Female Demographic Disadvantage in India 1981-1991: Sex Selective Abortion, Female Infanticide and Excess Female Child Mortality

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This paper is a detailed abstract of prior work by us, titled "Female Demographic Disadvantage in India 1981-1991: Sex Selective Abortion and Female Infanticide" *Development and Change* Vol. 30 No. 3 July 1999 pp. 585-618 Special Issue on Gendered Poverty and Well-being.

All institutional and personal acknowledgements appear there. A complete list of references and citations appears in that paper. The maps printed here first appeared there. The numerical tables on which the maps are based are found in that publication, and are available on request.

A detailed summary, titled: "Baaraat rakhni hai ya lautani hai? Growing female disadvantage in birth and death in modern India" is also found in *Committee on South Asian Women Bulletin*, Vol. 10 (1-2), 1999.

Introduction

Does bias against girl children persist during development and fertility decline in India? Has prenatal sex selection spread in India as elsewhere in Asia? Does female infanticide still occur? Is child mortality risk higher for girls than boys in India? We present evidence for these questions from various sources, including 1981 and 1991 Censuses of India, academic studies, and NGO and newspaper reports.

We discuss how female birth and death trends are linked to social and economic development in India that have worsened the situation of women. We map the spread of masculine sex ratios at birth (SRB) from 1981 - 1991 in India, which indicate sex selective abortion.[1] We also map the areas with female disadvantage in sex ratios of child mortality (from birth to age 5). We can thus see whether during development in India, excess female child mortality persists and pre-natal sex selection increases.

Link between women's situation and female demographic disadvantage

North / Northwest India (Haryana, Punjab, Western UP, Rajasthan, ravine areas of Madhya Pradesh etc.) has long had the highest female death rates and lowest SRB's. Women's social and economic status is lower in this area due to the focus on wheat cultivation (where women are less involved), dowry, exogamous marriage[2] and the female seclusion. Central and South India have more gender-balanced demographic rates, and higher women's status attributed to rice-based agriculture (with a greater role for women), less female seclusion, endogamous marriage, and marriage expenses that are more equal between bride's and groom's families. Women's education levels are higher in the South than the North. Therefore, there seems to be a link between women's socio-economic status and their life chances.

Female marginalization worsens during Indian development

Although India's development profile has many positive aspects, broadly speaking, development has devalued Indian women. Since Independence there has been declining female paid employment and persistent male-female gaps in literacy and life expectancy. These trends are unintended consequences of

development policies that ignored gender issues in formulation and implementation.

First, most Indian women work in agriculture. Agrarian development, including land redistribution programs that gave ownership to the household head (usually the senior male), inheritance norms that make it difficult for daughters to enforce legal claims to their share of property, and Green Revolution[3] technology that displaced women from important paid work, adversely affected women. More than 80% of rural women work as agricultural labourers and unpaid family workers. There is consistently greater unemployment among women vs. men.

Second, non-farm opportunities have not filled the gap. Though many urban women work in new occupations such as in export processing zones, there is little for those who lack basic education and specific skills. In 1991, only 39% of females above age 7 were literate, compared to 64% of males (World Bank 1998). Parents in India prefer to invest in educating their sons rather than their daughters, for many reasons. Women therefore cannot effectively compete for the new opportunities. Women thus continue to toil in fields, factories and at home, but are often not paid for it.

Third, cultural changes in India also heighten women's devaluation. Dowry has spread nation-wide to communities and castes where it had never been the custom. Though the southern part of the subcontinent had more egalitarian marriage customs, with matrilineal[4] family forms in many Southwest coastal communities, these have also recently moved toward patrilineal and dowry systems.

Thus, development has concentrated economic productivity and social value more in the hands of men, and girls are seen as liabilities. Parents may welcome one or two daughters in a family, but additional girls are at risk of being weeded out. What are the methods used for this purpose?

Post-natal sex selection: neglect of daughters and female infanticide

Post-natal sex selection is an age-old strategy. Widespread gender inequality occurs within Indian households in the provision of food and health care; women and girl children have last priority. This neglect heightens female child mortality especially among girls with one or two elder sisters.

Female infanticide is another option, recently noted in rural UP, Bihar, and Tamil Nadu. Infanticide is carried out by unscrupulous medical practitioners, and by 'dais' (traditional birth attendants), who are coerced by the male kin of the woman giving birth, over-riding the protests of the women in the family. Lack of other occupations, poverty, fear of reprisals, and socialization to obey those in authority lead the dais to comply. Estimates suggest that in 1995, 16,32,000 female infanticides occurred in 8 districts of Bihar, and 3174 occurred in Tamil Nadu.

Rising landlessness and poverty, escalating dowry, high sex difference in wages, low female education and few economic opportunities for women are suggested reasons for female infanticide. Earlier only upper castes such as Rajputs and Brahmins practiced infanticide but it has now spread to all other rural groups, including Scheduled Tribes, Christians and Muslims. Dowry, women's exclusion from paid work and the concentration of income in the hands of men, increased female seclusion and dependence on men. Men then began to emulate upper caste customs, including female infanticide[5]. This enables them to tap into upper caste economic networks to further upward mobility.

State Government plans to tackle the problem range from a 'cradle baby' adoption scheme for unwanted girls, to economic incentives for women who only have daughters and who agree to undergo sterilization. The coercive design of the schemes, and corruption and inefficiency in their management, led to their having a very limited impact. Do some families turn to female foeticide as an option?

Prenatal sex selection in India

Abortion was legalized in India in 1971. In 1975, amniocentesis techniques for detecting foetal abnormalities were developed at the All India Institute of Medical Sciences, New Delhi, and it was soon

known that the test could reveal the sex of the foetus. Most women who took the test were more interested in the sex of the child than in possible genetic anomalies, and those who already had two or more daughters and who learnt that their expected child was female, had an abortion.

Women's groups, civil liberties groups and health movements launched a campaign against prenatal sex selection. The Central Government then passed the Prenatal Diagnostic Technique (Regulation and Prevention of Misuse) Act, 1994, which states that determining and communicating the sex of a foetus is illegal; that genetic tests can be carried out only in registered facilities; and only offered to women who meet certain medical criteria, such as being over age 35, having a family history of genetic disorders, etc. However, these acts are full of loopholes that considerably weaken them.

Despite the bans facilities still operate in many states, and sex selection may be the major use of prenatal diagnosis in India. Doctors reveal the foetus' sex by covert means and raise the test fees to compensate for the legal risk. Performing the test is extremely profitable; doctors can conduct 10 to 12 tests a day at a fee of about Rs. 1,000. Training doctors in the technique is itself a lucrative business. The exploitation is not limited to the 'modern' medical sector. In 1991 health and consumer groups in Gujarat successfully lobbied the State Government to ban "Select", a best-selling herbal pharmaceutical product that claimed to use an ancient Ayurvedic technique called "Punsavana Prayog" to ensure a male foetus.

The cost of the test (now around Rs. 1,000) is not a barrier. While many clients have some education and disposable income, landless labourers and marginal farmers also take out loans at high rates of interest for the test. The motivation is illustrated by the infamous slogan: "Better Rs. 500 today than Rs. 50,000 tomorrow". The underlying logic is that an expenditure now (on the test) will save a greater sum later (on dowry, if the foetus is a girl).

The number of facilities increased from a few in cities like Amritsar, Bombay, and Delhi in the early 1980's, to several dozen in cities and small towns in Maharashtra, UP, Punjab, and Gujarat in the early 1990's. New technologies such as ultrasound are being used for sex determination. Newspaper reports describe mobile clinics offering ultrasound detection and immediate abortion of female foetuses in small towns of Haryana. The clients included farmers from villages half-an-hour away by road. Remote districts lacking drinking water or electricity had sex determination clinics, where amniotic fluid samples were sent in ice packs to towns for testing.

Many medical practitioners feel that aborting a female is preferable to condemning an unwanted daughter to a lifetime of abuse, thus offering sex selection is a "humane" service they perform. Some economists argue that if the supply of women goes down due to sex selection, their value will rise as demand will remain high. The general public feels that if female births are selectively averted that is a price worth paying for "population control".

Making even approximate count of the numbers of such procedures occurring in India is difficult. Estimates from various sources range between 78,000 female foetuses aborted after sex determination tests in 1978-82, to 3.6 lakh female foetuses aborted between 1993-94.

Pre-natal or post-natal sex selection? Or both?

We map the spread of sex-selective abortion, and of excess female child mortality in India between 1981-1991. Sex selective abortion is shown by the occurrence of abnormally masculine SRB's (those greater than or equal to 107 males per 100 females, since normal SRB's are 104-106 males per 100 females). Excess female child mortality is shown by a ratio of male to female child mortality that is less than 1 (since boys normally have higher death rates than girls, or at least equal rates).

Figure 1 shows that abnormally masculine sex ratios at birth (SRB) spread in India 1981-1991. In 1981, most Indian states' SRB were 'normal' (104-106 males per 100 females). Borderline masculine SRB were seen in urban areas of Northwest states. In 1991, however, urban and rural North / Northwest states, and urban parts of some Central and Western states, have very masculine SRB's. The tables on which these maps are based (available on request) show SRB's as high as 118 for urban Punjab. The

1991 all-India urban SRB reached 108 vs. 104 in 1981. By 1991, we calculate a deficit of about 2% of urban female births (approximately 74.6 thousand fewer girls born) mainly in the Northwest.

Figure 1

Sex ratios of child mortality (Figure 2) show that despite overall mortality decline, female mortality disadvantage persisted 1981 - 1991. In 1981, most North / Northwest urban and rural areas had excess female child mortality. In 1991, all these areas still show female mortality disadvantage (with some small exceptions). Disturbingly, some Southern states that had normal 1981 mortality sex ratios have 1991 ratios adverse to females. Thus, the phenomenon of excess female child mortality not only persisted over the decade, but also actually spread across more of India, even to the hitherto more egalitarian South.

Figure 2

Overall child mortality declined considerably from about 152 per 1000 in 1981, to 96 per 1000 in 1991. However, breaking the figures down by sex reveals that mortality fell more for boys than girls, and females still have higher mortality than males. The decade 1981-91 also witnessed a moderate fertility decline in the country as a whole (20%), from an average number of children = 4.5 in 1982 to 3.5 in 1994. The declines were more dramatic in the South, moderate in the East, Gujarat and Punjab. Other Central and North/Northwest states recorded more modest declines.

Conclusion

The demographic trend 1981-91 is of declining fertility and mortality, worsening female mortality disadvantage in much of India, and increasingly masculine SRB's mainly in the North / Northwest. Excess female child mortality coexists with prenatal sex selection in North / Northwest India to create a 'double jeopardy' for daughters there. Sex selection has not diminished with declining fertility and mortality. Cultural and economic development has devalued women and leads to a continuing preference for sons. Despite gains in education, life span, and income for some women, much of Indian society still considers daughters a liability. Female foeticide, infanticide, and neglect of daughters have spread where they were hitherto unknown. The co-existence of all these tactics makes the distinction between pre- and post-natal sex selection pointless. The bias against girls is entrenched and the choice of method depends on convenience. Some even term the persistent bias against girls as 'gender-cleansing' (Harriss-White, 1998), or term girls the 'endangered sex' (Miller, 1981).

The adverse sex ratio has not increase the value of women by decreasing the supply. India's population sex ratio worsened from 972 females per 1000 males in 1901 to 929 per 1000 in 1991. At the same time, women's status steadily eroded despite gains in some sectors by some groups. A 'shortage' of women does not lead to their increased value, but to greater restrictions and control placed over them. In China, practices such as kidnapping and sale of women, organized import of wives from other countries, etc., have been noted as a result of the shortage of women there. The same might be predicted for India.

What can be done about these trends? First, development statistics must be broken down by relevant sub-categories, particularly sex, to illustrate that seeming progress masks growing inequalities. Second, the planning process must specifically tackle inequalities, especially that of gender, in an appropriate manner from the planning stage.

Third, women's education as a policy prescription should be carefully thought out. While education is a basic human right and female education should be actively promoted, focusing on women's schooling alone will only partially address societal problems. Adequate economic opportunities for women and comprehensive development programs must accompany schooling. Men should be educated to value and support independent women. The content of education should promote social equality in every way.

Increasing public awareness of these issues, and lobbying that policies are planned and implemented in a

gender-sensitive manner, would help counter the trend. To the extent feasible, tactics such as social disapproval could be practiced against families who are known to have restricted the education or denied the inheritance of their daughters, demanded or paid exorbitant dowries, or aborted a girl. These tactics may arguably be more effective than taking legal or police action.

In 1992, the Indian government liberalized the economy, opening up the country to international market competition. Preliminary reports suggest that while the middle class as a group has benefited from this development, disparities between the rich and the poor have widened, and women specifically sustained further economic shocks. Also, in January 1996, the Indian Government announced a ban on abortion of healthy female foetuses identified during permissible genetic tests, with fines and prison terms for mothers, fathers, and doctors. Critics point out that women are rarely the primary decision-makers in these cases, and such legislation places a dual punishment on them. They fear that women will be driven to seek termination of unwanted pregnancies under illegal conditions, in a country where most abortions already take place illegally. Newer technologies are also being used for sex selection, such as chemical selection of sperm carrying the male chromosome. This circumvents existing legal restrictions.

It remains to be seen how effective new legislation will be in stemming sex selection, when past measures have not shown much success in a social climate that more and more views women as burdens. Any policy measures must not focus primarily on restricting technology used to women's detriment, but must address the root causes of devaluation of Indian women, or they will not succeed in eradicating discriminatory practices but will drive them underground where they will continue to flourish.

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Endnotes

1. Technical details of how we estimated the sex ratio at birth are given in Sudha and Rajan (1999). A 'normal' sex ratio at birth (SRB) ranges from 104 to 106 males per 100 females. This is a stable biological characteristic of human populations, found in societies all over the world irrespective of poverty or 'race'. In societies that have a marked preference for male children however, such as China and South Korea, extremely masculine SRB's have been noted, ranging from 112 or 113 among all births, to 120 or 185 among second, third, and higher-order births. back
2. Exogamy is the practice where a bride marries outside her natal kin, clan, lineage or village. Exogamous marriage makes women more vulnerable; it separates them from their natal kin and positions them as outsiders in their marital families, until they 'prove themselves' by bearing sons

and bringing dowry. Endogamy is the practice of marrying inside one's kin, clan or lineage or natal village, and is less detrimental to women's status. In North India, women are supposed to marry outside their fathers' and mothers' lineages and outside their natal villages. In South India, it is preferred for a woman to marry her cousin or uncle on her mother's side, and irrespective of whether this is within or outside her village. Thus, women are less 'outsiders' and less vulnerable after marriage. But, South India is moving toward Northern marriage practices and, despite higher female education there, bias against girls is rising. back

3. The Green Revolution refers to the 'high-tech' agricultural practices introduced in the 1950's and 1960's. It depended on 'high-yielding varieties' of hybridized seeds, mono-cropping, mechanized farming, and reliance on chemical fertilizers and pesticides. Though the Green Revolution greatly increased food yields, environmental destruction and social dislocation have also resulted. back
4. Matrilineal families are those where descent is traced in the female line, from mothers to daughters. Women are valued members of the family and are under no pressure to bear sons. Since they inherit property from their mothers and transmit it to their daughters, dowry is not an issue. Such families were prevalent in coastal Southwest India, e.g. among the Nayars of Kerala, until the early 20th century, when British legislative initiatives ended them. They still exist among tribal communities of Northeast India. Patrilineal families are those tracing descent through males, and fathers and sons are the core members of the family. Women often move to their husband's house after marriage, and are expected to bring dowry. They are under great pressure to bear sons. Their sexuality is restricted so that the paternity of their children is never in doubt. back
5. Christians, Muslims, and members of other religions in India often retain some Hindu-based social customs, including that of caste. back

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to the previous page