Atkins, P.J., Townsend, J.G., Raju, S. and Kumar, N. (1997) A geography of the sex ratio in India, *Espace, Populations, Sociétés* 2-3, 161-71. Reprinted in Guilmoto, C.Z. & Vaguet, A. (Eds)(2000) *Essays on Population and Space in India* Pondichery: Institut Francais De Pondichery

Introduction

The 1991 Census of India found 407 million girls and women but 439 million boys and men in India.[i] For every 1000 males there were only 927 females, a figure which is called the `sex ratio'.[ii] India has one of the lowest proportions of girls and women in its population in the world, although China and some of the countries in North Africa and the Middle East are not far behind. The figure for industrialised countries is 1050:1000, for sub-Saharan Africa 1020:1000 and for South East Asia 1010:1000. In order to achieve the world average shown in Table 1 India would need 32.9 million more females.

Table 1. Selected sex ratios: females per 1000 males

The world (excluding China and India)	1002
United Arab Emirates	448
Qatar	489
Saudi Arabia	788
Pakistan	905
India	927
Bangladesh	943
China	943
United Kingdom	1045
United States of America	1051
France	1060

Source: United Nations (1995) *Demographic yearbook* New York: United Nations

The sex ratio has been falling in India for most of the twentieth century, becoming more and more unlike most other countries and reaching its lowest ever value in 1991. The only improvements recorded this century were in 1941-51 and 1971-81 (Table 2). Since the proportion of women and girls in the population is a measure of their survival rate and therefore well-being, this improvement was regarded as a breakthrough, but the 1991 figures indicated a disappointing resumption of the dominant trend.[iii]

Table 2. The Indian sex ratio, 1901-91

1901	972	1951	946
1911	964	1961	941
1921	955	1971	930
1931	950	1981	934
1941	945	1991	927

Source: Census of India

Medical care and neglect

There is strong medical evidence that, given access to similar food, care and medical attention, fewer girls and women die at all ages than boys and men because they are biologically stronger (Waldron 1976). Yet, in India more die than males through childhood and their reproductive

years, until the age of thirty. Until very recently, life expectancy at birth for girls in India was lower than that for boys, which is very unusual.

It seems clear that there is a relative neglect of the health and well-being of girls as well as women. The killing of girl babies has a long history in north west India but remains common only in certain limited communities (Premi and Raju 1996). Most of the extra deaths of little girls occur after the age of one, so infanticide is not as widespread as is sometimes claimed. There is, however, a great deal of evidence of girls being given less food and care than boys, especially in north India. Breastfeeding of girls is shorter, girls are taken to fewer medical consultations and later or not at all to hospital (Drèze and Sen 1995).

`Natural' balances between males and females in human populations are difficult to discern because of the intrusion of cultural habits and technological improvements, but it seems that more males than females are always conceived, then males are at higher risk of morbidity and mortality in the first few decades of life in most societies. In recent hospital records in India, however, 89 girls were born for every 100 boys from 1981 to 1991 as against 94 from 1949 to 1958 (Premi and Raju 1996).[iv] Similar changes have appeared in western China and Korea. Since male foetuses are relatively more prone to miscarriage, some increase in the births of baby boys may be because of improved ante-natal care, as in the West. But technologies such as amniocentesis and ante-natal scans now enable parents to have female foetuses identified and aborted.[v] In China, the number of girls born per hundred boys fell from 95 to 93 in 1987 and 91 in 1991, which was thought to be caused by sex-selective abortion of female foetuses identified by ultrasound, illegal but widely used by the mid 1980s (Zeng 1993).

Everyone gains when more babies survive. The more who live, the fewer are born, so that the survival of more babies slows the rate of population growth, a phenomenon observed around the world. Having fewer babies, more of whom survive, is better for the babies, better for the country and better for the mothers, who can then be healthier, give more care to their children and realise some of their own aspirations. For instance, in South Asia, 80 per cent of pregnant women suffer from anaemia, the highest rate in the world, so that repeated pregnancy is not healthy for them. Both numbers of babies and deaths of mothers in childbirth are especially high in a belt from Rajasthan through Madhya Pradesh and Uttar Pradesh to Bihar.

India has done well in reducing the deaths of babies. In 1991, fewer babies died in their first year in India than in 32 other countries, some better off than India. Only 29 countries, all rich, did better than the State of Kerala, but still there is inequality. In 1991, the average death rate for children under five was 26 for boys but 29 for girls, and it is clear that the care of girls and boys varies between States and between the districts of a given State. For example, the life expectancy at birth of a girl in Uttar Pradesh is some 20 years lower than that of a girl in Kerala. In Kerala, where the fewest children in the country die, even fewer girls die than boys, whereas in Uttar Pradesh, not only are there far more deaths of children, but one fifth more girls die than boys.

Clearly, there is little difference between the rates of deaths of girls and boys before age one.[vi] Indeed, in more than half the districts of India (227 out of 429), more baby boys died than girls, as we would expect from other countries. Districts where more baby boys died were scattered from Kerala in the south to Gujarat in the west and Madhya Pradesh in the centre. There were even several districts in the northern plain where more baby boys died than girls, although the region is well known for treating boys better. As long as death is due mainly to biological factors, this is to be expected.

<Figure 1 here>

<Figure 2 here>

By the ages of three (Figure 1) and five (Figure 2) the well-known regional distribution of disadvantage for baby girls is well established. In 1981 only 175 of the 429 districts with information showed more boys dying. By age five, in the States of the northern plain, it is only in hill districts of Garhwal, Uttar Kashi and Dehradun in Uttar Pradesh that more boys still die. Surprisingly, looking at death rates for girls under five, Uttar Pradesh has both a district with one of the lowest sex specific death rates (Uttar Kashi, in the hills) and the five districts of India with the highest (Agra is the very highest, followed by Etah, Mathura, Firozabad, Mainpuri and Bharatpur). The hills and the plains are in very different cultural realms (Sopher 1980).

By age five, it was only in Andhra Pradesh, Himachal Pradesh, Kerala and Tamil Nadu that more boys had died than girls, as would be usual in other countries. Broadly, there is a north-south contrast in the treatment of little girls. In the Punjab, Uttar Pradesh and Bihar in the Indo-Gangetic plain, many more little girls die. The Narmada Valley marks the broad division between the north, where relatively more little boys survive and the south, where the difference is less marked or where more little girls survive.

Impressive differences appear between the non-tribal northern area and the tribal area of the Chattisgargh region and the Chota Nagpur Plateau in Madhya Pradesh. In almost the entire tribal belt, even including the areas north of the Narmada (southern Rajasthan, western Madhya Pradesh, eastern Gujarat) as well as the north east of India, many small children die, but not many more girls than boys.

There is some limited data on malnutrition, although it is rarely available for girls and boys separately. Again, it seems that there is no clear relationship between the income of an area and the underfeeding of children. For example, Madhya Pradesh and Maharashtra have the same rates of malnourished children, although Maharashtra's income per person is half as much again as that of Madhya Pradesh. In the Punjab, it is in the richer households that girls are more likely to be fed less than boys (Drèze and Sen 1995).

The numbers of girls relative to boys under seven are particularly low in parts of Gujarat, Haryana, north western Madhya Pradesh, Punjab, Rajasthan and, with the exception of the hill districts, in western Uttar Pradesh. They are scarcest in Punjab and Haryana where not a single district has more than 900 girls to 1000 boys. These States have 28 districts out of 55 in India with this dubious distinction. The situation is most severe in Salem in Tamil Nadu, Bhind in Madhya Pradesh and Jaisalmer in Rajasthan with 859, 850 and 851 girls to 1000 boys. In Tamil Nadu, Madurai and Dharmapuri also have exceptionally few girls (and women), the last two having been in the news for the alleged murder of baby girls.

In some villages, the proportion of girls in the child population is even smaller. Premi and Raju (1996) used the 1991 Census to locate those villages in Rajasthan and Madhya Pradesh with very few girls. Tanumanji village in Barmer, Rajasthan, for instance, recorded 245 girls per 1000 boys. On the other hand, East Kameng in Arunachal Pradesh, at the other extreme, has 1036 girls to 1000 boys. All 15 districts with more than 1000 girls for 1000 boys are located either in the tribal north east, or in tribal Madhya Pradesh and Orissa.

Regional variations in the sex ratio

Superficially, there are significant regional differences in the proportion of girls and women in the population (Figure 3 and Table 2). The State of Haryana, with 865:1000, has the smallest proportion of women and girls in the world with the exception of a few places with large numbers of men migrant workers, such as the Falkland Islands or countries in the Gulf.[vii] In the same region of India, parts of Gujarat, north western Madhya Pradesh, the border districts of Rajasthan and western Uttar Pradesh (with the exception of the hill districts) also have low sex ratios.

<Figure 3 here>

<Table 2 here>

The root causes for the neglect of girls and women and its variation over space are far from obvious. Several of the explanations advanced have regional manifestations that help us to understand the patterns. First there is the suggestion that females are differentially valued according to their economic functionality. The difference between rice (east and south) and wheat growing areas (north west) and their different work needs for women and girls is a case in point because rice transplanting and weeding is defined as women's work but most of the tasks in the wheat calendar are male dominated (Miller 1981; Rosenzweig and Schultz 1982).[viii] General maps support this, but detailed local maps do not (Harriss and Watson 1987; Raju and Bagchi 1993).

Second, there is the Sanskritic/Dravidian socio-cultural divide between north and south. Dyson and Moore (1983) argue that this is at its most significant in the differences of marriage patterns and the practice of dowry (Dyson and Moore 1983). Rural tradition in the Indo-Gangetic plain forbids marriage within the village or between close relatives, but such marriage is allowed further to the north, south and east. This exogamous tradition of marriage is reinforced by a strong bond between patrilineally related male kin, whose power and sense of honour is partly derived from the control of their women's lifestyles. Female mobility is therefore regulated by purdah, and mixing with natal kin is discouraged. Even husband-wife relationships are not allowed to undermine the primacy of the male network.

Before Independence, the custom of giving a dowry with a daughter in marriage was widespread among the `higher' castes. Although independent India outlawed dowry, the custom has not only survived but spread to new areas of India, to other castes and to poorer people, when these have gained in prosperity, as with the Green Revolution. The prospect of paying a dowry to marry a daughter understandably dismays parents. Before marriage she may never earn an income and her unpaid household and agricultural work for the family will be invisible. She will go to live with her husband's family, perhaps in a neighbouring village or even further away, and is therefore an economic loss to her parents. A daughter may be expected to marry `up', into a higher caste or richer family, which will demand an even bigger dowry. All of these problems are traditionally most severe in north India.

Murthi et al (1995) measure the `cultural worth' of Indian girls and women in terms of their labour force participation (Rosenzweig & Schultz 1982, Kishor 1993, 1995). This is significantly higher in the south in most economic sectors and, interestingly, is strongly and negatively correlated with child mortality. This may be because there is a demonstrably greater return on investment in girls through a higher probability of them earning a wage and a reduced cost of rearing them because dowries are lower. Alternatively one might suggest that paid work helps to raise female status

generally and particularly their bargaining power within the family. Certainly women earners have a lesser need to prefer sons who would look after them in their old age.

Third, there are argued to be important regional differences in the autonomy of women and girls (Dyson and Moore 1983; Jeffery and Jeffery 1994). By autonomy is meant control over one's own sexuality, fertility, freedom of movement, and choice of friendships and marriage partner; inheritance, ownership and disposal of property; access to information, knowledge, and the expression of opinions in public and through the ballot box; and access to rights and decision-making power within the domestic setting. Purdah is strongest in north west India, for instance, while in the south more girls are educated and more women vote. In Kerala females traditionally had rights to land, although this has changed considerably since the land reforms under successive left wing governments.

Female education is a key to some aspects of this complex web of factors. Murthi et al. (1995) find for the 1981 census that there is a negative and statistically significant relationship between female literacy and child mortality, with a larger impact on the deaths of girls. Better educated mothers are likely to be less consciously discriminatory and they make fuller use of locally available medical facilities, thus maximizing the life chances of their offspring of both sexes.

Dyson and Moore (1983) identify two basic demographic régimes in India: north versus south and east. In the south and east are found long-standing patterns of relatively low fertility, later age of marriage, and lower infant and child mortality. In addition it seems that female disadvantage is greatest amongst children of high birth parity (Dyson & Moore 1983, Murthi et al. 1995), because of the decreasing marginal return on additional girl babies in a large family with a low income.

Two myths should be dismissed about the sex ratio. First, regional contrasts in the survival of girls are far more striking than any contrasts relating to religious identity. Kerala, with the highest proportion of girls and women, has many Muslims, while the Punjab and Haryana, with the lowest, have only a modest Muslim presence (Table 2). Girls in Pakistan and north India have very similar chances of survival (Drèze and Sen 1995).

Second, income levels do not explain sex ratio patterns. In Rajasthan the landed, high status Rajputs have very few girls and women (Premi and Raju 1996). The Punjab and Haryana, where there is least poverty, have only 880 and 874 women and girls to 1000 men and boys. Economic growth and the reduction of poverty may initially put women and girls at a greater disadvantage. Where more girls and women survive, there tend also to be: many women and girls working in agriculture; many girls and women who can read and write; and many girls and women in paid work. However, there is some evidence that poorer families are less discriminatory and this is worrying if the process of development leads to greater sex imbalance.

The balance of the sexes in countryside, towns and cities

In rural India, there are 939 girls and women to every 1000 boys and men (Table 2). The even smaller numbers (894:1000) of women and girls in towns has been explained in terms of men leaving the countryside to work in the towns and leaving their families behind, as they often do in the north, along with the relatively high proportion of employment opportunities in agriculture for the remaining women. But if this was the main cause of imbalance, the nearby rural areas should have extra female representation. This *is* found in the hill districts of Uttar Pradesh and Himachal Pradesh or Durg in Madhya Pradesh and in parts of Maharashtra, where there are many girls and women in the countryside and few in towns. In the rest of India, the proportion of girls and

women in *towns* is like that in nearby rural areas, but lower. Sopher (1980) explains this pattern in terms of overwhelming social and cultural factors which affect the treatment of women and girls and are regional rather than rural or urban. Kerala is a case in point. The proportion of women and girls is extremely high for India, but a little lower in towns: the rural figure is 1037:1000 and the urban 1034:1000. Here, the numbers of men who migrate to work in the Gulf reduces the proportion of men (Gulati 1993). Urban districts of Andhra Pradesh and Tamil Nadu in south India have relatively more girls and women than Orissa, West Bengal and Bihar. This can be understood in terms of family migration being more common in the south.

Women and girls are even fewer in *cities* and Drèze and Sen (1995) show that this is especially true where high levels of urbanization are coupled with low the levels of poverty. There is change here, however.[ix] At 880:1000, Indian cities now have more girls and women than in 1961 (800:1000)(Raju and Bagchi 1993). This is an improvement for women and girls even though their proportion of the national population is still shrinking. Overall social and cultural constraints can be overcome in cities, and work opportunities (particularly in trade and non-household industries), together with the ability to read and write, do help women and girls in the cities. Here, for non-scheduled caste girls and women, white-collar jobs and work in services are important. Premi (1990) observes that employment and education are becoming increasingly important reasons for better-off women and girls to move to urban centres.

Again, these relationships are only suggestive and do not tell us what the actual processes are: do girls and women survive in the cities and countryside because they can read, write and work, or are they taught to read, allowed to work and enabled to survive because they are highly valued?

Caste

The list of castes which are scheduled changes from time to time and from one State to another, so that comparisons are difficult.[x] But the available evidence indicates that, although before Independence there were more women and girls in the castes now scheduled than among other Indians, this is no longer the case. Indeed, the decline in the number of girls and women in the population seems to have been particularly pronounced among the scheduled castes.

The scheduled castes have taken the `dominant' castes as their model as they gained in economic terms, with the lifestyle of women playing a central role as a symbol of social status (Drèze and Sen 1995). For example, in 1901, among the `untouchables', the Chamar caste in Uttar Pradesh had 986 girls and women for every 1000 boys and men. In 1981 the figure for this now scheduled caste was 880, very close to the State average. Much of the decline took place after 1961. The landed, martial castes in the same State, the Kshatriya, Rajput and Thakur, were already at 887 in 1901. They had a long tradition of fierce patriarchy, with practices of girl murder, child marriage, seclusion, dowry, sati (suicide of widows) and polygamy among others. Their proportion of women and girls is thought to have changed little since 1901; rather, other Indian populations have become more like them, and this is one explanation of declining sex ratios (Drèze and Sen 1995).

The place or *region* is now more important in determining a woman's or girl's survival than her caste or religion, for even across religion and caste, cultures in the same place in India influence each other strongly (Raju and Bagchi 1993; Drèze and Sen 1995).

Scheduled tribes

Other than in Kerala, the areas of high to very high levels of girls and women in the population are essentially tribal in character. The survival rates of males and females are clearly more equal than

in most other Indian communities, as are their numbers. The larger the numbers of tribal people in a district, the more balanced the population, which confirms the popular belief that gender inequalities are less marked in `tribal' than in `non-tribal' India.[xi] There seems to be no gender bias in access to basic needs of food and care and, although many children die, the difference in death rates between boys and girls is low. It may be not only that more girls and women survive, but that there is less under-reporting and undercounting.

Significantly, balanced populations are found across the tribal heartlands of east central India and the north east, despite important differences between tribal communities in these geographical areas, especially where scheduled tribals are in a majority or near majority of the local population (as in Orissa), or where the locally dominant non-tribal group has itself a balanced population (as in Kerala). In districts subject to rapid detribalisation in the twentieth century (such as Hazaribagh in Bihar) the tribal sex ratio is often lower, which is a source of concern. This also happens where there are relatively few tribal families, as in parts of western Uttar Pradesh, which suggests that small tribal communities have adopted behaviour typical of the region's non-tribal communities. Detribalisation has proceeded rapidly in this part of India, even though some groups continue to be recorded as scheduled tribes for the purposes of the census and of regional planning. More tribal girls and women survive where their share of agricultural work is high.

Scheduled castes in the past and scheduled tribes today tend to have more girls and women than the population as a whole, and are often regarded as having more egalitarian relations between men and women. But even among scheduled tribes, not only is the proportion of the population who are women or girls declining, but the decline is the fastest amongst all groups: from 983 in 1981 to 972 in 1991. It seems that the patriarchal norms of the higher castes are gradually spreading to lower castes, and sanskrization and detribalisation are similarly assimilating tribal peoples into a national culture of discrimination against girls and women (Drèze and Sen 1995).

Conclusion

Although in 1991 the presence of girls and women in the Indian population was the smallest ever, there is hope. In the 1990s, a higher proportion of girl children is surviving, to the extent that their mortality record is beginning to catch up with the boys (Government of India 1995). Since 1994, the sex of a foetus may only legally be identified under special circumstances and in special places. But hope will depend on social change and the acceptance of the law. National and State plans have set out to give Indian girls the same rights as boys by the year 2000 and many grassroots and non-government organisations have had real success.

Further progress will depend upon the issue staying before the public and the maintenance of a sustained campaign to gain the autonomy for women which seems to have such a positive effect. Academic research will play an important role because there is a dearth of empirical work at the micro-scale of the region, village and household to test the regularities which we have advanced here in the most general form.

Figure captions

Figure 1 The sex ratio of deaths at age 3, 1981, females per thousand males
Source: Raju et al. (1997)

Figure 2 The sex ratio of deaths at age 5, 1981, females per thousand males
Source: Raju et al. (1997)

Figure 3 The sex ratio at all ages, 1991, females per thousand males
Source: Raju et al. (1997)

Table 2 Sex ratios by State and Union Territory, 1991

State	All groups	Hindus	Muslims	Urban	Rural	Scheduled Castes	Scheduled Tribes
Andhra Pradesh	972	973	958	959	977	969	960
Arunachal Pradesh	859	708	531	728	880	627	998
Assam	923	915	938	838	934	919	967
Bihar	911	904	938	844	921	914	971
Goa	967	923	866	930	993	967	889
Gujarat	934	932	947	907	949	925	967
Haryana	865	862	872	868	864	860	-
Himachal Pradesh	976	980	840	831	990	967	981
Karnataka	960	960	952	930	973	962	961
Kerala	1036	1041	1048	1034	1037	1029	996
Madhya Pradesh	931	931	924	893	943	915	985
Maharashtra	934	935	903	875	972	944	968
Manipur	958	961	958	975	951	973	959
Meghalaya	955	800	869	910	966	821	997
Mizoram	921	374	100	932	912	157	982
Nagaland	886	552	605	749	917	-	946
Orissa	971	970	938	866	988	975	1002
Punjab	882	867	824	868	888	873	-
Rajasthan	910	908	921	879	919	899	930
Sikkim	878	874	407	750	892	939	914
Tamil Nadu	974	971	999	960	981	978	960
Tripura	945	944	949	958	942	949	965
Uttar Pradesh	879	875	897	860	884	877	914
West Bengal	917	914	923	858	940	931	964
Union Territory							
Andaman & Nicobar Is.	818	797	843	769	837	-	947
Chandigarh	790	769	670	810	632	810	-
Dadra & Nagar Haveli	952	957	831	817	965	925	1022
Daman & Diu	969	963	1022	1024	922	1067	931
Delhi	827	823	798	830	807	834	-
Lakshadweep	943	435	988	930	959	-	994

Pondicherry	979	963	1092	985	970	983	-
India	927	925	930	894	939	922	972

Source: Census of India

References

Drèze, J. and Sen, A. (1995) *India: economic development and social opportunity* Oxford and New Delhi: Oxford University Press

Dyson, T. and Moore, M. (1983) On kinship structure, female autonomy and demographic behaviour in India, *Population and Development Review* 9, 35-60

Government of India (1995) *Fourth World Conference on Women, Beijing 1995: Country Report* New Delhi: Department of Women and Child Development, Ministry of Human Resource Development

Gulati, L. (1993) *In the absence of their men: the impact of male migration on women* New Delhi: Sage

Harriss, B. and Watson, E. (1987) The sex ratio in South Asia in J.H. Momsen and J.G. Townsend (Eds) *Geography and Gender in the Third World* London: Hutchinson

Jeffery, R. and Jeffery, P. M. (1994) A woman belongs to her husband: female autonomy, women's work and childbearing in Bijnor, in A. Clark (Ed.) *Exploration of South Asian systems* Delhi and New York: Oxford University Press

Kishor, S. (1993) `May God give sons to all': gender and child mortality in India, *American Sociological Review* 58, 247-265

Miller, B. (1981) *The endangered sex: neglect of female children in rural north India* Ithaca, New York: Cornell University Press

Murthi, M., Guio, A-C. & Drèze, J. (1995) Mortality, fertility, and gender bias in India: a district-level analysis, *Population and Development Review* 21, 745-782

Premi, M.K. (1990) India, in C.B. Nam, W. Serow and D.E. Sly (eds) *International handbook on internal migration* New York: Greenwood Press

Premi, M. K. and Raju, S. (1996) *Imbalance in child sex ratio in Madhya Pradesh*, unpublished report, sponsored by the Department of Women and Child Development, Ministry of Human resource Development, Government of India

Raju, S. and Bagchi, D. (Eds)(1993) *Women and work in South Asia: regional patterns and perspectives* London: Routledge

Raju, S., Atkins, P.J., Townsend, J.G. & Kumar, N. (1997) *An atlas of women and men in India* New Delhi: Kali for Women

Rosenzweig, M.R. and Schultz, T.P. (1982), Market opportunities, genetic endowments, and intrafamily resource distribution: child survival in rural India, *American Economic Review* 72, 803-15

Sopher, D.E. (1980) Sex disparity in Indian literacy, pp 130-188 in Idem. (Ed.) *An exploration of India: geographical perspectives on society and culture* Ithaca: Cornell University Press

Zeng, Y., Tu, P., Gu, B., Xu, Y., Li, B. and Li, Y. (1993) Causes and implications of the recent increase in the reported sex ratio at birth in China *Population and Development Review* 19, 283-302

Notes

i. Including estimates for the state of Jammu and Kashmir where no census was held.

ii. The Census of India calculates the sex ratio as the number of females per thousand males, but internationally it is more usually expressed as the number of males per thousand females.

iii. The checks made after each census do not support any suggestion that the counting of girls and women in 1991 was less complete than in 1981. Nor do sex-selective migration or the ageing of the population explain the pattern (Drèze and Sen 1995).

iv. Interestingly, the Sample Registration System shows no such trend.

v. To know the sex of an unborn child, it used to be necessary to wait for eighteen weeks from conception and have an amniocentesis, a minor operation with some small danger to the child. More recently, it has become possible to know by a scan of the womb at a much earlier stage. A scan is very much cheaper and safer, and is widely advertised and available in India. The Prenatal Sex Determination Technique (Regulation and Prevention of Misuse) Act was passed by the Indian Parliament in 1994. It banned the sex determination test of unborn babies except under specific conditions. As with dowry, changing the law will not change the practice until there is change in public opinion and mind sets and there are celebrations for the birth of a girl.

vi. It is important to remember that the information for death rates before the age of one is probably not reliable, and that large numbers of deaths can as likely mean better recording as worse health conditions, just as few deaths may mean bad reporting.

vii. Haryana has also experienced inmigration. The other States and Territories with lower sex ratios have small populations, many of which have been unbalanced by inward or outward migration streams.

viii. This argument ignores women's household tasks and their important role in home processing for market and care of livestock.

ix. A city in the Indian census has over 100,000 people.

x. The terms `scheduled caste' and `scheduled tribe' refer to historically underprivileged groups who receive special treatment under the Constitution.

xi. But Kishor (1993) finds that the positive tribal effect disappears when patrilocal exogamy is included in an explanatory regression equation.