7.1. Female Deprivation and Missing Women

Inequality between men and women is one of the most crucial disparities in many societies, and this is particularly so in India. Differences in female and male literacy rates, discussed in the last chapter, are one aspect of this broader phenomenon of gender-based inequality in India. In much of the country, women tend in general to fare quite badly in relative terms compared with men, even within the same families. This is reflected not only in such matters as education and opportunity to develop talents, but also in the more elementary fields of nutrition, health, and survival. Indeed, the mortality rates of females tend to exceed those of males until the late twenties and even the late thirties in some states, and this—as we know from the experiences of other countries—is very much in contrast with what tends to happen when men and women receive similar nutritional and health care.¹ One result is a remarkably low ratio of females to males in the Indian population compared with the corresponding ratio not only in Europe and North America, but also in sub-Saharan Africa. The problem is not, of course, unique to India, but it is particularly serious in this country, and certainly deserves public attention as a matter of major priority.

There are, in fact, striking variations in the ratio of females to males in the population (hereafter ‘female–male ratio’, or FMR for short) in different regions of the world. While there are important

¹ See Sen (1992c), and the literature cited there; see also Kynch (1985).
social and cultural influences on survival rates, there is fairly strong medical evidence to the effect that—given similar care—women tend to have lower age-specific mortality rates than men (indeed, even foetuses are relatively less prone to miscarriage than their male counterparts). Even though males outnumber females at birth (and even more at conception), women tend to outnumber men substantially in Europe and North America, with an average ratio around 1.05. While that includes some remnant effects of greater male mortality in past wars, the ratio would still be considerably above unity after adjusting for that. In contrast, many parts of the Third World have female–male ratios substantially below unity, for example, 0.96 in North Africa, 0.94 in China, Bangladesh, and West Asia. The average FMR in India is around 0.93—one of the lowest in the world (it is no consolation that Pakistan’s ratio of 0.91 is even lower). There is much direct evidence, in India and in the other countries with a sharp ‘deficit’ of women, of relative neglect of the health and well-being of women (particularly young girls including female infants), leading to survival disadvantage of females vis-à-vis males over long periods.

It is easily calculated that no matter what female–male ratio we use as a benchmark for comparison (whether the FMR in contemporary Europe, or in sub-Saharan Africa, or one based on the historical experience of parts of Europe), we would find that there are many millions of ‘missing women’ in India. The sub-Saharan African ratio had yielded the colossal number of 37 million missing women in India in 1986 (Drèze and Sen, 1989, Table 4.1, p. 52). Klasen’s history-based calculation suggests figures closer to 35 million. These are gigantic figures—and again there is no consolation here in the

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It was on the basis of the sub-Saharan African FMR that the figure of ‘more than a hundred million missing women’ was presented for Asia and north Africa as a whole in Drèze and Sen (1989) and Sen (1989). Coale (1991) suggested a number closer to 60 million, on the basis of the historical experience of Europe, whereas Klasen (1994) arrives at around 90 million missing women on a different reading of the European experience. While refinements of the exact numbers can certainly continue, it is important to emphasize that no matter which standard FMR we use, we do get incredibly large numbers of missing women.
fact that the absolute number of missing women (though not in ratio to the population) in China is estimated to be even higher—between 38 and 40 million. We do have a problem of basic inequality here of extraordinary proportions.

7.2. *On the Female–Male Ratio*

We have noted in the preceding section that India has an exceptionally low female–male ratio. This problem is not, of course, equally acute in every region of India. As noted in chapter 3, there are large variations in the female–male ratio between different states. The female–male ratio is particularly low in large parts of north India, especially the north-western states (e.g. 0.87 in Haryana, 0.88 in Punjab and Uttar Pradesh, 0.91 in Rajasthan), and comparatively high in the south (e.g. 0.97 in Tamil Nadu and Andhra Pradesh, 0.96 in Karnataka). In Kerala, the female–male ratio is well above unity; in fact, it is as high as 1.04, a figure comparable to that of Europe and North America.5

These regional patterns of female–male ratios are consistent with what is known of the character of gender relations in different parts of the country. The north-western states, for instance, are notorious for highly unequal gender relations, some symptoms of which include the continued practice of female seclusion, very low female labour-force participation rates, a large gender gap in literacy rates, extremely restricted female property rights, strong boy preference in fertility decisions, widespread neglect of female children, and drastic separation of a married woman from her natal family. In all these respects, the social standing of women is somewhat better in south India. And Kerala, of course, has a distinguished history of a more liberated position of women in society.6 Important aspects of this history include a major success in the expansion of female literacy (see chapter 4), considerable prominence of women in influential social and political

5 Kerala’s high female–male ratio is partly due to high levels of male outmigration, but even the migration-adjusted female–male ratio is well above unity (see e.g. Agnihotri, 1994).


7 See e.g. Robin Jeffrey (1992).
activities, and a tradition of matrilineal inheritance for an important section of the population.\footnote{Property has traditionally been inherited through the female line for a powerful community in Kerala—the Nairs. While the Nairs constitute about 20 per cent of the total population, and the practice has changed a good deal in recent years, nevertheless the social and political importance of a long tradition of this kind, which goes against the conventional Indian norms, must not be underestimated.}

These regional contrasts, and also changes in the female–male ratio over time, provide a useful means of investigating different aspects of the problem of low female–male ratios in India. This investigation will be pursued a little further in this section and the next one. The motivation for focusing on the female–male ratio is partly that this indicator of gender inequality is important in its own right, and partly that it sheds some interesting light on other aspects of gender relations.

Two misconceptions

To begin with, we should deal with two misunderstandings that arise from time to time in popular discussions of the issue of low female–male ratios in India.

First, it is sometimes thought that the main cause of the problem is some phenomenon of hidden female infanticide, not captured in reported death statistics. In fact, census figures on female–male ratios are quite consistent with what one would predict based on (1) a standard female–male ratio at birth of about 0.95, and (2) independently recorded age- and sex-specific mortality rates. To illustrate, the predicted female–male ratio at age 5 in India in 1981, using information on age-specific mortality rates from the Sample Registration System, is 0.921.\footnote{This predicted female–male ratio at age 5 is calculated using the simple formula \( \text{FMR} = (0.95 \times (1-q^f_5)) / (1-q^m_5) \), where \( q^f_5 \) and \( q^m_5 \) are, respectively, the female and male probability of dying before the fifth birthday. The SRS-based estimates of \( q^f_5 \) and \( q^m_5 \) for 1976–80 are taken from Government of India (1988a), p. 3.} The actual female–male ratio at age 5 for that year, obtained from the 1981 census, is 0.920—very close to the predicted value.

It is possible, of course, that recorded child deaths include some female infant deaths due to infanticide, which are reported by the parents as due to some other cause. But the anthropological evidence suggests that female infanticide, when it does occur, takes place very
soon after birth. The bulk of excess female mortality in childhood, on the other hand, occurs after the age of one, with a less unequal pattern in the first year. In 1981, for instance, 113 out of 1,000 male children born alive died before the age of one, compared with 115 out of 1,000 for female children; in contrast, of the surviving children, another 68 males died before the age of five, compared with as many as 91 females.

The force of excess female mortality, therefore, lies in mortality rates in age groups beyond that of female infanticide. The female disadvantage in these age groups is itself due to a well-documented practice of preferential treatment of boys and neglect of female children in intra-household allocation. There is, indeed, considerable direct evidence of neglect of female children in terms of health care, nutrition, and related needs, particularly in north India.

It may be argued that the deliberate neglect of female children ought to come under the label of infanticide. There might be a case for this, but the point to recognize is that the social practices that lead to excess female mortality are far more subtle and widespread than the graphic stories of infant drowning, poisoning, or asphyxiation that periodically make headlines in the newspapers. This is not to deny that female infanticide, strictly defined, does indeed occur in India today and has done so in the past.

The second misinterpretation concerns some alleged 'Muslim influence'. The reasoning, in so far as there is any, is that female–male

10 See e.g. Panigrahi (1972), Miller (1981), George et al. (1992), and Venkatachalam and Srinivasan (1993).
11 Calculated from Sample Registration System data presented in Government of India (1988a), p. 3. This pattern of concentration of excess female child mortality in the 1–5 age group is even more pronounced in the states where the problem of excess female mortality in childhood is particularly acute (e.g. Uttar Pradesh, Punjab, Haryana).
13 A similar point might apply to the tendency to assume too readily that low female–male ratios in the younger age groups in China reflect explicit female infanticide on a large scale.
14 Female infanticide has a long history in north India, and remains quite common in particular areas or communities; see e.g. Panigrahi (1972) and Miller (1981). See also George et al. (1992) and Venkatachalam and Srinivasan (1993) on the current practice of female infanticide in parts of south India.
ratios in India tend to be particularly low in the north-west of the country, which is geographically close to Islamic countries, has been under Muslim influence for a long time and, even now, has a large Muslim population.\textsuperscript{15} But a glance at the figures immediately exposes the fragility of this hypothesis. The state of Kerala, which has the highest female–male ratio among Indian states (1.04 in 1991), comes second in terms of the proportion of Muslims in the population. The state with the lowest proportion of Muslims in the population (1 per cent in 1981) is Punjab, which has had the lowest female–male ratio among all Indian states until it was overtaken by Haryana in 1981. Haryana itself has an extremely small Muslim population (4 per cent of the total population).

We can take a closer look at this whole issue by examining the extent of gender bias in child mortality rates among Hindus and Muslims in different parts of India. The evidence is summarized in Figure 7.1. This diagram shows the ratio of female child mortality to male child mortality in different states, both for the Hindu population (on the horizontal axis) and for the Muslim population (on the vertical axis). The point representing a particular state lies to the right of the point marked ‘1’ on the horizontal axis if and only if female mortality is higher than male mortality among Hindus, and above the point marked ‘1’ on the vertical axis if the same statement applies for Muslims. Further, a state lies above the diagonal if and only if the ratio of female to male child mortality (which can be interpreted as a measure of anti-female bias in child survival) is higher among Muslims than among Hindus.\textsuperscript{16}

This figure highlights two points. First, regional contrasts in the extent of gender bias in child survival are far more striking than the contrast relating to religious identity. Specifically, the relative survival chances of girls are low in large parts of north India (including Punjab, Haryana, Uttar Pradesh, Rajasthan, and Bihar), and this applies

\textsuperscript{15} The political value of this kind of argument has not been lost on either side of the north-western border, judging from a recent report of the Pakistan Institute of Development Economics on the condition of women in Pakistan (Shah, 1986). In its analysis of the ‘roots of the Pakistani woman’s status’ (pp. 19–21), this report primarily blames the historical influence of the ‘traditions of the Hindu majority in undivided India’ for the deprived condition of women in contemporary Pakistan.

\textsuperscript{16} The mortality estimates on which Figure 7.1 is based are indirect estimates grounded on census information, and the individual numbers are subject to some margin of error. The purpose of Figure 7.1 is to highlight a broad pattern, rather than to convey precise estimates for particular states.
Fig. 7.1. *Ratio of Female to Male Child Mortality Among Hindus and Muslims in Different States, 1981*

*Note.* The horizontal axis indicates the ratio of female child mortality to male child mortality among Hindus in different states; similarly with Muslims on the vertical axis. The child mortality measure used here is $q_f$, the probability of dying before age 5.


$I =$ *India*

| AP = Andhra Pradesh | HP = Himachal Pradesh |
|BI = Bihar | HA = Haryana |
|GU = Gujarat | JK = Jammu & Kashmir |
|KA = Karnataka | KE = Kerala |
| MA = Maharashtra | MP = Madhya Pradesh |
|OR = Orissa | PU = Punjab |
|RA = Rajasthan | TN = Tamil Nadu |
|UP = Uttar Pradesh | WB = West Bengal |
whether they are Hindus or Muslims. Second, there is no evidence of any overall tendency for the female disadvantage to be particularly large among Muslims.

**Time trends**

It is well known that the female–male ratio in India has steadily declined since the beginning of this century. In fact, there has been an almost monotonic decline from 1901 to 1991, when the female–male ratio in India reached its lowest-ever recorded value (927 females per 1,000 males).\(^7\)

The same pattern does not apply at the state level, where a good deal of diversity can be found: since 1901, the female–male ratio has steadily declined in some states (e.g. Bihar, Uttar Pradesh, Orissa), steadily increased in others (e.g. Kerala, Himachal Pradesh), and fluctuated or stagnated in quite a few cases (e.g. West Bengal, Maharashtra).\(^8\)

The root causes of the all-India decline are far from obvious.\(^9\) The fall cannot be explained by sex-selective migration, enumeration biases, or a change in the sex ratio at birth.\(^10\) Nor can it be attributed

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\(^7\) The decline of the female–male ratio from 1901 onwards was preceded by a slight rise between 1891 and 1901 (from 963 to 972). This may reflect the demographic effect of the famines of 1896–7 and 1899–1900. Indeed, male mortality typically rises more than female mortality in famine situations (Drèze and Sen, 1989, chapter 4), and this pattern applies in particular to late-nineteenth century famines in India (Maharatna, 1992). Further, the increase of India’s female–male ratio between 1891 and 1901 was overwhelmingly concentrated in the districts that now make up the states of Madhya Pradesh, Maharashtra, Orissa, and Rajasthan, and each of these regions was severely affected by the famines of 1896–7 and 1899–1900 (see Bhatia, 1967).

\(^8\) For the latest figures on state-specific female–male ratios since 1901, see Nanda (1992), pp. 102–3. Note that these state-specific female–male ratios, to be used further in this chapter, consistently refer to the 1991 state boundaries.


\(^{10}\) See P. Visaria (1961) and Nanda (1992), pp. 9–14. The female–male ratio at birth has been declining in recent years, possibly due to sex-selective abortion. But this is a
to a change in the age distribution of the population (e.g. due to fertility decline). Indeed, if we combine 1981 age-specific female–male ratios with the 1901 age distribution of the population (available in S.B. Mukherjee, 1976), we obtain an overall female–male ratio of 936, very close to the actual female–male ratio of 934 in 1981. And similarly, combining the 1901 age-specific female–male ratios with the 1981 age distribution of the population, we find an overall female–male ratio of 976, very close to the actual 1901 female–male ratio of 972. The decline of India’s female–male ratio over time is overwhelmingly due to the decline of age-specific female–male ratios, rather than to changes in the age distribution of the population.

Another possibility is that states with low initial female–male ratios have tended to experience faster population growth than others, pulling down the all-India average. This has indeed happened to some extent, but it only explains a very small part of the observed decline. In fact, had the 1901 state-specific female–male ratios remained unchanged to 1991, we would now observe an all-India female–male ratio of 970 per thousand (taking as given the current inter-state distribution of the population), only 2 points down from the female–male ratio of 972 in 1901.

The contribution of different states to the decline of the female–male ratio at the all-India level is examined in Table 7.1, where we decompose the all-India decline between 1901 and 1991 into: (a) a population-weighted sum of state-specific changes in female–male ratios; (b) a ‘differential growth rate effect’, which captures the fact that states with different initial female–male ratios grow at different rates (roughly speaking, this term tells us how the all-India female–male ratio would have changed, due to different state-specific population growth rates, had state-specific female–male ratios remained unchanged); and (c) a residual (or ‘second-order term’) which measures the difference between the actual FMR decline and the linear approximation to this decline obtained by adding up (a) and (b). In this table, the different states are arranged in descending order of female–male ratio in 1901 (except for the residual category of ‘other

relatively new phenomenon, which cannot explain the sustained decline of the female–male ratio since 1901. In fact, a large-scale survey carried out in the nineteen-fifties in health institutions found a female–male ratio at birth of 942 (Nanda, 1992, p. 11), which is quite standard.

21 The calculations are based on population figures for 1901 and 1991 presented in Nanda (1992), pp. 86–113.
Table 7.1: Decomposition of the Decline of India's Female-Male Ratio, 1901–91

<table>
<thead>
<tr>
<th>Share of India's male population</th>
<th>Female-male ratio</th>
<th>Effect of change in state-specific FMR on Indian FMR²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1901 (f'&lt;b&gt;1&lt;/b&gt;)</td>
<td>1991 (f'&lt;b&gt;6&lt;/b&gt;)</td>
</tr>
<tr>
<td>India</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Bihar</td>
<td>0.111</td>
<td>0.104</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>0.079</td>
<td>0.065</td>
</tr>
<tr>
<td>Orissa</td>
<td>0.042</td>
<td>0.037</td>
</tr>
<tr>
<td>Kerala</td>
<td>0.027</td>
<td>0.033</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>0.071</td>
<td>0.079</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>0.080</td>
<td>0.078</td>
</tr>
<tr>
<td>Karnataka</td>
<td>0.055</td>
<td>0.053</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>0.081</td>
<td>0.094</td>
</tr>
<tr>
<td>Gujarat</td>
<td>0.039</td>
<td>0.049</td>
</tr>
<tr>
<td>West Bengal</td>
<td>0.073</td>
<td>0.082</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>0.210</td>
<td>0.170</td>
</tr>
<tr>
<td>Assam</td>
<td>0.014</td>
<td>0.027</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>0.045</td>
<td>0.053</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>0.009</td>
<td>0.006</td>
</tr>
<tr>
<td>Haryana</td>
<td>0.021</td>
<td>0.020</td>
</tr>
<tr>
<td>Punjab</td>
<td>0.034</td>
<td>0.025</td>
</tr>
<tr>
<td>Other states/UTs</td>
<td>0.009</td>
<td>0.025</td>
</tr>
</tbody>
</table>

Decomposition of the all-India change in FMR: (a) Total effect of changes in state-specific FMRs (column total) - 46.1
(b) Differential growth rate effect: f'<b>1</b> * (f'<b>1</b> - f'<b>6</b>) - 2.3
(c) Second-order term: (f'<b>1</b> - f'<b>6</b>) * (f'<b>1</b> - f'<b>6</b>) - 3.4
Change in female-male ratio (a+b+c) - 45.0

Notes. Change in state-specific FMR, multiplied by initial share of the male population
UT = Union Territory * denotes vector product

It can be seen that the broad regional patterns of female-male ratios that are observed today, and that have been much discussed in the literature, already existed at the beginning of this century. In particular, the north-western region (including Punjab, Haryana, Rajasthan, and Uttar Pradesh) has had the lowest female-male ratios all along, and, similarly, the states of the southern region (Kerala, Andhra Pradesh, Karnataka, and Tamil Nadu) already had above-average female-male ratios in 1901. But there have also been some significant changes in regional patterns. In particular, the relative position of the eastern states (Bihar, Orissa and, to a lesser extent, West Bengal) in the scale of female-male ratios has considerably declined.

Changes in state-specific female-male ratios between 1901 and 1991 have partly taken the form of a ‘convergence’ effect, with most of the states starting off with a high female-male ratio experiencing a particularly large decline over that period, and some increase taking place in the states with the lowest initial female-male ratios. The main exceptions to this pattern are Kerala (where the female-male ratio increased from a high initial value) and Uttar Pradesh (where there was a large decline despite a low base value). In addition to this convergence pattern, however, there has been a fairly widespread decline of the female-male ratio, not confined to any specific region. The largest absolute declines in female-male ratios have taken place in Bihar, Orissa, Tamil Nadu, Madhya Pradesh, Maharashtra, and Uttar Pradesh. As can be seen from the decomposition in the last column of the table, these six states (which combine large declines in FMR with large populations) account for an overwhelming proportion of the all-India decline in the female-male ratio. Bihar and Uttar Pradesh alone account for about half of the all-India decline.

Figure 7.2 shows the evolution of the female-male ratio in India between 1901 and 1981 (the last census for which age-specific population totals are available), distinguishing between two different age groups: 0–29 and 30+. As this figure suggests, the decline in the overall female-male ratio seems to be driven by a sustained decline in the ratio of women to men in the second age group (this group accounted for about one-third of the population in 1981). The same pattern is observed for each of India’s broad geographical regions.22

22 The last statement is based on age-specific population totals for the western, northern, southern, central, and eastern ‘zones’ presented in S.B. Mukherjee (1976). In each of these zones, there has been a sharp and sustained decline in the female-male ratio for
In order to understand this pattern, it is useful to distinguish between two possible causes of major change in the female–male ratio (other than the effects mentioned earlier). First, the ratio can change in response to a gender-neutral change in the mortality level in a particular age group, without there being any change in the ratio of female to male mortality in that age group. For instance, if the infant mortality rate is lower among females than among males, then an equi-proportionate decline of infant mortality rates would generally lead to some decline in the female–male ratio. Since we are looking at a period over which mortality levels have declined in all age groups, this may be referred to as the ‘mortality decline effect’.

Second, the female–male ratio can change in response to a change in the ratio of female to male mortality in a particular age group. This may be called the ‘changing mortality bias effect’.

As far as the mortality decline effect is concerned, gender-neutral mortality decline in a particular age group can be shown to reduce the female–male ratio in the subsequent age groups if women initially have a survival advantage in that age group. Since women typically have a survival advantage in the older age groups, even in India, this relationship suggests that the decline of the female–male ratio in the 30+ age group is at least partly attributable to the mortality decline effect.

This does not mean that the decline in the female–male ratio in India is some kind of ‘natural’ phenomenon, reflecting little more than the decline of mortality. Indeed, in other regions of the world, the 30+ age group between 1901 and 1981, and relatively little change in the female–male ratio for the 0–29 age group.

More precisely, an equi-proportionate decline of mortality in a particular age group leads to FMR decline in all subsequent age groups if and only if the ratio of female to male mortality in that age group is lower than unity. To see this, let \( M \) and \( F \) respectively denote the male and female populations in the reference age group, \( q \) the male mortality rate in that age group, and \( k \) the female mortality rate, where \( k \) (the ratio of female to male mortality in the reference age group) can be interpreted as a measure of female disadvantage in survival. The female–male ratio in the next age group (say, FMR) can then be written as \( \text{FMR}_n = \frac{M_q(1-kq)}{M_q(1-q)} \). The last expression implies that the derivative of FMR, with respect to \( q \) is positive (i.e. equi-proportionate mortality decline leads to FMR decline in the next age group) if and only if \( k \) is below unity. A similar reasoning can be used to show that, if \( k \) is below unity, then equi-proportionate mortality decline leads to FMR decline in all subsequent age groups.
the decline of mortality in the twentieth century has usually gone hand in hand with an increase in the female–male ratio, reflecting a sustained improvement in the survival chances of females relative to males. 24 Even in Kerala and Sri Lanka, recent demographic trends have followed this typical pattern. 25 The all-India FMR decline seems to reflect a combination of the 'mortality decline effect' in the older age groups with a failure to remove the anti-female bias in the younger age groups. As Figure 7.2 shows, the female–male ratio in the 0–29 age group has stagnated around 0.96 until 1961; this figure is very close to the typical female–male ratio at birth, indicating roughly equal male and female mortality in that age group. 26 As was mentioned earlier, in countries where young males and females receive similar treatment in terms of food, health care, and related necessities, females have substantial survival advantages. India's female–male ratio of 0.96 in the 0–29 age group suggests some considerable anti-female discrimination, which—in contrast with many other countries—has not gone away with the decline of mortality. 27

In fact, after 1961, the female–male ratio has declined even in the 0–29 age group, and this cannot be explained in terms of the 'mortality decline effect'. By 1971, female mortality rates were higher than male mortality rates throughout that age group (except immediately after birth), and that is still the case today. 28 This development

24 See e.g. Preston (1976), chapter 6, and Lopez and Ruzicka (1983).
25 As noted earlier, the female–male ratio in Kerala has steadily increased since 1901 (see also Table 7.1). Similarly, mortality decline in Sri Lanka has gone hand in hand with a major improvement in the relative survival chances of females vis-à-vis males; see Nadarajah (1983), Langford (1984, 1988), and Langford and Storey (1993).
26 This statement does not apply to each age group within the 0–29 age group. In fact, female–male ratios for more narrowly-defined age groups (e.g. 0–4, 5–9, etc.) have followed rather complex patterns over time, which call for more detailed analysis than can be presented in this chapter.
27 The female–male ratio for the 0–29 age group in, say, Western Europe is also around 0.96 (United Nations, 1993, p. 40), but this is because mortality rates for the younger age groups in that region are very low, so that the female–male ratio in the 0–29 age group remains relatively close to the female–male ratio at birth (around 0.95 in Western Europe). A more relevant comparison may be with sub-Saharan Africa, which has high mortality rates (like India) but relatively little female disadvantage in survival (unlike India). In that region, the female–male ratio for the 0–29 age group was just above unity in 1985 (United Nations, 1993, p. 68).
28 See e.g the Sample Registration System (SRS) data presented in Karkal (1987), and in the annual SRS publications. It should be mentioned that, since 1971, there has been a consolidation of female survival advantage in the older age groups, and the age at which
is in sharp contrast with the typical pattern of reduced female
disadvantage in the younger age groups as mortality declines.

The preceding discussion does not rule out the possibility that,
even in the older age groups, the decline in the female–male ratio
reflects some adverse change in the relative survival chances of women
vis-à-vis men. Since 1971, the trend has been in the direction of
an increase in female survival advantage in these age groups, but
this does not rule out a contrary trend earlier on. The FMR decline,
in fact, is most pronounced in the pre-1971 period (Figure 7.2),
and for that period there is no reliable evidence of the direction
of change in the relative survival rates of adult men and women.

If it is the case that the relative survival rates of men and women
in the older age groups were changing in favour of men at one
stage, contrary to the usual pattern in a phase of longevity expansion,
the main explanation may simply be that adult men disproportionately
benefited from improvements in living conditions and medical care.
Such a phenomenon is quite plausible, given the tendency of economic
development to affect men more rapidly than women: the current
lifestyle of women in, say, rural Bihar or Uttar Pradesh is probably
much closer to what it was at the beginning of this century than
in the case of men. The fact that professional attendance at birth
remains so rare in these states, while modern medical treatment is
very often used to cure diseases that are not specific to women,
is a good illustration of this point.29

A further possibility is that, aside from men benefiting more than
women from medical advances and related improvements, there has
also been a more basic change in gender relations, leading to a
shift in the distribution of resources in favour of men. An example
of this possibility is considered presently.

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29 In 1991, the proportion of all births taking place in medical institutions was as low
as 4 per cent in Uttar Pradesh and 12 per cent in Bihar, compared with 92 per cent in
Kerala (see Statistical Appendix, Table A.3). Maternal health, in general, remains one
of the most neglected areas of health policy in India; see Karkal (1985), M.E. Khan et
Jejeebhoy and Rama Rao (1994), and Mari Bhat et al. (1994).
Gender and caste

The decline of the female–male ratio in India has not been at all even between different castes and religious communities. Specifically, the decline appears to have been significantly more pronounced among disadvantaged castes.\(^{30}\)

Many census reports of the pre-independence period have noted that the female–male ratio tends to be considerably higher among the ‘lower’ castes than in the population as a whole.\(^{31}\) This is no longer the case: in 1991, the female–male ratio among scheduled castes was 922 per thousand, compared with 927 in the population as a whole.\(^{32}\) As far as the female–male ratio is concerned, the scheduled castes are now much like the rest of the population, in contrast with the earlier pattern.

A detailed examination of this development is complicated by the fact that pre-independence and post-independence census reports use different caste classifications. Pre-independence census reports give caste-specific population totals (for males and females), but post-independence reports do not provide a caste breakdown, except among the scheduled castes. A further difficulty is that the names under which particular castes are recorded often change over time.

In order to keep things reasonably simple, we shall restrict our discussion of the relationship between female–male ratios and caste to the state of Uttar Pradesh (as we saw earlier, Uttar Pradesh accounts for a large part of the all-India decline in the female–male ratio since 1901). For this state, the 1981 census lists 66 ‘scheduled castes’, of which 47 can be readily identified in the 1901 census volumes. Assuming that these 47 castes are more or less representative of the whole group of scheduled castes, we can reconstruct the 1901 female–male ratio for this group. The results are presented in Table 7.2.

As the table indicates, castes that are now classified as scheduled castes (previously often referred to simply as ‘untouchables’) had

\(^{30}\) For a pioneering discussion of this issue with reference to the post-independence period, see Agnihotri (1994).

\(^{31}\) See e.g. Census of India, 1931, United Provinces of Agra and Oudh, vol. xviii, part 4, p. 278.

\(^{32}\) Nanda (1993), p. 12, based on 1991 census data. The female–male ratio remains higher among scheduled tribes (972 per thousand in 1991) than in the population as a whole, but that gap too is slowly narrowing over time (Agnihotri, 1994).
TABLE 7.2. Female–Male Ratio and Caste in Uttar Pradesh, 1901 and 1981

<table>
<thead>
<tr>
<th>Caste</th>
<th>Total population, 1901 (thousands)</th>
<th>Female–male ratio, 1901</th>
<th>Female–male ratio, 1981</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Scheduled castes (SC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chamar</td>
<td>5,891</td>
<td>986</td>
<td>880</td>
</tr>
<tr>
<td>All SCs</td>
<td>9,821</td>
<td>970</td>
<td>892</td>
</tr>
<tr>
<td>(ii) Kshatriya, Rajput, Thakur</td>
<td>3,354</td>
<td>887</td>
<td></td>
</tr>
<tr>
<td>(iii) Other Hindu</td>
<td>27,517</td>
<td>929</td>
<td>878&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Hindu (i + ii + iii)</td>
<td>40,692</td>
<td>935</td>
<td>881</td>
</tr>
<tr>
<td>Muslim</td>
<td>6,731</td>
<td>957</td>
<td>903</td>
</tr>
<tr>
<td>Other</td>
<td>269</td>
<td>783</td>
<td>884</td>
</tr>
<tr>
<td>Total</td>
<td>47,692</td>
<td>937</td>
<td>885</td>
</tr>
</tbody>
</table>

Note.  
<sup>a</sup> The corresponding 1991 figures are still to be published.  
<sup>b</sup> Only 47 of the 66 castes listed as 'scheduled castes' in the 1981 census could be confidently identified in the 1901 census; the 1901 figures in this row apply to these 47 castes. The 1981 figures include a tiny proportion (about 1 per cent) of scheduled-caste persons who were not counted as ‘Hindus’ in that census.  
<sup>c</sup> Female–male ratio for all Hindus not belonging to a scheduled caste (post-independence censuses provide no information on the caste composition of the population outside the scheduled castes).


much above average female–male ratios in 1901. The Chamar, for instance, who are by far the largest scheduled caste in Uttar Pradesh, had a female–male ratio of 986 in 1901, compared with 937 for the state population as a whole. By 1981, however, the female–male ratio among scheduled castes (including the Chamars) was very close to the UP average. This is one indication that, as far as gender relations are concerned, the scheduled castes in Uttar Pradesh are now more like the 'higher' castes than they used to be.<sup>33</sup>

<sup>33</sup> The female–male ratio among Muslims in Uttar Pradesh has also declined a good deal since the beginning of the century (from 957 in 1901 to 903 in 1981), but remains higher than the female–male ratio for the Hindu population in that state.
The contrast between the scheduled castes and the martial castes (Khatriya et al.) is particularly interesting. The martial castes, which have a high rank in the caste hierarchy, and an important place in the history and culture of large parts of north India (including Uttar Pradesh), have a long tradition of fierce patriarchy. In fact, the martial castes in north India have played a leading role in the history of female infanticide, child marriage, seclusion, dowry, *sati*, johar, levirate, polygamy, and related patriarchal practices. Among these castes, in Uttar Pradesh, the female–male ratio was already very low at the beginning of the period under consideration (887 in 1901). Further, it has changed little over the years, at least during the pre-independence period (the relevant caste-specific figures are not available for the post-independence period). This is an important indication, suggesting that whatever factors led to a decline in the female–male ratio among other castes did not operate among the martial castes over this period—or had already operated earlier.

This pattern is consistent with the hypothesis, widely discussed in the literature on social anthropology, that the patriarchal norms of the higher castes are gradually spreading to other castes. The most common interpretation of this phenomenon is that it reflects a process of emulation of the higher castes by the lower castes, with the lifestyle of women playing a central role in this process as a symbol of social status. This process is likely to be particularly strong when the disadvantaged castes experience upward economic mobility. That the norms of the martial castes should often have been taken as the 'model' in Uttar Pradesh is not surprising, given the dominant position which these castes have occupied in that region for a long time.

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35 The notion of 'Sanskritization' was developed by M.N. Srinivas (1962, 1965, 1967, 1989); see also Berreman (1993), and the more recent studies cited there. Increased resistance to widow remarriage among upwardly-mobile castes (the prohibition of widow remarriage being widely perceived as an upper-caste norm) is a well-documented example of how restrictions on the lifestyle of women often play an important role in the Sanskritization process. On this, see Kolenda (1983), Drèze (1990c), Chen and Drèze (1994), Chen (forthcoming, a), and the literature cited there.

36 On the long-standing dominance of martial castes in rural Uttar Pradesh, see Drèze and Gazdar (1996), and the literature cited there. It should be mentioned that the dominant position of these castes in the rural society of Uttar Pradesh derives less from their martial activities as such (which are now largely confined to local feuds and fist
The observed convergence of female–male ratios among scheduled castes and higher castes may have causes other than this process of emulation. It has often been suggested, for instance, that gender inequality in India tends to be relatively low among poorer households. In the cross-section analysis of district female–male ratios discussed further in this chapter, it is also found that higher levels of poverty tend to go with higher female–male ratios, for a given composition of the population in terms of the proportion of scheduled castes and scheduled tribes. It is, in fact, plausible that the partnership aspect of gender relations is stronger in poorer households, where survival depends on effective cooperation, than among privileged households, where women tend to have a more dependent and symbolic position. And this feature of gender relations within the household, in turn, may affect the general status of women in different classes. If there is a causal association of this kind between poverty and gender inequality, then economic growth and poverty reduction may, in some respects at least, be a source of intensified female disadvantage. The sharp decline of female–male ratios among scheduled castes may be a manifestation of this economic process, rather than being directly related to caste as such.

What is not in doubt is that the convergence effect has taken place (not only in Uttar Pradesh but also in India as a whole), and that it has made some contribution to the overall decline of the female–male ratio in India since 1901. The time pattern of this convergence is also interesting. Specifically, the decline of the female–male ratio among scheduled castes seems to have been particularly dramatic after 1961. In Uttar Pradesh, for instance, the female–male ratio in 1961 was not yet terribly low for the scheduled castes—941 to be exact, compared with 909 for the population as a whole. Thirty years later, the corresponding values were 877 and

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38 The FMR decline among scheduled castes, on its own, must have made a relatively modest contribution to the overall FMR decline in India, given the small share of this group in the total population (about 16 per cent in 1991). But the process of diffusion of the patriarchal culture of the higher castes, and related causal antecedents of the convergence effect, may have affected a broader section of the population. The widespread transition from bride-price to dowry among large parts of the population in south India illustrates this possibility.
879, indicating a massive decline of the female–male ratio among scheduled castes after 1961. A similar pattern applies in India as a whole, with the female–male ratio among scheduled castes falling from 957 in 1961 (compared with 941 for the population as a whole) to 922 in 1991 (compared with 927 for the whole population). It is quite possible that the post-1961 decline of the female–male ratio in the 0–29 age group at the all-India level, noted earlier in this section, relates at least partly to the convergence effects we have just discussed.

All this is a useful reminder of the fact that economic progress on its own does not necessarily do very much to reduce gender inequalities. In fact, in so far as the convergent decline of the female–male ratio among scheduled castes is due to some process of emulation linked with their upward economic mobility, or to some other causal process related to the expansion of the economy, this seems to be a case where economic growth leads to some intensification of gender bias. The fact that higher levels of poverty are associated with higher female–male ratios in cross-section analysis reinforces these observations based on time trends. Clearly, the removal of gender inequalities cannot be based on some presumption that the problem will resolve itself on its own in the process of economic expansion. Punjab and Haryana are good illustrations of this point: both states have experienced rapid economic growth since independence, and are now far ahead of all other Indian states in terms of per-capita income, but they still have lower female–male ratios than any other state except Uttar Pradesh. Achieving greater gender equality involves a process of active social change which has no obvious link with economic growth.

7.3. Women’s Agency and Child Survival

A number of empirical studies indicate that the extent of anti-female bias in survival is substantially reduced by various influences that give women more voice and agency within the family. One of these influences is female education, and this consideration adds to those already presented in earlier chapters on the crucial role of basic education in general and female education in particular. Another

39 See Agnihotri (1994), who also presents an excellent analysis of the phenomenon of accelerated FMR decline, after 1961, among the scheduled castes in many Indian states.
factor of importance is women's ability to earn an independent income through paid employment.\footnote{A higher participation rate of women in so-called 'gainful' activities in sub-Saharan Africa seems to play a major role in placing women there at a less disadvantaged position compared with their counterparts in north Africa and Asia. On this see Boserup (1970), Kynch and Sen (1983), Bardhan (1984a, 1988), Sen (1984, 1989). Within India, high rates of female labour-force participation among tribal communities, and in the Himalayan region, also help to explain the comparatively favourable status of women (and relatively high female–male ratio) in these societies.} This opportunity tends to enhance the social standing of a woman in the household and the society. Her contribution to the prosperity of the family is, then, more visible, and she also has more voice, because of being less dependent on others. Further, outside employment often has useful 'educational' effects, in terms of exposure to the world outside the family. These positive links between gainful female employment and the status of women are also relevant to the female child, in so far as they affect the importance that is attached to her development and well-being.\footnote{See Miller (1981), Rosenzweig and Schultz (1982), Kynch and Sen (1983), Sen (1985c, 1990), Alaka Basu (1992), Guio (1994), Murthi, Guio, and D'Elite (1995); also Kishor (1993, 1994), and the literature cited there. The strength of these relations, however, depends on the nature of the female employment, its social standing, and economic rewards. For further discussion of this issue, see Ursula Sharma (1980, 1986), Kalpana Bardhan (1985), Bina Agarwal (1986), Desai and Jain (1992), among others, and also Nirmala Banerjee's (1982) illuminating study of the condition of 'unorganized women workers' in Calcutta.}

It is worth examining more closely how these and other aspects of female agency influence male and female mortality rates, and the extent of gender bias in survival. The age patterns of male and female mortality are complex (Kynch and Sen, 1983), and the discussion in this section will be confined to mortality in the 0–4 age group—hereafter 'under-five mortality'. Countries with basic gender inequality—including India, Pakistan, Bangladesh, China, West Asia, and so on—tend to have a high ratio of female to male mortality even in this age group, in contrast with the situation in Europe or America or sub-Saharan Africa, where female children typically have a substantial survival advantage. In India itself, male and female death rates in the 0–4 age group are now quite close to each other in terms of averages for the country as a whole, but a strong female disadvantage persists in regions where gender inequality is particularly pronounced, including most states of north India.\footnote{In 1991, the death rate in the 0–4 age group (per thousand) was 25.6 for males and 27.5 for females at the all-India level. The female mortality rate in that age group was...}
In a recent study, Murthi, Guio, and Drèze (1995) present an analysis of variations in under-five mortality rates between different districts of India in 1981 (the latest year for which adequately detailed data are available). One aspect of this analysis is an examination of the relationship between an index of female disadvantage in child survival (reflecting the ratio of female to male mortality in the 0-4 age group at the district level) and a number of other district-level variables such as the female literacy rate, female labour-force participation, the incidence of poverty, the level of urbanization, the availability of medical facilities, and the proportion of scheduled castes and scheduled tribes in the population. The basic results are presented in the first column of Table 7.3.43

As discussed in Murthi, Guio, and Drèze (1995), what is rather striking is that the variables directly relating to women’s agency (in particular, the female labour-force participation rate and the female literacy rate) have strong effects on the extent of female disadvantage in child survival, and go in the expected direction, i.e. higher levels of female literacy and labour-force participation are associated with lower levels of female disadvantage in child survival. By contrast, variables that relate to the general level of development and modernization either turn out to have no statistically significant effect, or suggest that modernization, if anything, amplifies the gender bias in child survival. This applies inter alia to urbanization, male literacy, the availability of medical facilities, and the level of poverty (with lower levels of poverty being associated with a larger female disadvantage). These results, based on cross-section evidence, reinforce an observation made earlier in connection with the decline of the female–male ratio over time: on their own, the forces of development and modernization do not necessarily lead to a rapid reduction in gender inequalities. In so far as a positive connection does exist in India between the level of development and reduced gender bias in survival,

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43 For a detailed discussion of these results, see Drèze, Guio, and Murthi (1995) and Murthi, Guio, and Drèze (1995). Some of the findings presented here have much in common with those of an independent study carried out earlier by Sunita Kishor (1993). For related analyses based on Indian district data, see also Rosenzweig and Schultz (1982), Gulati (1992), and Khemani (1994).
**TABLE 7.3. Basic Results of a Cross-section Analysis of the Determinants of Child Mortality, Fertility and Gender Bias in Indian Districts (1981)**

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Female disadvantage in child survival (FD)</th>
<th>Under-five mortality rate, male and female combined (Q5)</th>
<th>Total fertility rate (TFR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.86†</td>
<td>205.82†</td>
<td>6.594†</td>
</tr>
<tr>
<td></td>
<td>(3.00)†</td>
<td>(14.37)†</td>
<td>(23.10)†</td>
</tr>
<tr>
<td>Female labour-force participation (proportion of 'main workers' in the female population)</td>
<td>-0.02†</td>
<td>0.44†</td>
<td>-0.017†</td>
</tr>
<tr>
<td></td>
<td>(-3.85)†</td>
<td>(1.82)†</td>
<td>(-3.57)†</td>
</tr>
<tr>
<td>Female literacy rate (proportion of literate women in the female population)</td>
<td>-0.04†</td>
<td>-0.87†</td>
<td>-0.031†</td>
</tr>
<tr>
<td></td>
<td>(-4.46)†</td>
<td>(-2.45)†</td>
<td>(-4.28)†</td>
</tr>
<tr>
<td>Male literacy rate (proportion of literate men in the male population)</td>
<td>0.015†</td>
<td>-0.49†</td>
<td>-0.005†</td>
</tr>
<tr>
<td></td>
<td>(1.97)†</td>
<td>(-1.40)†</td>
<td>(-0.70)†</td>
</tr>
<tr>
<td>Level of urbanization (proportion of the population living in urban areas)</td>
<td>0.005†</td>
<td>-0.31†</td>
<td>-0.0004</td>
</tr>
<tr>
<td></td>
<td>(1.73)†</td>
<td>(-2.40)†</td>
<td>(-1.15)†</td>
</tr>
<tr>
<td>Availability of medical facilities (proportion of villages with some medical facilities)</td>
<td>0.005†</td>
<td>-0.25†</td>
<td>-0.002†</td>
</tr>
<tr>
<td></td>
<td>(1.84)†</td>
<td>(-2.23)†</td>
<td>(-1.04)†</td>
</tr>
<tr>
<td>Level of rural poverty ('Sen index')</td>
<td>-0.02†</td>
<td>0.54†</td>
<td>0.007†</td>
</tr>
<tr>
<td></td>
<td>(-3.13)†</td>
<td>(1.76)†</td>
<td>(1.14)†</td>
</tr>
<tr>
<td>Scheduled castes (proportion of scheduled-caste persons in the population)</td>
<td>-0.01†</td>
<td>0.55†</td>
<td>-0.007†</td>
</tr>
<tr>
<td></td>
<td>(-1.13)†</td>
<td>(1.89)†</td>
<td>(-1.23)†</td>
</tr>
<tr>
<td>Scheduled tribes (proportion of scheduled-tribe persons in the population)</td>
<td>-0.01†</td>
<td>-0.60†</td>
<td>-0.011†</td>
</tr>
<tr>
<td></td>
<td>(-3.96)†</td>
<td>(-3.57)†</td>
<td>(-3.40)†</td>
</tr>
<tr>
<td>Dummy variables for different regions†</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South</td>
<td>-0.82†</td>
<td>-41.50†</td>
<td>-0.548†</td>
</tr>
<tr>
<td></td>
<td>(-4.91)†</td>
<td>(-3.85)†</td>
<td>(2.60)†</td>
</tr>
<tr>
<td>East</td>
<td>0.154†</td>
<td>-38.08†</td>
<td>-0.254†</td>
</tr>
<tr>
<td></td>
<td>(0.81)†</td>
<td>(-2.91)†</td>
<td>(-0.99)†</td>
</tr>
<tr>
<td>West</td>
<td>-0.15†</td>
<td>-12.35†</td>
<td>-0.379†</td>
</tr>
<tr>
<td></td>
<td>(-0.87)†</td>
<td>(-1.32)†</td>
<td>(-2.06)†</td>
</tr>
</tbody>
</table>
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Notes. The different regions are defined as follows: South = Andhra Pradesh, Karnataka, Kerala, and Tamil Nadu; East = Bihar, Orissa, and West Bengal; West = Gujarat and Maharashtra. The 'control region', for which no dummy variable is included, consists of the northern and central states of Haryana, Madhya Pradesh, Punjab, Rajasthan, and Uttar Pradesh.

* Significant at 5% level (asymptotic $t$-ratios in brackets).


Explanatory Note. The observations on which these regressions are based consist of 296 districts for which the relevant data are available. All the variables relate to 1981, and are based on the 1981 census, except for the 'poverty' indicator. The poverty indicator used for each district is the Sen index of rural poverty in 1972–3 for the National Sample Survey 'region' in which the district in question is situated (the 296 districts are located in 51 different NSS regions). The regressions are based on maximum-likelihood estimation, in a model which takes into account spatial correlation in the error terms.

These regressions can be interpreted as the 'reduced form' of a system of simultaneous equations which determines three endogenous variables: the total fertility rate (TFR), the level of child mortality for both sexes combined ($Q_5$), and the extent of female disadvantage in child survival ($FD$), as measured by the proportionate difference between female and male child mortality (or, more precisely, by $FD = (Q_{5f} - Q_{5m})/Q_{5m}$, where $Q_{5f}$ and $Q_{5m}$ are the levels of female and male child mortality, respectively). For further details on definitions, sources, estimation, diagnostics, and related issues, and a detailed discussion of the results, see Murthi, Guio, and Dréze (1995).

It seems to work through variables that are directly related to women's agency, such as female literacy and female labour-force participation.

The analysis also includes dummy variables for different regions, and it turns out that at least some of these regional dummies (particularly the 'South India' dummy) are statistically significant even after the other variables are included. In other words, the sharp contrasts that are observed between different regions of India, in terms of the relative survival chances of male and female children, are only partly explained by differences in female literacy, female labour-force participation, and other variables included in this analysis. This suggests that other variables, which may be hard to quantify, also have an important influence. Women's property rights, cultural or ideological

\footnote{There is also some evidence, from the same study, of high fertility rates being associated with low survival chances of female children \textit{i.e.} fewer male children. This is consistent with the fact that the survival disadvantages of female children progressively worsen as we consider children of higher 'parity', that is, the second girl in a family tends to do worse than the first, and so on. On this, see particularly Das Gupta's (1987) pioneering work on rural Punjab; also M.E. Khan et al. (1989) on rural Uttar Pradesh.}
influences, and some aspects of the kinship system (e.g. the rules of exogamy and patrilocality) are plausible examples of such variables.\footnote{On these different influences, see the studies cited in Drèze and Sen (1989), D.B. Gupta et al. (1993), and Dasgupta (1993); also Das Gupta (1990, 1994b), Alaka Basu (1992), Sunitha Kishor (1993), Bina Agarwal (1994), and Satish Agrawal (1994, 1995), among other recent contributions. The persistence of regional influences on relative survival chances, even after controlling for a wide range of district characteristics on which quantitative data are available, has been noted earlier by Kishor (1993).}

A similar analysis can be used to examine the effects of different variables on the level of under-five mortality for males and females combined. We have already noted that higher female labour-force participation improves the relative survival chances of girls \textit{vis-à-vis} boys. But this does not tell us how female labour-force participation affects the absolute levels of under-five mortality. It is, in fact, difficult to predict whether the effect of higher female labour-force participation on child survival is positive or negative.\footnote{The variable used to measure female labour-force participation is the ratio of female 'main workers' (women engaged in 'economically productive work' for at least 183 days in the year) to the total female population. The instructions to census investigators make it clear that unpaid 'household duties' are not to be counted as economically productive work (Government of India, 1981, pp. 106–7). The census definition of 'economically productive work' is questionable, but it serves our purpose, since we are interested in the relationship between child survival and women's independent income-earning opportunities (rather than their economic contribution generally—whether or not rewarded).} There are at least two important effects to consider, working in opposite directions. First, as was discussed earlier, involvement in gainful employment has many positive effects on a woman's agency roles, which often include child-care. Second, the 'double burden' of household work and outside employment can impair women's ability to ensure the good health of their children, if only by reducing the time available for child-care activities (since men typically show great reluctance to share the domestic chores).\footnote{For useful empirical analyses of this 'maternal dilemma' in the Indian context, see Alaka Basu (1992) and Gillespie and McNeill (1992). On the related issue of the relationship between maternal labour-force participation and child nutrition, see Leslie (1988), Leslie and Paolillo (1989), and the literature cited there.} In the case of girls, a third consideration is that higher levels of female labour-force participation in the society may enhance the importance attached to the survival of a female child. The net result of these different effects is a matter of empirical investigation. The analysis of district-level data summarized in Table 7.3 (second column) suggests a positive association between female
bour-force participation and under-five mortality, but this association is not statistically significant. 48

Female literacy, on the other hand, is unambiguously found to have a negative and statistically significant impact on under-five mortality, even after controlling for male literacy. This is consistent with growing evidence of a close relationship between female literacy and child survival in many countries, including India. 49 Further, the authors find that female literacy has a larger effect on female under-five mortality than on male under-five mortality; this is why the ratio of female to male mortality is lower at higher levels of female literacy, even though mortality rates fall for both male and female children as female literacy increases.

It is worth adding that, in quantitative terms, the effect of female literacy on child mortality is quite large. This point is illustrated in Table 7.4, which shows how the predicted values of the 'dependent variables' in this analysis (the extent of female disadvantage in child survival, the level of under-five mortality, and the total fertility rate) respond to changes in female literacy when the other exogenous variables are kept at their mean value, and similarly with male literacy and poverty. For instance, keeping other variables constant, an increase in the crude female literacy rate from, say, 22 per cent (the actual 1981 figure) to 75 per cent reduces the predicted value of under-five mortality for males and females combined from 156 per thousand (again, the actual 1981 figure) to 110 per thousand. The powerful effect of female literacy contrasts with the comparatively ineffective roles of, say, male literacy or general poverty reduction as instruments of child mortality reduction. An increase in male literacy over the same range (from 22 to 75 per cent) only reduces under-five mortality from 167 per thousand to 141 per thousand. And a 50 per cent

48 As discussed in Murthi, Guio, and Drèze (1995), there is a real possibility of this association being, in fact, negative after controlling more carefully for the economic and social disadvantages that often motivate Indian women to seek paid employment. That possibility is consistent with international evidence on the relationship between female employment and child nutrition. Based on a review of 50 relevant studies, for instance, Oomne Leslie (1988) concludes that 'overall there is little evidence of a negative effect of maternal employment on child nutrition' (p. 1341).

Table 7.4. Effects of Selected Independent Variables (Female Literacy, Male Literacy and Poverty) on Child Mortality (Q5), Female Disadvantage (FD) and Fertility (TFR)

<table>
<thead>
<tr>
<th>Assumed level of the independent variable (%)</th>
<th>Predicted values of Q5, FD and TFR when the female literacy rate takes the value indicated in the first column</th>
<th>Predicted values of Q5, FD and TFR when the male literacy rate takes the value indicated in the first column</th>
<th>Predicted values of Q5, FD and TFR when the proportion of the population below the poverty line takes the value indicated in the first column^a</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q5</td>
<td>FD</td>
<td>TFR</td>
</tr>
<tr>
<td>10</td>
<td>166.4</td>
<td>10.7</td>
<td>5.38</td>
</tr>
<tr>
<td>20</td>
<td>157.7</td>
<td>5.9</td>
<td>5.07</td>
</tr>
<tr>
<td>30</td>
<td>149.0</td>
<td>1.1</td>
<td>4.76</td>
</tr>
<tr>
<td>40</td>
<td>140.2</td>
<td>-3.3</td>
<td>4.45</td>
</tr>
<tr>
<td>50</td>
<td>131.5</td>
<td>-7.1</td>
<td>4.15</td>
</tr>
<tr>
<td>60</td>
<td>122.8</td>
<td>-10.3</td>
<td>3.84</td>
</tr>
<tr>
<td>70</td>
<td>114.0</td>
<td>-12.8</td>
<td>3.53</td>
</tr>
<tr>
<td>80</td>
<td>105.3</td>
<td>-14.8</td>
<td>3.22</td>
</tr>
</tbody>
</table>

Note. ^a For convenience of interpretation, the 'Sen index' of poverty has been replaced, in this table, by the 'head-count ratio' (i.e. the proportion of the population below the poverty line). The figures presented in the last three columns are based on the same regressions as in Table 7.3, with the Sen index replaced by the head-count ratio.

Source. Drèze, Guio, and Murthi (1995), based on the regressions presented in Table 7.3. The variables Q5, FD, and TFR are defined as in that table.
reduction in the incidence of poverty (from the actual 1981 level) only reduces the predicted value of under-five mortality from 156 per thousand to 153 per thousand.

Here again, the message seems to be that some variables relating to women's agency (in this case, female literacy) often play a much more important role in promoting social well-being (in particular, child survival) than variables relating to the general level of opulence in the society. These findings have important practical implications, given that both types of variables can be influenced through public action, but require very different forms of intervention.

7.4. Fertility and Women's Emancipation

It is not surprising that the agency of women is also particularly important for achievements in population policy. The serious adverse effects of high birth rates include their impact on the lives women can lead, and the drudgery of continuous child bearing and rearing, which is routinely imposed on many Asian and African women. There is, as a result, a close connection between women's well-being and women's agency in bringing about a change in the fertility pattern. Women in India have to face the lack of freedom to do other things that goes with a high frequency of births, not to mention the dangers of repeated pregnancy and high maternal mortality. It is, thus, understandable that reductions in birth rates have often been associated with enhancement of women's status and voice.

These connections are indeed reflected in inter-district variations of the total fertility rate, as Tables 7.3 and 7.4 indicate. In fact, among all the variables included in the analysis, other than regional dummies and ethnic composition, the only ones that have a statistically significant effect on fertility are female literacy and female labour-force participation. Once again, the importance of women's agency emerges forcefully from this analysis, especially in comparison with the weaker effects of variables relating to general economic progress.

The link between female literacy and fertility is particularly clear. This connection has been widely observed in other countries, and it is not surprising that it should emerge in India too.50 The un-

willingness of educated women to be shackled to continuous child-rearing clearly plays a role in bringing about this change. Education also makes the horizon of vision wider, and, at a more mundane level, helps to disseminate the knowledge of family planning.

As we discussed in chapter 4, Kerala’s particular experience of fertility reduction based on women’s agency is quite remarkable, and has extremely important lessons for the rest of India. While the total fertility rate for India as a whole is still as high as 3.7, that rate in Kerala has now fallen below the ‘replacement level’ of 2.1 to 1.8. Kerala’s high level of female education has been particularly influential in bringing about this decline in the birth rate.51

There is also some demographic evidence to indicate that birth rates tend to go down following the decline of death rates. This is partly because the need for having many children to ensure some survivors goes down with lower mortality rates, but also because of the complementarity between the respective means of birth control and death control (giving people access to contraception can be effectively combined with delivery of medical attention and health care). In Kerala, the sharp reduction of death rates has been followed by a rapid decline of fertility, with the birth rate falling from 44 per thousand in 1951–61 to 18 by 1991. Since female agency and literacy are important in the reduction of mortality rates (as was discussed in the last section), this is another—more indirect—route through which women’s agency, in general, and female literacy, in particular, can reduce birth rates (in addition to the direct impacts mentioned earlier).

Recently, there has been a good deal of discussion of the imperative need to reduce birth rates in the world, and those in India in particular. China’s achievement in cutting down birth rates over a short period through rather draconian measures has suggested to many the need for India to emulate China in this respect. As was discussed in chapter 4, however, the coercive methods do involve many social costs, including the direct one of the loss of the effective freedom of people—in particular, women—to decide themselves on matters that are clearly rather personal. That aspect of the problem is often dismissed, especially in the West, on the grounds that cultural differences between


Asia and the West make such policies acceptable in the Third World in a way they would not be in the West. Cultural relativism is a tricky terrain, and while it is easy enough to refer to despotic Oriental traditions, that line of reasoning would be no more convincing than making judgements on what to do in the Western societies today on the basis of the history of Spanish inquisitions or Nazi concentration camps.

It is not clear how the acceptability of coercion can be tested except through democratic confrontation. While that testing has not occurred in China, it was indeed attempted in India during the Emergency period in the seventies when compulsory birth control was tried by Mrs Gandhi’s government, along with suspending various legal rights and civil liberties. The policy of coercion in general—including that in birth control—was overwhelmingly defeated in the general elections that followed. Furthermore, family-planning experts have noted how voluntary birth-control programmes received a severe set-back from that brief programme of compulsory sterilization, as people had become deeply suspicious of the entire movement. The coercive measures of the Emergency period, in fact, aside from having little immediate impact on fertility rates, were followed by a long period of stagnation in the birth rate, which only ended in 1985.9

There is evidence that some forms of compulsion or forceful pressure to accept birth control (especially sterilization) continue to be used in some Indian states, particularly in the north, where fertility rates tend to be high. Even when coercion is not part of official policy, the government’s firm insistence on ‘meeting the family-planning targets’ often leads administrators and health-care personnel at different levels to resort to all kinds of pressure tactics that come close to compulsion.10 Examples of such tactics include verbal threats, making sterilization a condition of eligibility for anti-poverty programmes,

9 See, for example, Hardin (1993).
10 See Bose (1991a), pp. 67–8. The Emergency period also caused a substantial decline in medical attendance at birth, and a large increase in neo-natal mortality rates, and it took five years for the pre-Emergency levels of these variables to be restored; on this, see Tuladhar and Sarma (1993).
depriving mothers of more than two children from maternity benefits, reserving certain kinds of health care services to persons who have been sterilized, and forbidding persons who have more than two children from contesting panchayat elections. The long-run consequences of these practices can be quite disastrous both for health care and for the consensual emergence of social norms favouring smaller families.

What also has to be borne in mind is the fact, discussed in chapter 4, that compulsion has not produced a lower birth rate in China compared with what Kerala has already achieved entirely through voluntary channels, relying on the educated agency of women. In fact, it is not at all clear (for reasons discussed earlier) exactly how much of extra reduction in birth rate China has been able to achieve by resorting to coercive methods. What must be taken into account in trying to assess the contribution of compulsion is that China has had many social and economic attainments that are favourable to fertility reduction, including expansion of education in general and female education in particular, augmentation of health care, enhancement of employment opportunities for women, and, recently, rapid economic development. These factors would themselves have reduced the birth rates (well below that of the Indian average, for example). While China seems to get too much credit for its authoritarian measures, it gets far too little credit for other—supportive—policies that have helped to cut down the birth rate.

Kerala's low birth rate—lower than China's—also suggests that these supportive influences may be effective enough to render compulsion quite redundant, even if it were acceptable otherwise. As has been noted before, Kerala not only has a much higher level of female literacy (86 per cent) than India as a whole (39 per cent), it is also well ahead of China's female literacy rate (68 per cent). The fact that the ranking of female literacy is exactly the same as that

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55 It is quite extraordinary that the last measure (recently introduced in Rajasthan and Haryana) has been widely praised, even though it involves a strong violation not only of personal liberty but also of basic democratic values. Even the government's draft National Population Policy, despite placing emphasis on the need to reject coercive methods, gives full support to this measure as one means of meeting the overriding goal of bringing the total fertility rate down to 2.1 by the year 2010 (Government of India, 1994c, p. 40). At the time of writing, there is a strong possibility of the proposed measure being adopted at the all-India level, and extended to diverse forms of political participation other than the contesting of panchayat elections.

56 See Table 4.2 in chapter 4.
of birth rates is in line with other evidence for the close connection between the two. It might also be mentioned here, in passing, that the increasing popularity of sex-selective abortion of female foetuses in China, as well as parts of India, contrasts sharply with the absence of such a practice in Kerala. While the solution of this problem has been sought in India through banning sex-selective abortion—a ban that may well be evaded easily enough—the real resolution of the problem must lie ultimately in a shift in family preference away from the rejection of female children.

As we saw in chapter 4, Kerala is not alone in having achieved a rapid reduction of the birth rate without compulsion. A similar—if not equally rapid—success has also occurred in Tamil Nadu, where the total fertility rate (2.2 in 1991) is now very close to the replacement level. A significant acceleration of fertility decline has also occurred during the eighties in a number of other states.57 Further, what is rather striking is that the states where fertility decline remains extremely slow (including Uttar Pradesh, Bihar, Rajasthan, and Madhya Pradesh) are precisely those where coercive methods, by all available accounts, have been most extensively used.

These diverse experiences reinforce the general arguments presented earlier in favour of a collaborative approach to fertility reduction, based on due recognition of the agency of women in bringing down fertility and mortality rates. An unequivocal rejection of all coercive and heavy-handed methods (including those that are currently being used) is essential from many points of view, including those of fertility reduction, mortality reduction, women’s well-being, and elementary freedom.58

57 See Visaria and Visaria (1994).
58 Aside from the imperative need to reject coercive methods, it is also important to promote the quality and diversity of non-coercive means of family planning. As things stand, family planning in India is overwhelmingly dominated by female sterilization, even in the southern states. To illustrate, while nearly 40 per cent of currently-married women aged 13–49 in South India are sterilized, only 14 per cent of women in that group have ever used a non-terminal, modern contraception method. Even the knowledge of modern methods of family planning other than sterilization is extraordinarily limited in India. Only half of rural married women aged 13–49, for instance, seem to know what a condom or IUD is. On these matters, see International Institute for Population Sciences (1994), and also Table A.3 in the Statistical Appendix of this book.
7.5. Widowhood and Gender Relations

One consequence of the low participation of Indian women in public life and political activity is that many social issues relating to women and gender relations receive far too little attention. In recent years, there has been improved awareness of some specific aspects of gender inequality and female deprivation, such as the problem of low female–male ratios and the anti-female bias in child survival. But many other issues continue to get low social recognition; they apparently haven’t yet caught the attention of the male-dominated society. Examples include the problem of reproductive health and maternal mortality (severely neglected in health research and policy), the widespread violation of women’s legal property rights (aside from the persistence of continued anti-female bias in the law itself), and the general acceptance of endemic violence against women.

Another striking example of the low social visibility of some important aspects of the condition of women concerns the well-being of widows.\footnote{On this, see Drèze (1990c), Chen and Drèze (1994, 1995) Chen (forthcoming, 4), and the literature cited there. This section draws extensively on these studies. It should be mentioned that, while widows represent the vast majority of single adult women in India, other single women (e.g. those who are divorced or separated) also tend to experience major social disadvantages. For some relevant studies, see Krishnakumari (1987) and Dandavate et al. (1989).} There are about 33 million widows in India, representing 8 per cent of the female population—a proportion similar to that of agricultural labourers in the male population.\footnote{See Government of India (1993b), p. 71, and Nanda (1992), pp. 115, 155. The reference year is 1991.} Further, there is a good deal of evidence of the deprived condition of many widows in India. A recent demographic study, for instance, concludes that mortality rates are, on average, 86 per cent higher among elderly widows than among married women of the same age.\footnote{See Mari Bhat (1994). These results corroborate earlier findings for Bangladesh (see Rahman et al., 1992).} Similarly, economic surveys indicate that the loss of one’s husband often leads to a sharp decline of household income. Anthropological studies have also highlighted the fact that many widows suffer from social marginalization and psychological hardship, in addition to being particularly vulnerable to poverty.

It should be added that the prospect of widowhood reduces the quality of life of most Indian women, even if only a minority of
em are actually widowed at any particular point in time. The portion of widows in the female population rises sharply with age, reaching 63 per cent among women aged 60 and above, and 80 per cent among women aged 70 and above. In other words, an Indian woman who survives to old age is most likely to become a widow. The prospect of losing their husband at some stage not only affects the lives of Indian women even before that event, but there is a close relationship between widowhood, old-age security, and fertility decisions in the early stages of married life.

In spite of their magnitude and significance, the deprivations of widows rarely feature in public debates, in the media, or even in social science research, except when—in a small number of cases—they take on a sensational form, such as sati. This fact relates to the general point, made in section 5.1, that endemic but quiet deprivations are often much harder to bring to public attention than sensational events such as a famine or natural disaster. A similar point can be made in relation to other aspects of women’s deprivation. The frequent media focus on rape, for instance, contrasts with the quiet acceptance of widespread domestic violence against women.

If widowhood is such a neglected social issue, it is partly because the experience of losing one’s spouse is, overwhelmingly, a woman’s experience. Only 2.5 per cent of all Indian men are widowed, compared with 8.1 per cent of women. Further, the consequences of losing one’s spouse are very different for men and women. A widower not only has greater freedom to remarry than his female counterpart, he also has more extensive property rights, wider opportunities for remunerative employment, and a more authoritative claim on economic support from his children. Had the living conditions of widowers been as precarious as those of widows, it is likely that widowed persons would have attracted far more attention.

The circumstances of widows vary a great deal between different regions, communities, classes, and age groups. Nevertheless, it is possible to identify some basic factors of disadvantage and insecurity experienced by many Indian widows. The following considerations emerge with particular force from recent surveys carried out in north India.

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63 For the evidence, and further discussion, see Drèze (1990a) and Chen and Drèze (1994, 1995).
First, a strong tradition of patrilineal ownership, which modern legislation has only begun to challenge, makes it hard for many widows to defend their legal inheritance rights. Formally, according to contemporary Indian law, a widow has an unequivocal right to a share of her husband’s property, including his land.\textsuperscript{64} This is in addition to the legal rights she has—irrespective of her marital status—to a share of her parents’ property. Field studies, however, indicate that these legal rights are comprehensively violated, and that a large majority of widows have very limited and insecure property rights. This deprivation of property rights not only represents the loss of a potential source of independent income, but also diminishes the bargaining power of a widow \textit{vis-à-vis} her in-laws, sons, and other potential supporters.

Second, the norms of patrilocality are an important cause of social isolation. In north India, widows are expected to remain in their husband’s village, and most of them do so. At the same time, they are unlikely to receive much support from their in-laws. On the contrary, the relationship between a widow and her in-laws is typically quite tense (property rights being one of the most common sources of tension). Widows are thus denied both the freedom to leave their husband’s village, and the support they need to live there happily.

Third, widows have a limited freedom to remarry. In some communities, particularly in north-west India, ascriptive leviratic unions (e.g. between a widow and her brother-in-law) remain quite common. Elsewhere, the standard pattern is that most childless widows remarry, but only a small proportion of widowed mothers do so.

Fourth, the gender division of labour severely restricts employment opportunities for widows. Census data indicate that age-specific labour-force participation rates are a little higher for widows than for married women. But the low involvement of north Indian women in gainful employment—irrespective of marital status—is the basic problem. Further, because widows tend to be concentrated in the older age groups, their average labour-force participation rate is lower than that of married women.

Fifth, most widows can expect little economic support from their

\textsuperscript{64} According to the Hindu Succession Act of 1956, for instance, a widow is entitled to the same share of her husband’s land as other ‘Class 1’ heirs (these also include the deceased person’s children and widowed mother, if alive). On the general issue of women’s land rights in India, see Bina Agarwal (1988, 1994).
family or community, except possibly in the form of co-residence with one of their adult sons. In particular, the notion that the joint family provides economic security to widows in rural India is little more than a myth. Most surveys find that co-residence of a widow with her in-laws is rare in north India (except in cases of leviratic unions), and that the relationship between a widow and her deceased husband’s family is often far from harmonious. An overwhelming majority of widows live on their own, with their unmarried children, or as a dependent in the household of one of their adult sons.

As these observations illustrate, there are close links between the position of widows in society and a whole range of patriarchal institutions such as patrilineal inheritance, patrilocal residence, remarriage norms, and the gender division of labour. In that sense, the cause of widows must be seen as an integral part of the larger battle against gender inequalities.

Taking effective action (e.g. aimed at expanding women’s land rights) requires a combination of public pressure and state response. The first task is to bring the issue closer to the centre of public attention. The agency of the women’s movement is central to this challenge, and so is that of widows themselves.65

7.6. Gender Equality and Social Progress

Earlier in this chapter, we have had several occasions to note the role of women’s agency in social progress. In particular, we have discussed the connections between women’s agency and child survival, and also between women’s agency and fertility, based on an analysis of inter-district variations in under-five mortality. These connections also show up in more aggregative comparisons of different regions in India. In fact, it is rather striking that the demographically ‘backward’ regions of India (where mortality, and also fertility, are particularly

65 Many Indian widows—and other single women—have shown that they are not just victims of the existing social order, but also spirited agents of change; see e.g. Bhatia (forthcoming), Chen (forthcoming, b), and Omvedt (1989a). The last author, in a very enlightening account of collective action by single women in Sangli district (Maharashtra), emphasizes ‘the militancy of these women, who tend to provide the vanguard of toiling women’s struggles everywhere’ (p. 911). It is, in fact, not surprising that single women have often been found at the forefront of social and political movements. Indeed, freedom from conjugal control and the need to earn an independent living often lead single women to adopt a more autonomous and assertive lifestyle than their married sisters.
high) tend to be those where gender relations are highly unequal. This applies particularly to the large north Indian states (Uttar Pradesh, Bihar, Madhya Pradesh, and Rajasthan). Even in Punjab and Haryana, mortality and fertility rates are not much lower than the all-India averages (in fact, the fertility rate in Haryana is higher than the Indian average), despite very high levels of per-capita income in comparison with other Indian states, and this may have something to do with the comprehensive subordination of women in these two states.

Conversely, states which have experienced rapid progress in improving health and reducing mortality and fertility are often those where women play an important social or economic role. Two striking examples are Kerala and Manipur. The empowerment of women has had a different basis in each case: the early promotion of female literacy (and, perhaps, the influence of matrilineal communities) has played a crucial role in Kerala, while other sources of female emancipation (including the economic roles of women) appear to have been more central in the case of Manipur. But the common feature is that, in both cases, women have ended up with a far more equal and active role in the society than their sisters in, say, the large north Indian states. And, correspondingly, there has been far more progress in the fields of health and mortality reduction, not just in terms of reducing the female disadvantage in survival, but also in improving survival chances for everyone.

There is a sense in which this connection is quite obvious. Given the gender division of labour that prevails in most of India, nutrition, child health, and related matters typically depend primarily on women’s decisions and actions. It is hardly surprising that social achievements in this domain are more impressive where women are better educated, more resourceful, more valued, more influential, and generally more equal agents within the household and in society.

The importance of women’s agency, of course, is not confined to the field of demographic change. When the creative abilities and personal contributions of one half of the society are stifled by constant subjugation, in addition to the drudgery of constant domestic work and child-bearing, social opportunities are suppressed in a wide range of domains. Even the level of economic production is likely to

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64 On Kerala, see the case study by V.K. Ramachandran (1996) in the companion volume, and the literature cited there. The case of Manipur, where birth and death rates are comparable to those of Kerala, is examined in A.K. Shiva Kumar (1992, 1994).
be higher, other things being equal, in a society where women are able to engage in a diverse range of activities compared with that in a society where their life is confined to domestic work. The realms of politics and social reform can also be considerably enriched by the active participation of women.

This general connection, too, emerges from broad inter-regional comparisons. Kerala not only has much lower levels of mortality and fertility than, say, Uttar Pradesh or Rajasthan, it has also made far more progress in removing traditional social inequalities, in using public services as a basis for enhancing the quality of life, and in evolving a vigorous civil society. By comparison, the large north Indian states are notorious for the persistence of feudal agrarian relations, for the continued oppression of disadvantaged castes, for chaotic public services, and for the comprehensive corruption of political institutions. Even in comparison with south India as a whole (not just Kerala), these north Indian states present a picture of resilient social backwardness. If one were to look for the deep historical roots of these inter-regional contrasts in the nature of society and politics, the position of women in society is certainly one of the influences that would command attention.

What is also striking is how the gender factor can overpower many other influences that often receive more attention, such as religious identity and national boundaries. We have already seen that the extent of anti-female bias in child survival does not vary much, if at all, between Hindus and Muslims in north India. Nor does it vary much between north India and Pakistan. The entire northern region is one where the agency of women has been comprehensively repressed, among Hindus as much as among Muslims or Sikhs, leading not only to a severe female disadvantage in child survival but also to the persistence of very high levels of mortality and fertility. Similarly, it is remarkable that Kerala and Sri Lanka have so much in common in terms of social achievements, cutting across the religious, cultural, and national boundaries. Here again, the common heritage of less unequal gender relations (which includes less patriarchal kinship systems, less male-dominated property rights, and a greater prominence of women in influential economic, social, and political activities) appears to be a causal factor of major importance.

By way of conclusion, we would like to focus on four elementary points. First, the persistence of extraordinarily high levels of gender inequality and female deprivation are among India’s most serious
social failures. Few other regions in the world have achieved so little in promoting gender justice.

Second, gender inequality does not decline automatically with the process of economic growth. In fact, we have seen that some important forces operate in the reverse direction (e.g., the tendency of upwardly-mobile castes to restrict the lifestyle of women in order to achieve a higher social status). Even where economic growth has a positive influence on the status of women, e.g., by expanding female employment opportunities or literacy rates, this influence tends to be slow and indirect. It is important to aim at more radical and rapid social change based on public action.

Third, gender inequality is not only a social failure in itself; it also leads to other social failures. We have illustrated this link in some detail with particular reference to child mortality and general fertility, but have also pointed to similar links that apply in other fields where the agency of women is important.

Finally, the agency of women as a force for change is one of the most neglected aspects of the development literature, and this neglect applies as forcefully—or more—in India as anywhere else. There has, happily, been a growing awareness in recent years of the disadvantaged predicament of women in Indian society. That understanding of the victimization of women has to be supplemented by a recognition of women as agents of social change. It is not merely that more justice must be received by women, but also that social justice can be achieved only through the active agency of women. The suppression of women from participation in social, political, and economic life hurts the people as a whole, not just women. Those regions in India, such as Kerala, which have moved in the direction of more gender equality have received more for all from that move. The emancipation of women is an integral part of social progress, not just a ‘women’s issue’.
8.1 What is the Cage?

A tiger in a cage adorned the cover of the informative survey of the Indian economy that The Economist published on 4 May 1991. The Indian economy was then in deep trouble, and the special report began with a crisp diagnosis: ‘The future of India looks more threatened than for many years’. The analysis put much of the blame for India’s economic predicament on its ‘ever-proliferating bureaucracy’ and its ‘licence raj’, and expressed the dialectic hope that with the election then due, ‘the new government will immediately face a fiscal crisis’ and as a consequence it ‘might—just might—start a reappraisal of the economic role of government that is so long overdue’. The events that ushered in the economic reforms after the new elections did not depart very far from that scenario.

The analogy of the caged tiger was an appropriate one in many ways (even if The Economist might have been over-kind in referring to ‘India’s boundless potential’). India does have a long history of commerce, trade, and sophisticated industrial production; even at the time of the industrial revolution, Lancashire had to resort to rather wily tactics to compete with India’s unpowered but refined cotton textile industry. It has had a labour force of talent which has shown the ability to adapt to new technical challenges given the opportunity to do so. And Indian entrepreneurs and professionals have been remarkably successful in a variety of economic operations outside India, varying from running neighbourhood grocery stores

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1 'A Survey of India', The Economist, 4 May 1991. The report was prepared by Clive Cook.