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DISPARITIES OF SEX RATIO IN MAHARASHTRA STATE OF INDIA

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ABSTRACT

The aim of the paper is to study of sex ratio in Maharashtra state with the help of decennial census report of the Government of India and investigates the current trends of sex ratio. The sex ratio is usually defined as the number of females per thousand males in India. The sex ratio needs special mention for it is one of the related aspects of the socio-economic characteristics. It plays the pivotal role in assessing the reproductive performances, mortality, occupational structure and the migratory character of the population. There are many ups and downs in sex ratio over a period of time in 1901 to 2011. Some of the reasons commonly put forward to explain the consistently low levels of sex ratio are neglect of the girl child resulting in higher mortality at younger age, high maternal mortality, sex selective abortions, female infanticide.

There were 984 females for every thousand males in the World in 2011. Europe had the highest sex ratio followed by North America and Africa. Asia, on the other hand, had the largest deficiency of females. India, there were 933 females for every thousand males in India, which increased to 940 in 2011. The country's sex ratio has declined from 934 in 1981 to 927 in 1991. In west Maharashtra has high sex ratio in comparison to other part of Maharashtra. The tribal belt of Maharashtra is characterized by high sex ratio. Highly urbanized districts of Maharashtra

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is Mumbai, Mumbai suburban and Thane (832, 860 and 886 females per thousand male) distributed sporadically also had a low sex ratio. In India urban sex ratio of 1901 census was 910 and 2011 are 926 females, whereas urban Maharashtra sex ratio was 862 in 1901 and which was increase slightly up to 899 females per 1000 males in 2011. We found lot of variation in rural and urban sex ratio in Maharashtra state.

Key words: Sex Ratio, Gender Imbalance, Trends in Sex Ratio, Mortality.

INTRODUCTION:

According to census (2011) male female sex ratio in India is 940 that means there are 940 females of per 1000 males in the country. If reversed it is 1063 male per 1000 females. India ranks number 21 for male per female sex ratio in the world. Maharashtra has below the national level average sex ratio i.e. 925females per 1000 males. In India five states of or Union Territories have lowest sex ratio they are Haryana (877), Delhi (866), Chandigarh (818), Dadar& Nagar Haveli (775) & Daman & Diu (618). In India Kannur district in Kerala state has highest sex ratio of 1133 females per 1000 males has also a Ladakh district in Jammu & Kashmir state has lowest sex ratio of 583 females per 1000 male. Sex ratio is one of the important indices of women's health and position in any society (Barakade2012). It was found that while sex differentials in childhood mortality were substantial and widely distributed in rural India from the censuses of 1961 and 1971 (Miller1989) the overall sex ratio in Maharashtra improved marginally in census 2011 compared to that of 2001. But there are large variations in sex-ratio across districts in Maharashtra.

The sex ratio of Maharashtra state as a whole and district wise shows different picture because some district have higher sex ratio. For the purpose of analysis, here on attempt has been made to study the district wise sex ratio from 1991 to 2011 decade. Changes in sex composition largely reflect the underlying socio-economic and cultural patterns of a society in different ways. Sex composition of population is one of the key factors in a country's development and has both demographic and social implications. The proportion of males and females in the population affect the social and economic relationships within a region. Sex ratio is an important factor for

determining the death rate of any population. Women generally have lower death rates then men at most ages in most countries.

All the demographic attributes of population, the sex structure is one of the most fundamental and directly related to the reproductive potential of the humankind, deaths and marriages. Sex ratio is a biological fact that more males are born than females. This does not mean that all the regions have similar natural sex ratio. Males have dominated sex ratio for population of India since long.

OBJECTIVES:

1) Comparative study urban sex ratio.
2) To analyze the decadal changes in sex ratio.
3) To study the district wise structure of sex ratio.

STUDY AREA:

The State of Maharashtra extends from 15˚ 45' to 20˚ 6' North Latitude and 70˚ 36' to 80˚ 54' East Longitude with Geographical area 3, 07,713 Sq. Km. It is bounded by Arabian Sea in the west, the State of Gujarat in the Northwest. Madhya Pradesh in the North, Chhattisgarh in the East, Andhra Pradesh in the Southwest, Karnataka in the South and Goa in the Southwest. Maharashtra occupies the western and central part of the country and has a long coastline stretching nearly 720 Km along the Arabian Sea. The state has 35 districts, Tahsils 355, census town are 279.

DATA BASE AND METHODOLOGY:

The present study is based on secondary data collected from census Reports of Government of India. Covering sex ratio of Maharashtra state, census handbook (1991, 2001 and 2011), Socio-economic review of Maharashtra statistical abstract.For detailed study of changes in sex ratio of districts. The collected data has been processed and analysed by using different quantitative, statistical technique. The tabulated data has been presented by graph. To make the comparative analysis the sex ratio of changes has also been computed. It can give better understanding regarding the sex ratio in Maharashtra state.

TABLE 1 WORLD SEX RATIO OF TEN MOST POPULOUS COUNTRIES

Sr. no.	Name of The Country	2001	2011
1	China	944	926
2	India	933	940
3	USA	1029	1025
4	Indonesia	1004	988
5	Brazil	1025	1042
6	Pakistan	938	943
7	Russian Federation	1140	1167

8	Bangladesh	958	978
9	Japan	1041	1055
10	Nigeria	1016	987
	World	**986**	**984**

Table no. 1 shows that the disparities of sex ratio in World in 2001 and 2011. The ten most populous countries are selected in the study. The highest females observed in Russian Federation i.e. 1167 females per 1000 males and lowest sex ratio are found in chine i. e. 926 females for 1000 males. The world sex ratio was found in 984 females in 2011. Four countries are observed in above 1000 females per 1000 male. i.e. 1025, 1042, 1167 and 1055 USA, Brazil, Russian Federation and Japan respectively,and above the Worlds sex ratio and below the 1000 female countries are as Indonesia and Nigeria i.e. 988 and 987 female. The below Worlds average sex ratio observed in the countries are China, India, Pakistan and Bangladesh i.e. 926, 940, 943 and 978 respectively in 2011.

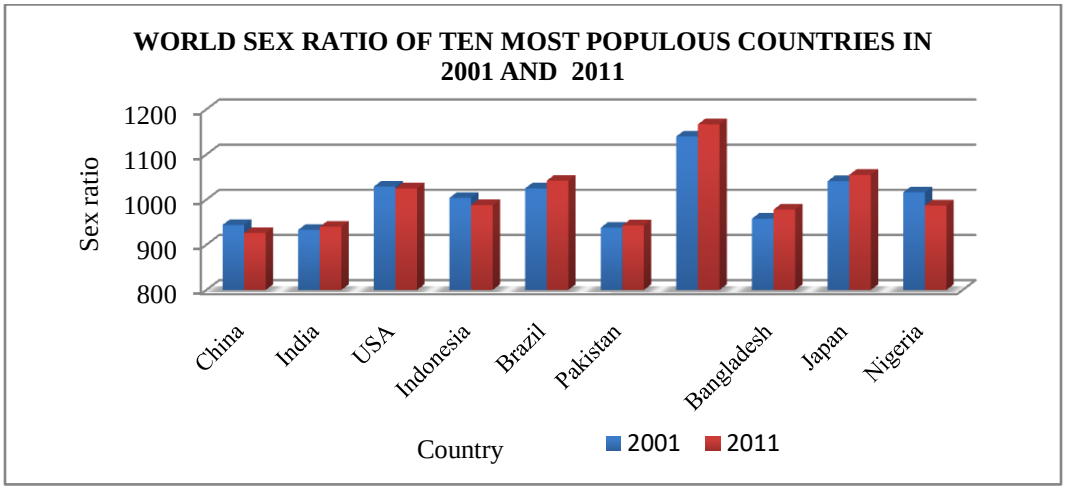


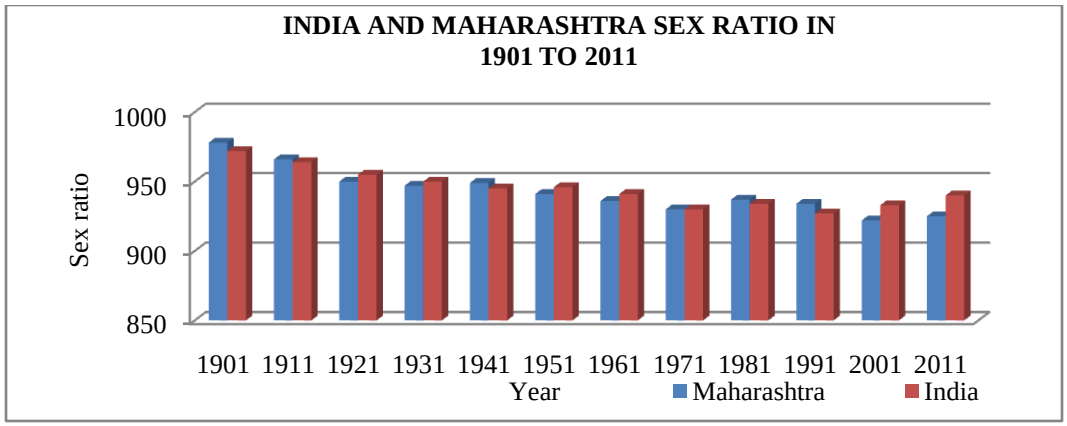
TABLE 2 INDIA AND MAHARASHTRA SEX RATIO IN 1901 TO 2011

Year	Maharashtra	Decadal Variation	India	Decadal Variation
1901	978		972	
1911	966	-12	964	-8
1921	950	-16	955	-9
1931	947	-3	950	-5

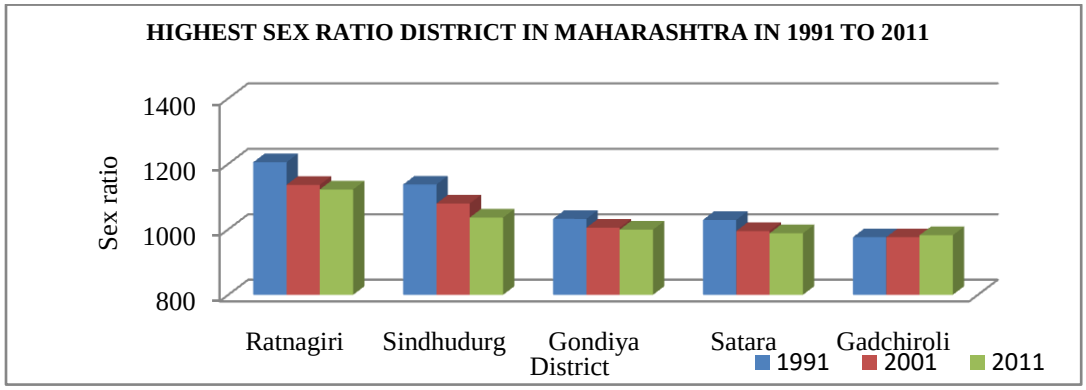
1941	949	2	945	-5
1951	941	-8	946	1
1961	936	-5	941	-5
1971	930	-6	930	-11
1981	937	7	934	4
1991	934	-3	927	-7
2001	922	-12	933	6
2011	925	3	940	7

Table no. 2show that the disparities of sex ratio in India and Maharashtra state from 1901 to 2011. In 1901 the sex ratio in India was 972 females for every 1000 males. Sex ratio of Maharashtra 978 was quite high than that of India in 1901 but it was down up to 925 in 2011. It had reached the lowest point at 927 females in 1991, and highest sex ratio observed in 1901 i.e. 972 females. The sex ratio has increased by 06 point to 933 females at 2001; present sex ratio of India was 940 females per 1000 male in 2011. The table reveals that trends in sex ratio for India and Maharashtra. Generally, from the above table, it is observed that the sex ratio for all these hierarchical regions recorded the declining trends. There are too many reasons behind it. Mostly the men-dominant community is the root cause of this, throughout ancient India this is the basic reason for declining number of females in the total population and many other reasons are tots of this. The decadal variations in sex ratio for the investigated century for all the two hierarchical regions. Interestingly it shows maximum rows is the downward direction, while only few rows went up ward. It means there were more negative fluctuations than the positive fluctuations in the sex ratio for investigated century in all the two hierarchical regions.

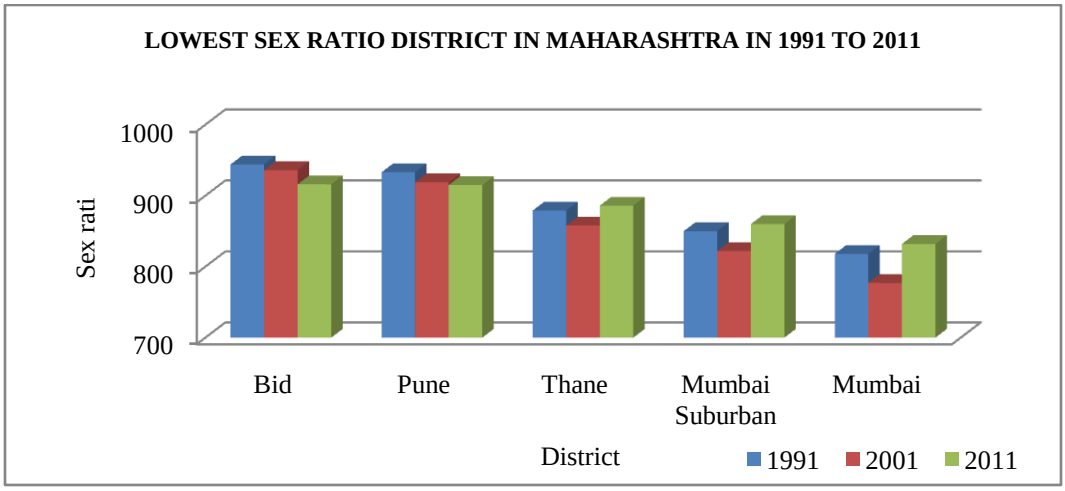
The 1931- 41, 1971- 81and 2001-2011 decade, which showed the positive variation in the sex ratio for Maharashtra state and 1941-51, 1971-81 and 2001-2011 decade, which observed the positive variation in sex ratio of India,while Maharashtra and India had declining trends in the number of females per 1000 males. The 2001-2011 decade was positive trends in India and Maharashtra i.e. 7 and 3 points respectively.



MAHARASHTRA STATE DISTRICT WISE RANKING OF SEX RATIO:



The table no. 3 reveals that the ranking of sex ratio in 1991 to 2011. The first rank of sex ratio was found district Ratnagiri and 35 ranks was observed in Mumbai district. As per 2001 and 2011 census, know rank change in district of Ratnagiri 1, Sindhudurg 2, Gondiya 3, Satara 4, Pune 32, Thane 33, Mumbai Suburban 34 and Mumbai 35.



The decrease of rank in sex ratio of 1 to 5 points are Nandurbar, Dhule, Jalgaon, Bhandara, Nanded, Raigarh, Ahmadnagar, Latur and Osmanabad district, total 9 district are observed in this groups. 5 to 10 rank decreases are observed in 5 district i.e. Buldana, Washim, Hingoli, Parbhani and Bid Districts. Above 10 rank decrease observed in one district are Jalna 11 points decrease in the 2001 to 2011 decade. It was the highest declining in sex ratio of the Maharashtra state and Second declining district are Bid in 8 points.

TABLE 3MAHARASHTRA STATE DISTRICT WISE RANKING OF SEX RATIO IN1991TO 2011

Sr. No.	District	Sex ratio			Ranking of district by Sex Ratio		
		1991	2001	2011	1991	2001	2011
1	Nandurbar	NA	977	978	NA	6	7
2	Dhule	958	944	946	10	16	18
3	Jalgaon	940	933	925	20	27	28
4	Buldana	953	946	934	12	15	25
5	Akola	939	938	946	22	22	17
6	Washim	NA	939	930	NA	20	26
7	Amravati	936	938	951	24	21	14
8	Wardha	939	935	946	21	26	16
9	Nagpur	922	932	951	28	29	13
10	Bhandara	988	981	982	5	5	6
11	Gondiya	NA	1005	999	NA	3	3
12	Gadchiroli	976	976	982	6	8	5
13	Chandrapur	948	948	961	15	14	9
14	Yavatmal	951	942	952	13	18	12
15	Nanded	945	942	943	16	17	19
16	Hingoli	NA	953	942	NA	11	20
17	Parbhani	953	958	947	11	9	15
18	Jalna	958	951	937	9	12	23

19	Aurangabad	922	925	923	27	31	30
20	Nashik	940	927	934	19	30	24
21	Thane	879	858	886	29	33	33
22	Mumbai Suburban	NA	822	860	NA	34	34
23	Mumbai	818	777	832	30	35	35
24	Raigarh	1010	976	959	4	7	10
25	Pune	933	919	915	26	32	32
26	Ahmadnagar	949	940	939	14	19	21
27	Bid	944	936	916	17	23	31
28	Latur	942	935	928	18	25	27
29	Osmanabad	937	932	924	23	28	29
30	Solapur	934	935	938	25	24	22
31	Satara	1029	995	988	3	4	4
32	Ratnagiri	1205	1136	1122	1	1	1
33	Sindhudurg	1137	1079	1036	2	2	2
34	Kolhapur	961	949	957	7	13	11
35	Sangli	958	957	966	8	10	8

TABLE 4 MAHARASHTRA STATE DISTRICT WISE SEX RATIO IN 2001 TO 2011

Sr. No	**Group**	**District 2001**	**District 2011**
1	Below 850	Mumbai, Mumbai suburban **(2)**	Mumbai **(1)**
2	851 To 900	Thane **(1)**	Mumbai suburban, Thane **(2)**
3	901 To 950	Pune, Aurangabad, Nashik, Nagpur, Osmanabad,Jalgaon, Wardha, Latur,Solapur, Bid, Akola, Amravati, Washim, Ahmadnagar, Yavatmal, Nanded, Dhule, Buldana, Chandrapur, Kolhapur **(20)**	Pune, Bid, Aurangabad, Osmanabad,Jalgaon, Latur, Washim, Buldana, Nashik, Jalan, Solapur, Ahmadnagar, Hingoli, Nanded, Dhule, Akola, Wardha, Parbhani**(18)**

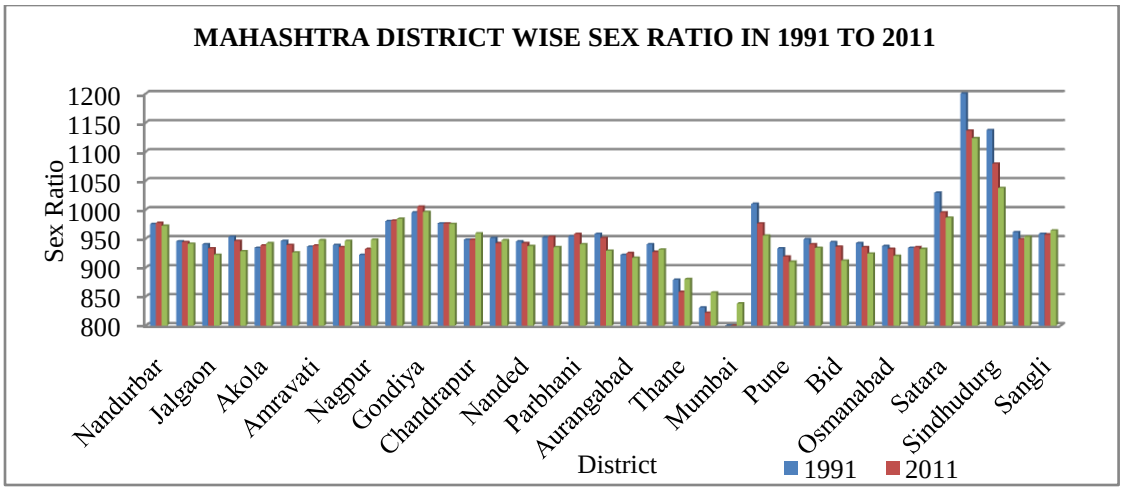
4	951 To 1000	Jalan, Hingoli, Sangli, Parbhani, Gadchiroli, Raigarh, Nanadurbar, Bhandara, Satara **(9)**	Amravati, Nagpur, Yavatmal, Kolhapur, Raigarh, Chandrapur, Sangli, Nanadurbar, Bhandara, Gadchiroli, Satara, Gondiya, **(12)**
5	Above 1000	Gondiya, Sindhudurg, Ratnagiri**(3)**	Sindhudurg, Ratnagiri**(2)**
		Total District **35**	Total District **35**

The district wise sex ratio of Maharashtra are observed in five class i.e. below 850 females per 1000 male are show in the Mumbai in 2011 and Mumbai and Mumbai Suburban in 2001 census. The above 1000 females per 1000 males are observed in only two district i.e. Sindhudurg and Ratnagiri. The class 901 to 950 observed district in this class was 20 in 2001, 2011 was decrease of two districts and reaming 18 district present. The class 951 to 1000 females per 1000 males are observed in 2001 was 9 district and 2011 was increase up to 12 district.

TABLE 5MAHARASHTRA STATE DISTRICTWISE DIFFERENCE BETWEEN 1991 TO 2011

Sr.No	**District**	**Year**		**Difference between 1991-2001**	**Year**		**Difference between 2001-2011**
		1991	**2001**		**2001**	**2011**	
1	Nandurbar *	NA	977	NA	977	978	1
2	Dhule	958	944	-14	944	946	2
3	Jalgaon	940	933	-7	933	925	-8
4	Buldana	953	946	-7	946	934	-12
5	Akola	939	938	-1	938	946	8
6	Washim *	NA	939	NA	939	930	-9
7	Amravati	936	938	2	938	951	13
8	Wardha	939	935	-4	935	946	11
9	Nagpur	922	932	10	932	951	19

10	Bhandara	988	981	-7	981	982	1
11	Gondiya *	NA	1005	NA	1005	999	-6
12	Gadchiroli	976	976	0	976	982	6
13	Chandrapur	948	948	0	948	961	13
14	Yavatmal	951	942	-9	942	952	10
15	Nanded	945	942	-3	942	943	1
16	Hingoli *	NA	953	NA	953	942	-11
17	Parbhani	953	958	5	958	947	-11
18	Jalna	958	951	-7	951	937	-14
19	Aurangabad	922	925	3	925	923	-2
20	Nashik	940	927	-13	927	934	7
21	Thane	879	858	-21	858	886	28
22	Mumbai (Suburban) *	NA	822	NA	822	860	38
23	Mumbai	818	777	-41	777	832	55
24	Raigarh	1010	976	-34	976	959	-17
25	Pune	933	919	-14	919	915	-4
26	Ahmadnagar	949	940	-9	940	939	-1
27	Bid	944	936	-8	936	916	-20
28	Latur	942	935	-7	935	928	-7
29	Osmanabad	937	932	-5	932	924	-8
30	Solapur	934	935	1	935	938	3
31	Satara	1029	995	-34	995	988	-7
32	Ratnagiri	1205	1136	-69	1136	1122	-14
33	Sindhudurg	1137	1079	-58	1079	1036	-43
34	Kolhapur	961	949	-12	949	957	8
35	Sangli	958	957	-1	957	966	9
	Maharashtra	**934**	**922**	**-12**	**922**	**929**	**7**



According to 1991 to 2001, -0 to -10 difference in sex ratio was observed in the district are 13, and -11 to -20 de district difference show that the 4 i.e. Dhule, Nashik, Pune and Kolhapur -14, -13, -14 and -12 respectively. The declining of sex ratio -21 to -30 point is show in only one district i.e. Thane -21, -30 and above differences occurs in 5 district i.e. Raigarh -34, Satara -34, Mumbai -41, Sindhudurg-58 and Ratnagiri -69 respectively. The negative sex ratio observed in 30 district of Maharashtra and positive sex ratio observed in only 5 districts i.e. Amravati, Nagpur, Parbhani, Aurangabad and Solapur respectively.

According to 2001 to 2011, -0 to -10 difference in sex ratio was observed in the 9 district, and -11 to -20 difference observed in 7 district and above -21 difference observed in only one district i.e. Sindhudurg -43. The negative sex ratio observed in 17 district in Maharashtra, and positive sex ratio observed in 18 district. The sex ratio district increase in 13 district of Maharashtra. The highest sex ratio increase in Mumbai district i.e. -41 to +55 in 2001 to 2011 decade and lowest sex ratio difference observed in Sindhudurg district i.e. -43 point. The average sex ratio of Maharashtra was increase in 2001 to 2011 decade i.e. 922 to 929 female per 1000 males.

TABLE 6MAHARASHTRA STATE DISTRICTWISE DEVIATIONS IN 1991 TO 2011

Sr.No	District	1991	Deviation	2001	Deviation	2011	Deviation
1	Nandurbar *	NA	NA	977	55	978	49
2	Dhule	958	24	944	22	946	17
3	Jalgaon	940	6	933	11	925	-4

4	Buldana	953	19	946	24	934	5
5	Akola	939	5	938	16	946	17
6	Washim *	NA	NA	939	17	930	1
7	Amravati	936	2	938	16	951	22
8	Wardha	939	5	935	13	946	17
9	Nagpur	922	-12	932	10	951	22
10	Bhandara	988	54	981	59	982	53
11	Gondiya *	NA	NA	1005	83	999	70
12	Gadchiroli	976	42	976	54	982	53
13	Chandrapur	948	14	948	26	961	32
14	Yavatmal	951	14	942	20	952	23
15	Nanded	945	11	942	20	943	14
16	Hingoli *	NA	NA	953	31	942	13
17	Parbhani	953	19	958	36	947	18
18	Jalna	958	24	951	29	937	8
19	Aurangabad	922	-12	925	3	923	-6
20	Nashik	940	8	927	5	934	5
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22	Mumbai (Suburban) *	NA	NA	822	-100	860	-69
23	Mumbai	818	-116	777	-145	832	-97
24	Raigarh	1010	76	976	54	959	30
25	Pune	933	-1	919	-3	915	-14
26	Ahmadnagar	949	15	940	18	939	10
27	Bid	944	10	936	14	916	-13
28	Latur	942	8	935	13	928	-1
29	Osmanabad	937	3	932	10	924	-5
30	Solapur	934	0	935	13	938	9
31	Satara	1029	95	995	73	988	59
32	Ratnagiri	1205	271	1136	214	1122	193

33	Sindhudurg	1137	203	1079	157	1036	107
34	Kolhapur	961	27	949	27	957	28
35	Sangli	958	24	957	35	966	37
	MAHARASHTRA	**934**		**922**		**929**	

The Maharashtra state observed in two types of deviations i.e. positive and negative deviations are present.

NEGATIVE DEVIATION:

This category of deviation occurred in -0 to -50 points. This deviation was observed in 8 district of Maharashtra. The district name was Thane -43, Pune -14, Bid -13, Aurangabad -6, Osmanabad -5 Jalgaon -4, and Latur -1 are observed in 2011 census.The second type was -51 to -100 points. This deviation observed in two district of Maharashtra i.e. Mumbai -97, and Mumbai Suburban -69 the highest deviation district of state. The negative deviation observed in 10 district in Maharashtra state.

POSITIVE DEVIATION:

The positive deviations are observed in 25 district of Maharashtra state. The three categories are observed in positive deviation. The first class in this category are 1 to 50 points. This deviation was observed in 19 district of Maharashtra state. The district name is Nandurbar 49, Dhule 17, Wardha 17,Chandrapur 32 and Sangli 37 etc. this district includes 54.28 per cent of state. Deviation 51 to 100 points. This category of deviation includes 4 district of Maharashtra. The name of the district areBhandara 53, Gondiya 70, Gadchiroli 53 and Satara 59 points are observed in Maharashtra state.Deviation above 100 points. This category of deviation includes only two district of Maharashtra i.e. Sindhudurg 107 and Ratnagiri 193 points observed in 2011 census.

CONCLUSIONS:

In 1901 the sex ratio in India was 972 females for every 1000 males. Sex ratio of Maharashtra 978 was quite high than that of India in 1901 but it was down up to 925 in 2011.The sex ratio has increased by 06 point to 933 females at 2001; present sex ratio of India was 940 females per

1000 male in 2011. Maharashtra and India had declining trends in the number of females per 1000 males. The 2001-2011 decade was positive trends in India and Maharashtra i.e. 7 and 3 points respectively. the ranking of sex ratio in 1991 to 2011. The first rank of sex ratio was found district Ratnagiri and 35 ranks was observed in Mumbai district. Above 10 rank decrease observed in one district are Jalna 11 points decrease in the 2001 to 2011 decade. It was the highest declining in sex ratio of the Maharashtra state. The above 1000 females per 1000 males are observed in only two district i.e. Sindhudurg and Ratnagiri. The negative deviation observed in 10 district in Maharashtra state. The positive deviations are observed in 25 district of Maharashtra states.

REFERENCE:

1) A. J. Barakade (2012), Decline Sex Ratio: An analysis with Special Reference to Mahaashtra State, Geoscience Research, Vol. 3, (1):92-95.

2) B. D. Miller (1989), Changing Pattern of Juvenile Sex Ratio in India: 1961 to 1971, Economic and Political Weekly, V ol. XXIV, No. 22, 1229-36, June 3.

3) K. B. Kankure (2011), Astudy of Sex Rato in Parbani District (M. S.), International Referred Research Journal, Vol. 3 (31).

4) Michel Guillot (2002), The dynamics of the population Sex ratio in India, 1971-96, Population Studies, 56: 51-63, 2002.

5) N.S. Shetkar, and Narwade S.S. (2013) Chaining pattern of sex ratio in maharashtra during the period of economic reforms.

6) Nanded district census handbook (1981, 1991, 2001 and 2011).

7) P. Bardhan (1988), Sex Disparity in child survival in rural india,

8) P. M. Visaria (1971), The Sex Ratio of the Population in India, Census Monography, No. 10, New Delhi.

9) P.B. Waghmare and P.A. Khadke (2014), "A Geographical study of sex ratio in Nanded district", IRJHEI, ISSN 2277-9329, Vol. II, Issue 12 (1), March 2014, P 37-40.

10) P.B. Waghmare and P.A. Khadke (2014), "Urban sex ratio of Nanded district of Maharashtra state (India),"Review of Research, Vol. 3, Issue 10 I. M. Factor 2.1002, ISSN 2249-894X, July 2014. P 1-7.

11) S.V. Karande& P.A. Khadke (2013), Decline Trend of Child Sex ratio 0-6 Years age group in Maharashtra, Research Front, Vol. 1, No.3, July-Sept, 2013.

12) V. P. More, Ingle A. R., Shind V. S. (2012), Generation and District-wise Study of Sex Ratio, International Journal of Health Sciences and Research,Vol. 2 (7).