

**Gender Preference and India's Missing Girls: Evidence from
some selected States of India**

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Abstract:

In the last few decades, India has developed both economic and social sector, but the evidence shows that the prevailing gender discrimination is one the major problem in the Indian society. The preference of male child and discrimination against the female child causing the rapid disappearance of female child in India. According to Census 2001, there are 35 million female are missing compared to male population, which was 32 million during 1991, where the sex ratio (0-6 age group) has decline from 940 in 1992-93 to 925 in 1998-99 female per thousand male. So this study is an attempt to shows the effect of gender preference causing the missing of total number of female in Indian society, which has considered as a fact of intolerance and violence against the women. For the present study, data has been taken from the Census of India and National Family Health Survey-I&II.

Introduction:

During the past three decades, there have been rapid changes in South Asia, not only in the socio-economic and political status, but also in the demographic status. In almost all countries of South Asia, the population growth has declined as a result of fertility decline. In most cases, it has been belief that lower fertility should increase the value of human capital, help to accelerate the socio-economic development and bring about greater gender equity. However, in some countries lower fertility helping towards the gender bias, for example gender preference, especially for male children, and India is one of them.

Amartya Sen¹, highlights, taking gender balance in industrialized countries as his point of reference, and he found the evidence of female deficit in Asia and Africa. He conclude that about 11% of women are missing in these both continents. While Ansley Coale² has offered a lower estimate of global deficit, suggesting that the total number of

¹ Sen, Amartya (1990), 'More than 100 million women are missing', New York Review of Books.

² Coale, Ansley (1991), 'Excess female mortality and the balance of the sexes in the population: An estimate of the number of missing females', Population Development Review, 17(3).

missing females is about 60 million and nearly half of this deficit is from China (29.1 million) and India (22.8 million). One of the most crucial aspects of the Programme of Action, adopted by the International Conference on Population and Development held at Cairo in 1994, regards the empowerment of women and their improved status. Improvement of the status of females is considered essential not only for the success of population programmes but also sustainable national development. Gender preference for male children thus can be seen as undermining the success of the overall development process, because it reflects discrimination on the basis of sex from the earliest to the later stages of life³ (United Nations, 1995).

Gender preference for children of a certain sex can have an impact not only on fertility but also on mortality and sex ratio. There is evidence that advanced medical technologies such as those used for pre-natal sex identification have been exploited as a tool for the selection of children by the sex of the fetus. In other words, ultrasound and amniocentesis have been used as methods for determining whether or not to abort a fetus. In general, a preference for children of one sex, i.e. males, may lead to problems, a '*marriage squeeze*', deterioration of the family system and have effects on the future fertility of countries; it may even interrupt the advance towards sustainable social and economic development in countries where such a preference exists. However, in India the process has taken a skewed turn, fertility levels have dropped accompanied by economic development, but entirely without the social enlighten that must come within and the outcome is small family with its 'one boy and one girl', which contributed the low child sex ratio.

In other, India's low sex ratio are a stark indicator of the inferior position of women in the Indian society. Pranab Bardhan⁴, mention in early 1970s, that the historical, cultural, ecological and sociological causes are some reason behind of the low sex ratio in India. The Committee on Status of Women in India concluded that 'an increase in the neglect of female lives as an expendable asset' is the only reason for the declination of the females in

³ United Nations (1995), 'Population and Development: Programme of Action Adopted at the International conference on Population and Development', Cairo, 5-13 September, 1994, vol.1 (ST/ESA/ESR.A/149).

⁴ Bardhan, Pranab (1982), 'Little girls and death in India', Economic and Political weekly, 17(36).

the Indian society⁵. Though these are the some explanation for the declining sex ratio in India, but apart from these, there are some factors like socio-cultural and economic played major role in the process of declining sex ratio. As Hindu society has been dived into four castes⁶, the lower caste (Sudra) people discriminate the female child, because it is difficult them to find out a suitable bride for their daughter, and if somehow they manage to find out then they have to give heavy dowry during the marriage, so to escape from this situation, they practice the female infanticide. In the economic factor, in the Indian society culturally it is not accepted that Indian women should work or to contribute on the household economic, so they become an economic burden for the family, where they suffer a discrimination and neglect from their house. Last few decades, many feminist organizations of India like National Council of Women In India of Pune, National Commission of Women of New Delhi and Women's Foundation of New Delhi are rising their voice against the female infanticide, gender discrimination and violence against the women but the present evidence still the Indian women have the subordinate position in the society.

Objective of the study and Data used:

In the light of the social norms and inhibitions prevailing in India an attempt has been made in this paper to compare the incidence of sex preference with child mortality and declining sex ratio in India and some selected Indian states according to different regions; such as Andhra Pradesh (Southern region), West Bengal (Eastern region), Gujarat (Western region), Punjab (Northern region) over the periods 1992-93 and 1998-99.

For the present study, the data has been taken from the National Family Health Survey 1 and 2, where a nation-wide large scale probability sample of around 90,000 ever married women at the age group of 15-49 were interviewed during 1992-93 and 1998-99. The main objectives of these two surveys were to provide reliable and up to date information on fertility, family planning, mortality and maternal and child health.

⁵ Committee on Status of Women in India (1975), 'Towards Equality: Report of the Committee on the Status of women in India, New Delhi, Government of India, Ministry of Education and Social Welfare, Department of Social Welfare.

⁶ The higher caste is Brahmin who are engaged on ritual aspects, second is the Khatriya, who are engaged on the military, third is the Baisya, who are engaged in the commercial and fourth is the Sudra, who are lowest caste and these caste serve to all above three castes.

Methodology:

To assess the nature and degree of sex preference, here I use the answer to the question on ideal family size and its sex composition. The data on ideal family size and its sex composition have been used to measure the intensity of sex preference through the following Index (I)

$$I = (E/C) * 100$$

Where 'E' is the excess of mean ideal number of sons over daughters that is among the women who specially mentioned about the sex composition of the number of children considered ideal by them, and 'C' represents the mean ideal number of children for all women belonging to a specific state including those who remind indifferent about the sex composition of the family size considered ideal. The index varies between -100 and +100, where the extreme values correspond respectively to the cases when only son or only daughters are considered ideal. It assumes the value 0 (Zero), when equal number of sons and daughters are considered ideal or all women are indifferent about the ideal sex composition or combination of both⁷. Though the index was originally developed by the first author in situation where all the respondents could able to specify the sex composition of the number of children considered ideal by them the above index is also applicable to the present situation where a group of women remains indifferent about the sex composition of their ideal family size.

Age-Sex distribution of Population:

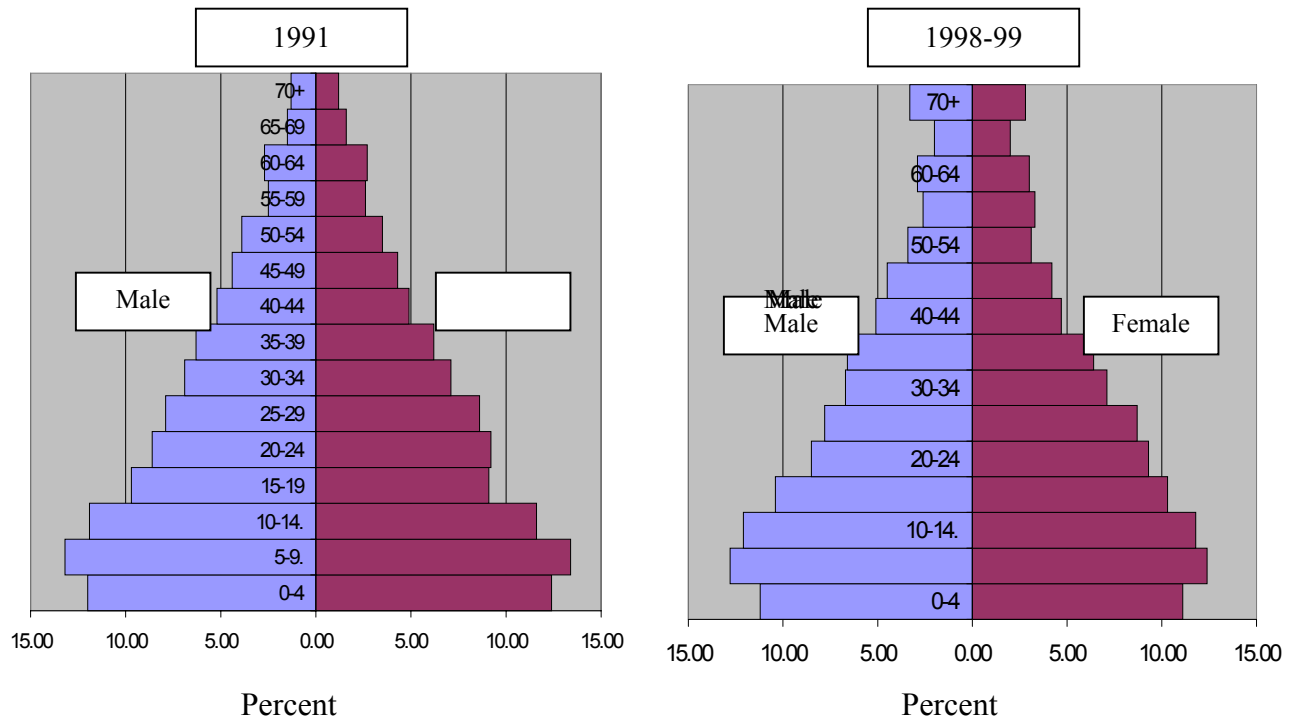
The age-sex structure of India's population is the result of past trend in fertility, mortality and migration. The table 1 shows the age-sex composition of the population of India during 1991 and 1998-99. It has been seen that, over the period there is a decline in the 0-4 and 5-9 age group population. It is because of decline in the fertility level, but, if we see according to the sex, it has been seen that during 1991 to 1999, the female population in the age group of 0-4 and 5-9 has also been decline compared to the male population of the same age group (see figure 1).

⁷ Lahiri Subrata (1974), 'Preference for sons and Ideal Family in Urban India', Indian Journal of Social Work, vol.4, No.1

Table 1: Age-sex population distribution in India

Age group	1991		1998-99	
	Male	Female	Male	Female
0-4	12	12.4	11.2	11.1
5-9	13.2	13.4	12.8	12.4
10-14	11.9	11.6	12.1	11.8
15-19	9.7	9.1	10.4	10.3
20-24	8.6	9.2	8.5	9.3
25-29	7.9	8.6	7.8	8.7
30-34	6.9	7.1	6.7	7.1
35-39	6.3	6.2	6.6	6.4
40-44	5.2	4.9	5.1	4.7
45-49	4.4	4.3	4.5	4.2
50-54	3.9	3.5	3.4	3.1
55-59	2.5	2.6	2.6	3.3
60-64	2.7	2.7	2.9	3
65-69	1.5	1.6	2	2
70+	1.3	1.2	3.3	2.8

Source: Census of India, 1991 and National Family Health Survey-2, 1998-99



Fertility trend:

To understand the situation of gender preference and the changing sex ratio in India, it is necessary to investigate the change that have occurred in fertility, since it is recognized as an important factors for the change in the child mortality and sex ratio. The table 2 shows the estimated changes in the total fertility rate (TFR) between NFHS-1 and NFHS-2 for the India and the selected states. The estimated TFR for whole country has been declined about half of a child per woman during 1992-93 and 1998-99. The estimated changes according to region that, all most in all region the TFR has declined over the period and comes closer to replacement level but in the state like Gujurat (Western region), where the TFR has not been declined as compared to other region. The most important contributing factors for this rapid decline in fertility rate is development of socio-economic status of people of India. For example, the level of poverty which is the main contributing factor for the high fertility, where the children are seems as the economic assets for the household income, come down to 26 per cent in 1999 from 36 per cent in 1994. In other contributing factors the literacy rate of women, which increase from 43 per cent in 1992-93 to 51 per cent in 1998-99 and

the decline in the infant mortality rate from 79 in 1992-93 to 68 per 1,000 lives birth in 1998-99.

Table-2: Total fertility rate during NFHS-1 and NFHS-2

	NFHS-1	NFHS-2
India	3.4	2.8
Andhra Pradesh	2.6	2.2
West-Bengal	3.0	2.3
Punjab	3.0	2.2
Gujurat	3.0	2.7

Source: National Family Health Survey-1 and 2, 1992-93 and 1998-99

Gender preference:

The common indices of gender preference used in various are sex ratio at birth, sex differentials in infant mortality. In India, sex preference is mainly manifested in the form of excessive mortality of female children. The excessive mortality of female children relatively to males is found to be due to the discrimination against females in the allocation of food and health care within the household. In Indian societies, sons are the parents only source of security in old age. This is particularly so where women have little economic independence or cannot inherit property. Son preference is also strong when daughters are more expensive to marry off than sons owing to the dowry system; in addition, women have few opportunities to earn income and invest household resources in female children. The daughter mortality differentials between northern and southern India were attributed to variations in women's status and the strength of sex preference⁸.

In India, the cultural factors such as kinship systems and religious traditions also tend to value males more highly than females. For example traditional patrilineal kinship

⁸ Das Gupta, Monica (1994), 'Discrimination against female children in India', paper presented at International Symposium on Issues Related to Sex Preference for Children in the Rapidly Changing Demographic Dynamics in Asia, Seoul, Republic of Korea, November.

Visaria, Leela (1994), 'Deficit of women, son preference and Demographic transition in India' paper presented at International Symposium on Issues Related to Sex Preference for Children in the Rapidly Changing Demographic Dynamics in Asia, Seoul, Republic of Korea, November.

systems require women to marry out their families of origin and after marriage not provide financial or even emotional support to their parents⁹. In the Hindu tradition, only sons can pray for and release the souls of dead parents, and only males can perform birth, death and marriage rituals¹⁰. It has been observed that females are more likely than males to die in nearly childhood particularly in India and other South Asian countries owing to poor nutrition and health care. Visaria (1969)¹¹, in a study of inter State sex ratio differences between 1901 and 1961, showed that through out the period, sex ratios were persistently higher in the northern Indian states and lower in the Southern states. He argued that mortality differentials by sex mainly responsible for these differences.

Dyson and Moore (1983)¹² also found that sex differentials in child mortality are much higher in the northern than the southern states of India. They established that the main reason for the relatively high sex ratios in the northern part of the country is higher female mortality; they attributed this phenomenon to the discrimination against females in access to food and medical care. they also related the differentials observed in the north and south to variations in kinship system and female autonomy. So, as Lahiri¹³ observed in his study that in Indian society sons are expected to provide economic support for their parents and in contrast, daughters may represent a substantial economic burden in places where their parents provide dowry. The more valuable sons are to their parents relative to daughters. Presumably the greater the parents, desire for a high ratio of sons to daughter. One simple measure of the degree of son preference is women's expressed desire for the ideal number of sons and daughters converted into the ideal proportion of sons (ideal numbers of sons/ideal total number of children). Son preference is the desire to have a high proportion of sons as compared to daughter, which may affect the child mortality, sex ratio and the fertility.

⁹ Greenhalgh, S (1991), 'Women in the Informal Enterprise: Empowerment or Exploitation? New York, population Council.

¹⁰ Benjamín, J (1991), 'Socio-religious status of girls in India, In: Devasia, L. and Devasia, V.V. (eds) 'Girl Child in India', New Delhi, Ashish Publishing.

¹¹ Visaria, Pravin M (1969), 'The Sex Ratio of the Population of India', Census of India-1961, vol. 1, Monograph, No.10.

¹² Dyson, Tim and Mick Moore (1983), 'On Kinship structure, female autonomy and demographic behaviour in India', population and Development Review, 9(1).

A review of earlier study suggests that there are many factors related to the gender preference. These factors can be classified into micro and macro level. Concerning micro level factors, the individual characteristics of parents, especially the mother, are expected to have an influence on the preference for children of a certain sex. While some researcher in developed countries stated that improving socio-economic status of parents could affect preferences for the sex children, particularly because the increasing autonomy of the mother would lead to a greater girl preference, or a more equitable view of the gender composition of the family. In the macro level factors, the fertility decline and population policies, cultural setting and socio-economic factors are main causes behind the gender preference. In India rapid fertility decline has been an achievement of population policy. Such policies usually concentrate on reducing the total fertility rate or the number of children per woman, so it has increased concern among couples who, if they are going to have fewer children, would want to make sure they bear some sons¹⁴ (Goodkind, 1994).

The table-3 presents the sex preference with the intensity of preference in India and some selected states over the period of 1992-93 and 1998-99. During 1992-93, in whole India the mean ideal number son was 1.6 where as it was 1.1 for daughter and the intensity of preference was 17.2 per cent, whereas during 1998-99 both the mean ideal number of son and daughter has decline (1.4 to 1.0) compared to earlier survey, and similarly the intensity of preference has also decline from 17.2 per cent during 1992-93 to 14.8 per cent in 1998-99. All most in the every region of India the mean ideal number of children and intensity of preference has decline but it has been seen that in the northern region (Punjab) and Western region (Gujurat), the intensity of preference has not declined as compared to the Eastern and Southern region. It is because of rapid decline in fertility and increase of soico-economic status of people. As some demographers argue that in most of Asian societies that modernization or the development process causes strong bias towards boys, which can be observed in these two region, which are more developed as compared to the other region.

¹³ Lahiri, 1974, *op. Cit.*

¹⁴ Goodkind, Daniel (1994), 'Sex preference for children in Vietnam', Paper presented at International Symposium on Issues Related to Sex Preference for Children in the Rapidly Changing Demographic Dynamics in Asia, Seoul, Republic of Korea, November.

Table-3: Intensity of gender preference during NFHS-1 and NFHS-2

Mean ideal number of				
	Son	Daughter	Either sex	Index
India				
NFHS-1	1.6	1.1	0.2	17.2
NFHS-2	1.4	1.0	0.3	14.8
Andhra Pradesh				
NFHS-1	1.4	1.0	0.4	14.3
NFHS-2	1.0	0.8	0.5	8.7
West-Bengal				
NFHS-1	1.4	1.0	0.2	15.4
NFHS-2	1.1	0.9	0.4	8.3
Punjab				
NFHS-1	1.5	0.9	0.2	23.1
NFHS-2	1.2	0.8	0.3	17.4
Gujurat				
NFHS-1	1.4	0.8	0.4	23.1
NFHS-2	1.2	0.8	0.5	16.0

Child mortality:

Discrimination against girls has been widely reported in all states of India, where son preference is strong. In India the higher female mortality has been attributed to grater parental care and favored treatment with regard to food and medical attention for male children. The table 4 shows that the under five mortality rates for the 0-4 years prior to the surveys have declined over the two National Family Health Survey (NFHS) periods in all states including India, but except Punjab. In Punjab the under five mortality has increased compared to the earlier survey, it is because of strong sex preference. As in table 3 found that there is very little change in the intensity of sex preference in the case of Punjab, which results high discrimination against female child. It is interesting to note that the extent of decline in under five mortality among the female children compared to their male counter part is much faster in West Bengal and Gujurat. Furthermore, the sex differentials in under

five mortality in West Bengal and Gujrat become more favorable among females compared to Punjab and Andhra Pradesh. It is rather surprising though in Andhra Pradesh the intensity of sex preference has declined much faster during 1992-93 and 1998-99 compared to Punjab and Gujrat, but the gap in sex differential under five mortality become worse during the same period of time.

Table-4: Infant and child mortality during NFHS-1 and NFHS-2

	NFHS-1						NFHS-2					
	Infant mortality		Child mortality		Under five mortality		Infant mortality		Child mortality		Under Five mortality	
	M	F	M	F	M	F	M	F	M	F	M	F
India	88.6	83.6	29.4	42.0	115	122.4	74.8	71.1	24.9	36.7	97.9	105.2
Andhra Pradesh	77.6	68.9	21.5	27.6	97.5	94.5	72.9	68.7	16.6	27.8	88.2	94.5
West-Bengal	84.7	77.4	21.7	35.4	104.5	110.0	57.3	44.2	18.5	23.9	74.7	67.1
Punjab	55.6	49.1	12.7	23.0	67.6	71.0	49.7	65.2	5.9	23.8	55.4	87.4
Gujurat	72.3	74.8	27.1	38.6	97.4	110	69.0	59.4	25.1	31.4	92.4	89.0

Sex ratio:

Sex ratio is an important indicator for the status of women in India. The last few censuses indicate that there is a clear decline in the sex ratio. At the beginning of the 20th century it was 972 and as per the provincial census report of 2001, the female sex ratio stands at 933 for every 1000 males. *What is alarming is the dramatic drop in the sex ratio of the girl child population in the 0-6 age group?* The 2001 census shows a decline in the number of girls in the 0-6 years from 962 per 1000 boys in 1981 to 945 girls in 1991 and to 927 girls per 1000 boys in 2001. The important causes of sharp decline of sex ratio are:

- Demand of more son for the old age security and escape from the dowry problem,
- Unregulated use of pre natal diagnostic technologies in whole over the country,
- The existing state laws, policies and programmes fail to comprehensively address issues of girls and women's survival¹⁵.

In other, India's family planning programme with its 'one boy and one girls' norm contributed to the low sex ratio. In the two child norm family, if the first birth is a female, then the pressure to produce a boy is that much more. As a result, the parents targeted elimination of all subsequent female foetuses till a male child is finally conceived¹⁶. In India, generally, sex ratio is calculated number of female in every thousand of male.

The new figures give India is one of the world's lowest ratios for women to men; the statistical norm is 1,050 females for every 1,000 males. The drop is largely due to the widespread but illegal practice of using ultrasound scans to identify female foetuses and then aborting them. In 1994, the Pre-Natal Diagnostic Technologies (PNDT) Act banned the practice, but it has proved toothless – seven years after enactment, not a single conviction has taken place. The states like Punjab and Gujarat – the first to ban the use of sex determination tests – point to the PNDT failure. It is precisely in these states that the ratio of baby girls has declined dramatically. During 1991 only two states had child sex ratios below 880; today there are five states and one union territories in this category: Punjab (793), Haryana (820), Chandigarh (845) Delhi (865) and Gujarat (878). The Punjab-Haryana-Himachal Pradesh belt in the north is called by some '*India's Bermuda Triangle*' where girls vanish without a trace. Even states with better socio-economic indicators, like Karnataka, have shown a dip in the child sex ratio – from 960 in 1991 to 949 in 2001¹⁷.

A pronounced skew in sex ratios has long been a feature in India. Girls and women routinely suffer from poorer health and nutrition, infanticide and high rates of death from pregnancy and child birth. India is catching up with other sexist, modern societies like

¹⁵ Registrar General of India (2001), 'Census of India', www.censusindia.net

¹⁶ Subrahmaniam, V (2003), 'India's Missing Girls', The Times of India, 11th June.

¹⁷ Malini Karkal Manushi (2002), 'Sex ratio in India', C1/3 Sangam Estate, 1 Underhill Road, Delhi 110054, India

South Korea and China in sex selective abortions. The government of India is taking action, spurred by a Supreme Court directive mandating the government to crack down on unscrupulous medics who continue to determine foetal sex for their patients. The roots of the problem can be traced to deep-rooted patriarchy and anti-women attitudes in the country. In other, parents reluctance to raise large amounts of money for a girl's dowry is often cited as the reason for decline in the sex ratio. *'Parvathi, a mother of two daughters in Bangalore, says: "Better to spend 5,000 rupees [\$106] now, than raise 500,000 rupees later for the dowry," echoing clinic flyers that brazenly propagate sex determination technologies in Belgaum town. She adds she will have the foetus scanned next time she gets pregnant to avoid having another daughter'*¹⁸.

Since the 1980, ultrasound clinics have mushroomed all over the country, no village is too remote for enterprising doctors who ferry portable equipment in vans. Villages might not have clean drinking water but they have an ultra-sound machine. Although the PNMT Act makes registration of ultrasound units mandatory, until the Supreme Court ruling few states complied. In Punjab not even one clinic of the approximately 3,000 with ultra-sound facilities has been registered. Clinics are openly advertise their foetal sex determination techniques, charging on average about 500 rupees (just over \$10). If the foetus is female, doctors or midwives are on hand to conduct an illegal abortion – for an additional fee. Abortion is legal when a woman's life or health is at risk, or in cases of foetal impairment, rape and contraceptive failure¹⁹ (ActionAid India, 2001).

According to Census of India that the number of males in the 2001 census count was 531,277,078 and that of females, 495,738,169. This actually indicates that there are over 35 million fewer females are missing compared to male population (table-5). During the last decade, the absolute deficit of females increased by about three million. More significant is the report on the sex ratio for children below six years of age. The Registrar General (RG) reports that the sex ratio for this age group has gone down from 945 in 1991 to 927 in 2001— a large decadal difference.

¹⁸ Ramachandran, S (2001), 'Concern Over India's Vanishing Girls', deutsche Stiftung fur internationale Entwicklung (DSE), Frankfurt, Germany.

¹⁹ ActionAid India, 2001, 'Tackling Gender Issues', www.actionaidindia.org.

Table 5. Sex ratio and total number of missing female in India.

Year	Total number of female per 1000 male	Total population (million)		Missing female (million)
		Male	Female	
1961	941	226.3	212.9	13.4
1971	930	284.0	264.1	19.9
1981	934	343.9	321.4	22.9
1991	927	435.2	403.4	31.8
2001	933	531.2	495.7	35.5

Source: Census of India 2001.

The table 6 shows the sex ratio level in India and selected states during 1992-93 and 1998-99. It has been seen from table 5, that during 1992-93 and 1998-99, there is a sharpest decline in sex ratio as country as a whole, while in the states like Andhra Pradesh (Eastern region) and Gujarat (Western region), where there were more female compare to 1,000 male during 1992-93 has decline to less than 1,000 female compared to thousand male during 1998-99. In other, the states like Punjab (Northern region) and West Bengal (Eastern region) also shows the declining trend in the sex ratio. This is because of abortions of female foetuses after the sex determination test and high female child mortality due to the low birth weight and less attention of female child health care, for example around 20 per cent of female children at the age group of 0-3 years have undernourished (weight for age) compared to 17 percent of male during 1998-99 and in relation to received all types the vaccination (BCG, Measles, three doses of DPT and Polio vaccines) at the age group of 1 to 2 years shows that about 41 per cent of female children have been received all types of vaccination compared to 44 per cent of male, and in supplementation of vitamin A, in the age group of 1 to 3 years, about 28 per cent female child given vitamin A compared to 31 per cent of male in all India level. So this type of gender discrimination on health care leads to the high female child mortality and which ultimately affects the sex ratio.

Table-6: Sex Ratio during NFHS-1 and NFHS-2

Age group	NFHS-1		NFHS-2	
	0-4	0-6	0-4	0-6
India	952	940	944	925
Andhra Pradesh	1022	1023	992	936
West-Bengal	943	972	921	941
Punjab	841	828	823	833
Gujurat,	1004	975	968	906

Source: NFHS 1 and NFHS 2

Final considerations:

The sharpest declines in sex ratio for the children are reported from all over the country, but the most striking states are Punjab, Gujarat, West Bengal and Andhra Pradesh, where abortions of female foetuses after sex determination test are widely practiced. In addition to the foeticides, the practice of female infanticide is apparently increasing in the state of Punjab is an another major concern. Greater neglect of female babies in terms of provision of food and medical attention also decreases their chances of survival.

According to UNICEF, about 402 districts of India where, the number of deaths of females up to age five is higher than males, though biologically female babies have better chances of survival than male babies. Amartya Sen (Nobel Literate in Economics, 1998) reports that if the women are not be discriminated, then nation sex ratio is about 105 women per 100 men. Though, the total fertility rate (TFR) went down from 3.4 during 1992-93 to 2.8 during 1998-99 but the maternal mortality rate (MMR) is still high in India (408 per 100,000 mothers) —or the chances of dying from pregnancy related causes— continues to be among the highest in the world, while it was 115 in China and 30 in Sri Lanka, which causes the neglect on the child care during the early age of child. Similarly, the chances of dying of children born to mothers whose health is not satisfactory—the infant mortality rate (IMR)—in India were 68 per 1,000 births in 1998-99 is high compared to 31 in China, 46 in Indonesia and 22 in Thailand. Among the others, the main reason behind the sex ratio in India is gender bias and low status of women in Indian society and

other socio-cultural practices like dowry. So one can therefore conclude that the missing the female child in the Indian population is due to the less survival chances because of gender preference with decline fertility and less health care and nutritional attention.

Suggestions and Policy implications:

From the foregoing discussion it is evident that the wide-spread son preference in India is manifested in the form of post-natal discrimination against the girl child. The gender preference closely associated with the declining sex ratio and infant and child mortality. If females become scarce, the situation may improve the status of women in the long term. However, it may also contribute to an increase in sex related crimes and violence as well as homosexual activities. The decline of family size norms and the availability of sex selection technologies among the population in India in the course of its demographic transition may contribute to the widening of the social gap between males and females in the future, as children of smaller families who are likely to be predominantly males may be advantaged in the allocation of household resources for education, nutrition and health care.

Also, it seems that the increasing new medical technologies and facilities may provide more availability for induced abortions in future, which may cause to decline in the family size norms in near future. Therefore, the possible long term improvement of the position of women resulting from the projected shortage of females in the reproductive ages may be offset due to the above causes. So, it is necessary for improve the children's chances of survival, and also for raising women's status, guaranteeing better access to opportunities for their work outside the home and education, all of which will result in the reduction of sex preference.

In other, as we see that infant and child mortality is another important factor for the gender preference and declining sex ratio, a number of measures should be necessary to implement to reduce the infant and child mortality, such as; comprehensive health and nutrition programme, especially focusing on women and children, providing for safe motherhood, universal immunization of pre-school children, and the wider availability of safe drinking water and sanitation, including provisions for supplementary food and

vitamins for the children. If we can improve the socio-economic and demographic status, then over the period of time, it is likely that wider societal acceptance of education, health etc will occur owing to the demonstration effect of the benefits of these services to families and the community at large. This would contribute to the elimination of post natal sex discrimination and enable couples to resolve the conflict between the achievement of small family and sex preference with the balance in sex ratio.

Reference:

1. ActionAid India, 2001, '*Tackling Gender Issues*', www.actionaidindia.org.
2. Arnold, Fred (1992). '*Sex preference and its demographic and health implications*', International Family Planning Perspectives 18 (3).
3. Bardhan, Pranab (1982), 'Little girls and death in India', Economic and Political weekly, 17(36).
4. Benjamin, J. (1991). '*Socio-religious status of girl in India*', In: Devasia, L. And Devasia, V. V. (eds) '*Girl Child in India*', New Delhi: Ashish Publishing.
5. Coale, Ansley (1991), 'Excess female mortality and the balance of the sexes in the population: An estimate of the number of missing females', Population Development Review, 17(3).
6. Committee on Status of Women in India (1975), 'Towards Equality: Report of the Committee on the Status of women in India, New Delhi, Government of India, Ministry of Education and Social Welfare, Department of Social Welfare.
7. Das Gupta, Monica (1994), '*Discrimination against female children in India*'. Paper presented at International Symposium on Issues Related to Sex Preference for Children in the Rapidly Changing Demographic Dynamics in Asia, Seoul, Republic of Korea, November.
8. Dyson, Tim and Mick Moore (1983), '*On kinship structure, female autonomy and demographic behaviour in India*', Population and Development Review, 9(1).
9. Goodkind, Daniel (1994), '*Sex Preference for Children in Vietnam*', Paper presented at International Symposium on Issues Related to Sex Preference for Children in the Rapidly Changing Demographic Dynamics in Asia, Seoul, Republic of Korea, November.

10. Greenhalgh, S (1991), *'Women in the Informal Enterprise: Empowerment or Exploitation?'* (New York: Population Council).
11. International Institute of Population Sciences (IIPS) (1992-93), *'National Family Health Survey-1 (NFHS-I)'*, Mumbai, India.
12. International Institute of Population Sciences (IIPS) (1998-99), *'National Family Health Survey-2 (NFHS-II)'*, Mumbai, India.
13. Knodel, Jhon and Visid Prachuabmoh, (1976), *'Preference for Sex of children in Thailand: A Comparison of Husband and Wives Attitude'*, Studies in Family Planning, Col. 7, No. 3.
14. Lahiri, Subrata and S. K. Singh, (2000). *'Child Mortality and Fertility Situation in Andhra Pradesh and Desire for an Additional child in Relation to child Survival and Sex Preference in Indian States: An analysis based on NFHS Data'*, Paper presented at the National Seminar on Fertility Decline in Andhra Pradesh: A Historical and Contemporary Perspective, Organized jointly by IIPS, Mumbai and IHHFW, Hyderabad, 13-15 of March, 2000.
15. Lahiri Subrata (1974), *'Preference for Sons and Ideal Family in Urban India'*, Indian Journal of Social Work, vol.4, No. 1.
16. Malini Karkal Manushi (2002), *'Sex Ratio in India'*, C1/3 Sangam Estate, 1 Underhill Road, Delhi 110054, India.
17. Ramachandran, S (2001), *'Concern Over India's Vanishing Girls'*, Deutsche Stiftung für internationale Entwicklung (DSE), Frankfurt, Germany
18. Registrar General of India (2001), *'Census of India'*, www.censusindia.net
19. Sen, Amartya (1990), *'More than 100 million women are missing'*, New York Review of Books.
20. Subrahmaniam, V (2003), *'India's Missing Girls'*, The Times of India, 11th June.
21. United Nations (1995), *'Population and Development: Programme of Action Adopted at the International Conference on Population and Development'*, Cairo, 5-13 September 1994, vol. 1 (ST/ESA/SER.A/149).
22. Visaria, Leela (1994), *'Deficit of women, son preference and demographic transition in India'*. Paper presented at International Symposium on Issues Related

to Sex Preference for Children in the Rapidly Changing Demographic Dynamics in
Asia, Seoul, Republic of Korea, November

23. Visaria, Pravin M (1969). *'The Sex Ratio of the Population of India'*, Census of
India 1961, vol. 1, Monograph, No. 10.