Sex ratio**

The analysis of concentration in sex ratio in the state is showing the child sex ratio is less than 850 were 0 in 1991, 01 in 2001 and 07 in 2011. About 22% district below 900 in 1991, 25% in 2001 and 57 % in 2011. So the district wise concentrations of child sex are decreased in the given period. The number district of above 950 child sex ratio is 05 in 1991 and 2001 but it decrease in 01 in 2011.

**Table 2. Number of District by Child Sex Ratio (1981-2011)**

Sex Ratio	Census Year		
	1991	2001	2011
Below 825	0	0	01
825-849	0	01	06
850-874	03	01	09
875-899	05	07	04
900-924	08	10	07
925 -949	14	11	07
Above 950	05	05	01
Total	35	35	35

### District wise Analysis of Child Sex Ratio

District wise variation of child sex ratio for 1991 -2011 is given in the table no.3. It is observed that the highest variation in sex ratio is found in Bid district and such things are also observed in Osmanabad (74), Hingoli (67), Jalna (67), Washim (62). The reduction in sex ratio is observed in 35 districts ranging from 75 to 97 in 01 districts, 50 to 75 in 09 districts, 25 to 50 in 11 districts and 0 to 25 in 12 districts. Only in Sangli (+12) and Chandrapur (+1) and there is a significant increasing of child sex ratio.

**Table03. Sex Ratio of Child Population in Age group 0-6 yrs.**

District Name	1991	2001	2011	Variation 2011 - 1991	Variation 2011 -2001
Nandurbar	966	961	932	-34	-29
Dhule	907	907	876	-31	-31
Jalgaon	867	880	829	-38	-51
Buldana	915	908	842	-73	-66
Akola	936	933	900	-36	-33
Washim	921	918	859	-62	-59
Amravati	947	941	927	-20	-14
Wardha	934	928	916	-18	-12
Nagpur	949	942	926	-23	-16
Bhandara	958	956	939	-19	-17
Gondiya	964	958	944	-20	-14
Gadchiroli	974	966	956	-18	-10
Chandrapur	944	939	945	1	6
Yavatmal	942	933	915	-27	-18
Nanded	944	929	897	-47	-32
Hingoli	935	927	868	-67	-59
Parbhani	926	923	866	-60	-57
Jalna	914	903	847	-67	-56
Aurangabad	884	890	848	-36	-42
Nashik	936	920	882	-54	-38
Thane	933	931	918	-15	-13
Mumbai (Suburban)	913	923	910	-3	-13
Mumbai	913	922	874	-39	-48
Raigarh	943	939	924	-19	-15

Pune	906	902	873	-33	-29
Ahmadnagar	890	884	839	-51	-45
Bid	898	894	801	-97	-93
Latur	923	918	872	-51	-46
Osmanabad	927	894	853	-74	-41
Solapur	897	895	872	-25	-23
Satara	884	878	881	-3	3
Ratnagiri	954	952	940	-14	-12
Sindhudurg	946	944	910	-36	-34
Kolhapur	859	839	845	-14	6
Sangli	850	851	862	12	11

Source: Census Report of Maharashtra and Compiled by researcher.

### Top five and Bottom five districts in the state

In Maharashtra among the district while comparing the child sex ratio Bid district is in the bottom of child sex ratio (801) followed by Jalgaon (829), Ahmadnagar (839), Buldana (842), Kolhapur (845). Gadchiroli which has 956 child sex ratio 956 districts Chandrapur (945), Gondiya(944) and Ratnagiri (940) and Bhandara (939) whereas the sex ratio is highest in the state.

**Table 04. Highest & Lowest District according to child sex ratio**

S.No	District	1991	District	2001	District	2011
<b>Lowest Sex Ratio</b>						
1.	Sangli	850	Kolhapur	839	Bid	801
2	Kolhapur	859	Sangli	851	Jalgaon	829
3	Jalgaon	867	Satara	878	Ahmadnagar	839
4	Aurangabad	884	Jalgaon	880	Buldana	842
5	Satara	884	Ahmadnagar	884	Kolhapur	845
<b>Highest Sex Ratio</b>						
1	Gadchiroli	974	Gadchiroli	966	Gadchiroli	956
2	Nandurbar	966	Nandurbar	961	Chandrapur	945
3	Gondiya	964	Gondiya	958	Gondiya	944
4	Bhandara	958	Bhandara	956	Ratnagiri	940
5	Ratnagiri	954	Ratnagiri	952	Bhandara	939

Source: Compiled by researcher.

### Causes of Decline Sex Ratio

There are several causes of decline the number of girls child in the state. Sex selective abortion, son preference view and high infant mortality of female child; neglect the girls, male oriented society, gender bias, ultrasonography centre for natal test these factor are influence the child sex ratio.

**Table No-05. Child Sex Ratio at Birth in Maharashtra**

NFHS –I (1992-93)	NFHS –II (1998-99)	NFHS –III (2005-06)
942	904	860

Source: National Family Health Survey in India 1992-93, 98-99 and 2005-06.

As per NFHS the normal sex at birth is decreasing during the period of 1992-2006 about 82 female children. The decline rate of child sex ratio is indicating the increasing sex selective abortion in the state.

## 2. Strong Son Preference

As per survey of NEHS-II about 84.5 percent family wants at least one son, whereas 79.3 percent want at least one daughter. Only 35 per cent of women with two female children are happy and they do not want a son. If a family has a son and a daughter, contraception is resorted to by at least 63 per cent of women. If the two children are boys, then the percentage are going on 79 per cent.

**Table No- 06. Son preference ratio**

If first birth was girls	Total	Rural	Urban	If first birth was boys	Total	Rural	Urban
	749	736	782		1168	1199	1101

Source- Jha.Prabhat, et.al.2006

The analysis of son preference data of the state, if the first birth was girl the people are preferred the boy so, child sex ratio is low however if first birth was boy the sex ratio is high. The son preference view is affected by child sex ratio.

## 3. Ultrasonography center

According to the Population Research Center of Gokhale Institute of Politics and Economics, Pune the correlation of child sex ratio and Ultrasonography centers in Maharashtra is positive. Only 78% Sonography center in the state are registered other 22% are illegal in Western Maharashtra and Mumbai region.

The Sonography center is less than 20 in Gadachiroli, Chandrapur, Gondiya, Nandurbar and Bhandara district whereas sex ratio is more than 939. According to the study which women have gone in Antenatal care (ANC) and sonography there is sex ratio only 893 and births to women who have not gone for any ANC there is sex ratio is 983.

## 4. Infant Mortality

**Table No-07. Infant mortality rate.**

Year	1981	1991	2001	2002	2003	2004	2005	2006	2007	2008	2009
Male	82	60	43	48	32	31	34	35	33	33	28
Female	75	59	48	42	54	42	37	36	35	33	33

Source: Sample Registration System RGI.

The percentage of infant child mortality is reflecting into child sex ratio. According to the data of RGI the infant mortality rate of female is high comparing to the male. The table no. 07 shows the infant mortality rate of Maharashtra.

## 5. Gender issues in politics

The approach against the girls in the society is negative as compare to the son. In the politics of Maharashtra there is very little participation of female before 2011. The governments of Maharashtra pass the bill of 50 % reservation of women in the local bodies. Before that the participation of women in the local bodies is less than 30 percent. Same thing the percentage of women participation in the Legislative Council and Assembly is below 10 percent from 1962 to 2009.

**Table 8. Women’s Participation in Local Bodies as on 1 April 2001**

Municipal Corporation		Municipal Council		Zilla Parishad	
% of Corporators	% of Chairpersons in Standing Committees	% of Members	% of Chairpersons in Standing Committees	% of Members	% of Chairpersons in Standing Committees
24.54	21.90	18.70	72.38	55.64	21.61
Panchayat Samitis		Gram Panchayats			
% of Members	% of chairpersons	% of Members	% of Sarpanches		
32.72	39.73	28.12	29.40		

Source: Directorate of Economics and Statistics, Mumbai.

**6. Economic condition of people**

The economic conditions of people are adversary influenced by the child sex ratio. Economic condition of people is well in the sugar belt (Sangali, Kolhapur, Jalgaon, Ahmednagar, Solapur) where is the sex ratio is low. However the economic condition of people is poor in tribal (Gadachiroli, Chandrapur, Gondiya, Nandurbar and Bhandara) district. Where the child sex ratio is is high, It is clear that the people of rich community mostly preferred the sex selective abortion and pre-natal test.

**Concluding remarks and suggestion:**

1. In the state loss of female child is higher in rural areas as compared to the urban.
2. If the reduction of child sex ratio can be continues the projected child sex ratio up to 2051 it will be 808 girls per 1000 boys. So in state about 192 male will cannot be married in 1000.
3. The highest sex ratio is constant in Gadachiroli, Nanadurbar, Gondiya and Bhandara which are tribal districts where the status of women is likely to be high and positive bias in favour of girls as compare to the develop district.
4. A declining sex ratio in the population is also strongly suggestive of the neglect of girl children and sex selective abortions where available medical services are used to realize that.
5. The sex ratio in Maharashtra (883) for child in the age group of 0-6 years is below that of the national figures, which is at 914 (2011). The reason for this may be attributed to the strong son preference approach in Maharashtra.
6. The sex ratio of total population is increasing in 2011 whereas the sex ratio of child population is decreased.
7. To required the strong act and action against the ultrasound center in the state.
8. In the develop sugar belt and industrial area aware about use medical facility so the sex ratio is less.



9. To required the more participation of female in the politics and society.

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