SIGNIFICANCE OF GENDER DEVELOPMENT INDICATORS: AN ANALYSIS OF INDIAN STATES

Preet Rustagi

This paper highlights the importance and significance of gender development indicators for assessing relative levels of progress or backwardness of women's status across the states of India. An analysis on the current situation of women across the Indian states based on a select set of indicators covering issues of survival, safety, work, health, education and women's participation in private and public decision-making is undertaken here to illustrate the relevance of adopting a simple methodology of individual indicators. This analysis reveals the utility of such a methodology in identifying the areas of gender backwardness and possible intervention mechanisms that can prove to be effective in improving the situation of women.

The paper focuses on three major points in the context of development indicators for women's status. First, that gender development is a complex and dynamic process which does not follow a uniform path. Second, for any planned development to be effective and replication of the successful experiments, there is a need for more specific details that can be provided by the gender development indicators. Third, the identification of variables and creation of indicators for women's status oriented towards this objective need to be non-complex, simple and individual/disaggregated rather than a composite index [that is, of the nature of Human Development Index (HDI) or Gender-related Development Index (GDI) as propounded by the United Nations Development Programme (UNDP)].

The objective of gender development indicators is to be able to generate specific sets of information that can be usefully utilised for identification and intervention for amelioration of the status of women. Individual, disaggregated indicators provide statistical data in the format that is amenable for identification of the problem areas as well as for intervention, thereby making it a better tool in comparison to any composite index.

This is precisely due to the fact that development of any nation or area does not necessarily follow a uniform path. Also, the direction, pace or intensity of growth do not exhibit unique patterns (Kelley, 1991; Krishnaji, 1997; Rustagi, 2000). That is to say, any impetus or stimulant introduced into the existing state of affairs does not always lead to a predetermined outcome and even the path adopted to attain or reach the goal set out often varies from individual case to case. This is because the trajectory of growth is a process that is dynamic. The process by itself is not an assimilation of different static parts but an ongoing,

interlinked, intertwined combination of varied factors, each of which may react differently even if one aspect undergoes a change. The presence and operation of these multiple factors, each of which can assume a different form with the slightest change occurring in any dimension, makes the process dynamic.

To convert all these variables to form a single composite index involves combining by assigning different weights to various variables and introducing subjective biases thereby hiding them under one number, which seems to be non-transparent. There have been substantial debates and deliberations on these matters of composite indexation and related issues of weightage, standarisation and combination [see Baster, 1972; Drenowski, 1977; Hilhorst and Klatter (eds.), 1985; Morris and McAlphin, 1982; UNESCO, 1981 among others].

The purpose here is not to undermine the importance of any composite index, which is a useful policy tool for cross-country comparisons, but does not always help in focused, targeted development planning. That is because, numerous variables are hidden under a single number. Therefore, focussed policy intervention needs the tools in the form of individual indicators without 'clubbing', which are easily comprehensible and hence interventions implementable.

The first section of the paper deals with a few of the issues associated with gender development indicators including the formation of indicators. Methodological issues on the choice of indicators, analysis and data sources are provided in section II. Section III deals with the situation of women across Indian states based on a diverse set of dimensions such as survival, health, education, work, private-public participation in decision-making, security and violence. This is followed by a few concluding remarks.

Issues relating to Indicators

This section addresses a few issues regarding indicators in general and gender development indicators in particular.

An indicator is a statistic that is designed to reflect or denote some aspects of an issue for which it has been identified. For instance, sex ratio is the indicator that has been formed from population figures of males and females to indicate the demographic balance in a particular geographical location. Once identified and formulated, the indicator has to be defined. To design the demographic information into a ratio to reflect the balance, sex ratios have to be either male population by female population or vice versa. That is to say that the sex ratio may be defined as females per 100 or 1000 males or males per a standard number of females.

Often a set of statistical information can be malleable to form more than one indicator and hence an element of choice is involved in selecting a particular form or definition. For example, number of educated women by itself is a piece of data. How can this information be utilised for forming an indicator? That depends substantially on the purpose that the indicator has to serve. If the objective is simply to know how many women in India are literate – then female literates as a proportion of total female population can be calculated to derive the indicator of female literacy rate. This statistic of female literacy rate is an indicator of the proportion of literacy among women in India, which can be compared across states or districts. The shortfall of literacy in a particular region can be calculated as another indicator, if that is the dimension to be monitored by comparing literacy levels in the states, say, with the literacy at the all India level or with the state which has the best record. In other words, depending on what is to be identified, variables can be so measured, calculated or standarised to form an appropriate indicator.

However, it may also be stated at this juncture that not always is it so simple, especially where data gaps exist. On such occasions, the effort has to be directed towards data procurement or availability. In the event of failure of such an endeavour, a method has to be evolved to approximately fill the gaps in the data using sophisticated statistical tools. There are also situations where quantifications are not easy, since some aspects may be more qualitative and hence not amenable to quantification.

There are numerous aspects concerning women's lives that help to understand their status. All of these are neither quantifiable adequately, nor are the statistical information for deriving indicators always available. For instance, issues pertaining to choice and freedom regarding reproductive behaviour, sexuality, income autonomy and so on are not easily quantifiable.

Indicators can pertain to inputs or outputs (see Rajivan, 1998 among others). Aspects such as provision of various infrastructural dimensions like access to water, housing, schooling, sanitation are viewed as inputs that can assist the process of development in a region. The extent of variation in the impact of the input variables is tremendous and it is sometimes unclear as to what effect any particular change will have on the disparate groups within the area of focus. However, when the intention is to monitor or measure levels of development, the preferred indicators are those which are output variables, such as demographic balance, literacy, mortality and so on (Sen, 1992). To a large extent, the output variables, since they depict outcomes of some changes or developments that have already occurred do not exhibit doubts that input variables generate.

Indicators can be negative or positive. There are two ways of interpreting them. The positive or negative does not pertain to the value of the indicator. Negative indicators can refer to aspects that have negative influence or effect such as violence against women, child abuse, gender discrimination; while positive indicators are those which assist the process of development such as literacy, health, fertility decline and so on. Provision of greater number of schools, electricity connections, drinking water taps and so on can be viewed as positive indicators, while their absence or poor levels of provision are seen as backwardness that requires intervention to improve the situation.

The other way of perceiving positive and negative indicators is to consider in what manner the variable/aspect impacts upon the objective set out. For instance, if the aim is to move towards gender equality, then adverse sex ratio is a negative indicator in as much as it has a detrimental impact on development, while improving literacy is a positive one. Thus, each indicator can be positive or negative to the given desired objective. Improvements in health or education, reduction of violence against women and so on are positive, while declining literacy levels, deterioration in the accessability to health care or increasing incidence of crime are the negative indicators.

Under such a frame, gender discrimination or bias in any sphere is indicative of a negative influence and decline in the gap among men and women may be an improvement. Here it needs to be pointed out that if men surpass in a negative indicator such as suicides which reduces the gap, this does not necessarily bring about a positive change. Because, a reduction in the gap among men and women can occur by either a reduction in male incidence of the stated indicator or increase in the incidence among women. Such a decline in gender gap is not necessarily due to an improvement for women and their well being and hence cannot serve as a viable indicator.

Gender gaps are therefore, calculated as indicators in those variables where the differences exist due to prevalent biases that discriminate against women. Under these circumstances, women are worse off than men and the comparisons of gender gaps reflect the improvement or deterioration in the women's well being by constructing the indicator in such a manner that it reflects this dimension. For example, women have been educationally deprived for a number of reasons. Even in the state of Kerala, where female literacy rate is among the highest in the country, gaps among males and females in literacy rates exist. Since the reasons for this literacy gaps stem from socio-cultural reasons rather that infrastructural or economic ones, terming this as gender gap is only appropriate.

In the case of gender differences in mortality rates, higher infant male mortality is generally expected due to biological reasons. Yet, there are instances of female

mortality rates being higher than male infants. The mortality gaps among male and female infants need to be evaluated keeping the above stated fact in mind. Declining gap in infant mortality across gender tending towards zero is a better scenario, the negative figures indicate excess male mortality and the higher positive difference highlights the poor health conditions of female infants.

Considerable thought is to be devoted to the possible influences any particular variable under focus can have upon gender development to decipher what constitutes positive or negative impact. This is necessary since there can be differing views on whether a given indicator does lead to positive development or not, especially with regard to women's equality (Rustagi, 2003).

To sum up the discussion for this section, it may be stated that where the number of variables to be considered are numerous, then composition into one index becomes incomprehensible (see Krishnaji, 1997; Rajivan, 1998; Rustagi, 2000 among others). Individual indicators serve as a far better method for both identification and evolving effective intervention strategies. Since these variables transformed into indicators reflect upon a particular aspect of women's well-being, any number of such dimensions can be considered as may be desirable to understand levels of gender development or backwardness. Hence, there is no upper limit on the number of variables used or indicators constructed. The limitations are only related to the nature of data and methodological issues such as comparability and the appropriateness of different data sources for the issue under consideration.

Methodological Issues

This section deals with the methodological issues, including the selection of indicators, the different data sets and the method of analysis adopted to illustrate the significance of using individual indicators.

The range of gender development indicators that can be identified are numerous, but the feasibility of calculating or measuring them quantitatively is limited by availability of data. Hence, in this paper too, the issues under discussion are limited to the set of indicators that can be quantified for state level analysis [For deliberations on the non-conventional indicators or other alternative suggestions, see Gurumurthy (1998); Hirway and Mahadevia (1996); Sonpar and Kapur (2001); Viswanathan (2001) among others].

A diverse set of indicators shed light on women's status and reflects on the extent of gender equality and empowerment. Prior to selection of the variables that can be used for the assessment of gender development, the terms of equality and empowerment need to be defined.

Questioning the assumptions of development as a gender-neutral process formed the origins of various theories and debates around the concept of gender development (Haddad and Kanbur, 1990; Sen, 1992; Tinker, 1990; UNDP, 1995; Woolley and Marshall, 1994 among many others). In order to work towards development that benefits women too, the need to focus on women came to be recognised in the matter of policies and various developmental programmes. This perspective moved away from the earlier 'welfare' approach wherein women were relegated to being mere recipients of various beneficiary projects, often under the assumption that some benefits would trickle down to them [for a thorough exposition of the processes through which these changes have occurred in the treatment of women's issues, see Mazumdar, et al., 2001]. Gender development, within the gamut of human development (as opposed to income development) emphasises upon women as individuals, human beings and citizens with equal rights and opportunities.

Equality refers to equal opportunities in terms of access to sources of livelihood, health, and education, as well as to social, economic and political participation without discrimination. The patriarchal structures aid the prevalence and perpetuation of gender inequalities despite the constitutional provision of equality.

Gender inequalities stem from relations of power and authority, class-caste hierarchies and socio-cultural traditions, customs and norms. Empowerment may be defined as the process of transforming these structures and institutions, thereby ensuring equality. The indicators selected and used to assess levels of gender development cannot shed light on all the intricate patterns and dimensions of the changes occurring. However, these indicators provide mechanisms for evaluation to strategise the directions and steps that need to be taken to move towards gender equality and empowerment.

The indicators selected for a comparison of women's status across Indian states serve an illustrative purpose here. The different spheres covered in this paper can be broadly classified under the following six heads – survival, health, education, work, participation in private – public decision-making and safety/security.

Under the issue of survival of women and girls, the chosen indicators are sex ratios, especially child sex ratios; infant mortality rates among females; maternal mortality rates and life expectancy at birth among females. A more detailed discussion on the subject will be undertaken in the relevant section on survival.

Indicators discussed on the issue of women's health are limited to their mean age at marriage, total fertility rate, couple protection rate and anaemia levels. Education forms a very basic indicator for women's equality and empowerment. Levels of female literacy, gender gaps in literacy levels, enrolment and dropout rate at primary schooling level are the indicators taken into account here.

Women's work is one of the most crucial indicators and serves as an empowerment tool. However, the number of women who work are poorly captured or enumerated since most of the work they do are not remunerated and hence remains unrecognised. Naturally, the rate of women's participation in the workforce is low. Given poor human capital investment, the share of women in the organised sector employment is also low. The only source that reveals the high share of women's participation is the time use survey that calculates the number of hours per day worked and hours per week worked.

How significant is the participation of women in private and public decision-making? Some information on the autonomy levels and roles of women in decision-making regarding what to cook, healthcare, mobility without having to seek permission and so on have been provided by the National Family Health Survey (NFHS), which is used in this paper for exposition on this issue.

Shares of women as voters, contestants and winners in general elections and in panchayati raj institutions as elected representatives are used as indicators for the role of women in public decision-making. Incidence of crimes against women is used to reveal the safety and security experienced by women.

The data sources used for various gender development indicators have been procured from the Registrar General's office – the Census of India, Sample Registration System (SRS), and information collected by the Vital Statistics Division; Central Statistical Organisation (CSO); National Family Health Survey (NFHS); National Crime Records Bureau (NCRB); and Election Commission of India (ECI). Other sources include information from various departments and ministries of the Government of India, such as Department of Family Welfare of the Ministry of Health and Family Welfare; Ministry of Rural Development, Directorate General of Employment and Training (DGE&T) of the Ministry of Labour and so on.

Based on the latest information available from these data sources, indicators have been constructed to reflect the levels of women's status. For comparison across the Indians states, a simple ranking exercise is adopted. The ranks have been assigned to highlight the states which are most backward. Hence, the lowest rank – 1 – is given to the state that requires intervention in the area which the indicator pertains to and the highest rank, say 25, is assigned to the state with the

best record. These ranks are provided in the respective tables and the discussion highlights the worse and better states, generally in comparison to the all India levels of gender development recorded, based on the particular indicator.

The Status of Women in Indian States: What do Different Indicators Reveal?

In this section, the status of women in the states of India is assessed based on a selected set of gender development indicators. The various indicators chosen are categorised under six aspects pertaining to women's lives, that is, survival, health, education, work, participation in private-public decision-making and safety/security issues.

Issue of Survival

The indicators chosen to represent this aspect of women's or girls survival are child sex ratios, infant mortality rates among girls, maternal mortality rate and life expectancy at birth among women. Child sex ratios are defined as the number of girls for every 1000 boys in the 0 to 6 years population. This indicator is insulated from the disturbances created by migration in the overall sex ratio for the population (see Agnihotri, 2000; Bhat, 2002; Mazumdar and Krishnaji (eds.), 2001 among others).

Infant mortality rate among females is the probability of infant deaths among every 1000 infants before attaining the age of one year. Mortality rate among infants share a high proportion in the overall mortality rates (see Clark, 1987; Dyson and Crook, 1984; Visaria, 1985 among others). Among adults, maternal mortality rates is the selected indicator (SRS, 2000a). At the overall level, the life expectancy at birth among females is the chosen indicator.

Sex Ratios

A decline in the share of women in the populations of many countries worldover has been witnessed over the years (see Krishnaji, 2000 and the references cited therein). This is especially so in societies where a cultural tradition of son preference is strong. This strong male preference is witnessed not only in India but also in other societies in Japan, China, North Korea and so on.

Patrilineal property transfers, religious and ritualistic practices and other patriarchal social structures together lay emphasis on the need for a male offspring. This forms the base for a family which should have at least one or more boys. The lower status ascribed to women stemming for societal beliefs and practices that view them as burdens, costs and dangers to family honour and

dignity further intensifies this male preference. The sex ratios are most strikingly imbalanced and declining over the years among the younger cohorts.

India has had an imbalanced sex ratio from the beginning of the last century (Mitra, 1979; Visaria, 1971). Even if that inequality could have been explained by the sex ratio at birth and other factors such as mortality differentials among male and female children at different ages, what is not explicable is the continuing decline in sex ratios over a period of time. Waldron (1998) suggests that either more males are conceived or females have higher mortality than males during the embryonic and foetal stages of the child's growth. This is based on certain evidences that indicate a possibility of there being far more males than females by the second month of development within the womb.

The reduction of male mortality at younger ages due to the improvements in health services and the existence of gender bias in availing health care facilities may account for a share of the imbalance. Nevertheless, demographers claim that this is inadequate in explaining the extent of imbalance (Bhat, 2002; UN, 1998 and the articles therein). Especially since mortality rates have been declining with improvements in health conditions and fertility rates have also been steadily falling, the smaller number of women in the population has posed a challenge to demographers, social scientists and women's studies researchers.

A number of reasons are provided by the researchers which link up to the son preference, gender bias against girls in health care, nutrition, food allocation and so on (Clark, 1987; Kanitkar, 1991; Miller 1981; UN, 1998 among others). The desired family size and gender composition of children under the prevalent regime of male preference (Dasgupta and Bhat, 1998; Jejeebhoy, 1993 among others) work towards elimination of girls, in the foetal stages through intervention of advanced scientific technologies, in the infancy stages through (killing infants adopting a number of methods) or neglect and discrimination (Bardhan, 1982; George, et al., 1992; Mazumdar, 1994; Muthulakshmi, 1997; Sudha and Irudayarajan, 1999).

The actual scenario over the last decade 1991-2001 regarding child sex ratios for all the states of India is presented in Table 1. This reveals the low proportion of girls in the states of Punjab, Haryana, Gujarat, Himachal Pradesh, Rajasthan, Uttar Pradesh and Maharashtra. The declining trend is almost universal, except for the states of Sikkim, Tripura, Kerala and Mizoram. Although not conclusive, historical prevalence of matriliny, women's control over property and resources, greater economic participation and a more significant role in decision-making are some of the likely factors that may explain the better demographic balance and the improvements in the sex ratios in these states.

Table 1: Child Sex Ratio over the Decade 1991-2001among States

Rank 2001	States	Child Sex Ratio		Rank	Difference
		2001	1991	1991	2001-1991
1	Punjab	793	875	1	-82
2	Haryana	820	879	2	-59
3	Gujarat	879	928	4	-49
4	Himachal Pradesh	897	951	8	-54
5	Rajasthan	909	916	3	-7
6	Uttar Pradesh	915	928	5	-13
7	Maharashtra	917	946	6	-29
	INDIA	**927**	**945**		**-18**
8	Goa	933	964	13	-31
9	Madhya Pradesh	933	952	9	-19
10	Bihar	938	959	11	-21
11	Tamilnadu	939	948	7	-9
12	Karnataka	949	960	12	-11
13	Orissa	950	967	15	-17
14	Manipur	961	974	19	-13
15	Arunachal Pradesh	961	982	22	-21
16	Kerala	963	958	10	5
17	West Bengal	963	967	16	-4
18	Andhra Pradesh	964	975	20	-11
19	Assam	964	975	21	-11
20	Mizoram	971	969	18	2
21	Tripura	975	967	17	8
22	Nagaland	975	993	24	-18
23	Meghalaya	975	986	23	-11
24	Sikkim	986	965	14	21

Source: Calcutated from Census of India, 1991 and 2001

On the other extreme end, lower proportion of women in the north-western regions of the country has also been witnessed since the beginning of the twentieth century (Mitra, 1979; Mazumdar and Krishnaji (eds.) 2001). However, the rate of decline in that share has been rapid over the decades. Research studies through fieldwork have highlighted the lower status of women in these societies as explanations for the adverse sex ratios (Dasgupta, 1987; Khan, M.E. et al., 1988; Miller, 1981 among others). Explanations for women's plight have ranged from invasion, kidnapping, sexual assault to son preference. Subsequent decline as is continuing even today draws upon prevalent factors of dowry, foeticide, increasing financial burden, smaller family size, wherein one or more boys are considered desirable, sometimes mandatory (CWDS, 2002; Kishor, 1993 among others).

Contrary to the expectation that the economic burden of bringing up a daughter would compel the poor to resort to various measures against the girl child's survival, it is those who have the means to exercise such choice by using their

economic prosperity, who pose a threat to girls being born and their survival (Agnihotri, 2000; Mazumdar, 1994; Rustagi, 2003). That explains the states of Punjab, Haryana, Gujarat and Maharashtra sliding down on the child sex ratios indicator. The role of advanced scientific technologies in facilitating the elimination of female foetuses has been highlighted by many researchers and groups in the various states where its adoption is attaining severe limits due to the connivance of greedy medical professionals (Patel, 1997; Sharma and Joseph, 1994).

Infant Mortality Rate among Females

Mortality rates are the highest in the infancy stages as compared to all other ages (SRS, 2000b). Infant mortality rate (IMR) is defined as the probability of infants not surviving among every 1000 babies within the first year of being born. Male infants are known to be more susceptible than females due to biological and genetic reasons (Waldron, 1976). However, in India, the female infant mortality rate surpasses that of males which is reflective of the socio-cultural influences on mortality (Agnihotri, 1999; Clark, 1987; Visaria, 1985 among others).

The indicators used here are infant mortality rate among females (IMRF) and gender differences in the infant mortality rate (IMRD). The gender gap in infant mortality rate is defined as the difference between the female infant mortality rate and the male infant mortality rate. A positive value of IMRD implies higher infant mortality rate among females as compared to males, while a negative figure reflects the excess male mortality among infants.

The data for IMR, is based on the Sample Registration System (SRS) of 1999. The infant mortality rate among females for India is 71, while the male infant mortality rate is lower at 70. The gender gap reveals one excess female not surviving during infancy, as compared to males, among every 1000 babies born (see Table 2). Among the 16 major states for which SRS provides information, in 1999, 8 states record excess female mortality rates than their male infant counterparts.

The states of Haryana, Punjab, Rajasthan and Gujarat where sex ratios among children from 0-6 years have been low and declining are among those where infant mortality rates among females are higher than that of the male infants. Tamilnadu is another such state. In some of the districts of Tamilnadu, infanticide practices are reported prominently (George et al., 1992; Muthulakshmi, 1997; Sunanda, 1995). In other words, the SRS data on IMRs does not seem to contradict the Census based sex ratios. Although, these mortality figures may not be adequate in explaining the rate of decline in women's share as represented in the sex ratios (Bhat, 2002; UN, 1998). There is no doubt however,

that the discrimination in access to health care services by males and females and the lower status ascribed to females in our society is at the base of this excess female mortality in the infancy stages (see Basu, 1989; Basu and Basu, 1991; Levinson, 1974; Timaeus, et al., 1998; Visaria, 1988 among others).

Table 2:Infant Mortality Rates among Females and Gender Differences - 1999 (Total)

India/ States	IMRF	Gender Gap
India	70.8	1
Andhra Pradesh	63.5	-5.4
Assam	76.4	1.7
Bihar	62.3	-0.9
Gujarat	64.8	3.1
Haryana	78.4	19.3
Himachal Pradesh	51.1	-5.8
Karnataka	56.7	-1.9
Kerala	15.3	1.6
Madhya Pradesh	89.5	-0.1
Maharashtra	48.5	0.7
Orissa	96	-1.3
Punjab	56.4	5.9
Rajasthan	83.9	5
Tamilnadu	54.5	4.2
Uttar Pradesh	83.5	-1.7
West Bengal	43	-17.7

Note: IMRF refers to infant mortality rates among females

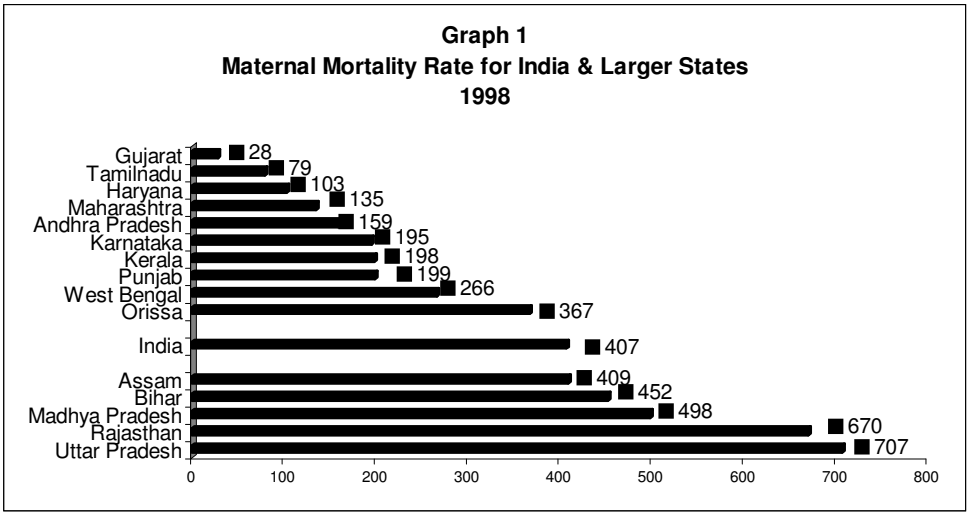
Gender Gap provides the difference between female and male infant mortality rates

Source: SRS Bulletin, 2000-1

Maternal Mortality Rate

The Maternal Mortality Rate (MMR) is calculated as the number of maternal deaths per 100,000 live births. This indicator of MMR is based on information collected that refers to deaths of women on account of pregnancy, childbirth or within 42 days of childbirth. The MMR indicates how safe motherhood is. The all India rate for 1998 is 407 (see Graph 1). The range of MMRs across the states of India varies from 28 in Gujarat to 707 in Uttar Pradesh for the year 1998 (SRS, 2000a). It is the BIMARU states of Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh which record the highest MMRs.

The mean age at marriage for females in India stands at 17 years despite the legal minimum age of marriage being 18 years (Census of India, 1991). Early marriage leads to girls becoming mothers at a younger age. Often these young mothers are neither mentally nor physically prepared for the responsibility of bearing and rearing children. Poor health and nutritional status further takes its toll raising the number of natural deaths.



Source: SRS, 2000a.

Tuberculosis and anaemia are the prominent causes of deaths among rural females, that are a reflection of low immunity levels due to lack of balanced food intake, proper nutrition and health care for women. Even deaths during childbirth are often an outcome of these factors together with the unhygienic conditions in which both institutional and non-institutional deliveries occur, which increases the chances of severe infections that adversely affect the survival of women. Deliveries that occur without formal help or with the assistance of untrained *dais* (midwives) increases the risk of non-survival, especially in the cases of complicated pregnancies. Women living in Rajasthan, Madhya Pradesh, Bihar and Assam have a higher probability of not surviving childbirth (IIPS, 2000).

It needs to be highlighted here, however, that contrary to popular belief, the high rates of maternal mortality are not due to reproduction, but are a result of poor health conditions that are an outcome of gender discrimination meted out over the years from childhood (see Gopalan and Shiva, 2000; Krishnaji and James, 2002; Qadeer, 1998 among others). Deprivations in healthcare, nutrition on the one hand and the compulsions of marriage and reproduction on the other hand, adversely affect female bodies, which prove to be fatal at times. Women who survive beyond the reproductive years, tend to outlive men as is seen in the life expectancy figures.

Life Expectancy at Birth among Females

The expected years of survival at birth for females has been showing a positive trend over the years. Women live up to an average of 62 years (see Table 3). A number of explanatory factors which have lead to this improvement over a long period of time in India can be identified. The NFHS-II lists a few as follows: Reduction of the crude birth rate from 40.8 births per 1000 population in 1951 to 26.4 in 1998; Halving of the infant mortality rate from 146 per 1000 live births in 1951 to 72 per 1000 live births in 1998; Reduction of the crude death rate from 25 deaths per 1000 population in 1951 to 9 in 1998; Quadrupling of the couple protection rate from 10 per cent in 1971 to 44 per cent in 1999; and Reduction in the total fertility rate from 6.0 in 1951 to 3.3 in 1997 (IIPS, 2000).

All these factors which have occurred with an overall improvement in the standards of living over the years have enhanced the life chances and longevity, even for women. It is worth noting that unlike the sex ratios which exhibits a correlation with prosperity, the life expectancy at birth indicator seems to correlate positively with estimates of poverty (Rustagi, 2003). The states with low life expectancy at birth among females are Madhya Pradesh, Uttar Pradesh, Orissa, Assam, Bihar and Rajasthan, which rank among the poor states in the country. The best states based on this indicator and Kerala, Punjab, Maharashtra, Himachal Pradesh and Tamil Nadu.

This indicator of life expectancy at birth reflects a positive trend for gender development. This implies that there are bound to be many more women in the older age cohorts in the future. Given the absence of social security for them, on the one hand, and the declining support structures from family and society, on the other, this feminisation of old age is bound to be a cause of concern for the policy makers and planners in immediate future.

Table 3: Expectation of Life at Birth by Sex - India

Year	Male	Female	Person
1901-11	22.6	23.3	22.9
1911-21	19.4	20.9	20.1
1921-31	26.9	26.6	26.8
1931-41	32.1	31.4	31.8
1941-51	32.4	31.7	32.1
1951-61	41.9	40.6	41.3
1961-71	46.4	44.7	45.6
1971-75	50.5	49	49.7
1976-80	52.5	52.1	52.3
1981-85	55.4	55.7	55.4
1986-90	57.7	58.1	57.7
1987-91	58.1	58.6	58.3

1988-92	58.6	59	58.7
1989-93	59	59.7	59.4
1990-94	59.4	60.4	60
1991-95	59.7	60.9	60.3
1992-96	60.1	61.4	60.7
1993-97	60.4	61.8	61.1

Source: Registrar General of India,

1. Census Actuarial Reports
2. Sample Registration System based abridged life tables 1986-90
3. Central Statistical Organisation, 2001

Women's Health

The State's approach to the issue of women's health has concentrated excessively on aspects concerning reproductive health (see Dutta, 2003; Gopalan and Shiva, 2000; Mazumdar, et al., 2001). Women are viewed as channels of reproduction for the perpetuation of societal and human growth, often at the cost of their own personal, individual identity. Even now, despite some efforts to widen the concerns placed upon women's health to issues of their nutrition, bodies, sexualities, which looks into both physical and mental aspects, the state policies and programmes still emphasise and concentrate on family welfare and reproductive health. A major share of the budgetary allocations are under these heads [see Gopalan and Shiva, 2000 and references cited therein].

The indicators selected as broad aspects which reflect on the health situation of women in the states of India are mean age at marriage, total fertility rates, anaemia levels in women and couple protection rate.

Age at Marriage among Females

Despite the legally stipulated minimum age at marriage of 18 years, girls still get married before attaining this age in the states of Madhya Pradesh, Rajasthan, Andhra Pradesh, Bihar, West Bengal and Uttar Pradesh (see Table 4). The NFHS-II 1998-99 states that nearly 60 to 80 per cent of the married women between the ages of 25-49 years surveyed by them, were married before they were 18 years old (IIPS, 2000).

Early marriage often accompanies early pregnancy too, with young unprepared mothers being saddled with responsibilities beyond their capacities. Young age pregnancies are more likely to result in underweight babies, still births or abortions, especially where these accompany poor health conditions and deficiencies.

Table 4: Mean Age at Marriage among Females

Rank	State	Total
1	Madhya Pradesh	16.62
2	Rajasthan	16.67
3	Andhra Pradesh	16.81
4	Bihar	16.95
5	West Bengal	17.21
6	Uttar Pradesh	17.27
	INDIA	**17.68**
7	Tripura	17.82
8	Haryana	17.88
9	Maharashtra	17.91
10	Orissa	17.96
11	Karnataka	18.00
12	Himachal Pradesh	18.13
13	Assam	18.23
14	Arunachal Pradesh	18.50
15	Gujarat	19.01
16	Tamil Nadu	19.12
17	Sikkim	19.22
18	Meghalaya	19.33
19	Manipur	19.45
20	Punjab	19.70
21	Kerala	19.85
22	Nagaland	20.12
23	Mizoram	20.30
24	Goa	20.42

Source: Census of India, 1991

Total Fertility Rate

The fertility rate as per the NFHS-II is an average of 3 babies for the country as a whole. The number of childbirths among women belonging to the stats of Meghalaya, Uttar Pradesh, Rajasthan, Nagaland, Bihar and Madhya Pradesh are even higher (see Table 5). Although declining for the country as a whole, total fertility rate is close to replacement level in only some of the states. Low total fertility rates are recorded in the states of Goa, Kerala, Karnataka, Himachal Pradesh and Tamilnadu.

Table 5: Total and Desirable Fertility Rates

Rank	State	Total wanted fertility rate	Total fertility rate
1	Meghalaya	3.83	4.57
2	Uttar Pradesh	2.83	3.99

3	Rajasthan	2.57	3.78
4	Nagaland	2.98	3.77
5	Bihar	2.58	3.49
6	Madhya Pradesh	2.4	3.31
7	Manipur	2.5	3.04
8	Mizoram	2.66	2.89
9	Haryana	2.1	2.88
	INDIA	**2.13**	**2.85**
10	Sikkim	1.65	2.75
11	Gujarat	2.08	2.72
12	Jammu & kashmir	1.74	2.71
13	Arunachal Pradesh	1.74	2.52
14	Maharashtra	1.87	2.52
15	Orissa	1.9	2.46
16	Delhi	1.72	2.4
17	Assam	1.75	2.31
18	West Bengal	1.78	2.29
19	Andhra Pradesh	1.88	2.25
20	Punjab	1.55	2.21
21	Tamil Nadu	1.71	2.19
22	Himachal Pradesh	1.5	2.14
23	Karnataka	1.56	2.13
24	Kerala	1.81	1.96
25	Goa	1.47	1.77

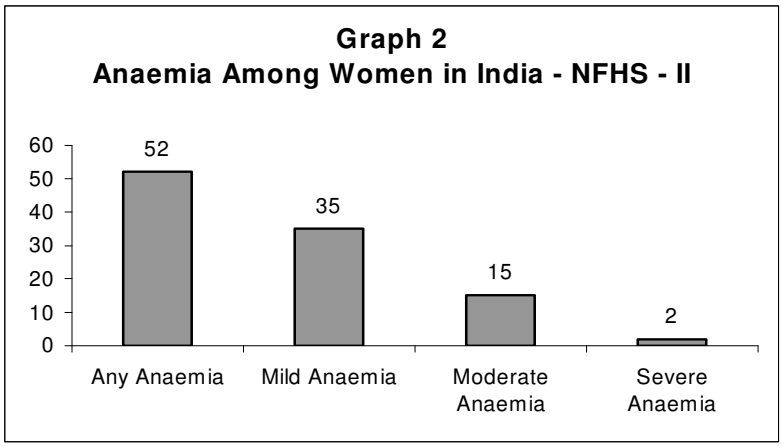
Source: NFHS-2, 1998-99.

Frequent childbearing, often an offshoot of the predominant son preference in our society, takes a heavy toll on the women (Dasgupta and Bhat, 1998; Murthi, et al., 1995; Srinivasan (ed), 1996 among others). Among the resource poor households, it is distressing to note that women are simultaneously breastfeeding more than one child due to the lack of finances to feed the earlier child with alternative or supplementary diets.

During childbirth, several severe complications are commonly reported, such as haemorrhage, excessive bleeding, anaemia, toxicity, premature babies and their associated problems (IIPS, 2000). Among these anaemia is a prominent cause that leads to maternal deaths, apart from resulting in physically weak children.

Anaemia among Women

Every second woman in India suffers from some degree of anaemia according to NFHS-II. Severe anaemia is reported from 2 per cent women, while 35 per cent and 15 per cent are affected by mild and moderate anaemia levels respectively (see Graph 2).



Source: NFHS-II, 1998-99; IIPS, 2000.

A majority of women are anaemic in 10 states (see Table 6). This iron deficiency is particularly pronounced among women inhabiting the eastern and some of the northeastern states. Lowest prevalence of anaemia are recorded in the states of Kerala, Manipur, Goa and Nagaland. It is difficult to explain such wide variations in the proportion of women suffering from anaemia within Indian states, especially those belonging to the same region. Efforts to collate more information from hospital records are needed to make more useful data available on other health related variables affecting women.

Table 6: Women suffering from Anaemia- Statewise

Rank	State	Percentage of women with any anaemia	Percentage of women with:		
			Mild anaemia	Moderate anaemia	Severe anaemia
1	Assam	69.7	43.2	25.6	0.9
2	Bihar	63.4	42.9	19	1.5
3	Meghalaya	63.3	33.4	27.5	2.4
4	Orissa	63	45.1	16.4	1.6
5	West Bengal	62.7	45.3	15.9	1.5
6	Arunachal Pradesh	62.5	50.6	11.3	0.6
7	Sikkim	61.1	37.3	21.4	2.4
8	Jammu & Kashmir	58.7	39.3	17.6	1.9
9	Tamil Nadu	56.5	36.7	15.9	3.9
10	Madhya Pradesh	54.3	37.6	15.6	1
	INDIA	**51.8**	**35**	**14.8**	**1.9**
11	Andhra Pradesh	49.8	32.5	14.9	2.4
12	Uttar Pradesh	48.7	33.5	13.7	1.5
13	Maharashtra	48.5	31.5	14.1	2.9
14	Rajasthan	48.5	32.3	14.1	2.1
15	Mizoram	48	35.2	12.1	0.7
16	Haryana	47	30.9	14.5	1.6

17	Gujarat	46.3	29.5	14.4	2.5
18	Karnataka	42.4	26.7	13.4	2.3
19	Punjab	41.4	28.4	12.3	0.7
20	Delhi	40.5	29.6	9.6	1.3
21	Himachal Pradesh	40.5	31.4	8.4	0.7
22	Nagaland	38.4	27.8	9.6	1
23	Goa	36.4	27.3	8.1	1
24	Manipur	28.9	21.7	6.3	0.8
25	Kerala	22.7	19.5	2.7	0.5

Source: NFHS-2, 1998-99

Couple Protection Rate

Apart from prevalence of anaemia, the poor nutritional status of most women, and the toll of maternity and childcare, the additional burden of contraception also falls overwhelmingly on women. The latest data available from the Department of Family Welfare under the Ministry of health and Family Welfare reveals that female sterilisations account for 95 per cent of all sterilisations. It is as if to emphasise that since women conceive and bear children, it is their responsibility to control or protect themselves against further reproduction.

Less than 50 per cent of couples in the reproductive age groups have resorted to some method of contraception (as on 31st March, 1999). Punjab, Gujarat, Karnataka and Haryana are the best states in terms of couple protection rates (see Table 7). In the tribal populated states of the northeast where traditional beliefs predominate, there has been very little intervention by way of modern contraceptive methods.

The NFHS-II in its states series records very high awareness levels (close to universal) among the surveyed population regarding some method of contraception. However, adoption of these measures vary across age cohorts due to specific preferences, cultural considerations regarding family size, ideal sex composition of offsprings and so on (Basu, 1992; Jejeebhoy, 1993; Khan, et al. 1988 among others). It has been noted that the older age cohort among the reproductive ages of women have a higher rate of adopting contraceptive measures (IIPS, 1995 and 2000). Male contraception, however, is still lacking, with very few men taking the responsibility of adopting vasectomies.

Public awareness creation measures have been adopted by the state, aid agencies and various NGOs through media regarding the option, possibility and ease of male sterilisation. These efforts will have to spread more widely to remote areas in the country.

Table 7: Effective Couple Protection Rate (CPR)

Rank	State	1998	1999
1	Meghalaya	3.9	4.8
2	Nagaland	7.9	7.9
3	Arunachal Pradesh	12.6	14.6
4	Jammu & Kashmir	16.4	15.4
5	Assam	17.6	17.3
6	Bihar	20.9	20.1
7	Manipur	21.3	21.2
8	Sikkim	20.7	22.6
9	Tripura	25.6	27.2
10	Goa	27.8	29.3
11	West Bengal	33.8	34.4
12	Mizoram	38.2	35.3
13	Rajasthan	34.6	41.8
14	Orissa	39	41.9
15	Kerala	41.3	42.4
16	Uttar Pradesh	39.1	42.4
	ALL INDIA	**45.4**	**48.6**
17	Himachal Pradesh	50.3	51.5
18	Tamil Nadu	50.8	52.1
19	Andhra Pradesh	49.1	52.4
20	Madhya Pradesh	47.7	52.4
21	Maharashtra	50.7	52.5
22	Haryana	50.7	55.8
23	Karnataka	55.4	57.4
24	Gujarat	53.8	60.4
25	Punjab	68.9	73.1

Note: As on 31st March, 1999.

Source: Department of Family Welfare, Ministry of Health & Family Welfare.

Education

Does women's education lead to a positive impact on gender development? Will it ensure greater gender equality? While it can be stated with certain degree of certainity that improving education of women will lead to gender development, a similar affirmation of the second statement is difficult since literacy alone is not sufficient to bring about equality among men and women. The discrimination and biases witnessed are an outcome of socio-cultural factors and patriarchal structures which are not easily overcome by introduction of literacy alone. Nevertheless, the benefits of education cannot be trivialised as these are long term changes which have an impact upon empowerment of women.

The indicators that will be examined in the section are female literacy, gender gap in literacy, enrolment and dropout rates at primary schooling levels. Literacy rate among females is defined as the effective literacy rate pertaining to women above the age of 6 years. Women literates as a proportion of female population of 7 years and above is the effective literacy rate.

Female Literacy and Gender Gaps

Literacy is the first step towards formal education. It refers to the ability to read and write. Female literacy has been improving over the years. The proportion of women who are literate has increased by 15 per cent over the last decade from 39 per cent in 1991 to 54 per cent in 2001. This is a remarkable improvement that reflects the concerted efforts of the state along with the assistance from NGOs and other concerned groups. Yet, even today 193 million women lack the basic capability to read and write.

The emphasis laid on education especially for women is visible in the policy documents of the Government such as the various 5 years plans (especially even since the Sixth Plan, 1980-85), National Policy on Education and so on (see the CSWI, 1975; Gopalan, 2002; Mazumdar et al., 2001, for a detailed exposition on the evolution and planning on women's education). Many programmes targeting different segments of the population have been instituted to promote literacy among women, young and old. These efforts have been partially successful due to the lower value ascribed to women's education in our society.

All Indian states have registered improvements in female literacy rates (see Table 8). Rajasthan with the worst literacy levels among women in 1991 (as low as 20) has doubled the proportion of literate women in a decade to 44 in 2001. Chattisgarh, the newly formed state and Madhya Pradesh are the other states with similar levels of improvements in women's literacy. This is an outcome of various educational programmes such as Mahila Samakhya, District Primary Education Programme (DPEP), Adult Literacy Mission and Non-Formal Education ventures (Karlekar (ed), 2000; Rampal, 1996).

The states with high women's literacy levels are Kerala, Mizoram and Goa. These are also the states where gap in literacy rates across men and women are low. Bihar, U.P. and Jharkhand remain the worse states in terms of women's literacy, despite some improvements over the decade. The states of Madhya Pradesh, Orissa and Andhra Pradesh exhibit literacy levels that are below the all-India average. These are also the states with higher gender gaps in literacy. While low literacy rate may be explained by a range of factors such as non-availability of schools, teachers, equipment and infrastructure which affect both

sexes, it is social attitudes and perceptions that attach lower preference to girls' education that increases the gender gap in literacy.

Table 8: Female Literacy and Gender Gap in Literacy Rates - Statewise 1991-2001

Rank 2001	States	FLIT 01	FLIT 01	Rank 1991		Rank 2001	States	LGAP 01	LGAP 91	Rank 1991
1	Bihar	33.57	21.99	2		1	Rajasthan	32.12	34.55	1
2	Jharkhand	39.38	25.52	4		2	Jharkhand	28.56	30.28	5
3	Jammu & Kashmir	41.82	NA			3	Uttar Pradesh	27.25	30.45	4
4	Uttar Pradesh	42.98	24.37	3		4	Bihar	26.75	29.38	6
5	Arunachal Pradesh	44.24	29.69	7		5	Madhya Pradesh	26.52	29.19	7
6	Rajasthan	44.34	20.44	1		6	Chhatisgarh	25.46	30.55	3
7	Madhya Pradesh	50.28	29.35	6		7	Orissa	24.98	28.41	9
8	Orissa	50.97	34.68	9		8	Jammu & Kashmir	23.93	NA	
9	Andhra Pradesh	51.17	32.72	8		9	Uttaranchal	23.75	31.16	2
10	Chhatisgarh	52.40	27.52	5		10	Haryana	22.94	28.63	8
	INDIA	**54.16**	**38.79**			11	Gujarat	21.90	24.49	10
11	Assam	56.03	43.03	12			**INDIA**	21.69	24.52	
12	Haryana	56.31	40.47	10		12	Arunachal Pradesh	19.83	21.76	17
13	Karnataka	57.45	44.34	13		13	Andhra Pradesh	19.68	22.40	16
14	Gujarat	58.60	48.64	18		14	Karnataka	18.84	22.92	14
15	Manipur	59.70	47.60	17		15	Maharashtra	18.76	24.24	11
16	West Bengal	60.22	46.56	15		16	Manipur	18.17	24.03	12
17	Uttaranchal	60.26	41.63	11		17	Himachal Pradesh	17.94	23.23	13
18	Meghalaya	60.41	44.85	14		18	Tamil Nadu	17.78	22.42	15
19	Sikkim	61.46	46.76	16		19	West Bengal	17.36	21.25	18
20	Nagaland	61.92	54.75	24		20	Tripura	16.06	20.93	19
21	Punjab	63.55	50.41	20		21	Assam	15.90	18.84	21
22	Tamil Nadu	64.55	51.33	21		22	Sikkim	15.27	18.94	20
23	Tripura	65.41	49.65	19		23	Goa	13.37	16.55	22
24	Maharashtra	67.51	52.32	23		24	Punjab	12.08	15.25	23
25	Himachal Pradesh	68.08	52.13	22		25	Nagaland	9.85	12.87	24
26	Goa	75.51	67.09	25		26	Kerala	6.34	7.45	26
27	Mizoram	86.13	78.60	26		27	Meghalaya	5.73	8.27	25
28	Kerala	87.86	86.17	27		28	Mizoram	4.56	7.01	27

FLIT - Female Literacy; LGAP - Gender Differences in Literacy Rates.
Source: Census of India, 1991 and 2001.

Both, non-economic and economic factors and discussed in the literature to explain the prevalence of gender gap in literacy rates (Nayar, 1993; Nuna, 1990; PROBE, 1999; Rustagi, 2003; Tilak, 2002; Wazir (ed.) 2000 and so on). The situation among other disadvantaged groups such as the scheduled castes and scheduled tribes is even worse.

Enrolment and Dropout Rates

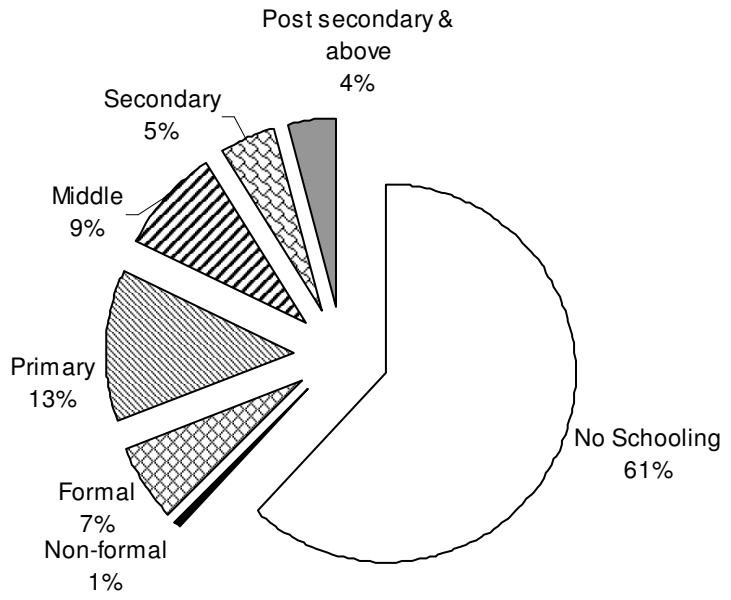
The enrolment of girls in schools even at the primary level is lower as compared to boys. In 1999-2000, the enrolment ratio for girls was 85 per cent in classes I-V

(6-11 years). This dropped further to 50 per cent in classes VI-VIII (11-14 years)[Selected Educational Statistics, GOI, 2001]. The emphasis laid upon training girls for marriage, inadequate facilities for girls in schools, absence of adequate female teachers, fear for their safety and so on are among the reasons for the low enrolment of girls in schools. This is further compounded by higher levels of dropouts among girls. In 1999-2000, 42 per cent of girls in primary schools had dropped out in India.

Rajasthan, Uttar Pradesh, Bihar and West Bengal are some of the states where enrolment is low and dropout rate high, implying a very low retention rate of girls at primary school levels. Alternative uses of girls in sibling care, as additional hands for helping mothers in household, farm and off-farm work and so on operate in reducing the significance of formal education for them (Chaudhuri, 1999; Hirway, 2001; Rustagi, 2002).

Given the low retention at primary levels, very few girls reach middle and secondary schooling or higher levels of education (see Graph 3). This implies low human capital development, poor levels of skill/training to meet market demands, leaving little probability of women joining the labour market except in jobs that are in the informal sector, low paid and virtually with no protection or security.

Graph 3
Educational Attainment among Women



Source: GOI, 2001.

Most of the states are still far behind the goal of universalisation of elementary education that is to be met by 2010. Unless improvements in women's educational status take place, their chances to participate in the social, economic and political spheres remain severely curtailed.

Women's Work and the Issue of Non-Recognition

Women work both for the labour market and for the household. Some of this work is recognised and remunerated, while most of it goes unenumerated and remains unpaid. Their contribution to the household, economy and society goes unrecognised since most of the activities females are involved in do not enter the market spheres and remains non-monetised. Most of the work undertaken by women is often interspersed with other household chores, making it difficult to separate them out. The role fulfilled by women in household maintenance and care activities cannot be trivialised. Assigning monetary value to all the tasks undertaken by women, however, are not very easy. Some effort to capture the time spent by women in the course of the day to do various tasks have been made through the time use surveys (CSO, 2000). This brings out the significance of time spent by women in unpaid care activities [Bhatia, 2002; Hirway, 2002 among others].

The indicators covered under economic participation are female work participation rate (FWPR), share of women in organised sector employment, gender differences in work participation rate and unpaid work contributed by women based on time use survey (TUS). Since the time use survey is only a pilot survey covering six states, no state level analysis is provided here.

Female Work Participation Rate and Gender Gaps

Female work participation rate is measured as female main plus marginal workers as a proportion of women's population. The standard definitions of economic activity based work participation rate provides a low share of women's work. At the all India level, only 30 per cent of women are covered as workers, main or marginal. Among the states, Kerala has the lowest FWPR, while Uttar Pradesh, West Bengal and Punjab are other states where female work participation is low (see Table 9).

Table 9: Female Work Participation and Gender Gap in Participation

FWPR Rank	State/ UTs	FWPR	Rank WGAP	WGAP
1	Kerala	17.2	3	40.1
2	Uttar Pradesh	20.0	4	37.8
3	West Bengal	21.0	1	41.8

4	Punjab	21.2	2	41.1
5	Bihar	23.5	6	35.7
6	Tripura	24.3	8	34.2
7	Goa	24.8	5	36.6
8	Assam	24.9	7	34.5
9	Jammu & Kashmir	25.7	10	32.2
10	Orissa	28.6	9	32.9
	INDIA	**30.3**		**31.0**
11	Gujarat	30.9	12	30.3
12	Uttaranchal	31.9	18	23.5
13	Haryana	32.1	14	27.8
14	Jharkhand	32.2	15	26.3
15	Tamil Nadu	35.1	11	30.3
16	Karnataka	36.6	13	28.8
17	Maharashtra	37.7	17	24.2
18	Madhya Pradesh	40.1	19	22.3
19	Andhra Pradesh	40.2	16	24.9
20	Rajasthan	41.0	21	20.5
21	Meghalaya	43.7	23	15.9
22	Nagaland	44.8	28	9.4
23	Arunachal Pradesh	45.0	22	17.2
24	Sikkim	45.5	20	21.0
25	Manipur	46.2	27	10.5
26	Chhatisgarh	48.0	24	15.7
27	Himachal Pradesh	49.7	25	13.2
28	Mizoram	56.8	26	11.3

Note: Work participation rates are calculated as the proportion of total workers (main + marginal) among respective populations above six years. FWPR- Female Work Participation Rate; WGAP- Gender Gap in Work Participation.

Source: Based on Calculations from Census of India, 2001.

Female work participation rates are high among the hilly region states and those inhabited by tribals, such as most of the northeast, Himachal Pradesh and Chattisgarh. These are also the states where disparities across gender in terms of work participation are lower.

Organised Sector Employment

Organised sector employment constitutes a small share of total employment in India. Reliable estimates for this sector are available from the Ministry of Labour, Directorate General of Employment and Training. Women's share in organised sector employment is only 17 per cent. Most women even within the organized sector are located in the lower rungs of the hierarchy (Joseph and

Prasad (eds), 1995; Srivastava, 1997). Very few are managers, bosses or decision-makers (Menon-Sen and Kumar, 2001).

The highest shares of women in organised sector employment are noted for the states of southern and north-eastern India. In Kerala, women constitute 39 per cent of all organised sector workers (DGE&T). This is both an outcome of the educational advancement of women and the higher avenues available in the state.

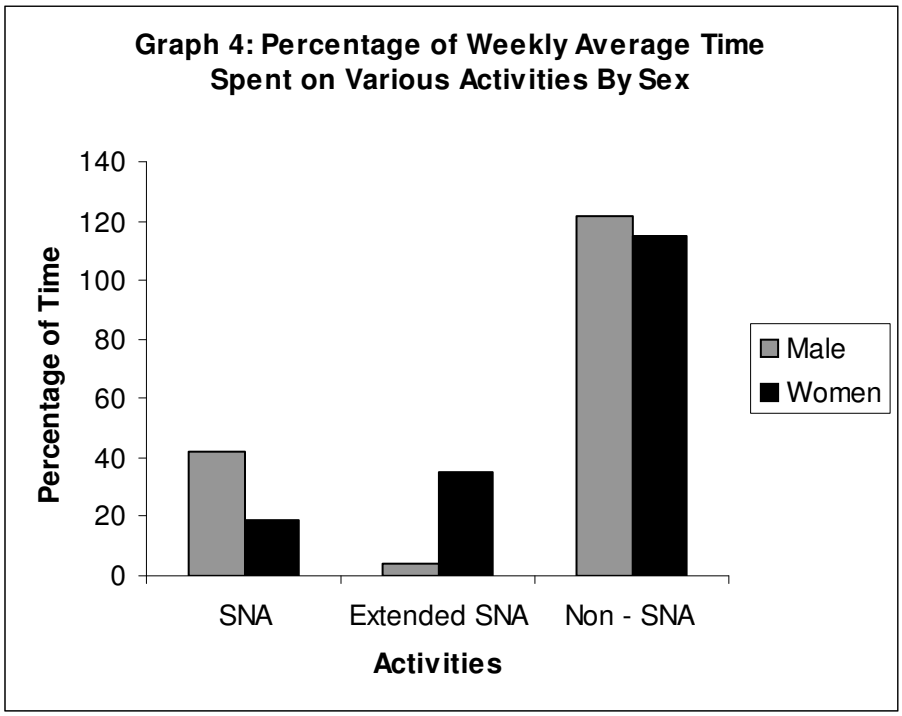
The states with low share of women's employment in organised jobs are Bihar, Uttar Pradesh, West Bengal, Jammu and Kashmir and Orissa. A larger share of women are located in the diverse range of unorganised sector activities, not all of which get enumerated despite the efforts being made to improve their coverage in data collection.

Time Use Survey – Women's Contribution to Unpaid Activities

The time use survey categorises activities into three parts – those accepted as economic activities as per the System of National Accounting (SNA), extended SNA and non-SNA. The household maintenance are care activities which are not considered to be economic activities under the SNA are included in the second category of extended SNA. The SNA activities have been further classified into paid and unpaid activities. While paid SNA activities are undertaken largely by men, women are found to be involved for larger number of hours in unpaid SNA activities, many of which are prone to go unrecognised (CSO, 2001).

In SNA activities, women spend 19 hours per week, while men's time is far higher at 42 hours per week on average. Unpaid SNA work burden shared by women contributes 51 per cent of their time, while men devote only 33 per cent of their time.

In extended SNA activities, the scenario of work participation reverses with women doing most of the household management and care work (see Graph 4). Women spent 35 hours while men contributed only 4 hours weekly time on extended SNA activities. Even the results of this pilot survey covering six Indian states reveals the excess contribution of work by women when both SNA and extended SNA are taken into consideration. An extension of this time use survey by the Central Statistical Organisation to cover all states would enable very useful comparisons.



Source: CSO, 2001.

Women's Participation in Decision-making

Since women are located in different households, castes, communities, regions bound by distinct rituals, practices and power authorities, they rarely view themselves as a group with similar demands and needs. They are often governed by decisions that others take on their behalf which are unquestioningly followed.

Do women have any autonomy? What is the extent of their public presence and participation as voters, contestants and winners in the general elections of the country? Women's presence in local governance structures, the panchayati raj institutions and its implications are considered in this section.

Autonomy

Autonomy indicators ought to reflect the control women have over themselves, their bodies, their incomes and in conducting their lives. Not all of these aspects are amenable to easy quantification. Case studies based on qualitative surveys have shown that even when women work and earn their own incomes, they have little or no control over spending it (Batliwala, et al., 1998; Visaria, 1993).

Table 10: Women's Autonomy by State

State	% not involved in any decision making	% involved in decision making on:				% who do not need permission to		% with access to money
		What to cook	Own Health care	Purchasing jewellery etc.	Staying with her parents/ siblings	Go to the market	Visit friends/ relatives	
Andhra Pradesh	7.4	86.2	56.1	61.4	57.7	20.1	14.6	57.7
Arunachal Pradesh	1.4	93.6	70	76.5	74.8	46.8	53.7	78.6
Assam	4.6	88.4	65.1	54.3	45.4	13.2	13.9	35
Bihar	13.5	82.4	47.6	42.9	44	21.7	20.5	66.7
Delhi	5.3	83	68.7	58.5	46.5	51.7	33.9	82.3
Goa	3.6	89.9	61.6	62.5	72.4	66.7	58.7	82.4
Gujarat	4.1	90.4	71.4	73.6	65.1	55.1	50.6	73.6
Haryana	3.4	93.5	67.2	77.8	64.5	36.7	20.8	70.8
Himachal Pradesh	0.8	95.1	80.8	93.4	91.4	32.5	31.1	80.1
Jammu & Kashmir	12.4	80	55.5	58.2	48.9	12	7.8	58.1
Karnataka	8.1	88.4	49.3	47.3	44.5	43	34.3	67
Kerala	7.2	80.9	72.6	63.4	59.7	47.7	37.9	66.2
Madhya Pradesh	12.5	81.7	36.6	44.3	38.1	21	19.5	49.3
Maharashtra	7.2	87.5	49.9	50.3	44.4	48.5	32.1	64.2
Manipur	3.3	87.4	43.3	66.3	63.2	28.6	28.3	76.8
Meghalaya	2.6	91.7	78.9	70.6	78.4	46.5	48.5	81.5
Mizoram	5.8	88.2	73.2	77.8	77	64.2	59.5	55
Nagaland	0.4	97.4	69.4	77.3	80	17.3	20.1	27.9
Orissa	10.6	86.3	38.6	54.8	48.3	18.2	15.4	46.3
Punjab	1	96.7	78.5	75.3	67.6	50.1	28	78.3
Rajasthan	13.3	82.3	40.6	42.7	39.3	19	17	40.5
Sikkim	2.7	92.1	60.2	57.9	56.7	38.2	41.6	78.9
Tamil Nadu	2.4	92.1	61.1	67.4	62.4	78.5	55.9	79
Uttar Pradesh	16.4	77.8	44.8	41.4	36.1	17.4	12.4	52.3
West Bengal	8	87.4	45.1	48.4	46.7	17.8	14.1	51.4
INDIA	**9.4**	**85.1**	**51.6**	**52.6**	**48.1**	**31.6**	**24.4**	**59.6**

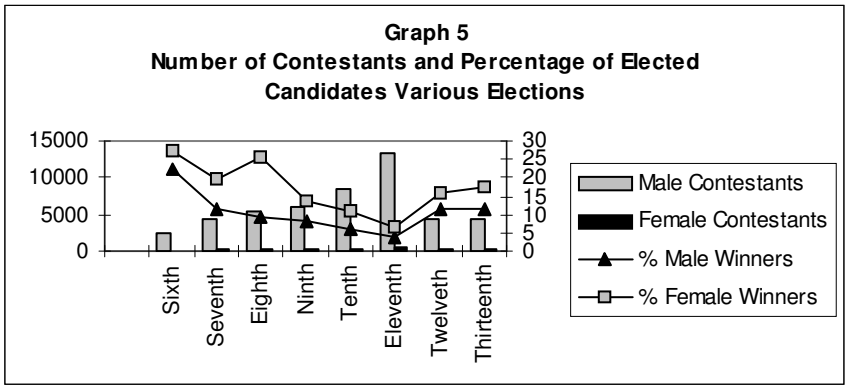
Source: National Family Health Survey-II, 1998-99.

Some aspects of women's lives which are only partially indicative of the extent of autonomy they have are captured by the NFHS-II. This data is used here to emphasise the relative levels of autonomy women have across these states in the limited spheres covered (see Table 10). NFHS-II information has been collated on decision-making in certain common spheres of women's daily lives to assess their autonomy in what to cook, their own health care, purchasing jewellery and similar items, and staying with their parents/siblings. The extent of mobility and women's ability to make these choices to go to the market or visit friends/relatives without having to seek permission to do so are also covered.

A large percentage of women in most states have the freedom to choose what to cook. Mobility indicators reveal the very low degrees of freedom for women.

Public Decision-making

Women's participation in public decision-making is gradually improving. In the last 8 general elections from 1977 to 1999, 51 to 59 per cent of women voters have participated. Of the few contestants among women, the winning rate is higher than that of men (see Graph 5).



Source: ECI; CSO (2001)

Panchayati Raj Institutions

Nearly a million women have gained entry at different levels through a policy of reservation of one-third seats for women in village level panchayats and urban municipalities. This space in local governance structures has been created by the 73rd and 74th Amendment to the Constitution of India.

These amendments have opened up opportunities for women to participate in local politics, help fulfil the requirements of their people, especially women and children. Despite the cases of misuse, proxy members and sarpanches, there have been some instances of significant positive developments that are more gender just and empowering for women (Buch, 2000; ISS, 1995-2001). Only the future will reveal whether this can be sustained. The bill on reservations for women in Parliament is stuck in the pipeline for the last few years, without success of being accepted.

Safety and Security

The extent of violence in a society and crimes against women reflect how safe women feel. Living a life of dignity is a basic requirement that women desire. Placed on the wrong side of power and hierarchies, women often face the brunt of violence. Since they are viewed as property of the men in their lives, whose responsibility it is to protect them – conflicts arising between men or households for anything –easily manifests into violating women (CWDS, 2002; Gurumurthy,

1998; ICRW, 1999). The fear of this violence permeates all spheres and all persons, proving to be a severe hindrance for women in attaining their potential and in building capabilities. How safe and secure a place is considered for women by them and society at large affects girls' education, their mobility, employment, skill enhancement, income earning capacity and political participation among many others. Discrimination and neglect in different spheres of their lives can also be considered forms of violence. Violence assumes various forms, not all of which are quantifiable.

The National Crime Records Bureau (NCRB) collates information based on police records of different crimes on an annual basis. Crimes against women (CAW) under the Indian Penal Code (IPC) include dowry deaths, rape, molestation, sexual harassment, cruelty by husband and his relatives and kidnapping and abduction of women and girls.

Crimes against Women

The crimes women face have been increasing at a higher rate than is the case for overall crimes in society. From 1998 to 1999, CAW increased from 123 to 127 cases per million persons (see Table 11), while the total cognisable crime rate declined from 1837 to 1823 over the same period. However, CAW constitutes only six per cent of total crimes. The low share of CAW as a proportion of total crimes may also be due to low reportage.

Women often face violence at the hands of their protectors (CWDS, 2002). Cruelty by the husband and his relatives as registered under IPC section 498A consistently tops the list of the highest crime rate, followed by the molestation rate. Cruelty/torture cases constitute 36 per cent, while molestation cases cover 26 per cent of total CAW (see Graph 6). The cases that have increased most are those of sexual harassment and cruelty at home (see Graph 7).

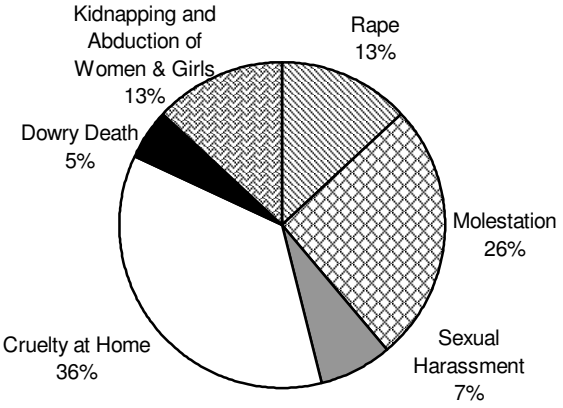
Table 11: States/UTs Ranked by Crime Rates Against Women in 1999

Rank 1999	States	1998	Rank 1998	1999
1	Rajasthan	231	1	246
2	Madhya Pradesh	206	2	221
3	Mizoram	171	4	176
4	Haryana	152	6	166
5	Jammu & Kashmir	184	3	165
6	Andhra Pradesh	143	8	161
7	Kerala	153	5	154
8	Arunachal Pradesh	123	12	148
9	Maharashtra	151	7	144
10	Gujarat	139	9	140
11	Assam	130	11	138

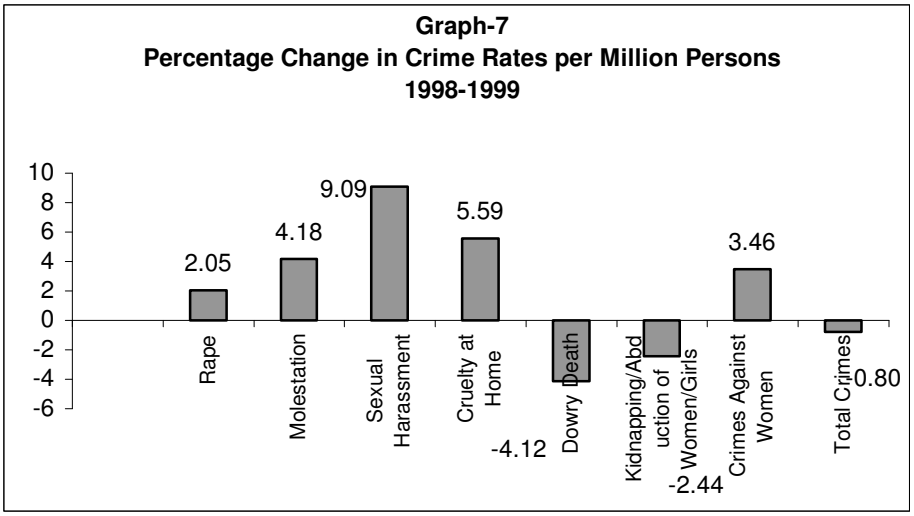
12	Himachal Pradesh	134	10	135
	ALL INDIA	**123**		**127**
13	Orissa	121	13	124
14	Uttar Pradesh	103	14	101
15	Tamil Nadu	83	17	100
16	Tripura	102	15	98
17	West Bengal	89	16	90
18	Karnataka	74	19	81
19	Punjab	53	22	66
20	Goa	61	20	58
21	Sikkim	75	18	56
22	Bihar	54	21	53
23	Manipur	39	23	29
24	Meghalaya	33	24	25
25	Nagaland	18	25	11

Source: NCRB (relevant years).

Graph 6
Components of Crimes Against Women
India 1999



Source: NCRB, 1999.



Source: NCRB, 1998 and 1999

The decline in dowry death rate over the years 1998 to 1999 cannot be seen as a reduction in the incidence of dowry related violence. The incidence of female deaths classified as suicide or accidental deaths by burns are very insightful in this context. Many women's organisations, concerned groups or individuals highlight the false categorisation of female murders as suicides or accidents (Vimochana, 1999;Viswanathan, 2001). Eleven per cent each of all accidental deaths and suicides in India are by fire. Of these, an exceptionally high share of deaths by fire of women are recorded (see Table 12).

Table 12: Accidental Deaths and Suicides by Fire (2000)

Category	Males	Females
Accidental Deaths by Fire	7,531	17,936
Suicides by Fire/Self Immolation	3,904	7,701

Source: NCRB (2000), Accidental Deaths and Suicides in India.

Efforts are on to improve the institutional mechanisms and sensitise police personnel to approach these cases more carefully. Various channels are being developed to share the assistance of other groups, NGOs and so on in such cases.

The crime rates based on recorded data available with the police differ widely from state to state. Crimes against women are the highest in Rajasthan with a rate of 246 cases per million persons. This is followed by Madhya Pradesh (221) and Mizoram (1976) in 1999.

Mizoram and Madhya Pradesh recorded particularly high rate of rape and molestation. Torture and the killing/burning of women are prominent among the northern states of Haryana, Uttar Pradesh, Punjab and Rajasthan.

Reportage of crimes against women has been low due to the social taboos associated with it. Nevertheless, greater number of cases are reported over the years. More effort is required to work towards creating an appropriate environment for women to be able to access the institutional structures that exist for assisting them.

Concluding Remarks

Each individual indicator has its own significance in highlighting the levels of gender development or backwardness. Even when a set of indicators impact upon one dimension of women's status, say survival, all the indicators selected therein have distinct sets of information to highlight relative levels of gender development. More importantly, it is not always necessary that all the indicators of survival will reveal a similar status of women and girls in the Indian states. To elaborate, take the instance of Maharashtra, a relatively prosperous state which displays a child sex ratio that is more imbalanced with fewer girls than in the case of the Indian average. The infant mortality among females for this state, however, reveals a better scenario with a far lower rate. Among the other states with lower child sex ratios, the incidence of female infant mortality is also higher, as in the case of Punjab, Haryana, Rajasthan and Gujarat. This emphasises the point that no other indicator or approach may have highlighted this aspect of lowering child sex ratios in Maharashtra, other than the direct indicator itself.

The gender gap in literacy levels reveals the deep-rooted presence of patriarchal values that hinder women's equality and empowerment. Although at the core of gender discrimination lie the patriarchal structures, its direct manifestation is noted in particular, identifiable spheres. Understanding the phenomenon, and identification of its reasons, aid in the process of designing appropriate policies and programmes.

Different states exhibit areas of gender backwardness or development that are distinct to itself. Kerala, otherwise a developed state with positive indicators of literacy, health and sex ratios, falls short in the share of women's work particularly in relation to other states. Even in terms of crime rates against women and autonomy levels, the state's women do not fare too well compared to other states (Panda, 2003; Visaria, 1993).

This paper through the state level analysis illustrates the significance of individual gender development indicators for the problem or constraint

identification and policy intervention. The area of emphasis for intervention to improve the status of women differs from state to state. Such an analysis based on gender development indicators in fact must be undertaken at the level of programme implementation, that is, sub-state and preferable sub-district level at which the planning can be more targeted and focused.

Successful programme implementation or scheme operations in one location have often proved difficult to replicate in others. Specificities, particular to the region or area in question, need to be understood through indepth research to comprehend the nature and manifestations of the problems and constraints facing women.

In the end, it may be emphasised that what this analysis achieves is to illustrate the complexities involved in assessing women's development and status in our country. The same state fares very differently based on different indicators which highlights the non-linear path followed by development indicators, especially in the case of gender development. Therefore, detailed examination of different indicators (preferably at the district level or below) for the specific information that they reveal is essential in order to understand, strategise, plan and formulate programmes as well as implement the policies effectively.

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