



# DECLINING SEX RATIO IN INDIA: CAUSES AND CONSEQUENCES

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## Abstract

*Sex ratio in the Indian population is becoming adverse to women. It has been rapidly declining decade by decade. It widely differs among states and union territories. The major causes for declining sex ratio are: sex ratio at birth, sex-selective abortions, sex ratio of children and sex-differentials in mortality etc. This in turn leads to several consequences to men and on the society.*

**Keywords:** Sex ratio, Census years, abortion, Mortality, Net-migration, Amniocentesis, Female infanticide, under-enumeration.

## Introduction

The sex composition of a population is the most basic of all demographic characteristics. It has many important implications, the most fundamental being to

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define the limits of the society's reproductive potential. Further, the sex composition is also the basic demographic determinant of births, deaths and marriages. Migration rates, occupational structure and virtually all other population characteristics may be influenced by the ratio between the sexes. However, the sex structure of the present population is determined by the past trends of fertility, mortality and migration.

The sex structure is conveniently described by sex ratios; most commonly as "the number of females per 1000 males" or "the number of males per 1000 females". In India, it is presented in the former way. In developed countries, the sex ratio is favorable to males, while in many developing countries, it is adverse to females. This can be ascribed to high female mortality in the developing countries (Jain, 1976). Similarly in India also, the sex ratio has been declining decade by decade in the present century. This type of sex ratio is described as being "adverse to women". This unique feature of India has been highlighted by respective census reports and also studied by several authors' viz., Sexena (1982), Kanitkar (1992), and Premi (1991).

## Importance

The declining sex ratio in India affects the socio-cultural, economic and demographic aspects of population. Because of its several significant implications, the dynamics of India's sex ratio constitute a central subject to research for social scientists, planners, and policy makers. However, the declining sex ratio in India is Ascribed to several causes, which in turn leads to several consequences. In this context, an attempt is made in this paper based on empirical evidence.

## Objectives

The objectives of paper are:

- 1) To study the trends of sex ratio in India and its States as well as Union territories
- 2) Causes for declining sex ratio and
- 3) Its consequences.

## Methodology:

The data for this paper has taken from Census of India, 2001. The data covers for a period of ten decades (i.e. 1901-2001). Moreover, the Indian states as well as

Union territories are divided into four categories based on their trends of sex ratio viz. (1) States/Union territories where sex ratio is higher than the national average in most of the censuses, (2) States/Union territories where sex ratio is lower than the national average, (3) States/ Union territories where sex ratio is close to the national average and (4) States/ Union territories where sex ratio is fluctuating

## Analysis

At present the world has 986 females for 1000 males. The sex ratio in Russian Fede (1140); Brazil (1025); U.S.A (1029); Nigeria (1016) are higher. While except Indonesia (1004) and Japan (1041); other Asian countries viz. Bangladesh (953), China (944) and India (933) have comparatively lower sex ratio (Census of India, 2001).

In India, the overall sex ratio has been unfavorable to females and during 1901-2001, it became increasingly so, with slight exceptions, the 1981 and 2001 census have recorded a tiny upward movement (Table-1). There have been periods when the decline in the sex ratio has been sharp; for example, between 1901 and 1911; between 1911 and 1921 and then between 1961 and 1971. It was considered as a serious matter by the demographers and social scientists. However after an improvement in sex ratio in 1981, the 1991 census again recorded a decline of it. Further, the sex ratio is widely differing in Indian States and in Union territories (Table-1).

## High sex ratio

States/ Union territories with higher sex ratio than the national average in most of the censuses are: Bihar, Orissa, Andhra Pradesh, Madhya Pradesh, Chhattisgarh, Tamil Nadu, Kerala, Karnataka, Manipur, Jharkhand, Pondicherry, Meghalaya, Mizoram, Goa, Daman & Diu and Lakshadweep.

## Low sex ratio

States/ Union territories with lower sex ratio than the national average are: Assam, West Bengal, Rajasthan, Uttar Pradesh, Punjab, Jammu and Kashmir, Haryana, Delhi, Andaman & Nikobar, Chandigarh and Arunachal Pradesh, it is well below the national average since 1901.

Table-1: Sex Ratio (Females per 1,000 males) : 1901-2001

State/ UT Code	India/State/ Union territory	Census year												
		1901	1911	1921	1931	1941	1951	1961	1971	1981	1991	2001		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)		
	INDIA	972	964	955	950	945	946	941	930	934	927	933		
1	Jammu & Kashmir	882	876	870	865	869	873	878	878	892	896	900		
2	Himachal Pradesh	884	889	890	897	890	912	938	958	973	976	970		
3	Punjab	832	780	799	815	836	844	854	865	879	882	874		
4	Chandigarh	771	720	743	751	763	781	652	749	769	790	773		
5	Uttaranchal	918	907	916	913	907	940	947	940	936	936	964		
6	Haryana	867	835	844	844	869	871	868	867	870	865	861		
7	Delhi	862	793	733	722	715	768	785	801	808	827	821		
8	Rajasthan	905	908	896	907	906	921	908	911	919	910	922		
9	Uttar Pradesh	938	916	908	903	907	908	907	876	882	876	898		
10	Bihar	1061	1051	1020	995	1002	1000	1005	957	948	907	921		
11	Sikkim	916	951	970	967	920	907	904	863	835	878	875		
12	Arunachal Pradesh	NA	NA	NA	NA	NA	NA	894	861	862	859	901		
13	Nagaland	973	993	992	997	1021	999	933	871	863	886	909		
14	Manipur	1037	1029	1041	1065	1055	1036	1015	980	971	958	978		
15	Mizoram	1113	1120	1109	1102	1069	1041	1009	946	919	921	938		
16	Tripura	874	885	885	885	886	904	932	943	946	945	950		
17	Meghalaya	1036	1013	1000	971	966	949	937	942	954	955	975		
18	Assam	919	915	896	874	875	868	869	896	910	923	932		

State/ UT Code	India/State/ Union territory	Census year												
		1901	1911	1921	1931	1941	1951	1961	1971	1981	1991	2001		
19	West Bengal	945	925	905	890	852	865	878	891	911	917	934		
20	Jharkhand	1032	1021	1002	989	978	961	960	945	940	922	941		
21	Orissa	1037	1056	1086	1067	1053	1022	1001	988	981	971	972		
22	Chhattisgarh	1046	1039	1041	1043	1032	1024	1008	998	996	985	990		
23	Madhya Pradesh	972	967	949	947	946	945	932	920	921	912	920		
24	Gujarat	954	946	944	945	941	952	940	934	942	934	921		
25	Daman & Diu	995	1040	1143	1088	1080	1125	1169	1099	1062	969	709		
26	Dadra & Nagar Haveli	960	967	940	911	952	946	963	1007	974	952	811		
27	Maharashtra	978	966	950	947	949	941	936	930	937	934	922		
28	Andhra Pradesh	985	992	993	987	980	986	981	977	975	972	978		
29	Karnataka	983	981	969	965	960	966	959	957	963	960	964		
30	Goa	1091	1108	1120	1088	1084	1128	1066	981	975	967	960		
31	Lakshadweep	1063	987	1027	994	1018	1043	1020	978	975	943	947		
32	Kerala	1004	1008	1011	1022	1027	1028	1022	1016	1032	1036	1058		
33	Tamil Nadu	1044	1042	1029	1027	1012	1007	992	978	977	974	986		
34	Pondicherry	NA	1058	1053	NA	NA	1030	1013	989	985	979	1001		
35	Andaman & Nicobar Islands	318	352	303	495	574	625	617	644	760	818	846		

Source: Census of India, 2001: Provisional Population Totals, Series-1, paper 1 of 2001, Registrar General & Census Commissioner, India.

**Sex ratio close to the national average:** In Gujarat and Maharashtra the sex ratio is closer to national average during the reference period.

**States and union territories where sex ratio is fluctuating are:** Himachal Pradesh, Nagaland, Tripura, Sikkim and Dadra & Nagar Haveli. Moreover, the sex ratio in India widely differs in rural as well as urban areas and still prevails significantly among the component districts of each State.

The adverse and declining sex ratio for females in India accredited to several reasons. The most plausible causes for female shortages are (a) sex ratio at birth, (b) sex selective abortions, (c) sex ratio of children, (d) sex differential in mortality, (e) net-migration of females and (f) under-enumerations of females.

- (a) **Sex ratio at birth:** The sex ratio at birth is most commonly high (around 105 males) in countries where complete data are available. It varies fairly in a narrow range from country to country. Recent N.F.H.S.-II (1998-99) also reveals that sex ratio has been abnormally high (110/100). Moreover, the most recent data also confirm this observation (U.N. 1997). Thus, it has been major responsible cause for a decline in sex ratio in India.
- (b) **Sex selective abortions:** The rapid spread and use of ultrasound as well as amniocentesis for sex determination are playing vital role in female foetus induced abortions; it referred as "high-tech sexism" by Amartyasen (2001). The N.F.H.S.II (1998-99) highlighted that sex-selective abortions is a common practice in many parts of India. Arnold, et al (2002) estimated that over 1,00,000 sex selective abortions have been carried out annually in recent years. The socio-cultural factors of son preference, low status of women and wide spread practices of dowry are causes for sex-selective abortions. It is one of the factors highly responsible for declining in sex ratio in India.
- (c) **Sex ratio of children:** The sex ratio of child population (age 0-6 years) has sharply declined from 945 in 1991 to 927 in 2001 (Census of India, 2001) and it was also confirmed by the N.F.H.S. – II (1998-99). Neglect, bad bearing and rearing female children, female infanticide, poor nutrition & medical care, strong son preference may be the causes for death of female children. It is also one of the reasons for declining of sex ratio in India.
- (d) **Sex differentials in Mortality:** Females in India are more exposed to the risk of death at younger ages as well as in child bearing ages than males (Premi, 2003). Throughout the Census history of India till 1991, the main factor responsible for the numerical deficit of females was excess of female mortality (Vasaria, 1961 and Coale, 1991). The possible causes of higher

female mortality in India are: Neglect of females, early marriage, premature cohabitation, frequent child bearing, low status of women, practice of dowry, illegal sex, lack of medical care and dominant patriarchal values etc. Therefore, higher female's mortality is one of the causes for declining sex ratio.

- (e) **Sex ratio of net-migration:** The internal migration of females affects the sex ratio of the various regions of country. While, in international migration, female selective emigration or male immigration of a magnitude that can have a minimal effect on sex ratio. Accordingly, this factor is ignored.
- (f) **Under-enumeration of females:** Females have not been fully enumerated during census. The proportion of under count of females in 1951, 1971, 1981 and 1991 Census were 11.2; 18.3; 18.8; and 17.1 percent respectively (Shrivastava, 1996). However, it is a minor cause of imbalance in the sex ratio. Moreover, missing women on the sub-Saharan norms counts for 10.1 as percent of female population in 1991 (Shrivastava, 1996). While, Amartyasen (2001) estimated that missing women in India was 37 million. Apart from above causes, there are several indirect socio-economic and cultural etc. causes which are responsible for female curtailment in India.

## Consequences:

Declining sex ratio is certainly leads to imbalance in sex composition of population, which causes for many consequences. These would be:

- It is primarily adverse to men.
- Crimes will increase in future if the trend continues.
- Bring down society's reproductive potential by lower net reproduction rate.
- Events such as new household formation will decline.
- Marriage becomes problem to some males.
- Household chores of female such as child rearing, housekeeping, and other works remain as serious problems.

## Conclusion

The sex ratio in the country has always been adverse to women. The sex ratio which was 972 in 1901 has decreased to 933 in 2001 showing more and more

preponderance of males in the population. The sex ratio also widely differs among states as well as in union territories. All South Indian states have higher sex ratio than the national average. However, most of the north Indian states have shown lower sex ratio than the national average. The major causes for declining sex ratio in India are (1) sex ratio at birth, (2) sex selective abortions, (3) sex ratio of children and (4) sex differentials in mortality. Besides these, there are several indirect socio-economic and cultural causes. Thus, females are in Web of Problems. Declining sex ratio in India is primarily adverse to men and certainly has several consequences to the society. Therefore, an urgent public attention is needed apart from the government policies to save the females, especially the female children.

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