

CONCEPTUALIZING SECURITY, SECURING WOMEN

Swarna Rajagopalan

Mao Zedong famously said that women hold up half the sky. In today's India and China, the numbers of women are decreasing dramatically as modernization appears to have had an adverse impact on the prospects of a girl child or woman's physical survival. If traditional policy and academic notions of security fail to shore up the survival chances of what should theoretically be one-half of any state's population, then this paper argues that these notions are simply useless. What would a notion of security that ensures my daughter's survival and well-being as well as it would my son's, look like? This paper draws on feminist writing and previous empirical work to suggest core features of a gender equitable notion of security.

Seminars on security studies tend, famously, to be rooms full of men and conversations full of testosterone. Scholarly discussions are freely interspersed with locker-room comments, and the women in the room learn to pick their battles--their inner Kali holds back her impulse to rampage no matter what is said in that room.¹

One consequence of this disproportionate disciplinary demographic is that women have traditionally been invisible in the security discourse. Cynthia Enloe, in her path-breaking 'Bananas, Beaches and Bases,' uses a photograph taken at the G-8 summit with only one woman in it to

¹ This paper builds on previous work I have done on this subject that is to be found in Rajagopalan, "Women, Security, South Asia: An Exploratory Essay" in Farah Faizal and Swarna Rajagopalan, eds., *A Clearing in the Thicket: Women, Security, South Asia*, forthcoming and also in Rajagopalan, "Research, Policy, Reality: Women, Security, South Asia—An Essay," in a collection of papers from the 6th Sustainable Development Conference, Islamabad, Pakistan, December 2003, to be published by Oxford University Press, Pakistan.

illustrate this invisibility, which has three dimensions. First, there literally are very few women in any part of this field as it has been traditionally construed. The traditional core of this field, in both policy and academic circles, has been military-diplomatic, and until recently, these were essentially male arenas. Patriarchal societies have tended to categorize the public and private spheres as belonging primarily and exclusively to men and women respectively. Second, when security analyses are prepared, the impact of security policies on women and the role played by women in creating insecurities are both overlooked to a great extent. Victimized women show up on the polemical radar more often than on the policy or analytic ones, and then, victimized women show up much more than do women who show agency in war and peace-building. This is a reflection of the patriarchal need to view women as lesser creatures in need of protection. Finally, the insecurities faced by women in their daily lives do not figure at all in security discussions among policy-makers or academics. Traditional security studies privilege the nation-state over all other referents and state-level analysis over other levels of analysis. Consequently, unless the insecurities faced by women arise as a consequence of enemy state action, chances are the state and its elite will not pay them attention.

In the face of this, some women scholars leave the field altogether in frustration and sadness; some women scholars simply accept this as the order of things; others, like me, try very hard to channel the energy behind the rampage impulse to better the lot of my sisters within the seminar room and elsewhere. This paper, and the body of work that has preceded it, are the fruit of that struggle. Here, I posit and briefly illustrate the imperfection of the prevalent paradigm from the point of view of women's lives and realities, and argue for five new parameters that will inform the creation of a field of security policy and research that is gender equitable.

“If it ain’t broke, why fix it?”

To those in this room who would ask, as defence studies scholars, as former government officials and as military personnel past and present, why change a paradigm that has served us well, I would answer, because it is obsolete. Just as you would not now procure bows and arrows for your army, ride a horse to battle or use a quill to write on parchment, it is time to put away a notion of security that is blind to the insecurities faced by what should be half your population but is not. In this section, I am going to draw one example from shining India alone for the sake of brevity.

Table A: Gender Violence throughout a Woman's Life (highlights mine)

Phase	Type of Violence
Prenatal	Sex-selective abortions , battering during pregnancy, coerced pregnancy (rape during war)
Infancy	Female infanticide , emotional and physical abuse, differential access to food and medical care
Childhood	Genital cutting; incest and sexual abuse; differential access to food, medical care, and education; child prostitution
Adolescence	Dating and courtship violence, economically coerced sex, sexual abuse in the workplace, rape, sexual harassment, forced prostitution
Reproductive	Abuse of women by intimate partners, marital rape, dowry abuse and murders, partner homicide, psychological abuse, sexual abuse in the workplace, sexual harassment, rape, abuse of women with disabilities
Old Age	Abuse of widows, elder abuse (which affects mostly women)

Source: Heise, L. 1994. Violence Against Women: The Hidden Health Burden. World Bank Discussion Paper. Washington, D.C. The World Bank Taken from the UNFPA page on gender-based violence. <http://www.unfpa.org/gender/violence.htm>, accessed February 17, 2004.

In shining India, the number of women per thousand men is on the decline, ironically in India's more developed and literate areas. (See Appendices 1 and 2.) In 1992, Amartya Sen wrote that while in developed societies baby girls survive years 0-4 better than their brothers, the opposite was the case in most traditional developing societies. He estimated that there were 44 million "missing women" in China and 37 million "missing women" in India, arriving at a total of over 100 million "missing women" worldwide. Sen was not the first Indian economist to highlight the declining sex ratio; he followed in the footsteps of Asok Mitra and Kumudini Dandekar among others (Krishnaji 2000).² In spite of the best efforts of economists and demographers, this issue still remains with us, furthermore getting worse.

Writing in December 2003 in the *British Medical Journal*, which is one of the places he first published this finding, he wrote that strides in combating higher female mortality were being offset by the spread of sex selection technologies. Focusing this brief essay on India, he highlighted what appears to be a north-south distinction, also mentioned by Naila Kabeer in her work on the demographic transition (1996), and by process of elimination concluded that more than anything it must be something cultural that concentrates most of the deficit states in the north and even with Tamil Nadu's relatively poor showing, the states with reasonable to good sex ratios in the south.

Many factors have contributed to this trend, which defies conventional economic wisdom about levels of development and improving demographic indices. First, declining fertility seems to strengthen gender (male) preferences and not just in India. It seems as if the growing consensus on having smaller families means fewer female fetuses might survive. This is a feature particularly of

² See also, Premji 2001, Athreya and Chunkath 2000, Bhat 2002.

agrarian societies where (although women work the fields as much as men) male offspring are considered by convention to be more hands on the farm.

The second factor is the green revolution and the replacement of subsistence farming by commercial or cash crop cultivation, which complicates farming by adding markets at greater and greater distances and new kinds of credit, warehousing and technology to the mix. Given the inside-outside dichotomies of traditional patriarchal societies, these changes reinforce the importance of males in the family. They also have the consequence of increasing and concentrating the cash flow in the hands of more successful farmers and agricultural traders. In turn, conspicuous consumption—the most traditional of which has got to be the lavish wedding and wedding gifts—goes up, and the practice of dowry enters spheres where it might not have. (Sabu George 1999)

The custom of giving a dowry has come to be adopted by many communities in the last two hundred years as a consequence of their settling in places where it is practiced or migration. In recent decades dowry is demanded and dowry-deaths occur beyond the North Indian urban middle class, in other communities all over the subcontinent. Involving the prospect of debt, huge unproductive expenditure and capital loss, the marriage of a daughter and the payment of her dowry devalue the girl child in very real terms (Kurian 1993). A 2000 report said that Vimochana, a feminist group active in the Bangalore area, found that about 100 women died every month in that city with 70 percent of their deaths being registered as kitchen accidents. Death by kerosene burns is the most common form of dowry death, so the assumption is that many of these must be ‘bride-burnings’ (Wadhwa 2000).

Fourth, improved reproductive health care technologies have come to be used as a weapon of male preference. Sonograms and amniocentesis tests are used to determine the sex of a child and

the pregnancy is terminated if the child is female. Mobile units are known to perform these tests and operations in rural areas notwithstanding growing legislative censure.

Theoretically, one can expect women to outnumber men because they survive better as babies and they outlive men, all other things remaining the same. However, in traditional developing societies, men vastly outnumber women and this is particularly striking in the younger age groups. There has been work done recently discussing the security consequences for a society where gradually men vastly outnumber women. Hudson and Den Boer (2002) described the consequences of such a demographic change as having surplus males for societal security. Insights from social psychology and history both illustrate, in their view, that such a skewed sex ratio will diminish the prospects both for peace and democracy. This is reinforced by research done in north India first by Philip Oldenburg in 1992 and then replicated by Jean Dreze and Reetika Khera in 2000 that showed a strong correlation between murder and skewed sex ratios.

If in 1992, Sen wrote about 37 million missing Indian women, then even a non-economist like me feels safe in estimating that ten years later, with technology ratcheting the problem up a few notches, we might now talk about 40 million missing women at least. Based on UNFPA's publication, *The World at Six Billion*, this is approximately the same as the population of several countries.

Table B: Countries with a 1999 population estimate between 35 and 45 million.

Country	Population in 1999
Republic of Korea	46, 480, 000
Myanmar	45, 059, 000
Colombia	41, 564, 000
<i>India's missing women</i>	<i>40, 000, 000</i>

South Africa	39, 900, 000
Spain	39, 634, 000
Poland	38, 740, 000
Argentina	36, 577, 000

Source: United Nations Fund for Population Activities, *The World at Six Billion*, <http://www.un.org/esa/population/publications/sixbillion/sixbilpart2.pdf>, Accessed February 17, 2004.

It is also approximately twice the population of the world's six largest cities, as estimated by the State of the World's Population, 2000:

Table C: Cities and their populations, c. 2001

City	Population
Tokyo	26.4
Mexico City	18.1
Mumbai	18.1
São Paulo	17.8
Shanghai	17
New York	16.6

Source: United Nations Fund for Population Activities, *State of the World's Population 2001*, <http://www.unfpa.org/swp/2001/english/tables.html>, Accessed February 17, 2004

If the elimination of all Poles, Spaniards or South Africans constitutes an unthinkable outcome, and the bombing or razing of Mumbai or Mexico City is the very prospect that the conventional security papers presented today seek to prevent, then what is the justification for a security paradigm that overlooks an equal loss of life? Where the killing of six million Jews by the Nazis, 1.7 million Cambodians by the Khmer Rouge and the internecine killing of half a million

Rwandans is called genocide³, what is the quiet, overlooked non-existence, non-survival of 40 million women in India alone and over 100 million women worldwide to be called? At minimum, a lousy approach to security! If this forty million were to refer not to women but to racial minorities like the African-Americans in the US, ethnic minorities like the Tamils in Sri Lanka and religious minorities like the Muslims in China, would we not be suitably outraged?

This has been a discussion of one survival threat at one life-stage in one country. An approach to security, the provision of which to members/citizens is one of the primary functions of social and political organization, which prioritizes an abstract legal collective over a real person, is ultimately an empty approach. The argument for changing the way in which we conceptualize security then is two-fold. First, without a fundamental change of this sort, the idea of security is likely to have less and less analytical or political purchase. Analyses that do not take cognizance of the larger social reality and the legitimacy of security policies will seem to lack integrity and actions that remain untouched by everyday human insecurities will be questioned. Second, from the perspective of many of my identities that are at play in this paper—woman, feminist, security studies scholar—I would argue that if we in fact care about issues like the decline in the female population, we should claim for those causes, as I am in this paper, the power and leverage that ‘security’ problems have. Security is a ‘speech act’ and by performing this act and calling the everyday insecurities of women security problems we are able to draw attention both to something real (i.e., the problems in question) as well as something very distant and unreal (the defence of a state whose presence does not seem to benefit most of its citizens through the provision of water, power or

³ Sources for these figures are as follows: (1) Holocaust death toll from The Danish Center for Holocaust and Genocide Studies, “Holocaust: The Basics,” <http://www.holocaust-education.dk/holocaust/hvadhvemhvor.asp>, Accessed February 17, 2004; (2) Cambodian death toll from the Yale Cambodian Genocide Program, <http://www.yale.edu/cgp/>, Accessed February 17, 2004; (3) Rwandan estimate from Human Rights Watch, “Numbers” in *Leave None to Tell the Story: Genocide in Rwanda*, March 1999, <http://www.hrw.org/reports/1999/rwanda/Geno1-3-04.htm>, Accessed February 17, 2004.

sanitation, leave alone security!). How should our approach to security change if the resulting paradigm is to be inclusive and gender equitable?

Five Parameters to a New Paradigm?

Theoretical, empirical and polemical critiques point to five features of contemporary security thinking that mitigate against the consideration of both women's insecurities and agency. First, the things that most threaten women's physical survival (to use a minimal definition of security) have a short gestation period. It does not take long to abort a female foetus, to ensure the death of a female infant, to burn a bride in a kitchen accident or to send a woman to her husband's pyre. Conventional security thinking tends to work with a longer time frame, even lending to the term 'strategic' such a meaning. Even short-term planning has a longer time frame. Women seldom have that kind of time between the appearance of a threat and its fruition.

Second, most of the things that acutely threaten the survival of women threaten them in contexts that the security studies state consider outside their scope—foeticide and infanticide, domestic violence, incestuous abuse and dowry deaths all take place within the home and both policy-makers, enforcement agents and scholars tend to regard the threshold of the home as somewhat sacrosanct. Thus, female circumcision, as a cultural tradition, is a contentious entrant into the policy realm while torture in prisons is an acceptable human rights cause. Thanks to the inside-outside, private-public dichotomies that dominate security thinking, cultural relativism serves as a handy tool. How can we intervene to alter the course of patriarchy run amok, after all it is cultural tradition? This dichotomy reinforces the choice of the state and to a lesser extent, other collectives as the primary referent of security. However, it excludes women's lives from its purview altogether.

The third problem is to define security, and we have come full circle on this in some ways. UN and other multilateral reviews in the 1970s revised their perspective on security by including

developmental and some human rights (apartheid, for instance) issues in their consideration.

Academics in the 1980s, but even more in the 1990s, followed suit, expanding their understanding to include five dimensions—political, military, economic, societal and environmental (Buzan 1991:19).

However, broadening the scope of the field did not mean that most of them were willing to expand to other levels of analysis. In keeping with the west's utilitarian legacy, the greatest security of the greatest numbers remained the measure and all other possible levels of analysis were considered, then rejected in favor of the collective, and one collective in particular: the state. As long as the policy-maker and the analyst are willing to simplify the nature of the referent, it is possible to complicate the analysis of the threat. The threats that women face, except for those that they face in common with men, do not appear on this radar. Expanding the scope just in terms of dimensions does not therefore really serve them as well as expanding the level of analysis would. An expanded scope that includes all levels of analysis would leave us with an untenable field to work with; if all life is insecurity, all life is grist to the security mill! Thus, we come full circle to limit the meaning of the term to physical survival and safety from violence. Without denying the acuity of other threats, this is what leaves us with a manageable arena of operations.

Given the complexity of the referent, this simplified scope becomes particularly important. The individual as referent, no more than the collective, is a vacuum pack. S/he carries within the history of many generations, the weight of many identities, the ties of many relationships and affiliations and a host of variable preferences. Therefore, policy and research alike must take cognizance of these complexities. Indeed, one reason why women have been invisible to the field is that in the face of other problems they tend not to identify themselves as women but as members of another group. Far from sharing the same interests, they may in fact pose a threat to each other; for instance, if the mother and the female infant are victims of gender bias, the grandmother and the

midwife or doctor who assist in the abortion of the foetus are culpable. The women of one community who fail to bear witness to violence against women during a riot are another example of this conflict of interest. Thus, all women do not share an interest any more than all states do.

Finally, the view of security as a zero-sum game, now going out of fashion in most academic circles but still strong in policy circles, obfuscates the interrelated quality of both vulnerability and security. This applies not just to rivals at the same level of analysis—states in the international system or ethnic communities within a state—but also across levels of analysis. The former Soviet Union provided a good example of this; while it was one of the two superpowers and possessed a formidable military capacity, the fact that communities within the state were insecure proved its undoing, quite literally. Similarly, inasmuch as a state fortifies itself with nuclear weapons and ballistic missiles, it is still a house built on a weak foundation if its roads are not safe from bandits and sexual predators and if its workplaces entrench gendered power hierarchies. Sexual harassment at the senior echelons of power and dowry demands and related deaths in the families of senior policy-makers are as much indicators of a state whose teeth are sharp but whose gut is weak as the central government's slow and ineffectual response to events in Gujarat two years ago. Such a state, as the Kashmir insurgency shows, is open to attack on all sides because it begins to lack legitimacy.

What is proposed here are five small shifts in thinking that will alter the way in which we allow ourselves to conduct security discourse. I have shown why it matters and I will now show you how it will work.

1. Security questions require urgent consideration and action, not years of arcane debate.

The first thing to acknowledge is the urgency of a problem. This is not to advocate instant action or crisis responses. To the contrary, what I am suggesting is that instead of waiting for matters to reach crisis proportions and debating the semantics and epistemology of the intellectual questions, we

should swiftly move the kinds of issues I am talking about to the central discursive arena of security studies and policy. Let us not sit and debate how unwieldy or messy the field becomes, both for researchers and practitioners, but instead how best to prepare ourselves to tackle some of these calamitous problems. How do we seriously tackle the gender bias that predisposes people towards the killing of their own offspring? How do we tackle issues like sati and honor killings without retreating behind banal cultural relativism clichés? Security studies research needs to move away from navel-gazing and pondering its scope and security policy from admiring its hardware, and both need to move towards a more people-centered problem-solving approach. This cannot wait.

2. Individuals are the proper primary referent of security, not states and other collectives.

Whose face do you see when you launch a research project or consider a policy decision? Does your decision or discussion have any bearing on a real person's struggles? When something as vital as security is defined in terms of issues that, however grave, are far removed from people's lives, both policy and research seem to gratify something other than a real need. Individuals are the proper primary referent of security because they are the building block of any collective. Does this preclude research or policy-making in terms of collectives like the state? It does not; it requires rather that every project, every decision be weighed or framed in terms of its impact on people's lives. Grand narratives of state, history and strategy are meaningless in the face of a single person's life-struggles. Research on migration or missiles where the researcher never encounters a migrant, a person displaced because of a testing range or a person who is going to operate the missile, remains hollow and shallow. Policy is even more susceptible to this critique. Keeping individuals as the primary referent is a corrective to this tendency.

3. Security means first, physical survival and second, safety from violence.

Women, since this has been a paper about them, are subject to many indignities and insecurities, and also subject others to them in turn. It is quite appropriate to include poverty, malnutrition, lack of educational access and inability to find work and earn a livelihood in a more exhaustive empirical discussion of women's insecurities. However, we are forced to choose a subset of issue that we regard as more urgent and physical survival and safety from violence, as corollaries of the right to life, must belong there. The right to go through a pregnancy with good prenatal care and expecting not to die at childbirth, the right to be born although female, the right to go to school and college without being mauled on the bus, the right to work without sexual harassment, the right to choose your partner without fear of tribal retribution, the right to be married rather than handed over with a collection of consumer durables, the right to be alive and married and the right to live and in dignity when your husband dies—if you think about it, we as feminist scholars of security studies, ask for very little for women. And we merely ask that academe and the policy universe throw their considerable weight behind this simple demand.

4. *We cannot essentialize the referent and must remain cognizant of complexities and contradictions in the identities and interests of referents.*

Women, like men and states, are not all the same. One research question, one research design and methodology, one policy, one approach will not work the same way for all. Afghan women refugees in Peshawar in the last two decades have had quite different concerns from those of migrant Bangladeshi women in the Indian northeast. Women in the Sri Lankan security services and women fighting for the LTTE have quite different interests and perspectives. Women fighting for the LTTE and women fighting in the Maoist movements in South Asia will have had different experiences of combat. If social science with its ideal of generalization and policy with its need to serve the largest possible number, simply started on the assumption that one size does not fit all, their own goals may

be better served. Researchers will look in more detail for when certain conditions prevail and when they do not, and policy-makers will learn to build in adjustment mechanisms. Thus, there is a greater likelihood of generating valid knowledge and context-appropriate policy.

5. *Security is indivisible. That which we wish to secure exists in relation to other referents and the one cannot be secured in isolation of the other.*

Reconceptualizing security to secure women does not preclude continuing to secure other referents. Indeed, the fact is that securing women from domestic abuse only to have them killed in a terrorist attack would be tragic. However, the reverse is equally true: securing women from a terrorist attack to have them be beaten and raped by their husbands would be an empty security for them, and make a travesty of the state's security apparatus. Likewise, abuse and violence by the very agents that are charged with protecting citizens from abuse and violence is a breach of trust. Security is indivisible. The inalienable interdependence of vulnerabilities and feelings of security among actors/referents should be the starting point of both research and policy. To cast what it means for Hindus, soldiers, industrialists, Sinhalese, or any other group to be secure in terms that instead of diminishing another person or group's security, increases it as well, is what research should try to find and what policy should aim to attain.

Last words

This paper says something very simple, and I will state it simply in summary: without securing women from things that threaten their survival and from the threat of violence, you can have no meaningful security studies or policy. A problem-solving, people-oriented, nuanced and holistic approach is what is required if the pursuit of security is to have meaning in the everyday lives of ordinary women—and men.

SELECT BIBLIOGRAPHY

- Amartya Sen. 2003. Missing women—revisited: Reduction in female mortality has been counterbalanced by sex selective abortions. *British Medical Journal*. Volume 327: December. Pages 1297-8.
- Barry Buzan. 1991. *People, States & Fear*. Boulder: Lynne Rienner Publishers.
- Cynthia Enloe. 1989. *Bananas, Beaches and Bases: Making Feminist Sense of International Politics*. Berkeley: University of California Press.
- K.J. Kurien. 1993. Female Infanticide in India. *Eubios Ethics Institute Newsletter*. 3 (3).
<<http://www.biol.tsukuba.ac.jp/~macer/EEIN/EEIN3B.html>>. Accessed September 23, 2000.
- Mahendra K. Premi. 2001. The Missing Girl Child. *Economic and Political Weekly*. May 26. Pages 1875-1880.
- N. Krishnaji. 2000. Trends In Sex Ratio: A Review In Tribute To Asok Mitra. *Economic and Political Weekly*. April 1. Pages 1161-1163.
- Naila Kabeer. 1996. Gender, *Demographic Transition and the Economics of Family Size: Population Policy for a Human-Centered Development*. United Nations Research Institute for Social Development.
<http://www.unrisd.org/html/op/opb/opb7/op7.htm> Accessed February 17, 2001.
- P.N. Mari Bhat. 2002. On the 'Trail of 'Missing' Indian Females I: Search for Clues. *Economic and Political Weekly*. December 21. Pages 5105-5118.
- P.N. Mari Bhat. 2002. On the 'Trail of 'Missing' Indian Females II: Illusion and Reality. *Economic and Political Weekly*. December 28. Pages 5244-5263.
- Sabu M. George. 1999. Female Infanticide in Tamil Nadu, India: From Recognition to Denial?
<http://www.hsph.harvard.edu/Organizations/healthnet/SAsia/suchana/0225/george.html>
Accessed April 4, 2001.
- Soma Wadhwa and others. 2000. Fair sex or fair game? *Outlook*. May 29.
- Valerie M. Hudson and Andrea Den Boer. 2002. A Surplus of Men, A Deficit of Peace. *International Security*. 26:4 (Spring). Pages 5-38.
- Venkatesh Athreya and Sheela Rani Chunkath. 2000. Tackling Female Infanticide: Social Mobilisation in Dharmapuri, 1997-99. *Economic and Political Weekly*. December 2. Pages 4345-4348.

Appendix 1

Sex ratio (female per 1,000 males): 1901-2001

India/States/Union Territories*	1901	1911	1921	1931	1941	1951	1961	1971	1981	1991	2001
INDIA^{1,2,3}	972	964	955	950	945	946	941	930	934	927	933
Jammu & Kashmir ²	882	876	870	865	869	873	878	878	892	896	900
Himachal Pradesh ³	884	889	890	897	890	912	938	958	973	976	970
Punjab	832	780	799	815	836	844	854	865	879	882	874
Chandigarh*	771	720	743	751	763	781	652	749	769	790	773
Uttaranchal	918	907	916	913	907	940	947	940	936	936	964
Haryana	867	835	844	844	869	871	868	867	870	865	861
Delhi*	862	793	733	722	715	768	785	801	808	827	821
Rajasthan	905	908	896	907	906	921	908	911	919	910	922
Uttar Pradesh	938	916	908	903	907	908	907	876	882	876	898
Bihar	1,061	1,051	1,020	995	1,002	1,000	1,005	957	948	907	921
Sikkim	916	951	970	967	920	907	904	863	835	878	875
Arunachal Pradesh ⁴	NA	NA	NA	NA	NA	NA	894	861	862	859	901
Nagaland	973	993	992	997	1,021	999	933	871	863	886	909
Manipur	1,037	1,029	1,041	1,065	1,055	1,036	1,015	980	971	958	978
Mizoram	1,113	1,120	1,109	1,102	1,069	1,041	1,009	946	919	921	938
Tripura	874	885	885	885	886	904	932	943	946	945	950
Meghalaya	1,036	1,013	1,000	971	966	949	937	942	954	955	975
Assam	919	915	896	874	875	868	869	896	910	923	932
West Bengal	945	925	905	890	852	865	878	891	911	917	934
Jharkhand	1,032	1,021	1,002	989	978	961	960	945	940	922	941
Orissa	1,037	1,056	1,086	1,067	1,053	1,022	1,001	988	981	971	972
Chhatisgarh	1,046	1,039	1,041	1,043	1,032	1,024	1,008	998	996	985	990
Madhya Pradesh	972	967	949	947	946	945	932	920	921	912	920
Gujarat ³	954	946	944	945	941	952	940	934	942	934	921
Daman & Diu*	995	1,040	1,143	1,088	1,080	1,125	1,169	1,099	1,062	969	709
Dadra & Nagar Haveli*	960	967	940	911	925	946	963	1,007	974	952	811
Maharashtra	978	966	950	947	949	941	936	930	937	934	922

India/States/Union Territories*	1901	1911	1921	1931	1941	1951	1961	1971	1981	1991	2001
Andhra Pradesh	985	992	993	987	980	986	981	977	975	972	978
Karnataka	983	981	969	965	960	966	959	957	963	960	964
Goa	1,091	1,108	1,120	1,088	1,084	1,128	1,066	981	975	967	960
Lakshadweep*	1,063	987	1,027	994	1,018	1,043	1,020	978	975	943	947
Kerala	1,004	1,008	1,011	1,022	1,027	1,028	1,022	1,016	1,032	1,036	1,058
Tamil Nadu	1,044	1,042	1,029	1,027	1,012	1,007	992	978	977	974	986
Pondicherry*	NA	1,058	1,053	NA	NA	1,030	1,013	989	985	979	1,001
Andaman & Nicobar Is. *	318	352	303	495	574	625	617	644	760	818	846

Source: Census of India website, http://www.censusindia.net/data/ppt_t10.PDF Accessed Feb. 12, 2004.

Notes (in original table): 1. For working out the sex ratio of India and Assam for 1981, interpolated figures for Assam have been used; 2. For working out the sex ratio of India and Jammu and Kashmir for 1991, interpolated figures for Jammu and Kashmir have been used; 3. For working out the sex ratio of India, Gujarat and Himachal Pradesh for 2001, estimated figures for affected areas of Gujarat and Himachal Pradesh have been used; 4. The sex ratio for Arunachal Pradesh is not available for the years 1901-1951 and for Pondicherry it is not available for the years 1901, 1931 and 1941.

Appendix 2

Sex ratio (female per 1,000 males): 2001

India/States/Union Territories*	2001
Kerala	1,058
Pondicherry*	1,001
Chhatisgarh	990
Tamil Nadu	986
Manipur	978
Andhra Pradesh	978
Meghalaya	975
Orissa	972
Himachal Pradesh ³	970
Uttaranchal	964
Karnataka	964
Goa	960
Tripura	950
Lakshadweep*	947
Jharkhand	941
Mizoram	938
West Bengal	934
INDIA^{1,2,3}	933
Assam	932
Rajasthan	922
Maharashtra	922
Gujarat ³	921
Bihar	921
Madhya Pradesh	920
Nagaland	909
Arunachal Pradesh ⁴	901
Jammu & Kashmir ²	900
Uttar Pradesh	898
Sikkim	875

India/States/Union Territories*	2001
Punjab	874
Haryana	861
Andaman& Nicobar Is. *	846
Delhi*	821
Dadra& Nagar Haveli*	811
Chandigarh*	773
Daman& Diu*	709

Source: Census of India website,

http://www.censusindia.net/data/ppt_t10.PDF Accessed Feb. 12, 2004.

Notes (in original table): 1. For working out the sex ratio of India and Assam for 1981, interpolated figures for Assam have been used; 2. For working out the sex ratio of India and Jammu and Kashmir for 1991, interpolated figures for Jammu and Kashmir have been used; 3. For working out the sex ratio of India, Gujarat and Himachal Pradesh for 2001, estimated figures for affected areas of Gujarat and Himachal Pradesh have been used; 4. The sex ratio for Arunachal Pradesh is not available for the years 1901-1951 and for Pondicherry it is not available for the years 1901, 1931 and 1941.