Regional Analysis of Gender-Related Development:
Districts of Western India

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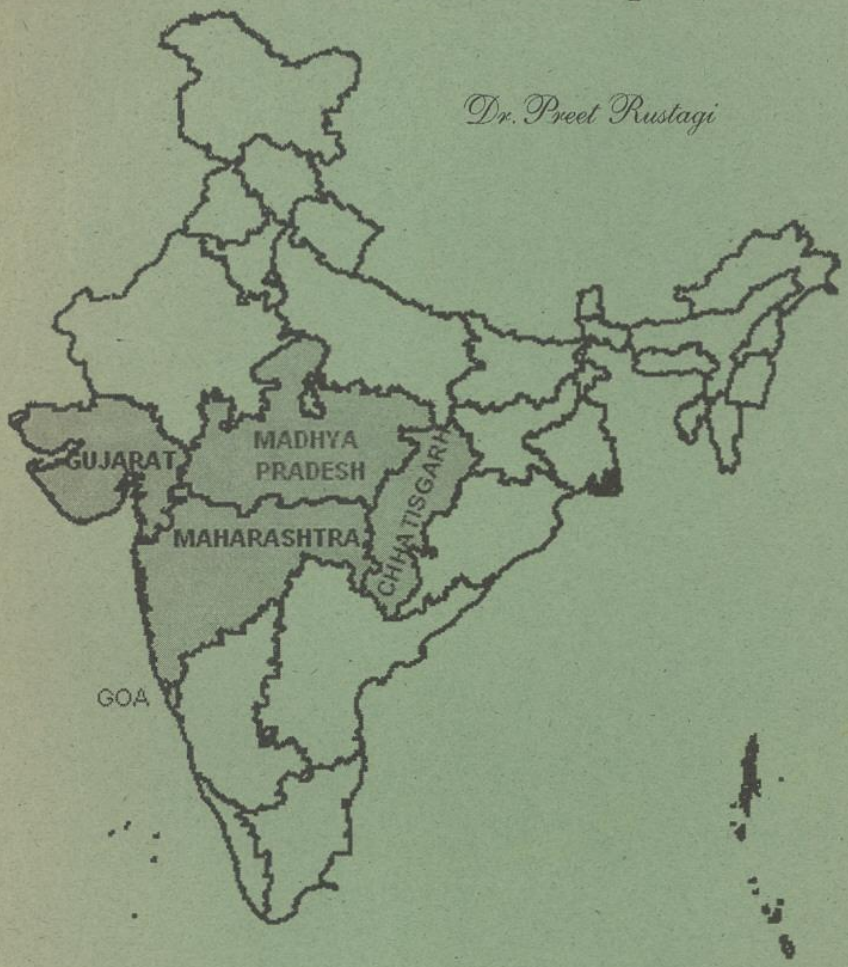

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In this paper the diverse dimensions of gender development are examined using individual indicators for the districts of the western region of India. The western region for the purpose of this study covers the five states of Goa, Gujarat, Maharashtra, Madhya Pradesh and Chattisgarh[1]. Using a selected set of indicators, the levels of women's development in demographic, educational, health-related, socio-cultural and economic spheres are identified. The methodology used is a simple ranking exercise that highlights relative levels of development or backwardness.

1.1 Why Regional Analysis?

Indian states by themselves are geographically vast areas encapsulating social, cultural, historical, political and economic diversities. The processes of planned development have highlighted the regional imbalances and unevenness in the states of India. Most of the analysis focused on poverty, non-farm or industrial development, investment dimensions and so on, with little or no attention to the gender dimensions of these. Researchers working on regional disparities[2] have dwelled on the increasing tendencies of divergence or convergence, while almost all of them note the prevalence of inequalities as well as its persistence. Under this frame, development is assumed to be gender neutral and therefore it is expected that women will benefit along with men from any improvements that occur. The realization that women need to be specifically addressed for their concerns with the debunking of the myth regarding gender neutrality which occupied researchers over the last two decades, finally came to be more widely acknowledged by the mid-nineties (the Beijing Conference and the United Nations Development Programme (UNDP) Human Development Report of 1995 focussing on gender-related development, were a few of the landmarks announcing this recognition).

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; Tinker, 1990; UNDP, 1995 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

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1 Chattisgarh is a new state carved out of Madhya Pradesh. For the changes in states/ districts that have occurred from 2001 census onwards, see Appendix 1. Since all information is not yet available from the latest census, all district level analysis uses 1991 data. Some comparative trends over 1991-2001 wherever data is available have been done for the state level.

2 To name a few recent studies, Debroy and Bhandari (eds.), 2003 and the various committees cited therein, p.16-17; Dholakia, 2003; Sachs, et al., 2002.

wherein women were relegated to being mere recipients of various beneficiary projects, often under the assumption that some benefits would trickle down to them. In order to move towards women's equality, the structures and institutions which define and help perpetuate inequalities across men and women need to be recognised. The discrimination and biases against women that are prevalent have to be identified and measured to the extent possible.

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.

One approach to fathom these gender complexities stemming from power and authority relations that affect all spheres of life and living is to assess levels of gender development through an indicator based analysis. The highlights and findings of such an exercise can help frame the right questions around which region specific explorations can be designed to improve our understanding on these complex issues connected with gender relations and development.

Another important purpose such an analysis serves is to enable better governance, policy framing, designing and implementation. Therefore, indicators of gender development need to consider smaller units at least at sub-state levels, to start with. Since district level data is by and large available from reliable national sources, it is feasible to use these statistics to identify areas of relative improvement or poverty with regard to women's status. This analysis is undertaken to enable a clearer regional picture of relative levels of betterment or backwardness in the various spheres of women's development.

1.2 The Choice of Indicators

Indicators have been selected based on the insight they lend for gender development. However, not all dimensions essential or desirable for such an analysis may be feasible given the limitations of data availability as well as the quantification of variables. Hence, the choices of indicators are limited by the secondary data sources that provide information that are amenable to comparisons at a national level.

The variables used for this study cover demographic, educational, health-related, socio-cultural and economic aspects. There are four demographic variables that include sex ratio among population above six years of age, child sex ratio pertaining to the 0-6 years age group, sex ratios among scheduled castes and tribes. Since the proportion of scheduled tribes (STs) in the districts of the region differ widely and may result in spurious gender balances among districts with lower insignificant proportion of STs, only districts with more than 5 per cent ST population are considered for the last demographic indicator. For discussions on the significance of

considering sex ratios as an indicator of women's status and the increasing concern over the decline of the share of women in the population, see CSWI, 1975; Mazumdar and Krishnaji (eds), 2001; Agnihotri, 2000; UN, 1998; Kundu and Sahu, 1991.

Effective female literacy, that is, the number of female literates in the population above six years, and gender gap in literacy rates are the two educational indicators used in this study. The four health-related variables are the female infant and child mortality rates, along with gender differences in the two rates. The socio-cultural variables are mean age at marriage among females and the total fertility rates. While there is no sacrosanct categorisation of these variables into different dimensions, the distinction is made to emphasise the major influences on the stated indicators. Otherwise, even the socio-cultural variables have implications for health of women and can be so treated. However, the manner in which the decisions influencing marriage and fertility work in our country, the impact of social and cultural factors is higher.

Female work participation rates along with the gender gap in participation levels are the twin economic variables considered in this study. The selected variables and their abbreviations are provided in List 1. While demographic balance, higher literacy, lower mortality, higher age at marriage (above the stipulated minimum of 18 years at least) and lower fertility is desirable for women's welfare, the direction of women's economic participation is not as intuitively clear. This is because of some researchers finding women opting out of paid work with improvements in the households' level of income or husband being employed at a comfortable pay (see NCSEW, 1988; Bardhan, 1985; Agarwal, 1985). Also the association of social status enhancement with women's non-participation given the existing frame as defined by norms governed by patriarchal social institutional structures adds to the confusion in apparent ways.

Whether women should work or not, be allowed to go outside their 'private' domains and how 'good' or 'bad' this will be for them is not an issue opened for debate here. It is adequate to state that these are dimensions essential to move towards gender equality in today's times and can be empowering for women. Certainly, women's work participation is more empowering than non-participation is disempowering and therefore it is believed here that women's increased participation in public, paid or economic domains is a movement in the direction of improving their status and well-being.

Low participation is also an outcome of the definitional and conceptual limitations within the prevalent standards followed wherein women's economic participation gets hidden or remain unenumerated due to the difficulty of separating their private-public participation, economic-non economic involvement, paid-unpaid categories and so on (see Agarwal, 1985). In the agricultural sector, due to the acceptance of the practices employed in conducting work, many women involved therein are now being recognised as economically active, however, their involvement in other sectors still remain unaccounted. This is a problem stemming from the definition and

therefore manifests in the data. As specified earlier since this study is based on what is available from data sources (howsoever limiting this may be), the figures for female work participation are used as they are.

List 1: Chosen Indicators

S. No.	Head/Description	Abbreviation
A.	**Demographic**	
1.	Sex Ratio of Population above the age of 6 years	SR>6
2.	Child Sex Ratio (0-6 years)	CSR
3.	Sex Ratio among Scheduled Caste Population	SRSC
4.	Sex Ratio among Scheduled Tribe Population	SRST
B.	**Literacy Rates**	
5.	Effective Female Literacy	FLIT
6.	Gender Differential in Literacy Levels	LGAP
C.	**Mortality Rates**	
7.	Infant Mortality Rate among Females [Q (1)]	IMRF
8.	Gender Differentials in Infant Mortality Rates	IMRD
9.	Child Mortality Rate among Females [Q (5)]	CMRF
10.	Gender Differentials in Child Mortality Rates	CMRD
D.	**Marriage and Fertility**	
11.	Mean age at Marriage among Females	MAMF
12.	Total Fertility Rate	TFR
E.	**Work Participation Rates**	
13.	Proportion of Main Female Workers in the total female population above the age of 6 years	FWPR
14.	Gap in Work Participation Rates among Males and Females	WGAP

An aspect in the sphere of measuring development in general and for gender dimensions that has preoccupied researchers all over the world for a long time now is what constitutes well-being, or development and which variables are appropriate in quantifying or measuring these dimensions. In this paper only the chosen indicators and what they signify is highlighted without going into the debates on their relevance or appropriateness since that falls outside the focus of this work[3].

1.3 Some Issues on Language/ Terms Used

The indicator on child sex ratio that pertains to the population 0-6 years is so called to distinguish between the infancy stages and sex ratio pertaining to the population above 7 years. The word 'child' refers to a longer span of years. This differs depending on the purpose for which a child is being defined. There is no other reasoning associated with terming this indicator as 'child' sex ratio other than not

[3] Some of these aspects have been discussed elsewhere in Rustagi (2000) (see the references cited therein; also see Sen, 1987; UNDP, 1990, 1995; Baster, 1972; Morris, 1979; McGranahan et al. 1972; OECD, 1976; UNESCO, 1981).

finding a more appropriate term. Since, this one does not clash with any other prevalent terminology, there is no problem perceived in using this nomenclature.

Some clarifications are essential on the use of gender where the variable refers to variations across males and females. Since, in most cases, these differences stem from the prevalent gender stereotyping and social institutions that draw heavily from patriarchal value systems, the statistical differences observed across men and women, although sexual on the face of it, are actually due to gendered behaviour.

Similarly, another term that needs to be clarified is whether these differences across males and females can be termed as discrimination or bias. Some scholars have tried to distinguish between the two and abstained from using these terms on the plea that numerical/ statistical differences are a result of certain perceptions and beliefs that need not necessarily indicate active discrimination by conscious design to do so (Timaeus, et al., 1998; Khan, et al., 1991; Basu, 1989). To draw such minute distinctions in perceptions, practices and results even while accepting that social institutions and values influence these, is merely a polemical issue. In so far as differential treatment is meted out to boys and girls, males and females, whatever be the rationale it is a reflection of the operation of structures that are influenced by patriarchy. Therefore, to term these findings as gender differences, discrimination and bias against girls is quite appropriate. How active or implicit this inequality is in the behaviour is immaterial here.

1.4 Brief Pointers on the Methodology

Indicators developed to portray levels of well being must be simple, easy to understand, based on results not inputs, should not assume a single development pattern or cultural value and should reflect the distribution of social results (Morris and McAlphin, 1982). In the last quarter of the 20th century, various attempts have been made to evolve measures and methods to calculate levels of development comparable across nations (see Morris, 1979; UNDP, over the 1990s).

The method adopted by the earlier efforts oriented to replace the unidimensional growth as reflected by the gross domestic product (GDP), tried to create a composite index which accounted for more than one variable/ dimension. This method was lauded and quickly replicated by many scholars around the world to calculate sub-national level development indices (see Shiv Kumar, 1995; Prabhu, et al., 1996; Mehta, 1995).

The major criticisms to such measures applicability to sub-national level or even national level were raised for a number of reasons. The choice of variables, limiting them to three variables, weights used for composition and so on were some of the prominent issues that were questioned (Kelley, 1991; Krishnaji, 1997a; Hirway and Mahadevia, 1996). Fundamentally, the basic unstated premise of this approach that assumes a single path of development poses the greatest criticism. The indicators of gender development must cover many dimensions and they do not follow a unique

path of development (Rustagi, 2003). The response of one area to a particular stimulant may be entirely different from another region. Number of other factors play a role in configuring the pace and path followed by an indicator.

Attempts to increase the number of variables to cover more aspects have been made, but even these efforts resort to calculating a composite index or sets of indices, incorporating hitherto not included dimensions (see Hirway and Mahadevia, 1996; efforts of the Department of Women and Child Development (DWCD) and Planning Commission).

Using one composite index forms into a synthetic number whose meaning is highly questionable. Varied, diverse social contexts that influence different variables differently are combined on the implicit assumption that they all follow the same path, which is incorrect (see Krishnaji, 1997a; Rustagi, 2000).

Another alternative that can be used is to emphasise upon individual variable based indicators. This overcomes the problem of assuming same path of development. In addition, this method helps retain simplicity, understanding and provides more information with clarity as opposed to composite indexation that has the effect of camouflaging information. Given these above stated advantages and the purpose such an analysis serves in enabling regional study to fulfill the objectives of intervention and governance mentioned in 1.1, this is the method used here. Ranking method is used to highlight areas requiring urgent attention where the situation of women with respect to the said indicator is backward. It also enables the identification of relatively better performing districts. For the regional analysis, 20 most backward districts and 20 better performing districts are identified using ranks.

1.5 Structure of the Report

After the introductory section where clarificatory and methodological issues are provided, section 2 compares the situation of women in the western region as a whole vis-à-vis the all-India scenario. In section 3, each of the western states are assessed to the regional situation. Districts performances within the western region are analysed in the fourth section where the best and worst districts have been identified for the 14 indicators.

Profiles of each of the four western region states are presented in section 5. The sixth section undertakes a district level regional analysis which is sub-divided into two sub-sections covering rural and urban locations. Both these sub-sections present the regions' better and worse districts in two separate parts. The analysis draws upon a ranking based listing of 20 extreme districts in each of these parts. Finally, a synthesis of the findings of the performances of districts of western Indian states is attempted in the concluding section.

2. India Vs the Western Region

The western region comprising of Goa, Gujarat, Maharashtra, Madhya Pradesh and Chattisgarh, occupies 30 per cent of Indian territory, spread over 8,98,424 square kilometers (Census of India, 1991b). More than one-third of India's coastline length is shared by the states of this region - over 2,700 kilometers. As per the 2001 Census figures, the density for the western region is at 257 persons per square kilometer, which is below the national average of 324 (see Table 2). A relatively larger proportion of scheduled tribes inhabit the region. The ST population constitutes 15 per cent of the population in the region, while scheduled castes (SCs) are only 11 per cent. Most of the STs belong to the states of Chattisgarh and Madhya Pradesh.

Table 2: Selected Indicators for India and the Western Region

Indicator	Period	T/R/U	India	Western Region
Density (per sq. km)	2001		324	257
Level of Urbanisation	2001		28	35
Sex Ratio among population above six years	2001	T	934	929
		R	948	956
		U	900	882
Child Sex Ratio	2001	T	927	920
		R	937	933
		U	903	891
Proportion of SCs (%)	1991		16	11
Sex Ratio for SCs	1991		922	928
Proportion of STs (%)	1991		8	15
Sex Ratio for STs	1991		972	977
Female Literacy	2001	T	54	59
		R	47	50
		U	73	75
Gender Gap in Literacy	2001	T	22	22
		R	25	26
		U	13	14
Infant Mortality Rates among Females	1991		75	67
Gender Differences in IMRs	1991		-4	-1
Child Mortality Rate among Females	1991		103	95
Gender Differences in CMRs	1991		-10	-7
Total Fertility Rates	1991		4.30	3.94
Mean Age at Marriage among Females	1991		18	19
Female Work Participation Rate	2001		17	23
Gender Gap in WPRs	2001		36	32

Source: Calculated from Census of India, 1991 and 2001; Rajan and Mohanachandran, 1998.

The sex ratio for the population above six years for the Western region was higher than the Indian average in 1991. This has now dropped by 2 points to stand at 929 - 5

points below the India level as per the 2001 Census. The decline is accounted for by the rural areas and almost entirely from Maharashtra and Goa. Among urban areas, Gujarat presents a drastic fall[4].

The child sex ratios present an even more disturbing picture. Over the last decade, the child sex ratios have dropped by 25 points – that is 7 points lower than the fall in CSR for India as a whole! In this case, the fall is consistently seen across all the western region states, irrespective of urban- rural locations.

The spheres where women fare better in the western region are literacy and work participation levels. The other aspect that reflects a slight relative improvement is among the health indicators. Mortality rates among females are not only lower but also reflect lesser discrimination in access of health care services and so on.

Female literacy is at 59 in 2001 – 5 points above the India level. The improvements over the last decade in female literacy levels are significant in rural areas. The extent of gender gaps in literacy rates among men and women in the western region are similar to the Indian averages. However, they highlight the need for focusing on reducing disparity in literacy levels across boys and girls.

The western region as a whole reports a slightly better health situation than in the country as seen in the mortality rates among women. The incidence of excess male mortality is noted in the western region both for infants and children.

The average age at marriage among females is higher among the western region when compared to the India levels. Correspondingly, the fertility rates are also lower at 3.94 while it is 4.30 for India.

The higher work participation levels and correspondingly lower gender gaps in participation is a reflection of a more active economic role occupied by women in the western region. Significantly, higher levels of FWPR are noted for the rural areas, which highlights that the nature of participation is more in rural, agriculture based occupations. Most of these jobs involve manual, low paid tasks, but what is noteworthy in the context is the mobility and public sphere participation of women that must be exercising a significant bearing on their own selves as well as on the notions and perceptions of women's status or role held by their immediate community.

On the whole, the western region is more urbanised and projects a relatively better situation of women as compared to the average Indian scenario in terms of most of the chosen indicators. Child sex ratios are the only alarming area since significant declines are noted in females among the 0-6 years age cohort tilting the demographic

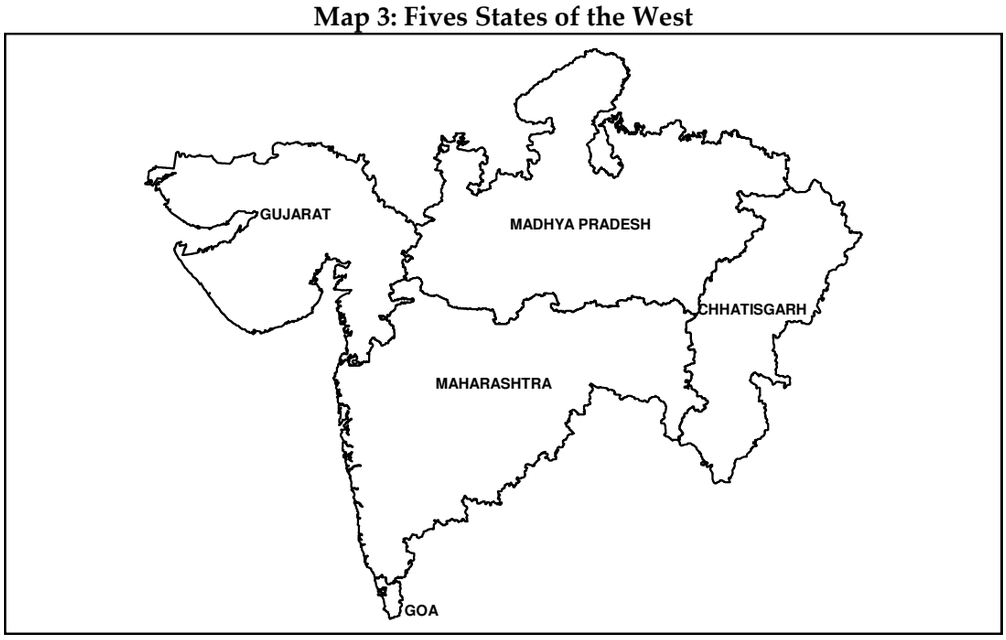
[4] The disturbances in Gujarat during the Census enumeration and the natural calamities preceding it could be part of the explanation for this scenario.

balance adversely. This otherwise alright picture depicted in the aggregate for the western region varies slightly when states of the region are considered.

3. The States of the West

Most of the states of the western region are large in size except Goa which occupies only 37 hundred square kilometers (i.e. less than 0.5 per cent of the western region). Map 3 gives an idea of the area occupied by the five western region states. Goa and Maharashtra are the two high density states of the western region, while M.P. and Chattisgarh (both part of one state prior to the 2001 Census) are the low density states. Madhya Pradesh and Chattisgarh both with relatively high concentration of STs, spread over a large area, report low densities of 196 and 154 respectively (see Table 3.1). Goa is the only western state that goes beyond the national average with a density of 363 per square kilometers in 2001 (see Graph 1). Gujarat, the state with the longest coastline in India, is at par with the western region average at 258.

Map 3: Fives States of the West

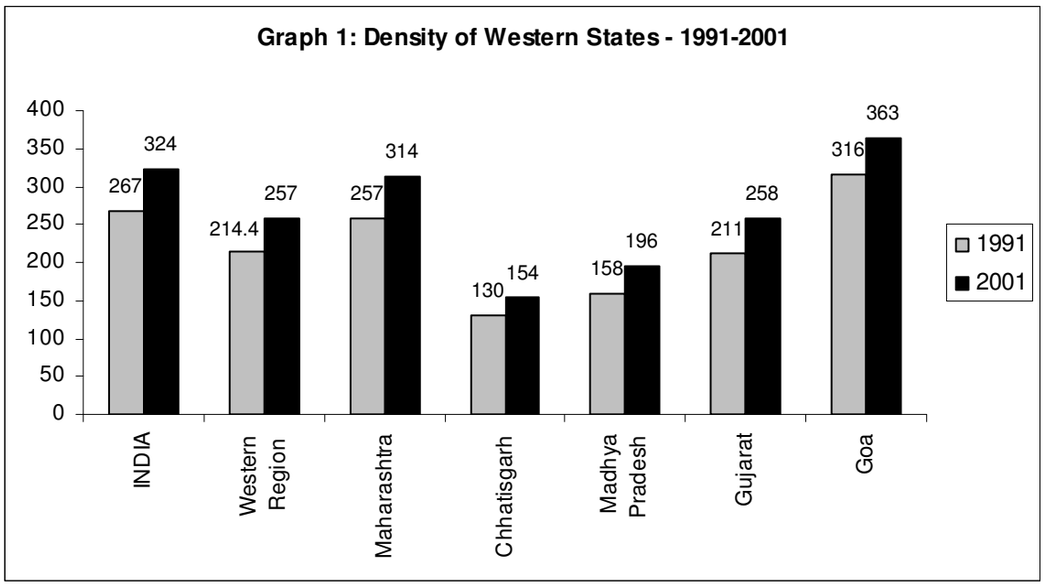


Source: 2001 Census, MAPINFO.

The densities in all the states have been increasing over the decade 1991-2001 and so is the level of urbanisation. However, demographic balances as reflected by the sex ratios among population above six years over the same period have shown a declining trend for the western region. These imbalances are especially glaring for the states of Gujarat and Maharashtra. In Gujarat, for every 1000 men, there were 9 women less in 2001 as compared to 1991 (see Table 3.2).

The sex ratio among population above six years shows a more equitable balance in Chattisgarh, followed by Goa. However, it is noteworthy that three of the five states

have recorded a decline in the sex ratios with only Madhya Pradesh and Chattisgarh showing improvement over the last decade 1991-2001.



Source: Census of India, 1991 and 2001.

Table 3.1: Density (per sq.km) for the Western States (1991 and 2001)

States/Region/ India	2001	1991
Goa	363	316
Gujarat	258	211
Chattisgarh	154	130
Maharashtra	314	257
Madhya Pradesh	196	158
Western Region	257	214
All India	324	267

Source: Census of India, 1991 and 2001.

In rural locations, Chattisgarh is one among few of the states of India where SR>6 is positive (i.e. above 1000) with a larger number of females as compared to males in the population. Among the urban areas, however, all the western region states record improvements over the decade, except Gujarat.

Maharashtra is the worst among the urban states in the western region based on SR>6. The high levels of industrialisation in the state and its employment potential draws migrants from other areas for work. This could be a possible explanation in so far as male exclusive influx of migrants can tilt the gender balance to show fewer women. Such disturbances are considered to be non-existent for the child sex ratio indicator.

Table 3.2: Adult Sex Ratio among the Western States

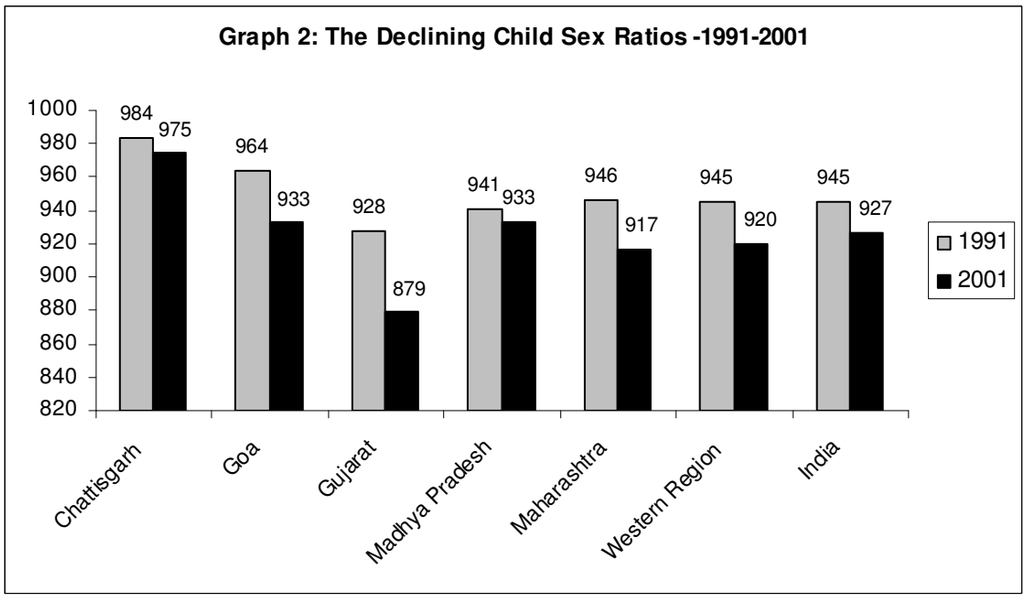
State/ Region/ India	Total		Rural		Urban	
	1991	2001	1991	2001	1991	2001
Chattisgarh	986	992	1003	1009	908	930
Goa	967	964	996	993	927	935
Gujarat	936	927	952	953	906	887
Madhya Pradesh	905	917	915	924	878	897
Maharashtra	931	923	977	966	864	869
Western Region	931	929	957	956	880	882
All-India	923	934	936	948	886	900

Source: Calculated from Census of India, 1991 and 2001.

Table 3.3: Child Sex Ratio among the Western States

State/ Region/ India	Total		Rural		Urban	
	1991	2001	1991	2001	1991	2001
Chattisgarh	984	975	988	982	960	941
Goa	964	933	972	948	953	919
Gujarat	928	879	936	905	909	827
Madhya Pradesh	941	933	944	941	931	906
Maharashtra	946	917	953	923	934	908
Western Region	945	920	951	933	929	891
All-India	945	927	948	934	935	903

Source: Calculated from Census of India, 1991 and 2001.



Source: Calculated from Census of India, 1991 and 2001.

The decline in child sex ratio is more exacerbated in the region than it is in the context of India as a whole (see Graph 2). Among the western region states, over the

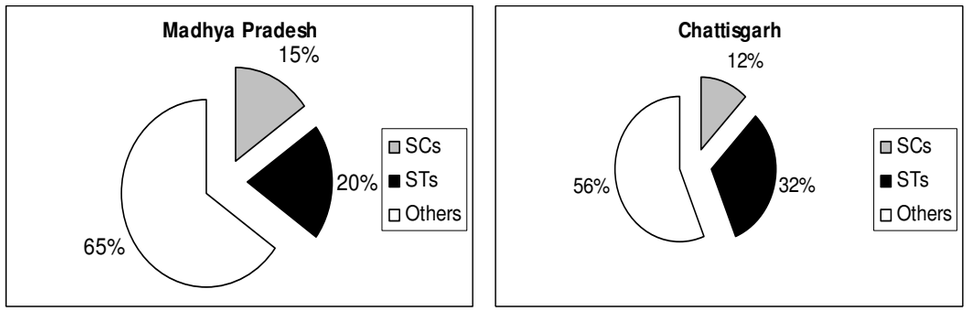
decade 1991-2001, the most steep decline has been witnessed for Gujarat from 928 to 879 – a drop of 49 points! Goa is a state with a fairly good record of demographic balances being equitable. Now even Goa has been experiencing changes that are tilting the gender balance against women with the most worrisome figures being noted among children in the 0-6 years of age. The CSR in Goa dropped from 964 in 1991 to 933 in 2001 (see Table 3.3).

In both these states of Gujarat and Goa, the CSRs have declined very steeply in urban areas as well as in rural areas when compared to the situation of CSRs in the other western region states. The reasons for this decline relate to a number of factors such as the sex ratio at birth (some scholars have even taken the explorations further to conception stage and during the entire period of embryo and foetus formation/ growth) (Waldron, 1998 and references cited therein), mortality rates of males and females during the different phases of the child's growth (LeGrand, 1992; Levinson, 1974; Visaria, 1988; Basu, 1989), as well as the practice of son preference and its ensuing implications for family formation and the use of scientific technologies to enable male selection and avoidance of female offsprings (Timaeus, et al, 1998; Mazumdar, 1994; Bhat, 2002). There are few reliable estimates of sex ratio at birth which are crucial to establish whether there are indeed far higher male births or is the discrimination against girls resulting in higher mortality among them that tilts the demographic balance against them. In either case, these are two distinct aspects both accelerating the tilt against girls.

Before shifting to the discussion on what the mortality rates reveal, the section looks at what the sex ratios are like among some of the social groups, the SCs and STs. Since these groups generally have a relatively poorer economic position, and survive on scarce means, it is of interest to learn about the demographic balances among such groups. If demographic balances are affected significantly by scarcity of resources and therefore the sheer inability of bringing up a larger number of children, which further influenced by male preferential attitudes in our society may cause such households to exercise a choice for males through adoption of the number of methods/ practices that discriminate against girls, then following this logical perception, the sex ratios ought to be the worst among these sections of society. But, is it so?

The sex ratios among STs have been noted to be higher for most areas where the tribal communities reside. The only state with a lower SRST is Goa, but these figures do not really amount to much since Goa has a negligible tribal population. Even the SC population in Goa is small, only 2 per cent. The only state where SRSC varies strikingly from the SR>6 or CSR is that of Madhya Pradesh. This variation has become very stark only after Chattisgarh is subdivided from the erstwhile state of M.P (for the share of SCs and STs in the population of M.P. and Chattisgarh see Graph 3). The SRSC in 1991 for undivided M.P. was 915 women per 1000 men which is nothing extraordinary. After culling out the figures for Chattisgarh where SRSC is 987, the SRSC for M.P drops to 895. The same exercise does not affect the ST figures so drastically, although there is a decline in SRST too.

Graph 3: Population of SCs, STs in Madhya Pradesh and Chattisgarh - 1991



Source: Calculated from Census of India, 1991.

As data on SCs and STs for 2001 census is not yet available, no time trends are feasible. On the basis of one time period analysis across states, it may be stated that the SCs data do not reflect any particular quirk in the demographic pattern whereas for the tribal populations the gender balance in the STs population is more equitable than for the overall population. In other words, this rules out the possibility that any additional discrimination against survival or birth of girls is resorted to among households belonging to these groups. Clearly the belief that their economic situation pushes them to be more discriminatory in the survival of girls is ruled out by the examination of SRSC and SRST along with SR>6 and CSR.

One explanation for Madhya Pradesh's excessively low sex ratios among the poorer sections of the SCs could lie in the higher infant mortality rates among girls. The overall health and nutritional scenario of children belonging to these resource poor households is bound to be worse than in others. The examination of IMRs reveals high levels of female mortality in M.P as compared to other states (see Table 3.5). However, the gender bias indicator which considers the difference in male and female infant mortality levels reveals that similar or in fact higher male mortality figures are noted for the state. These figures pertain to the undivided state (including Chattisgarh).

Table 3.4: Sex Ratios among Scheduled Castes and Tribes: Total/Rural/Urban-1991

State/Region/India	Sex Ratio among Scheduled Castes			Sex Ratio among Scheduled Tribes		
	Total	Rural	Urban	Total	Rural	Urban
Chattisgarh	987	995	953	1009	1013	920
Goa	967	967	966	889	854	901
Gujarat	925	935	909	967	971	925
Madhya Pradesh	895	897	889	971	976	894
Maharashtra	944	957	922	968	976	917
Western Region	928	935	912	977	982	913
India	922	926	905	972	926	920

Source: Calculated from Census of India, 1991.

Table 3.5: Infant Mortality Rates among Females and Gender Differences in IMRs – Total/Rural/Urban – 1991

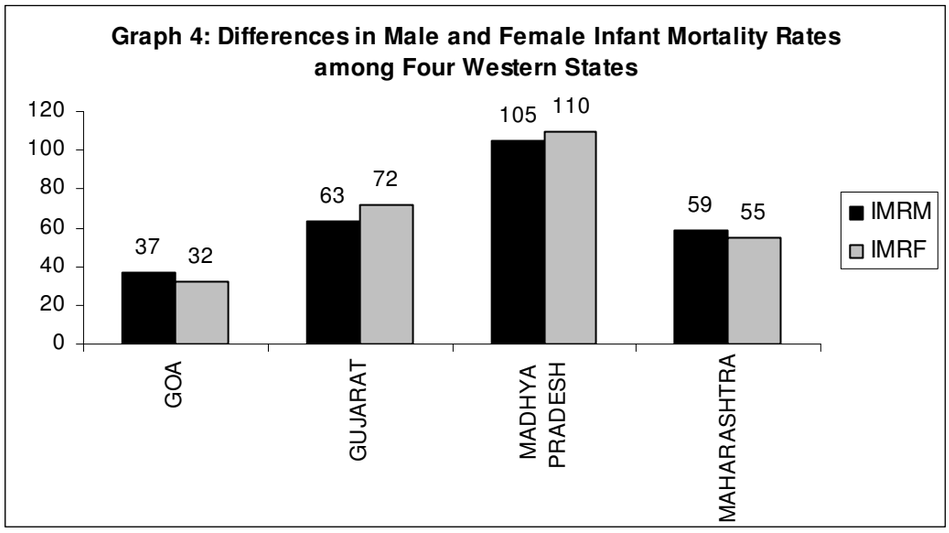
State/Region/India	Infant Mortality Rates among Females			Gender Differences in IMRs		
	Total	Rural	Urban	Total	Rural	Urban
Goa	32	37	29	5	4	3
Gujarat	72	82	50	-9	-10	-6
Madhya Pradesh	110	118	77	-5	-5	-6
Maharashtra	55	62	36	4	8	5
Western Region	67	75	48	-1	-1	-1
India	75	82	48	-4	-3	0

Source: Calculated from Rajan and Mohanachandran (1998).

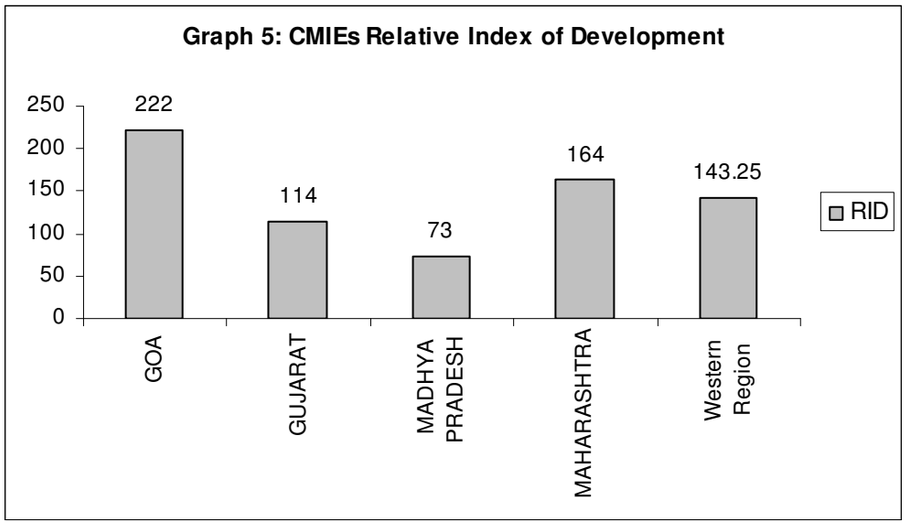
Table 3.6: Child Mortality Rates among Females and Gender Differences in CMRs – Total /Rural/ Urban – 1991

State/Region/India	Child Mortality Rates among Females			Gender Differences in CMRs		
	Total	Rural	Urban	Total	Rural	Urban
Goa	50	57	34	-2	-2	3
Gujarat	94	110	61	-14	-16	-9
Madhya Pradesh	166	180	104	-14	-12	-12
Maharashtra	71	79	41	1	7	5
Western Region	95	107	60	-7	-6	-3
India	103	115	59	-10	-13	-3

Source: Calculated from Rajan and Mohanachandran (1998).



Source: Rajan and Mohanachandran (1998).

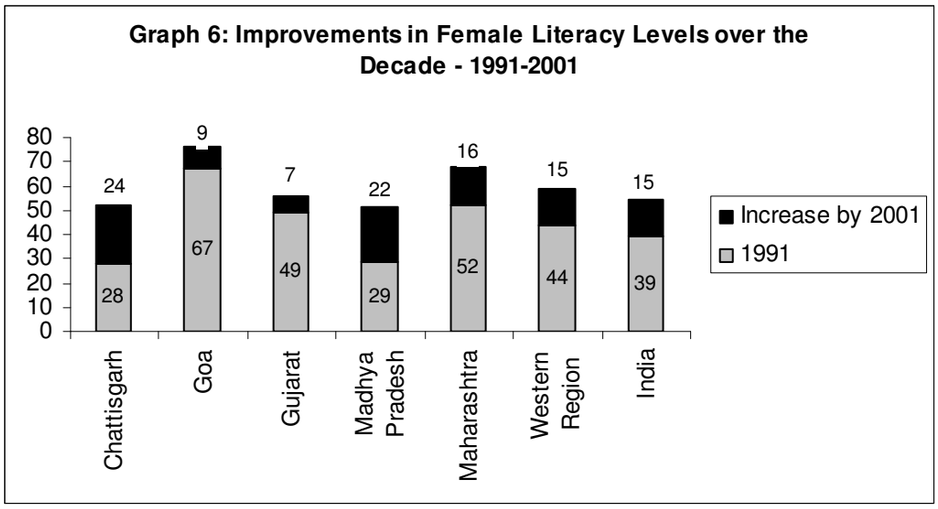


Source: CMIE (1993).

The states where gender differences show higher female infant mortality levels as compared to males are Goa and Maharashtra. Both these states incidentally are also the ones where IMRFs are the lowest. What this highlights is that in areas where health conditions are better and therefore child survival is more assured, discrimination against girls tends to be higher. Although this may appear counter-intuitive, these indicators seem to hint at the presence of gender bias among the better-off and not among the have-nots (see Graphs 4 and 5).

Another aspect that seems to be striking is that as the child grows up to 5 years, the child mortality figures are higher than among infants. However, this is true both for boys and girls. A comparison of male and female child mortality rates reveals an excess male mortality in all the western region states except Maharashtra (see Table 3.6). In the case of Goa, the bias against girls is noted only for urban areas. This is an offshoot of male preferences in society which diminishes the importance of girls, who are made dispensable since they are perceived as burdens and costs. One route to bring about any changes in these perceptions and attitudes is through the media of education. Are these practices occurring among the illiterate, backward people or among the educated?

The two states with higher literacy levels among women in the western region are Goa and Maharashtra. The economically poorer states of Madhya Pradesh and Chattisgarh which were very backward with respect to female literacy in 1991 have shown remarkable improvement by 2001 (see Graph 6). More than 50 per cent of the women are literate in the western states due to the various efforts made by governments, ngo's and concerned groups. What is appreciable about this positive development is that the impact has been more in rural areas where the literacy rates among girls were extremely low (see Table 3.7).



Source: Calculated from Census of India, 1991 and 2001.

Table 3.7: Female Literacy in the Western States

State/Region/India	Total		Rural		Urban	
	1991	2001	1991	2001	1991	2001
Chattisgarh	28	52	21	47	59	72
Goa	67	76	63	72	73	80
Gujarat	49	56	39	46	68	72
Madhya Pradesh	29	51	19	43	59	71
Maharashtra	52	68	41	59	71	79
Western Region	44	59	32	50	67	75
India	39	54	31	47	64	73

Source: Census of India, 1991 and 2001.

Maharashtra, the state where female literacy rate was at 52 in 1991 has shown improvement over the decade. Even for this state, the efforts have focused on rural areas where female education is generally receiving poor attention.

Table 3.8: Gap in Literacy among Men and Women in the Western States

State/Region/India	Total		Rural		Urban	
	1991	2001	1991	2001	1991	2001
Chattisgarh	31	26	31	27	24	18
Goa	17	13	19	16	13	10
Gujarat	24	21	28	25	17	13
Madhya Pradesh	29	26	31	29	22	17
Maharashtra	24	19	29	23	16	12
Western Region	26	22	29	26	18	14
India	25	22	27	25	17	13

Source: Calculated from Census of India, 1991 and 2001.

Even with this positive movement in the educational sphere, gender gaps in literacy levels remain among the western states. These differences are, as expected, more for rural locations than urban, Chattisgarh and Madhya Pradesh are the states where relatively higher gender differences in literacy are visible (see Table 3.8). Nevertheless, it is note worthy that gender gap in literacy is on the decline. In so much as these differences were a result of social, cultural and economic factors, some amends in the right direction have been made.

The reasons for lower emphasis being laid on women's education stems from the perception that women do not need it. Since women's role is predominantly viewed as one within the private household sphere, to be married, bear and rear children along with domestic chores, their need for education is overlooked and often undermined. Among the poorer sections, scarce resources compel parents to exercise a choice in favour of sending a selected set of children to school, who are generally boys. Since the need for educating boys is justified by their expected role of breadwinners, to seek employment and earn for their families, the choice against girls is considered as a rational and practical decision which will lead towards overall welfare of the households.

Synchronised with this framework of gender roles that exists among people's cultural consciousness is the emphasis on marriage of girls at an early age, below the minimum of 18 years that is legally stipulated, almost as an universal practice. Most often this leads to conception and delivery at a young age, which can be harmful both to the health of the mother and child.

Madhya Pradesh reports the lowest age at marriage among females. Maharashtra too is a borderline case. Some of its districts follow the practice of early marriages even in Maharashtra (this will be highlighted in the district level analysis). As per the 1991 Census, the total fertility rate (TFR) for India is 4.30. Madhya Pradesh is the only western state that reports a higher TFR than the all India average, while Goa is the best with respect to TFR at 2.92 (see Table 3.9).

Table 3.9: Mean Age at Marriage among Females and Total Fertility Rates in the Western States

State/Region/India	Mean Age at Marriage among Females			Total Fertility Rate
	Total	Rural	Urban	
Goa	20	20	21	3
Gujarat	19	19	19	4
Madhya Pradesh	17	16	18	5
Maharashtra	18	18	19	4
Western Region	19	18	19	4
India	18	17	19	4

Source: Census of India, 1991.

The predominance of this perception of women prevents recognition of their contribution to the economy. Even where women are engaged in a number of activities crucial for the household, their significance and value is often undermined. This attitude affects even the enumeration of workers as a false sense of pride is associated with women's non-working status. This is based on the notion that only where the situation is very dire or where the male is not able to adequately perform his breadwinner role, do women have to step out to make an earning. Very few distinctions are drawn even if women voluntarily or actively take up employment (see Bardhan, 1985). Some occupations have become socially acceptable such as that of teachers, health workers and so on. Even this varies from community group to area.

The states where women's participation is higher among the western states are Chattisgarh and Maharashtra. The more prosperous states of Goa and Gujarat report low FWPRs. Most of this employment among women is in the rural areas. Goa due to its peculiarities stemming from its historical past and its current economic structure finds higher proportion of women working in urban Goa (Gracias, 1996; Mendonca-Noronha, 2000).

A point worth mentioning with regard to WPRs is that over 1991-2001, FWPRs for all states, rural or urban, have been declining (see Table 3.10). The loss in employment seems to be a uniform phenomena across gender as differences in male and female WPRs for the western states reveal a decline in the gaps over the decade in all states except Goa, where there is a marginal increase in disparity (see Table 3.11).

Table 3.10: Female Work Participation Rates in Western States

State/Region/India	Total		Rural		Urban	
	1991	2001	1991	2001	1991	2001
Chattisgarh	38	27	43	31	13	12
Goa	19	17	21	17	16	16
Gujarat	16	16	21	21	7	8
Madhya Pradesh	25	21	30	25	10	10
Maharashtra	32	28	44	39	12	12
Western Region	27	23	35	30	11	11
India	19	17	23	20	10	10

Source: Census of India, 1991 and 2001.

The participation of women in this region is relatively higher especially in the tribal areas and the states where paddy cultivation takes place. The involvement of women in rice cultivation is generally higher (Duvvury, 1989; Bardhan, 1985).

Lower avenues for economic activities resulting in declining work participation levels is a matter of grave concern for the entire country. Creation of jobs needs to be considered on a priority basis. For without income to survive, work to fall back upon, gender concerns may be further pushed into the periphery which will be detrimental

to equitable development. The significance and necessity to concentrate on gender equality issues are highlighted very strongly when we move to the district level analysis in the following sections.

Table 3.11: Differences in Work Participation of Men and Women in the Western States

State/Region/India	Total		Rural		Urban	
	1991	2001	1991	2001	1991	2001
Chattisgarh	28	28	26	25	43	40
Goa	36	37	33	34	40	40
Gujarat	47	41	44	35	53	50
Madhya Pradesh	38	33	36	30	46	41
Maharashtra	30	28	20	17	46	45
Western Region	36	32	30	26	48	45
India	42	36	41	33	48	44

Source: Calculated from Census of India, 1991 and 2001.

4. Districts Performances within the Western Region

As per the 1991 Census, the western region contains 96 districts. The largest number of 45 districts belongs to the state of Madhya Pradesh. In this section, an analysis of the 14 individual indicators is undertaken to identify the best and the worst districts from among the western region.

Table 4: Best and Worst Districts of the Western Region

Indicator	Worst District		Best District	
SR > 6	Greater Bombay	(801)	Ratnagiri	(1256)
CSR	Bhind	(850)	Bastar	(1000)
SRSC	Bhind	(796)	Sindhudurg	(1103)
SRST	Amreli	(796)	Rajanandgaon	(1039)
FLIT	Jhabua	(12)	Gandhinagar	(81)
LGAP	Mandsaur	(40)	Greater Bombay	(12)
IMRF	Shivpuri	(156)	South Goa	(28)
IMRD	Tikamgarh	(41)	Greater Bombay	(-24)
CMRF	Shivpuri	(274)	South Goa	(36)
CMRD	Bhind	(79)	Greater Bombay	(-33)
MAM	Shajapur	(15)	South Goa	(20)
TFR	Morena	(6.63)	North Goa	(2.78)
FWPR	Bhind	(3)	Rajnandgaon	(56)
WGAP	Bhind	(55)	Rajnandgaon	(11)

As opposed to the figures noted in the earlier section at the state level, the degree of variation is far more significant at the district level. What is interesting is that in some cases even the best and the worst district of the western region belong to the same state. Such a variation is noted for the districts of Madhya Pradesh. The worst

district in terms of CSR, FWPR and WGAP is Bhind while the best districts are Bastar for the first indicator and Rajnandgaon for the latter two indicators. The best districts belong to that part of the state which is now Chattisgarh.

In terms of SR>6, Greater Bombay, where substantial number of migrants come to earn a livelihood, displays the worst sex ratio. The best figures are those of Ratnagiri district in Maharashtra. The SR>6 of Ratnagiri is prominent even at the all India level. Among SCs, Bhind is the worst sex ratio district while at the top - Sindhudurg of Maharashtra – records 1103 (see Table 4). The district of Chattisgarh region where women's work participation is the highest across all districts of the western states – Rajnandgaon - also reports the best sex ratio among STs. The worst district with a low SRST of 796 is reported for Amreli of Gujarat.

Extreme variations in literacy levels are witnessed among the districts of the western region - from a very low 12 (Jhabua – M.P) to as high as 81 (Gandhinagar – Gujarat). In terms of gender gap in literacy levels, Mandsaur district of M.P records the worst figures. Expectedly, metropolitan Greater Bombay has the lowest difference in male and female literacy levels, reflecting a relatively equitable scenario across gender with regard to educational opportunities. Relatively lower gender based discrimination in health indicators are also noted for Greater Bombay. An examination of the differences in male and female mortality rates identifies excess male mortality in this urbanised district. The lowest female mortality rates for infants and children are recorded for South Goa. On the other side of the story revealed by all four health indicators is the worse scenario of districts of Madhya Pradesh. Shivpuri is notorious for the highest female mortality rates among infants and children, while Tikamgarh and Bhind have the dubious distinction in recording far greater number of female deaths as opposed to male infants or children respectively.

In terms of age at marriage and total fertility rates, Goa's districts have the distinction of being the best among all western region districts. Women on an average get married at the age of 20 years in South Goa and the TFR of less than 3 children per women noted for North Goa is better than most states in the country. The NFHS-2 in its 1998-99 survey identifies Goa as the best state with the lowest TFR (see IIPS, 2000). On the worse end, there are the districts of Madhya Pradesh - Shajapur with a MAM among females of 15 years and Morena with the highest TFR of 7 children.

Based on these best and worst districts among all western region districts it may be stated that the districts of Madhya Pradesh figure among the backward ones while the districts of Goa and Maharashtra perform better in terms of most of the indicators.

5. Profiles of the Four Western States

In this section, a general introduction to each of the states is provided. Its

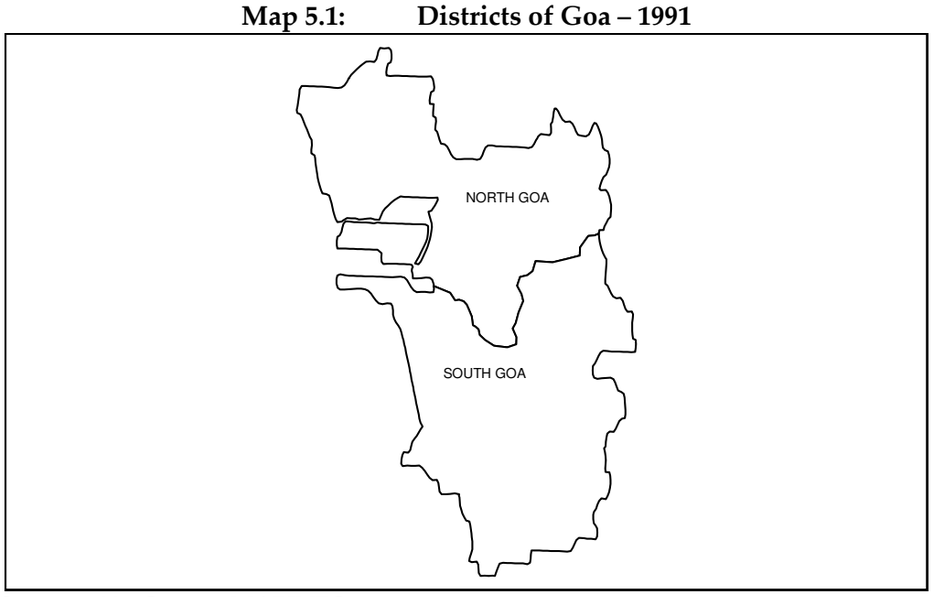
geographical location and some basic information on the state are presented to serve as a background for the analysis to follow.

5.1 Goa

The state of Goa is located on the western coast of the Indian peninsula. It is bounded on the north by river Tiracol which separates it from Sindhudurg district of Maharashtra. Goa is surrounded by Karnataka's Belgaum district in the east and Uttar Kannad district in the south, and in the west by the Arabian Sea.

Goa has a long history of 450 years of colonial rule by the Portuguese. The state was integrated with India after its liberation in 1961. Goa acquired the status of a full-fledged state only in 1987 when it got separated from the Union Territory of Goa, Daman and Diu (Census of India, 1991-Goa).

Map 5.1: Districts of Goa – 1991



Source: 1991 Census, MAPINFO.

The state of Goa has a coastline of 300 kilometers. It is famous for its long beaches of golden sand and scenic waterways which are exploited by the tourism industry to attract visitors. Of the 555 kilometers of inland waterways, 256 kms are navigable through rivers (Desai, 1997). Construction of major dams such as Anjunem in the north and Salauli in the south have benefited the state in terms of electrification of villages and irrigation.

However, these dams have also resulted in displacing the local population residing in nearby villages which were submerged due to the construction of these dams (Fernandes and Paranjape (eds), 1997). The energy situation is very good in the state with 99 per cent electrification of households in Goa (Census of India, 1991 - Goa).

Another natural resource endowed in the state is that of minerals. Mostly iron ore, manganese ore and bauxite are mined in the state. Prior to liberalisation, mining was a major activity contributing 18 per cent of the net state domestic product (NSDP) even in 1960. It generates only 3 per cent of contribution to NSDP now and is no longer a principal source of income for the state. The land covered by the mining leases in 65,000 hectares, while it employs only 8,500 persons directly.

Liberation of Goa and its coming under the Indian state ushered in industrial development in a major way with one unit per 250 inhabitants. This is higher than even the highly industrialised state of Maharashtra where the ratio is 1:1000. Prior to this planned development, Goan economy was essentially a trading one. Even today, the tertiary sector employees 46 per cent of Goa's workers.

Population is concentrated in the coastal region and central region with densities above 700. The distribution becomes sparse in the interior area towards the western ghats where the densities are as low as 200 and below. Marmugoa taluk of South Goa district is the most densely populated area. It locates one of India's important national harbour.

Table 5.1: Best and Worst Performing Districts of Goa

Indicator	Best District		Worst District	
SR > 6	South Goa	(973)	North Goa	(963)
CSR	North Goa	(967)	South Goa	(961)
SRSC	South Goa	(981)	North Goa	(960)
SRST	South Goa	(899)	North Goa	(875)
FLIT	North Goa	(69)	South Goa	(65)
LGAP	South Goa	(16)	North Goa	(17)
IMRF	South Goa	(28)	North Goa	(49)
IMRD	South Goa	(-6)	North Goa	(3)
CMRF	South Goa	(36)	North Goa	(61)
CMRD	South Goa	(-6)	North Goa	(7)
MAM	South Goa	(20)	North Goa	(20)
TFR	North Goa	(2.78)	South Goa	(3.02)
FWPR	North Goa	(19)	South Goa	(19)
WGAP	South Goa	(36)	North Goa	(36)

Even a small state of Goa spreads across 360 villages and 31 towns, which are divided into two administrative districts of South and North Goa (see Map 5.1). The two districts depict a more or less similar scenario with respect to most of the gender development indicators. The indicators that reveal wider variation across the two districts are the mortality rates. Female mortality among infants and children are far higher in the North Goa district, which also exhibits excess mortality among girls. South Goa is listed as the best district in terms of 10 of the 14 indicators (see Table 5.1). The four indicators by which North Goa has a better performance over the

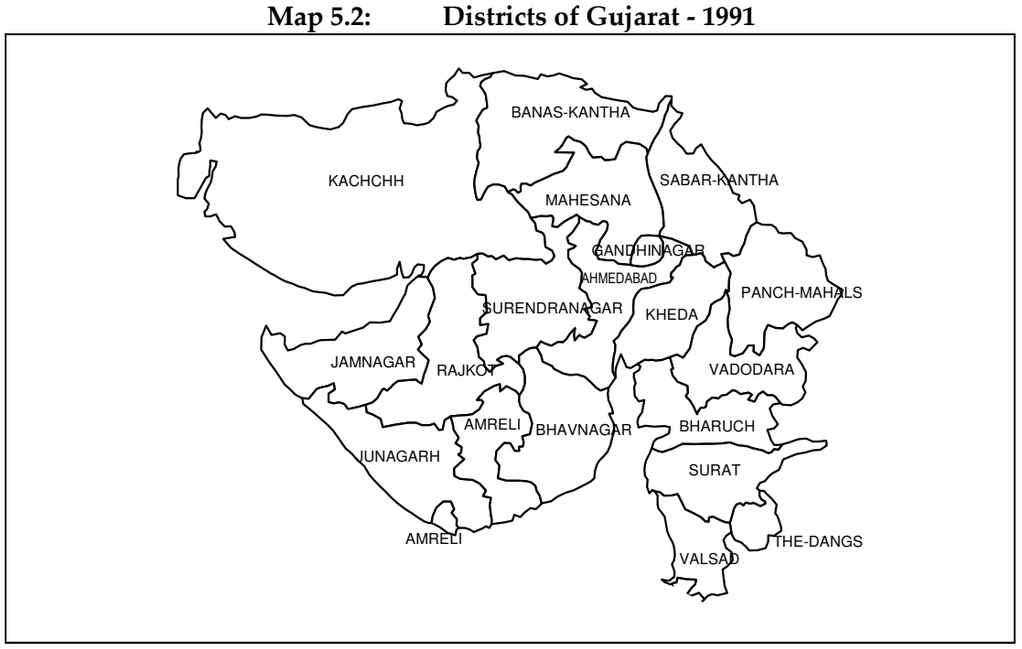
South are the child sex ratio, female literacy, fertility rate and work participation rates.

5.2 Gujarat

The state of Gujarat was carved out from Bombay state under the States Reorganisation Act of 1960. The state is bounded by Pakistan in the north-west, Rajasthan on the north and north-east, M.P on the east, Union Territory (UT) of Dadra and Nagar Haveli to the southeast and Maharashtra to the south. To the west of Gujarat lies the Arabian Sea. The state has the longest coastline in the country, covering 1600 kilometers (GOI, 1995).

The state has an area of 196,024 square kms which accounts for 6 per cent of Indian Territory. There are nineteen districts which are further divided into 184 taluks. Inhabited villages total upto 18,028, while 481 villages are uninhabited. There are 264 towns in the state (Census of India, 1991 – GU).

Map 5.2: Districts of Gujarat - 1991



Source: 1991 Census, MAPINFO.

In terms of area, Kachchh is the biggest district occupying nearly a quarter of the state's area (see Map 5.2). This district generally experiences semi-arid climate and has the lowest density of 28 persons per square km. Most of Gujarat enjoys a tropical monsoon climate. Rainfall is significant in the southern and south-eastern parts of the state during the monsoons. Normal rainfall varies between 380 mm in Kachchh to 2100 mm in Valsad areas. The Saurashtra peninsula being semi-arid experience constantly low and scanty rainfall.

Higher concentration of population is observed mainly in plains comprising eastern part of Mahesana, Gandhinagar, Ahmedabad, Kheda, Vadodara, Bharuch, Surat and Valsad districts. The reason for this high density levels may be assigned to agricultural development, industrialisation and developed means of transportation and communications network. The south-eastern parts of the state are comparatively sparsely populated as these are hilly terrain with thick forest cover. Gujarat is one among the states where forest cover has increased from 1995 to 1999 by nearly 600 sq. kms to become close to 13000 sq. kms (FSI, 1999). Mining is another significant activity in the state. Gujarat has 436 mines in 1999-2000 even though it is experiencing a declining trend (CSO, 2001).

The ST population concentration is dense from the district of Panchmahals down south upto the Dangs district. The tribals inhabiting the state are Bhil, Bhil Garasia and Vasava tribes. The northern districts of Banaskantha and Sabarkantha have a concentration of Bhils.

The sex ratios are worse in the urbanised districts of Surat (for adults), Gandhinagar (for children) and Ahmedabad (for SCs). Generally, the better sex ratios are noted for districts which are tribal-dominated. The performance of Gandhinagar, the smallest district of the state with the worst CSR, is best in terms of FLIT and LGAP – both the educational indicators (see Table 5.2).

The tribal district of Banaskantha records the lowest female literacy levels in the state. The gender disparity in literacy highlights the unequal levels of access and opportunities that girls have for education. Such an inequality is witnessed even in the work spheres for the district. Banaskantha also reports the highest TFR in the state with an average of 5 children. This is one clear instance of correlation among low literacy, low work participation and high fertility levels.

Table 5.2: Best and Worst Performing Districts of Gujarat

Indicator	Best District		Worst District	
SR > 6	Amreli	(992)	Surat	(892)
CSR	The Dangs	(999)	Gandhinagar	(879)
SRSC	Valsad	(1024)	Ahmedabad	(887)
SRST	Sabarkantha	(1002)	Amreli	(796)
FLIT	Gandhinagar	(81)	Banaskantha	(23)
LGAP	Gandhinagar	(13)	Banaskantha	(32)
IMRF	Valsad	(38)	Panchmahals	(91)
IMRD	The Dangs	(-18)	Mahesana	(18)
CMRF	Valsad	(45)	Panchmahals	(132)
CMRD	The Dangs	(-27)	Mahesana	(33)
MAM	Junagadh	(20)	Mahesana	(18)
TFR	Valsad	(3.43)	Banaskantha	(5.29)
FWPR	The Dangs	(52)	Gandhinagar	(10)
WGAP	The Dangs	(16)	Banaskantha	(51)

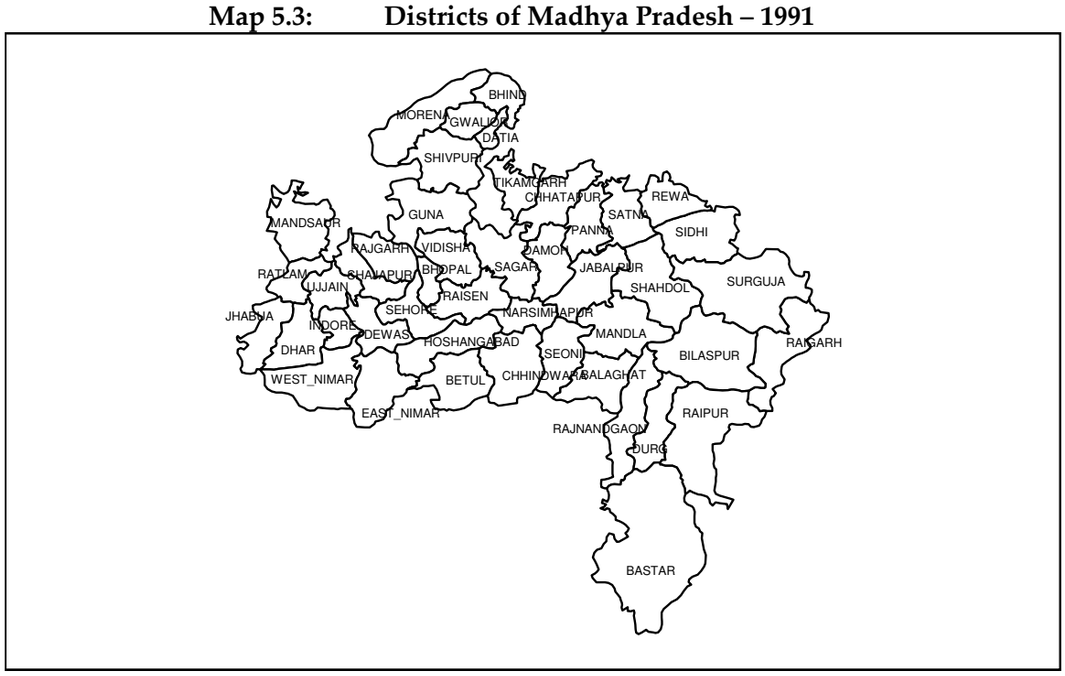
Female infant and child mortality rates are highest in the district of Panchmahals whereas excess female mortality at these two age levels of one and five years are noted in the district of Mahesana. On the best side, Valsad district reports the lowest mortality rates among infants and children. The Dangs, in fact, has the incidence of the highest excess male mortality rates. Mahesana is also the district where girls are married off by 18 years of age whereas the best district of Junagadh records an age of 20 years as average age at marriage among females.

In the Dangs district, the proportion of female cultivators is 75 per cent of women workers. This clearly highlights the economic significance of women's labour in this district. Related to work is the better status associated with these women as seen from the best CSR and better health conditions that keep mortality rates of girls under check. This tribal inhabited district displays positive gender development in the state.

5.3 Madhya Pradesh

The state of M.P came into being in 1956 as a result of the reorganisation of states on language basis. It is bounded by seven states namely U.P in the north, Bihar and Orissa in the east, A.P and Maharashtra in the south and the Gujarat and Rajasthan in the West. Area wise it is the largest state occupying nearly 14 per cent of the total geographical area in India.

Map 5.3: Districts of Madhya Pradesh – 1991



Source: 1991 Census, MAPINFO.

Of the 45 districts in the state of M.P, Bastar is the largest while Datia is the smallest (see Map 5.3). The river valleys have relatively higher concentration of population as

these areas have favourable geographical conditions with enough water and fertile land for human settlement. The northeastern and southern parts of the state are sparsely populated because of hills and forests (Census of India, 1991 – M.P.).

The state of M.P has a substantial area under forest cover, approximately 1,31,830 sq.kms in 1999 (FSI, 1999). Significant declines are reported in the forest cover in the state over the years. The maximum number of mines are located in the state, a total of 479 (CSO, 2001). This has caused displacement of many persons. More than 4000 villages are uninhabited as per the 1991 census.

Raipur district emerged as the most populated district, followed by Bilaspur and Jabalpur. The southeastern part that comprises the rice bowl of the state is the most populous region. The central and northwestern parts of the state are relatively small.

The north is characterised by extreme climate while the southern districts are more humid. The northern wheat growing tracts exhibit relatively lower sex ratios, while the southern districts predominantly rice growing tracts are characterised by high sex ratio patterns. Bhind of the north is the worst district in terms of all four sex ratios among adults, children, SCs and STs. The districts of Chattisgarh – Bastar and Rajnandgaon - are the best districts in terms of CSR and SR>6 respectively. Balaghat of south M.P has the highest SRSC of 1024 in the state (see Table 5.3).

Bhind is also the worst district in terms of higher child mortality rates and work related indicators. Women's participation is as low in this part of M.P as in the other north Indian wheat growing states. Rajnandgaon, the tribal inhabited district of Chattisgarh, where rice is grown is the best district with female participation being the highest for the state at 56 and lowest levels of difference across gender in work participation rates.

Table 5.3: Best and Worst Performing District of Madhya Pradesh

Indicator	Best District		Worst District	
SR > 6	Rajnandgaon	(1019)	Bhind	(807)
CSR	Bastar	(1000)	Bhind	(850)
SRSC	Balaghat	(1024)	Bhind	(796)
SRST	Rajnandgaon	(1039)	Bhind	(816)
FLIT	Bhopal	(54)	Jhabua	(12)
LGAP	Jhabua	(15)	Mandsaur	(40)
IMRF	Bhopal/Durg	(76)	Shivpuri	(156)
IMRD	Sehore	(-17)	Tikamgarh	(41)
CMRF	Bhopal	(103)	Shivpuri	(274)
CMRD	Sehore	(-22)	Bhind	(79)
MAM	Bastar	(18)	Shajapur	(15)
TFR	Indore	(3.81)	Morena	(6.63)
FWPR	Rajnandgaon	(56)	Bhind	(3)
WGAP	Rajnandgaon	(11)	Bhind	(55)

Jhabua district of the Malwa region is the worst in terms of female literacy levels. It is interesting to note that it is listed as the best district in terms of having the lowest gender disparity. That is to say, that both boys and girls in this district have despairingly low literacy levels. Mandsaur of the same region on the other hand has the highest recorded gender gap in literacy levels. The best performance in female literacy is noted for the capital district of M.P – Bhopal - at 54.

Just as for education, one may expect health facilities also to be better in Bhopal. Infant and child mortality rates among females are the lowest in this district. Durg is another district noted for low IMRF in the state. Sehore is listed for gender differences being closer to the biologically expected pattern with excess male mortality rates. Shivpuri reports the highest mortality rates among females. For gender differences, excess girl mortality is reported from Tikamgarh among infants and Bhind among children.

Shajapur of the Malwa region records an average age at marriage of 15 years, far below the legally stipulated minimum. Bastar, that is a tribal dominated Chattisgarh district is the best with average age at marriage among females being 18 years. Urbanised Indore has the lowest TFR in the state of 3.81 while Morena of north M.P has the highest TFR at 6.63. Once again, this hints at a link between high levels of fertility, low literacy and poor work participation rates. Irrespective of the direction of the causal link, the correlation levels are high.

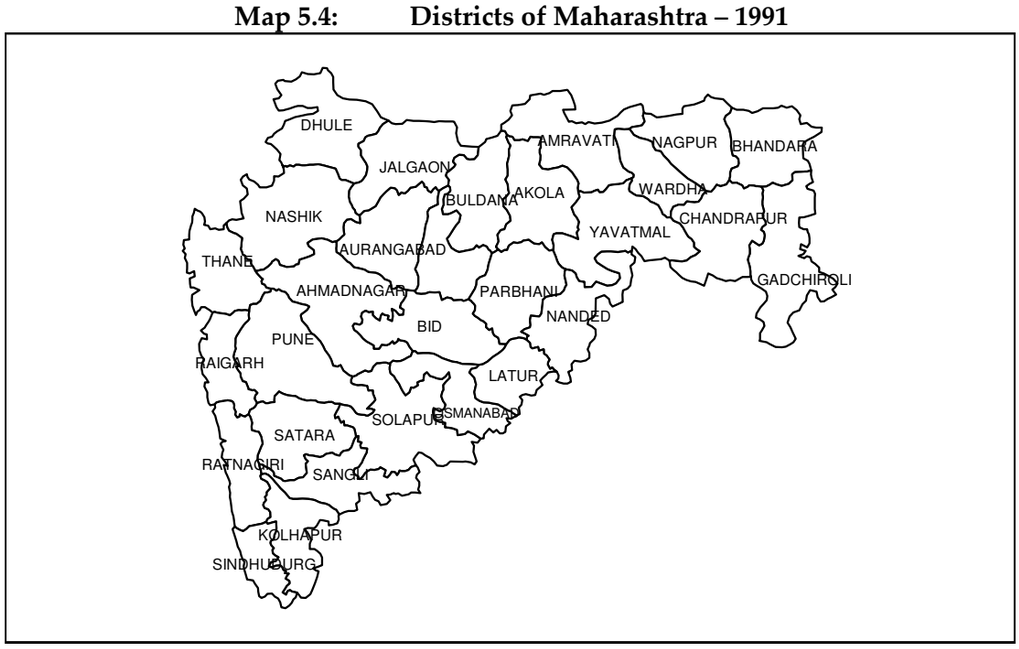
5.4 Maharashtra

Maharashtra is surrounded by Gujarat, Dadra, Nagar Haveli in north-west, M.P to its north and east, A.P and Karnataka to its south-east, Goa to its south, while the Arabian Sea lies west of it (Census of India, 1991 – MA). The state has a long coastline which stretches to about 840 kms from north Thane to south Ratnagiri districts. Bombay is one of the most important ports of the country and the commercial capital of India. Greater Bombay has a very high density – above 20,000 persons per sq.km (Census of India, 1991b).

The state covers over 3 lakhs sq.kms of Indian Territory, of which 46,672 sq.kms is under forest cover as on 1999 (FSI, 1999). The area under forest cover has been increasing over the years in the state despite the fact that this is the most urbanised western region state with 40 per cent of its population living in urban areas. As per the 1991 Census, the state has 30 districts (see Map 5.4).

Metropolitan Bombay presents the most disparate patterns of gender development. Educational and health situation of women is by far the best in the district of Greater Bombay. However, sex ratios among adults, SCs and STs are the worst among all districts of the state. Similarly, work participation rates among females are the lowest in the state despite high male WPRs. A part of the explanation of these negative aspects could be the high levels of male migration into the district for its lure of a livelihood.

Map 5.4: Districts of Maharashtra – 1991



Source: 1991 Census, MAPINFO.

Among children, the worst sex ratio is recorded for Sangli at 924 and the best is for Gadchiroli. The best SRSC is recorded for Sindhudurg, while Ratnagiri is the most prominent district with high sex ratios among population above 6 years as well as among tribals.

While Greater Bombay has the highest female literacy rate of 76 and minimum gender gap in literacy levels, Jalna of the inland central region has a very low FLIT of 27. The district of Jalna reports more than double the rate of literacy among men as compared to that of women, highlighting high levels of gender differences.

Table 5.4: Best and Worst Performing Districts of Maharashtra

Indicator	Best District		Worst District	
SR > 6	Ratnagiri	(1256)	Greater Bombay	(801)
CSR	Gadchiroli	(980)	Sangli	(924)
SRSC	Sindhudurg	(1103)	Greater Bombay	(880)
SRST	Ratnagiri	(1021)	Greater Bombay	(849)
FLIT	Greater Bombay	(76)	Jalna	(27)
LGAP	Greater Bombay	(12)	Jalna	(37)
IMRF	Greater Bombay	(34)	Gadchiroli	(97)
IMRD	Greater Bombay	(-24)	Wardha	(9)
CMRF	Greater Bombay	(38)	Gadchiroli	(142)
CMRD	Greater Bombay	(-33)	Latur	(18)
MAM	Sindhudurg	(20)	Nanded	(17)
TFR	Kolhapur	(2.94)	Aurangabad	(4.62)
FWPR	Bhandara	(48)	Greater Bombay	(12)
WGAP	Bhandara	(14)	Greater Bombay	(50)

Gadchiroli, the district with the best child sex ratio is also noted as having the highest female infant and child mortality rates. The extent of excess female mortality is not very significant in the state as compared to the other states in the western region. Wardha records 9 as the gender difference across female and male infant mortality rates (see Table 5.4). Latur reports 18 female child deaths over the male child mortality recorded for the district.

Nanded, the district bordering A.P and Karnataka is the worst in terms of mean age at marriage among females. Coastal Sindhudurg district is the best by the same indicator. In terms of fertility rates, Kolhapur has a TFR of 3, while Aurangabad records a TFR of 5 children.

Bhandara district contiguous to the southern M.P region has the highest female work participation rates. Even the disparity in WPR's across males and female is low among the districts of Maharashtra. While in some of the pockets, regional characteristics seem to be operative, in certain other areas counter-intuitive findings are reported. For instance, Gadchiroli district with the highest infant and child mortality rates among females still stands out as the area where CSR is the best. Do regional factors play a significant role in explaining or understanding complex dimensions of gender development? This is addressed to some extent in the next section by undertaking a regional analysis.

6. Regional Analysis

The entire western region consists of 96 districts. Two-thirds of the population resides in rural areas. There is only one entirely urban district that is Greater Bombay, therefore, rural districts total upto 95 in number. Each of the four states and their districts are categorised into different regions by the NSS (see Appendix 2). These districts and regions are used for analysis in this section.

Goa being the smallest state with two districts has only one region. Gujarat consists of four regions – dry areas, eastern, plains northern and Saurashtra –into which all its 19 districts are classified. Madhya Pradesh, the largest state with 45 districts (including the seven districts which formed the Chattisgarh region) has seven regions. Malwa region bordering Rajasthan contains 9 districts, while Vindhya bordering U.P. consists of 7 districts. Central, north and south regions have six districts each. The south-western region has only 4 districts. The 30 districts of Maharashtra fall under six different regions. There are five coastal districts and 3 eastern ones. Inland central region locates 7 districts. Inland eastern and inland western have six districts each, while inland northern has 3 districts.

The analysis in this section is based on districts lists for each indicator that have been identified to highlight the districts which are worse off and those which are relatively better within the western region. Each list contains 20 districts that lie at the top and at the bottom of the ranking scheme.

This section is subdivided into two parts – the first subsection deals with the rural scene while the second subsection presents the urban picture.

6.1 Rural Districts of the West

Priority ranking highlight districts needing urgent attention with respect to a particular indicator. Therefore, rank 1 refers to the most backward district and so on. The regions and districts identified among the better and worse sets are discussed here in two subsections respectively.

6.1.1 Better Districts

In all, 12 districts of the western states record SR>6 above 1000. Parts of coastal Maharashtra, the districts of Ratnagiri, Sindhudurg and Raigarh are among the higher sex ratios for the population above six years. Goa and Chattisgarh are the other states where SR>6 is more balanced. Three districts belonging to Gujarat of different regions Saurashtra, dry area and eastern are also listed (see List RB1).

List RB 1: The 20 Better Rural Western India Districts by Demographic Indicators

Sex Ratio among Population above 6 years					Child Sex Ratio				
Rank	District	State	Region	SR>6	Rank	District	State	Region	CSR
95	RATNAGIRI	MA	Coastal	1288	95	THE DANGS	GU	Eastern	1004
94	SINDHUDURG	MA	Coastal	1181	94	BASTAR	M.P	Chattisgarh	1002
93	SATARA	MA	Inland Western	1066	93	JHABUA	M.P	Malwa	996
92	RAIGARH	MA	Coastal	1049	92	PANCH MAHALS	GU	Eastern	993
91	RAJNANDGAON	M.P	Chattisgarh	1029	91	SARGUJA	M.P	Chattisgarh	992
90	BALAGHAT	M.P	South	1016	90	SHAHDOL	M.P	Vindhya	989
89	DURG	M.P	Chattisgarh	1016	89	DURG	M.P	Chattisgarh	988
88	RAIGARH	M.P	Chattisgarh	1014	88	RAJNANDGAON	M.P	Chattisgarh	988
87	SOUTH GOA	Goa	Goa	1013	87	RAIGARH	M.P	Chattisgarh	987
86	RAIPUR	M.P	Chattisgarh	1012	86	BETUL	M.P	South western	985
85	BASTAR	M.P	Chattisgarh	1009	85	RAIPUR	M.P	Chattisgarh	983
84	AMRELI	GU	Saurashtra	1001	84	GADCHIROLI	MA	Eastern	983
83	KACHCHH	GU	Dry Area	999	83	BILASPUR	M.P	Chattisgarh	982
82	BHANDARA	MA	Eastern	997	82	MANDLA	M.P	South	981
81	MANDLA	M.P	South	996	81	SIDHI	M.P	Vindhya	980
80	BILASPUR	M.P	Chattisgarh	992	80	BALAGHAT	M.P	South	977
79	THE DANGS	GU	Eastern	990	79	BHANDARA	MA	Eastern	975
78	NORTH GOA	GOA	Goa	987	78	SOUTH GOA	GOA	Goa	975
77	KOLHAPUR	MA	Inland Western	985	77	SEONI	M.P	South	974
76	GADCHIROLI	MA	Eastern	982	76	THANE	MA	Coastal	973
Sex Ratio among Scheduled Castes					**Sex Ratio among STs for Districts with more than 5% STs**				
Rank	District	State	Region	SRSC	Rank	District	State	Region	SRST
95	SINDHUDURG	MA	Coastal	1113	62	DURG	M.P	Chattisgarh	1042
94	RATNAGIRI	MA	Coastal	1100	61	RAJNANDGAON	M.P	Chattisgarh	1041
93	VALSAD	GU	Eastern	1061	60	RAIPUR	M.P	Chattisgarh	1031
92	BALAGHAT	M.P	South	1027	59	BALAGHAT	M.P	South	1023
91	RAIGARH	MA	Coastal	1022	58	RAIGARH	M.P	Chattisgarh	1022
90	RAJNANDGAON	M.P	Chattisgarh	1016	57	BASTAR	M.P	Chattisgarh	1018
89	BHANDARA	MA	Eastern	1007	56	MANDLA	M.P	South	1013
88	DURG	M.P	Chattisgarh	1006	55	BILASPUR	M.P	Chattisgarh	1008
87	RAIGARH	M.P	Chattisgarh	1005	54	SEONI	M.P	South	1007
86	RAIPUR	M.P	Chattisgarh	1004	53	SABAR KANTHA	GU	Eastern	1006
85	BASTAR	M.P	Chattisgarh	1003	52	BHANDARA	MA	Eastern	1005
84	SATARA	MA	Inland Western	1000	51	BETUL	M.P	South western	1005
83	THE DANGS	GU	Eastern	991	50	CHHINDWARA	M.P	South	1001
82	SURAT	GU	Eastern	984	49	THE DANGS	GU	Eastern	998
81	GADCHIROLI	MA	Eastern	982	48	GADCHIROLI	MA	Eastern	995
80	BILASPUR	M.P	Chattisgarh	979	47	DHULE	MA	Inland Northern	995
79	NORTH GOA	GOA	Goa	973	46	SURAT	GU	Eastern	989
78	SARGUJA	M.P	Chattisgarh	970	45	JHABUA	M.P	Malwa	988
77	CHANDRAPUR	MA	Eastern	970	44	CHANDRAPUR	MA	Eastern	987
76	SANGLI	MA	Inland Western	969	43	THANE	MA	Coastal	985

Source: Calculated from Census of India, 1991.

The two most highly tribal populated districts among the western states - the Dangs and Bastar – are the only two above 1000 recording child sex ratio districts. All districts of Chattisgarh and one Goa district fall in the list of more balanced CSRs. Three each of south M.P and Maharashtra districts are also noted here. What is worthy of mention here is that the districts of Maharashtra which stand prominently in the SR>6 list, do not figure in the CSR list. This hints at the better demographic balance among adults in those districts being an outcome of out-migration of males rather than a more general phenomenon.

Among the Scheduled Castes, sex ratios are more equitable in Chattisgarh. Again the two prominent districts with better SRSCs are Sindhudurg and Ratnagiri of coastal Maharashtra. These districts are known for the high levels of male out-migration.

Another region bordering Chattisgarh, belonging to eastern Maharashtra, also displays an equitable demographic balance among the SCs of the 95 districts, only 62 of them have more than 5 per cent STs inhabiting in them which have been taken into account to ascertain levels of SRST. Contiguous areas belonging to Chattisgarh, South M.P and eastern Maharashtra regions are the better SRST recording districts. All the three Gujarat districts listed here belong to the eastern region. Among tribal populations, 13 districts of the west record sex ratios above 1000 indicating a higher proportion of females to males in these areas.

The highest levels of female literacy in the entire western region are noted for Gandhinagar of Gujarat where 80 per cent of the women are literate. Goa as a state reports better literacy among females in both the districts and even the disparity levels across gender are not very significant. Thirteen districts of Maharashtra are found in the better literacy among females list. The regions to which these districts belong are inland eastern and inland western, apart from two districts of northern plains and one from inland northern region. Five districts of Gujarat – 2 each from Saurashtra (Rajkot and Amreli) and plains northern (Gandhinagar and Mahesana) and Valsad district of eastern region are noted for having higher female literacy rates as compared to other parts of the west (see List RB2).

Although no district of M.P. figures in the high FLIT list, the list indicating lower gender differences in literacy notes 5 districts of the state belonging to Chattisgarh, south western and Malwa regions. The tribal districts of Bastar and the Dangs for instance are listed here indicating literacy levels that are low for both boys as well as girls.

The presence and absence of districts belonging to M.P. in the 20 best districts lists is repeated in case of mortality rates among females and the gender gaps in them. There are no districts of M.P. among the lower female mortality rates whether for infants or children. The low female mortality figures are noted for Goa, Maharashtra and Gujarat. In Maharashtra, it is the inland western and coastal regions, while it is the Saurashtra and eastern regions of Gujarat where females experience relatively

better survival chances. This may be due to better infrastructure, resources or access to health care in these areas.

List RB2: The 20 Better Rural Western India Districts by Educational Indicators

Female Literacy					Gender Gap in Literacy Rates				
Rank	District	State	Region	FLIT	Rank	District	State	Region	LGAP
95	GANDHINAGAR	GU	Plains Northern	80	95	GANDHINAGAR	GU	Plains Northern	13
94	SINDHUDURG	MA	Coastal	66	94	JHABUA	M.P	Malwa	14
93	NORTH GOA	GOA	Goa	66	93	SOUTH GOA	GOA	Goa	17
92	SOUTH GOA	GOA	Goa	58	92	BASTAR	M.P	Chattisgarh	19
91	WARDHA	MA	Inland Eastern	56	91	SURAT	GU	Eastern	19
90	AMRAVATI	MA	Inland Eastern	55	90	WARDHA	MA	Inland Eastern	19
89	SATARA	MA	Inland Western	51	89	AMRAVATI	MA	Inland Eastern	19
88	NAGPUR	MA	Inland Eastern	50	88	NORTH GOA	GOA	Goa	20
87	RATNAGIRI	MA	Coastal	49	87	VALSAD	GU	Eastern	20
86	VALSAD	GU	Eastern	49	86	SINDHUDURG	MA	Coastal	20
85	RAIGARH	MA	Coastal	48	85	NAGPUR	MA	Inland Eastern	22
84	BHANDARA	MA	Eastern	47	84	AMRELI	GU	Saurashtra	23
83	MAHASANA	GU	Plains Northern	47	83	RAJKOT	GU	Saurashtra	23
82	KOLHAPUR	MA	Inland Western	47	82	BETUL	M.P	South western	24
81	AKOLA	MA	Inland Eastern	47	81	KACHCHH	GU	Dry Area	24
80	RAJKOT	GU	Saurashtra	47	80	SARGUJA	M.P	Chattisgarh	24
79	PUNE	MA	Inland Western	46	79	JAMNAGAR	GU	Saurashtra	24
78	SANGLI	MA	Inland Western	46	78	THANE	MA	Coastal	24
77	AMRELI	GU	Saurashtra	45	77	WEST NIMAR	M.P	South western	25
76	JALGAON	MA	Inland Northern	45	76	THE DANGS	GU	Eastern	25

Source: Calculated from Census of India, 1991.

List RB 3: The 20 Better Rural Western India Districts by Mortality Indicators

Infant Mortality Rates among Females					Gender Differences in Infant Mortality Rates				
Rank	District	State	Region	IMRF	Rank	District	State	Region	IMRD
95	SOUTH GOA	GOA	Goa	29	95	WARDHA	MA	Inland Eastern	-21
94	SANGLI	MA	Inland Western	40	94	BHOPAL	M.P	Central	-19
93	SATARA	MA	Inland Western	40	93	DURG	M.P	Chattisgarh	-17
92	RATNAGIRI	MA	Coastal	41	92	THE DANGS	GU	Eastern	-17
91	VALSAD	GU	Eastern	41	91	JABALPUR	M.P	South	-16
90	AMRELI	GU	Saurashtra	42	90	RAJNANDGAON	M.P	Chattisgarh	-15
89	LATUR	MA	Inland central	44	89	RAIGARH	MA	Coastal	-14
88	KOLHAPUR	MA	Inland Western	44	88	GADCHIROLI	MA	Eastern	-13
87	AHMEDNAGAR	MA	Inland Western	45	87	AKOLA	MA	Inland Eastern	-13
86	PUNE	MA	Inland Western	46	86	SEHORE	M.P	Central	-12
85	SURAT	GU	Eastern	46	85	BHARUCH	GU	Eastern	-12
84	SINDHUDURG	MA	Coastal	47	84	BHANDARA	MA	Eastern	-11
83	SOLAPUR	MA	Inland Western	49	83	BASTAR	M.P	Chattisgarh	-11
82	RAIGARH	MA	Coastal	50	82	BILASPUR	M.P	Chattisgarh	-11
81	NORTH GOA	GOA	Goa	53	81	SHAJAPUR	M.P	Malwa	-11
80	JUNAGADH	GU	Saurashtra	57	80	YAVATMAL	MA	Inland Eastern	-10
79	BID	MA	Inland central	62	79	LATUR	MA	Inland central	-10
78	THANE	MA	Coastal	63	78	SHAHDOL	M.P	Vindhya	-9
77	NANDED	MA	Inland central	64	77	CHANDRAPUR	MA	Eastern	-8
76	NASHIK	MA	Inland Northern	65	76	SOUTH GOA	GOA	Goa	-8
Child Mortality Rates among Females					**Gender Differences in Child Mortality Rates**				
Rank	District	State	Region	CMRF	Rank	District	State	Region	CMRD
95	SOUTH GOA	GOA	Goa	43	95	BHOPAL	M.P	Central	-33
94	VALSAD	GU	Eastern	48	94	JABALPUR	M.P	South	-29
93	SANGLI	MA	Inland Western	49	93	WARDHA	MA	Inland Eastern	-26
92	RATNAGIRI	MA	Coastal	49	92	GADCHIROLI	MA	Eastern	-24
91	SATARA	MA	Inland Western	50	91	THE DANGS	GU	Eastern	-24
90	KOLHAPUR	MA	Inland Western	52	90	RAIGARH	MA	Coastal	-21
89	AHMEDNAGAR	MA	Inland Western	52	89	DURG	M.P	Chattisgarh	-17
88	SINDHUDURG	MA	Coastal	53	88	BASTAR	M.P	Chattisgarh	-16
87	PUNE	MA	Inland Western	54	87	SEHORE	M.P	Central	-15
86	SURAT	GU	Eastern	56	86	SHAHDOL	M.P	Vindhya	-15
85	RAIGARH	MA	Coastal	60	85	BHARUCH	GU	Eastern	-14
84	NORTH GOA	GOA	Goa	66	84	BILASPUR	M.P	Chattisgarh	-13
83	AMRELI	GU	Saurashtra	69	83	AHMEDNAGAR	MA	Inland Western	-12
82	SOLAPUR	MA	Inland Western	74	82	RAJNANDGAON	M.P	Chattisgarh	-12
81	THANE	MA	Coastal	79	81	YAVATMAL	MA	Inland Eastern	-10
80	JUNAGADH	GU	Saurashtra	80	80	AMRAVATI	MA	Inland Eastern	-9
79	BHAVNAGAR	GU	Saurashtra	84	79	BULDANA	MA	Inland Eastern	-8
78	LATUR	MAH	Inland central	85	78	RAIGARH	M.P	Chattisgarh	-7
77	BID	MA	Inland central	85	77	BHANDARA	MA	Eastern	-6
76	WARDHA	MA	Inland Eastern	87	76	SANGLI	MA	Inland Western	-6

Source: Calculated from Rajan and Mohanachandran, 1998.

List RB 4: The 20 Better Rural Western India Districts by Mean Age at Marriage				
Rank	**District**	**State**	**Region**	**MAM**
95	SOUTH GOA	GOA	Goa	20.36
94	NORTH GOA	GOA	Goa	20.18
93	SINDHUDURG	MA	Coastal	19.83
92	JUNAGADH	GU	Saurashtra	19.58
91	JAMNAGAR	GU	Saurashtra	19.48
90	RAJKOT	GU	Saurashtra	19.46
89	SURAT	GU	Eastern	19.46
88	VALSAD	GU	Eastern	19.32
87	THE DANGS	GU	Eastern	19.21
86	BHARUCH	GU	Eastern	19.20
85	RATNAGIRI	MA	Coastal	19.17
84	BANAS KANTHA	GU	Dry Area	19.08
83	AMRELI	GU	Saurashtra	19.06
82	SABAR KANTHA	GU	Eastern	19.02
81	BHAVNAGAR	GU	Saurashtra	18.98
80	KACHCHH	GU	Dry Area	18.92
79	SURENDRANAGAR	GU	Dry Area	18.87
78	PANCH MAHALS	GU	Eastern	18.83
77	VADODARA	GU	Eastern	18.69
76	RAIGARH	MA	Coastal	18.49

Source:Census of India, 1991.

List RB 5: The 20 Better Rural Western India Districts by Economic Indicators										
Female Work Participation Rate						Gender Differences in Work Participation Rates				
Rank	**District**	**State**	**Region**	**FWPR**		**Rank**	**District**	**State**	**Region**	**WGAP**
95	RAJNANDGAON	M.P	Chattisgarh	62		95	RAJNANDGAON	M.P	Chattisgarh	7
94	DURG	M.P	Chattisgarh	58		94	DURG	M.P	Chattisgarh	7
93	THE DANGS	GU	Eastern	56		93	BULDANA	MA	Inland Eastern	10
92	BULDANA	MA	Inland Eastern	55		92	BHANDARA	MA	Eastern	11
91	NASHIK	MA	Inland Northern	53		91	NASHIK	MA	Inland Northern	11
90	JALNA	MA	Inland central	53		90	AURANGABAD	MA	Inland central	13
89	BHANDARA	MA	Eastern	52		89	THE DANGS	GU	Eastern	14
88	YAVATMAL	MA	Inland Eastern	51		88	YAVATMAL	MA	Inland Eastern	14
87	AURANGABAD	MA	Inland central	51		87	JALNA	MA	Inland central	14
86	MANDLA	M.P	South	50		86	AKOLA	MA	Inland Eastern	14
85	AKOLA	MA	Inland Eastern	50		85	BID	MA	Inland central	15
84	PARBHANI	MA	Inland central	50		84	CHANDRAPUR	MA	Eastern	16
83	RAIPUR	M.P	Chattisgarh	49		83	WARDHA	MA	Inland Eastern	16
82	BID	MA	Inland central	49		82	AHMEDNAGAR	MA	Inland Western	17
81	CHANDRAPUR	MA	Eastern	49		81	JALGAON	MA	Inland Northern	17
80	WARDHA	MA	Inland Eastern	48		80	NAGPUR	MA	Inland Eastern	17
79	NAGPUR	MA	Inland Eastern	47		79	RAIPUR	M.P	Chattisgarh	18
78	GADCHIROLI	MA	Eastern	46		78	PARBHANI	MA	Inland central	18
77	BETUL	M.P	South western	46		77	RATNAGIRI	MA	Coastal	18
76	AHMEDNAGAR	MA	Inland Western	46		76	MANDLA	M.P	South	19

Source: Calculated from Census of India, 1991.

Of the 95 rural districts in the west, 45 districts experience excess infant male mortality which is closer to the expected pattern based on scientific and biological research (see Waldron and other articles in UN (1998)). As the infants grow upto 5 years, the number of districts with incidence of excess male mortality rates declines to 36, although the extent of difference across gender becomes more stark. The lists

depicting the least discriminatory behaviour across gender in health care and nutrition in infancy include the districts of M.P. and Maharashtra. Chattisgarh of M.P., inland eastern Maharashtra, eastern Gujarat and South Goa are the regions listed here (see List RB3).

Another list with no reference to M.P. is the better ages at marriage among females. Goa tops this list with women marrying at a more physically and mentally appropriate age. All of Gujarat except the northern plains districts are located in this set. From Maharashtra, all the three districts that are found in this list belong to the coastal region (see List RB4).

The districts where female work participation figures are higher belong to Maharashtra and M.P. Three districts of Chattisgarh have high FWPR's. The Dangs is the only district belonging to Gujarat (see List RB5). From Maharashtra, inland eastern and inland central region districts are listed. The least difference in WPRs across gender is also located in the same districts, except in the case of Jalgaon and Ratnagiri of Maharashtra, where who have lower WPRs are reported for both males and females.

6.1.2 Worse Districts

Among the districts identified as the 20 worse ones with respect to sex ratios among population above six years, except one all others belong to the state of M.P. Vadodara belonging to the eastern region of Gujarat figures at rank 19 with a SR>6 of 917. The districts of northern M.P. - Gwalior, Bhind, Morena, Datia and Shivpuri are the worst five (see List RW1). The other region which has significance in this list belongs to central M.P. The three districts of Vindhya region that figure in this list are those bordering western U.P. which is prominent for some of the worst sex ratios in the country.

The situation as depicted from the CSR list has northern plains districts of Gujarat apart from the north and central M.P. districts. Gandhinagar, Kheda, Mahesana, Ahmedabad are the four districts of northern plains that are found contiguous to each other almost in a vertical line at the heart of Gujarat. These are the prosperous, better off districts of the state (CMIE, 1993). Rajkot and Jamnagar of Saurashtra are the other Gujarat districts. In all, 7 districts of Gujarat, including dry area Surendranagar record low CSRs. One Sangli district of Maharashtra with a CSR of 927 is also identified here. The majority of 12 districts are still from M.P.

In terms of SCs, the same five northern M.P. districts which were the worst by SR>6 are listed. Six districts of central M.P., while 3 districts each of Vindhya and northern plains are the other regions where SRSCs are lower. Three districts of Gujarat, all belonging to the northern plains region are the only other districts in the list from this state.

For SRST, only 62 districts where more than five per cent ST population resides are considered. Of these 62 districts, the 20 worst ones belong to M.P, especially Vindhya, central and north regions of the state. Some districts of Malwa and south-western M.P. are also found among the lower SRST list.

List RW1: The 20 Worse Rural Western India Districts by Demographic Indicators

Sex Ratio among Population above 6 years					Sex Ratio among Scheduled Castes				
Rank	District	State	Region	SR>6	Rank	District	State	Region	SRSC
1	GWALIOR	M.P	North	800	1	BHIND	M.P	North	795
2	BHIND	M.P	North	804	2	GWALIOR	M.P	North	813
3	MORENA	M.P	North	811	3	MORENA	M.P	North	814
4	DATIA	M.P	North	826	4	DATIA	M.P	North	835
5	SHIVPURI	M.P	North	831	5	SHIVPURI	M.P	North	835
6	CHHATARPUR	M.P	Vindhya	838	6	CHHATARPUR	M.P	Vindhya	853
7	VIDISHA	M.P	Central	854	7	TIKAMGARH	M.P	Vindhya	854
8	TIKAMGARH	M.P	Vindhya	855	8	VIDISHA	M.P	Central	864
9	BHOPAL	M.P	Central	858	9	SAGAR	M.P	Central	866
10	GUNA	M.P	North	860	10	RAISEN	M.P	Central	867
11	SAGAR	M.P	Central	871	11	GUNA	M.P	North	871
12	RAISEN	M.P	Central	873	12	BHOPAL	M.P	Central	877
13	PANNA	M.P	Vindhya	888	13	DAMOH	M.P	Central	887
14	HOSHANGABAD	M.P	South western	897	14	AHMADABAD	GU	Plains Northern	889
15	SEHORE	M.P	Central	899	15	PANNA	M.P	Vindhya	889
16	DAMOH	M.P	Central	902	16	SEHORE	M.P	Central	893
17	INDORE	M.P	Malwa	912	17	KHEDA	GU	Plains Northern	897
18	NARSIMHAPUR	M.P	South	913	18	HOSHANGABAD	M.P	South western	898
19	VADODARA	GU	Eastern	917	19	GANDHINAGAR	GU	Plains Northern	910
20	SHAJAPUR	M.P	Malwa	918	20	NARSIMHAPUR	M.P	South	911
Child Sex Ratio					**Sex Ratio among STs for Districts with more than 5% STs**				
Rank	District	State	Region	CSR	Rank	District	State	Region	SRST
1	BHIND	M.P	North	846	1	KACHCHH	GU	Dry Area	899
2	MORENA	M.P	North	880	2	REWA	M.P	Vindhya	914
3	GANDHINAGAR	GU	North	890	3	MANDSAUR	M.P	Malwa	929
4	GWALIOR	M.P	North	893	4	RAISEN	M.P	Central	930
5	KHEDA	GU	Plains Northern	897	5	GUNA	M.P	North	931
6	DATIA	M.P	North	900	6	MORENA	M.P	North	931
7	MAHASANA	GU	Plains Northern	902	7	INDORE	M.P	Malwa	931
8	AHMADABAD	GU	Plains Northern	903	8	BANAS KANTHA	GU	Dry Area	933
9	SEHORE	M.P	Central	909	9	SAGAR	M.P	Central	935
10	SURENDRANAGAR	GU	Dry Area	911	10	SATNA	M.P	Vindhya	936
11	SHIVPURI	M.P	North	911	11	SEHORE	M.P	Central	940
12	RAJKOT	GU	Saurashtra	918	12	HOSHANGABAD	M.P	South western	941
13	JAMNAGAR	GU	Saurashtra	919	13	NAGPUR	MA	Inland eastern	943
14	CHHATARPUR	M.P	Vindhya	919	14	SIDHI	M.P	Vindhya	947
15	TIKAMGARH	M.P	Vindhya	920	15	BULDANA	MA	Inland eastern	947
16	NARSIMHAPUR	M.P	South	926	16	VADODARA	GU	Eastern	948
17	SHAJAPUR	M.P	Malwa	927	17	PANNA	M.P	Vindhya	949
18	SANGLI	MA	Inland Western	927	18	WARDHA	MA	Inland eastern	950
19	DAMOH	M.P	Central	927	19	AMRAVATI	MA	Inland eastern	950
20	RAISEN	M.P	Central	928	20	SHIVPURI	M.P	North	951

Source: Calculated from Census of India, 1991.

Women living in the Malwa, Vindhya and north regions of M.P. have the worst literacy situation in the entire western region. In fact, it is worthy to note that all 20 worse FLIT districts belong to the state of M.P. (see List RW2). Bastar and Surguja of Chattisgarh and Chattarpur and Panna of Vindhya region are also among the 20 worse FLIT western regions districts.

Among the districts identified as worse in terms of gender differences in literacy, only 5 of the worst districts are both backward as well as exhibiting disparities across gender. This highlights the significance of considering areas where disparity in literacy across boys and girls is very high. It is the Malwa, inland coastal, north and Chattisgarh region where such variation is widespread. This also re-emphasises the point that where educational levels are low, it is probably due to inability to access

schools due to economic constraints or because infrastructural facilities are unavailable or poor. This is the reason why both males and females experience the low literacy levels, whereas, gaps in literacy rates across gender is more due to disparate behavior stemming from cultural stereotypes and mindsets whereby educating girls is considered to be a waste of resources since there is little use of it perceived by parents and society.

List RW2: The 20 Worse Rural Western India Districts by Educational Indicators

Female Literacy						Gender Gap in Literacy Rates				
Rank	District	State	Region	FLIT		Rank	District	State	Region	LGAP
1	JHABUA	M.P	Malwa	7		1	MANDSAUR	M.P	Malwa	43
2	SHIVPURI	M.P	North	9		2	INDORE	M.P	Malwa	40
3	RAJGARH	M.P	Malwa	9		3	BHIND	M.P	North	40
4	GUNA	M.P	North	10		4	DATIA	M.P	North	40
5	SIDHI	M.P	Vindhya	11		5	JALNA	MA	Inland central	40
6	BASTAR	M.P	Chattisgarh	12		6	SHAJAPUR	M.P	Malwa	39
7	SARGUJA	M.P	Chattisgarh	12		7	GWALIOR	M.P	North	39
8	SHAHDOL	M.P	Vindhya	13		8	MORENA	M.P	North	39
9	SHAJAPUR	M.P	Malwa	14		9	UJJAIN	M.P	Malwa	38
10	UJJAIN	M.P	Malwa	14		10	PARBHANI	MA	Inland central	38
11	RATLAM	M.P	Malwa	14		11	DEWAS	M.P	Malwa	38
12	CHHATARPUR	M.P	Vindhya	14		12	AURANGABAD	MA	Inland central	38
13	PANNA	M.P	Vindhya	15		13	BILASPUR	M.P	Chattisgarh	37
14	MORENA	M.P	North	15		14	SEHORE	M.P	Central	37
15	SEHORE	M.P	Central	15		15	RAIPUR	M.P	Chattisgarh	36
16	BHOPAL	M.P	Central	15		16	NANDED	MA	Inland central	36
17	TIKAMGARH	M.P	Vindhya	15		17	BID	MA	Inland central	36
18	DHAR	M.P	Malwa	16		18	DURG	M.P	Chattisgarh	35
19	DATIA	M.P	North	16		19	RAJNANDGAON	M.P	Chattisgarh	35
20	DEWAS	M.P	Malwa	16		20	REWA	M.P	Vindhya	35

Source: Calculated from Census of India, 1991.

A similar lack of emphasis is witnessed in the sphere of girls' health and well being as well. Since girls are not viewed as assets and instead seen as economic burdens due to the expenditure incurred on them for marriage, there is little interest in taking pains to save the girl child. This attitude is compounded by the poor economic resources available to most families that compels them to make adverse choices even at the cost of their daughters' survival.

The adverse health conditions or poor access to health care especially for girls is displayed in the case of M.P. quite prominently. Since all the 20 worst districts both in terms of IMRF and CMRF are that of M.P. (see List RW3). The regions are north, Vindhya, Central, Malwa, south-western and south. In terms of disparity across gender in mortality rates some districts of Gujarat are also listed. Mahesana and Gandhinagar of northern plains, Jamnagar of Saurashtra and Banaskantha of dry area regions are few of the districts where discrimination against girls in access to health care and nutrition is perhaps practiced.

The low age at marriage among females are noted among the districts of M.P. Districts of the Malwa, Vindhya, central and north regions are listed (see List RW4). This could be another explanation for the high mortality rates in these districts. The pregnancies among young women lead to heightening the vulnerability of children and their survival rate dips. This may be one additional factor for the higher

mortality especially among infants both for boys and girls as is reflected in the low gender differences.

List RW 3: The 20 Worse Rural Western India Districts by Mortality Indicators

Infant Mortality Rates among Females					Gender Differences in Infant Mortality Rates				
Rank	District	State	Region	IMRF	Rank	District	State	Region	IMRD
1	SHIVPURI	M.P	North	163	1	BHIND	M.P	North	38
2	CHHATARPUR	M.P	Vindhya	158	2	TIKAMGARH	M.P	Vindhya	31
3	SATNA	M.P	Vindhya	149	3	MORENA	M.P	North	24
4	TIKAMGARH	M.P	Vindhya	146	4	SHIVPURI	M.P	North	24
5	PANNA	M.P	Vindhya	142	5	CHHATARPUR	M.P	Vindhya	24
6	VIDISHA	M.P	Central	141	6	MAHASANA	GU	Plains Northern	22
7	BETUL	M.P	South western	140	7	DATIA	M.P	North	21
8	GUNA	M.P	North	139	8	NARSIMHAPUR	M.P	South	19
9	REWA	M.P	Vindhya	139	9	JAMNAGAR	GU	Saurashtra	18
10	JHABUA	M.P	Malwa	137	10	GUNA	M.P	North	18
11	RAJGARH	M.P	Malwa	136	11	UJJAIN	M.P	Malwa	18
12	DATIA	M.P	North	134	12	HOSHANGABAD	M.P	South western	17
13	SAGAR	M.P	Central	131	13	GWALIOR	M.P	North	16
14	DAMOH	M.P	Central	131	14	BANAS KANTHA	GU	Dry Area	15
15	HOSHANGABAD	M.P	South western	129	15	REWA	M.P	Vindhya	15
16	BHIND	M.P	North	127	16	CHHINDWARA	M.P	South	15
17	RAISEN	M.P	Central	127	17	GANDHINAGAR	GU	Plains Northern	14
18	NARSIMHAPUR	M.P	South	124	18	RAJGARH	M.P	Malwa	14
19	CHHINDWARA	M.P	South	124	19	SABAR KANTHA	GU	Eastern	12
20	JABALPUR	M.P	South	122	20	PANNA	M.P	Vindhya	12
Child Mortality Rates among Females					**Gender Differences in Child Mortality Rates**				
Rank	District	State	Region	CMRF	Rank	District	State	Region	CMRD
1	SHIVPURI	M.P	North	290	1	RAJGARH	M.P	Malwa	77
2	CHHATARPUR	M.P	Vindhya	278	2	DATIA	M.P	North	76
3	SATNA	M.P	Vindhya	259	3	TIKAMGARH	M.P	Vindhya	72
4	TIKAMGARH	M.P	Vindhya	251	4	SHIVPURI	M.P	North	71
5	DATIA	M.P	North	247	5	CHHATARPUR	M.P	Vindhya	70
6	PANNA	M.P	Vindhya	242	6	BHIND	M.P	North	62
7	BETUL	M.P	South western	239	7	UJJAIN	M.P	Malwa	55
8	GUNA	M.P	North	236	8	MAHASANA	GU	Plains Northern	54
9	JHABUA	M.P	Malwa	236	9	GUNA	M.P	North	53
10	REWA	M.P	Vindhya	224	10	HOSHANGABAD	M.P	South western	49
11	SAGAR	M.P	Central	217	11	MORENA	M.P	North	47
12	DAMOH	M.P	Central	217	12	GWALIOR	M.P	North	46
13	VIDISHA	M.P	Central	216	13	JHABUA	M.P	Malwa	46
14	HOSHANGABAD	M.P	South western	214	14	PANNA	M.P	Vindhya	42
15	RAJGARH	M.P	Malwa	209	15	NARSIMHAPUR	M.P	South	41
16	RAISEN	M.P	Central	205	16	DAMOH	M.P	Central	38
17	SHAJAPUR	M.P	Malwa	200	17	BANAS KANTHA	GU	Dry Area	34
18	UJJAIN	M.P	Malwa	192	18	REWA	M.P	Vindhya	34
19	NARSIMHAPUR	M.P	South	192	19	SHAJAPUR	M.P	Malwa	34
20	CHHINDWARA	M.P	South	192	20	AMRELI	GU	Saurashtra	32

Source: Calculated from Rajan and Mohanachandran, 1998.

One aspect where the districts of Gujarat stand prominent is regarding female WPRs. Eleven districts of northern plains, Saurashtra, eastern and dry area regions of the state report low female participation rates. North Goa also finds its way in this list. This is the only one of the 13 indicators based backward districts lists where Goa figures. Among M.P. districts of north and central regions, Surguja is the sole Chattisgarh district with a FWPR rank of 20 (see List RW5).

As to the scenario with regard to differences in WPRs across men and women too the situation of regions/ districts is almost the same as in the case of FWPRs. Only the ordering of ranks have undergone some alterations.

List RW 4: The 20 Worse Rural Western India Districts by Mean Age at Marriage				
Rank	**District**	**State**	**Region**	**MAM**
1	SHAJAPUR	M.P	Malwa	14.75
2	RAJGARH	M.P	Malwa	15.12
3	UJJAIN	M.P	Malwa	15.16
4	TIKAMGARH	M.P	Vindhya	15.27
5	MANDSAUR	M.P	Malwa	15.30
6	CHHATARPUR	M.P	Vindhya	15.37
7	SAGAR	M.P	Central	15.48
8	SHIVPURI	M.P	North	15.53
9	REWA	M.P	Vindhya	15.55
10	RATLAM	M.P	Malwa	15.57
11	SATNA	M.P	Vindhya	15.67
12	SIDHI	M.P	Vindhya	15.69
13	DAMOH	M.P	Central	15.72
14	INDORE	M.P	Malwa	15.72
15	BHIND	M.P	North	15.73
16	SHAHDOL	M.P	Vindhya	15.74
17	VIDISHA	M.P	Central	15.76
18	MORENA	M.P	North	15.77
19	DEWAS	M.P	Malwa	15.78
20	DATIA	M.P	North	15.85

Source:Census of India, 1991.

List RW 5: The 20 Worse Rural Western India Districts by Economic Indicators									
Female Work Participation Rate						**Gender Differences in Work Participation Rates**			
Rank	**District**	**State**	**Region**	**FWPR**	**Rank**	**District**	**State**	**Region**	**WGAP**
1	BHIND	M.P	North	3	1	BHIND	M.P	North	56
2	GWALIOR	M.P	North	10	2	GUNA	M.P	North	53
3	MORENA	M.P	North	10	3	GWALIOR	M.P	North	52
4	GANDHINAGAR	GU	Plains Northern	12	4	SARGUJA	M.P	Chattisgarh	51
5	GUNA	M.P	North	13	5	BANAS KANTHA	GU	Dry Area	51
6	BANAS KANTHA	GU	Dry Area	14	6	MORENA	M.P	North	51
7	DATIA	M.P	North	14	7	GANDHINAGAR	GU	Plains Northern	50
8	KHEDA	GU	Plains Northern	16	8	KHEDA	GU	Plains Northern	50
9	JUNAGADH	GU	Saurashtra	18	9	VADODARA	GU	Eastern	49
10	VIDISHA	M.P	Central	18	10	DATIA	M.P	North	49
11	AMRELI	GU	Saurashtra	18	11	VIDISHA	M.P	Central	49
12	MAHASANA	GU	Plains Northern	19	12	AMRELI	GU	Saurashtra	47
13	JAMNAGAR	GU	Saurashtra	19	13	JUNAGADH	GU	Saurashtra	47
14	PANCH MAHALS	GU	Eastern	19	14	SHIVPURI	M.P	North	45
15	KACHCHH	GU	Dry Area	20	15	PANNA	M.P	Vindhya	45
16	VADODARA	GU	Eastern	20	16	JAMNAGAR	GU	Saurashtra	45
17	RAISEN	M.P	Central	20	17	PANCH MAHALS	GU	Eastern	45
18	NORTH GOA	Goa	Goa	20	18	MAHASANA	GU	Plains Northern	44
19	SABAR KANTHA	GU	Eastern	21	19	CHHATARPUR	M.P	Vindhya	44
20	SARGUJA	M.P	Chattisgarh	21	20	BHARUCH	GU	Eastern	44

Source: Calculated from Census of India, 1991.

6.2 Urban Scenario of the West

The situation of women in urban areas differs from that seen in the rural locations. Generally, educational and health related indicators reveal a relatively better position of women than in the villages. The age at marriage is higher and fertility rates are lower. Yet, social and cultural factors continue to exercise their influence in the

behaviour patterns of people. The persistence of son preference is witnessed as much, if not more, even in urban areas. The demographic imbalance tilts more severely against girls in the urban context. The level of variation from district to district across the states of the western region however, remains high. Also, different sets of indicators show how certain areas are performing poorly in some spheres of gender development, while in others the situation is better. This is brought out through the analysis that follows in this section.

6.2.1 Better Districts

The entire Saurashtra region of Gujarat has a better demographic balance among population above six years. This is seemingly because of the incidence of male migration as none of these districts figure in the better child sex ratio list. Coastal Maharashtra districts are among the 20 better SR>6 recording districts (see List UB1). Chattisgarh, even in the urban locations exhibits a more balanced sex ratio. The number of districts belonging to this region is higher among the better CSR list.

Among better SRSC list, districts of Maharashtra dominate, particularly the inland western region of the state. Six districts of M.P. and three of Gujarat are listed in addition to the Maharashtra districts. Rajnandgaon of Chattisgarh is at the top of both the SRSC and SRST lists.

Considering the districts with more than 5 per cent STs, there are a total of only 31 districts, that is, less than one-third of all western region districts. In urban areas, the only district which has more than 50 per cent STs is the Dangs of Gujarat. Most of these districts are from M.P.- Chattisgarh, Vindhya, Malwa and south. Separate lists are not prepared for worse and better districts with respect to SRST since the total number of districts are few (see List UST).

Coastal Maharashtra among the higher female literacy districts fares well. District Sindhudurg of the region reports FLIT of 82. Both the districts of Goa have a record of relatively better literacy levels and they are present in this list of better female literacy rates (see List UB2). Other prominent areas where female literacy is better as compared to other urban west districts are eastern Gujarat, inland eastern and inland western region districts of Maharashtra.

The examination of gaps in literacy across men and women is undertaken to find out where discrimination occurs in provision of education across gender. Urban areas are expected to have lower levels of differences. The areas where female literacy is higher generally the gap among men and women is also narrowed down. However, this is not the case in all regions. The gap is quite significant in the districts of M.P. – only Bhopal is listed among the low differences. As for the other three states of the western region, most of the districts reporting higher levels of FLIT also have a low gender gap.

List UB 1: The 20 Better Urban Western India Districts by Demographic Indicators

Sex Ratio among Population above 6 years						Sex Ratio among Scheduled Castes				
Rank	District	State	Region	SR>6		Rank	District	State	Region	SRSC
96	SINDHUDURG	MA	Coastal	1003		96	RAJNANDGAON	M.P	Chattisgarh	1015
95	RATNAGIRI	MA	Coastal	985		95	SOUTH GOA	GOA	Goa	1000
94	RAJNANDGAON	M.P	Chattisgarh	965		94	BALAGHAT	M.P	South	998
93	AMRELI	GU	Saurashtra	958		93	BASTAR	M.P	Chattisgarh	988
92	JUNAGADH	GU	Saurashtra	955		92	BHANDARA	MA	Eastern	982
91	BHANDARA	MA	Eastern	954		91	SINDHUDURG	MA	Coastal	976
90	SOLAPUR	MA	Inland Western	947		90	RAIPUR	M.P	Chattisgarh	975
89	SABAR KANTHA	GU	Eastern	940		89	RAIGARH	M.P	Chattisgarh	964
88	BHAVNAGAR	GU	Saurashtra	940		88	AHMEDNAGAR	MA	Inland Western	961
87	RAIPUR	M.P	Chattisgarh	937		87	SANGLI	MA	Inland Western	957
86	RAJKOT	GU	Saurashtra	937		86	VALSAD	GU	Eastern	957
85	SANGLI	MA	Inland Western	936		85	YAVATMAL	MA	Inland Eastern	957
84	PANCH MAHALS	GU	Eastern	936		84	SATARA	MA	Inland Western	955
83	JAMNAGAR	GU	Saurashtra	935		83	WEST NIMAR	M.P	South western	950
82	SOUTH GOA	GOA	Goa	934		82	AMRELI	GU	Saurashtra	950
81	MAHASANA	GU	Plains Northern	934		81	KOLHAPUR	MA	Inland Western	948
80	BALAGHAT	M.P	South	933		80	RAIGARH	MA	Coastal	948
79	BULDANA	MA	Inland Eastern	933		79	THE DANGS	GU	Eastern	948
78	BASTAR	M.P	Chattisgarh	932		78	NASHIK	MA	Inland Northern	947
77	KHEDA	GU	Plains Northern	931		77	SOLAPUR	MA	Inland Western	945

Child Sex Ratio				
Rank	District	State	Region	CSR
96	RAIGARH	M.P	Chattisgarh	978
95	RAJNANDGAON	M.P	Chattisgarh	973
94	BASTAR	M.P	Chattisgarh	969
93	BILASPUR	M.P	Chattisgarh	965
92	NORTH GOA	GOA	Goa	961
91	SINDHUDURG	MA	Coastal	961
90	BALAGHAT	M.P	South	960
89	DURG	M.P	Chattisgarh	959
88	BETUL	M.P	South western	959
87	RATNAGIRI	MA	Coastal	958
86	RAIPUR	M.P	Chattisgarh	958
85	NANDED	MA	Inland central	958
84	BHARUCH	GU	Eastern	956
83	WARDHA	MA	Inland Eastern	956
82	MANDLA	M.P	South	954
81	SHAHDOL	M.P	Vindhya	953
80	DHAR	M.P	Malwa	953
79	OSMANABAD	MA	Inland central	953
78	RATLAM	M.P	Malwa	952
77	VALSAD	GU	Eastern	951

Source: Calculated from Census of India, 1991.

The mortality rates among girls are lower in the districts of Maharashtra and Goa. From Gujarat, only Valsad district is listed for low female mortality rates (see List UB3). The low CMRF list includes Rajkot district also. The regions of Maharashtra which report low IMRF and CMRF are inland western, inland central and coastal. Both districts of Goa display better health care of girls.

List UST: Sex Ratio among Scheduled Tribes for Urban Western India Districts with more than 5% STs				
Rank	**LOC_CODE**	**DTNAME**	**%ST/Pop**	**SRST**
1	MP	SIDHI	8	832
2	MP	WEST NIMAR	8	863
3	MP	DHAR	14	865
4	MP	REWA	6	880
5	MP	SEONI	6	899
6	MP	DURG	6	899
7	MP	MANDLA	12	900
8	MP	RAIGARH	15	904
9	GU	THE DANGS	59	905
10	MA	JABALPUR	6	906
11	MA	JHABUA	28	908
12	MP	GADCHIROLI	15	913
13	MA	CHANDRAPUR	9	914
14	MA	YAVATMAL	8	917
15	MP	BETUL	7	918
16	MP	SARGUJA	13	918
17	MP	BASTAR	18	919
18	MP	BILASPUR	7	922
19	MP	SHAHDOL	17	928
20	MA	DHULE	8	928
21	GU	BHARUCH	14	937
22	MA	NAGPUR	11	938
23	GU	PANCH MAHALS	13	941
24	MP	CHHINDWARA	9	946
25	GU	SURAT	7	953
26	MP	BALAGHAT	10	956
27	MA	WARDHA	8	957
28	MA	BHANDARA	8	968
29	GU	VALSAD	22	969
30	MA	RAIGARH	6	973
31	MP	RAJNANDGAON	6	997

Source: Calculated from Census of India, 1991

List UB2: The 20 Better Urban Western India Districts by Educational Indicators										
Female Literacy						**Gender Gap in Literacy Rates**				
Rank	**District**	**State**	**Region**	**FLIT**		**Rank**	**District**	**State**	**Region**	**LGAP**
96	SINDHUDURG	MA	Coastal	82		96	SINDHUDURG	MA	Coastal	11
95	GANDHINAGAR	GU	Plains Northern	82		95	GANDHINAGAR	GU	Plains Northern	12
94	RATNAGIRI	MA	Coastal	77		94	NORTH GOA	GOA	Goa	12
93	GREATER BOMBAY	MA	Coastal	76		93	THANE	MA	Coastal	12
92	WARDHA	MA	Inland Eastern	76		92	GREATER BOMBAY	MA	Coastal	12
91	NORTH GOA	GOA	Goa	76		91	AMRAVATI	MA	Inland Eastern	13
90	AMRAVATI	MA	Inland Eastern	74		90	WARDHA	MA	Inland Eastern	13
89	VADODARA	GU	Eastern	74		89	RATNAGIRI	MA	Coastal	13
88	NAGPUR	MA	Inland Eastern	74		88	VADODARA	GU	Eastern	14
87	VALSAD	GU	Eastern	73		87	VALSAD	GU	Eastern	14
86	THANE	MA	Coastal	73		86	SOUTH GOA	GOA	Goa	14
85	PUNE	MA	Inland Western	73		85	NAGPUR	MA	Inland Eastern	14
84	BHANDARA	MA	Eastern	72		84	SURAT	GU	Eastern	15
83	SATARA	MA	Inland Western	72		83	PUNE	MA	Inland Western	15
82	SOUTH GOA	GOA	Goa	71		82	AKOLA	MA	Inland Eastern	15
81	RAIGARH	MA	Coastal	71		81	RAIGARH	MA	Coastal	15
80	BHARUCH	GU	Eastern	71		80	BHARUCH	GU	Eastern	15
79	AHMADABAD	GU	Plains Northern	71		79	AHMADABAD	GU	Plains Northern	16
78	KOLHAPUR	MA	Inland Western	70		78	BHOPAL	M.P	Central	16
77	NASHIK	MA	Inland Northern	70		77	RAJKOT	GU	Saurashtra	16

Source: Calculated from Census of India, 1991.

List UB3: The 20 Better Urban Western India Districts by Mortality Indicators										
Infant Mortality Rates among Females						Gender Differences in Infant Mortality Rates				
Rank	District	State	Region	IMRF		Rank	District	State	Region	IMRD
96	LATUR	MA	Inland central	16		96	SINDHUDURG	MA	Coastal	-31
95	SANGLI	MA	Inland Western	24		95	THE DANGS	GU	Eastern	-30
94	THANE	MA	Coastal	25		94	GREATER BOMBAY	MA	Coastal	-24
93	VALSAD	GU	Eastern	25		93	LATUR	MA	Inland central	-23
92	RATNAGIRI	MA	Coastal	27		92	CHANDRAPUR	MA	Eastern	-18
91	AHMEDNAGAR	MA	Inland Western	28		91	WARDHA	MA	Inland Eastern	-16
90	BID	MA	Inland central	30		90	AURANGABAD	MA	Inland central	-16
89	KOLHAPUR	MA	Inland Western	30		89	BALAGHAT	M.P	South	-15
88	SATARA	MA	Inland Western	30		88	DHAR	M.P	Malwa	-14
87	PUNE	MA	Inland Western	30		87	GADCHIROLI	MA	Eastern	-13
86	SOUTH GOA	GOA	Goa	30		86	BID	MA	Inland central	-13
85	AURANGABAD	MA	Inland central	31		85	SOLAPUR	MA	Inland Western	-12
84	NANDED	MA	Inland central	32		84	BASTAR	M.P	Chattisgarh	-12
83	SOLAPUR	MA	Inland Western	32		83	SEHORE	M.P	Central	-12
82	OSMANABAD	MA	Inland central	33		82	SARGUJA	M.P	Chattisgarh	-11
81	SINDHUDURG	MA	Coastal	33		81	YAVATMAL	MA	Inland Eastern	-10
80	GREATER BOMBAY	MA	Coastal	34		80	RAJNANDGAON	M.P	Chattisgarh	-10
79	WARDHA	MA	Inland Eastern	35		79	AHMEDNAGAR	MA	Inland Western	-9
78	RAIGARH	MA	Coastal	35		78	RATLAM	M.P	Malwa	-9
77	NORTH GOA	GOA	Goa	35		77	BHANDARA	MA	Eastern	-8
Child Mortality Rates among Females						Gender Differences in Child Mortality Rates				
Rank	District	State	Region	CMRF		Rank	District	State	Region	CMRD
96	LATUR	MA	Inland central	21		96	THE DANGS	GU	Eastern	-51
95	SANGLI	MA	Inland Western	29		95	SINDHUDURG	MA	Coastal	-42
94	THANE	MA	Coastal	30		94	GREATER BOMBAY	MA	Coastal	-33
93	VALSAD	GU	Eastern	30		93	LATUR	MA	Inland central	-23
92	AHMEDNAGAR	MA	Inland Western	32		92	AURANGABAD	MA	Inland central	-20
91	RATNAGIRI	MA	Coastal	32		91	OSMANABAD	MA	Inland central	-19
90	SOUTH GOA	GOA	Goa	34		90	BALAGHAT	M.P	South	-19
89	AURANGABAD	MA	Inland central	35		89	JALNA	MA	Inland central	-16
88	KOLHAPUR	MA	Inland Western	35		88	BASTAR	M.P	Chattisgarh	-15
87	SATARA	MA	Inland Western	35		87	SEHORE	M.P	Central	-15
86	PUNE	MA	Inland Western	35		86	GADCHIROLI	MA	Eastern	-14
85	NANDED	MA	Inland central	36		85	CHANDRAPUR	MA	Eastern	-13
84	SINDHUDURG	MA	Coastal	38		84	SARGUJA	M.P	Chattisgarh	-13
83	GREATER BOMBAY	MA	Coastal	38		83	NAGPUR	MA	Inland Eastern	-12
82	NORTH GOA	GOA	Goa	39		82	RAJNANDGAON	M.P	Chattisgarh	-11
81	RAIGARH	MA	Coastal	40		81	AMRAVATI	MA	Inland Eastern	-10
80	RAJKOT	GU	Saurashtra	40		80	AHMEDNAGAR	MA	Inland Western	-10
79	JALNA	MA	Inland central	44		79	RATLAM	M.P	Malwa	-10
78	BID	MA	Inland central	46		78	YAVATMAL	MA	Inland Eastern	-9
77	SOLAPUR	MA	Inland Western	47		77	THANE	MA	Coastal	-8

Source: Calculated from Rajan and Mohanachandran, 1998.

The districts of Madhya Pradesh generally have higher mortality rates among girls and none of these areas are listed in the low IMRF and CMRF lists. However, these districts are listed in the low gender disparity denoting districts indicating that there is little difference across the mortality experienced by boys and girls in these districts. In fact, for infants excess male mortality is reported in 44 districts, while in 39 districts male children face higher mortality. This incidence of lower survival among boys is significant in the Dangs of Gujarat and in some districts of coastal, inland central and inland eastern regions of Maharashtra.

The expectation that urban areas with better education for females, displays the prevalence of higher ages at marriage for them is substantiated in the case of M.P since FLIT is lower, none of the M.P. districts are listed in the higher MAMF list. It is typically Goa, Gujarat and Maharashtra where female age at marriage is relatively higher (see List UB4).

List UB 4: The 20 Better Urban Western India Districts by Mean Age at Marriage				
Rank	**District**	**State**	**Region**	**MAM**
96	NORTH GOA	GOA	Goa	20.83
95	SINDHUDURG	MA	Coastal	20.78
94	SOUTH GOA	GOA	Goa	20.51
93	RATNAGIRI	MA	Coastal	20.09
92	VALSAD	GU	Eastern	19.75
91	BHARUCH	GU	Eastern	19.71
90	RAJKOT	GU	Saurashtra	19.66
89	JUNAGADH	GU	Saurashtra	19.59
88	JAMNAGAR	GU	Saurashtra	19.48
87	RAIGARH	MA	Coastal	19.46
86	THE DANGS	GU	Eastern	19.45
85	GREATER BOMBAY	MA	Coastal	19.40
84	VADODARA	GU	Eastern	19.38
83	BHAVNAGAR	GU	Saurashtra	19.37
82	SURAT	GU	Eastern	19.30
81	KACHCHH	GU	Dry Area	19.21
80	KHEDA	GU	Plains Northern	19.21
79	THANE	MA	Coastal	19.20
78	AMRELI	GU	Saurashtra	19.18
77	SABAR KANTHA	GU	Eastern	19.15

Source:Census of India, 1991.

List UB 5: The 20 Better Urban Western India Districts by Economic Indicators										
Female Work Participation Rate						**Gender Differences in Work Participation Rates**				
Rank	**District**	**State**	**Region**	**FWPR**		**Rank**	**District**	**State**	**Region**	**WGAP**
96	GADCHIROLI	MA	Eastern	22		96	BHANDARA	MA	Eastern	34
95	RAJNANDGAON	M.P	Chattisgarh	21		95	GADCHIROLI	MA	Eastern	34
94	BHANDARA	MA	Eastern	18		94	RAJNANDGAON	M.P	Chattisgarh	36
93	NORTH GOA	Goa	Goa	17		93	REWA	M.P	Vindhya	38
92	SAGAR	M.P	Central	17		92	SOLAPUR	MA	Inland Western	38
91	AHMEDNAGAR	MA	Inland Western	16		91	OSMANABAD	MA	Inland central	39
90	SOLAPUR	MA	Inland Western	16		90	THE DANGS	GU	Eastern	39
89	RAIPUR	M.P	Chattisgarh	16		89	DAMOH	M.P	Central	39
88	DAMOH	M.P	Central	16		88	SINDHUDURG	MA	Coastal	39
87	THE DANGS	GU	Eastern	15		87	SAGAR	M.P	Central	39
86	DHAR	M.P	Malwa	15		86	BALAGHAT	M.P	South	39
85	BULDANA	MA	Inland Eastern	15		85	NANDED	MA	Inland central	40
84	SOUTH GOA	Goa	Goa	15		84	MANDLA	M.P	South	40
83	SATNA	M.P	Vindhya	15		83	NORTH GOA	Goa	Goa	40
82	REWA	M.P	Vindhya	15		82	SOUTH GOA	Goa	Goa	41
81	TIKAMGARH	M.P	Vindhya	14		81	SATARA	MA	Inland Western	41
80	OSMANABAD	MA	Inland central	14		80	AHMEDNAGAR	MA	Inland Western	41
79	BALAGHAT	M.P	South	14		79	WARDHA	MA	Inland Eastern	41
78	MANDSAUR	M.P	Malwa	14		78	BULDANA	MA	Inland Eastern	42
77	BASTAR	M.P	Chattisgarh	14		77	TIKAMGARH	M.P	Vindhya	42

Source: Calculated from Census of India, 1991.

Higher levels of female work participation rates and lower gender gaps in WPRs are found in Goa, parts of M.P. and Maharashtra. The districts of M.P. – 3 each from Chattisgarh and Vindhya, 2 each from Central and Malwa regions are among the list of high FWPR. The lowest gender gaps in WPRs are noted for eastern Maharashtra districts at the difference of 34 (see list UB5). Inland western is the other region of the state from where 3 districts are identified. Only one district of Chattisgarh – Rajnandgaon - is noted for low disparity in work participation. Both the Goan districts also report lower disparity in WPRs.

The Dangs of eastern Gujarat is the only district of the state where despite three times more men working, the gender gap in WPRs is relatively lower. This reflects the overall lower levels of women's WPRs in urban western India districts which is both an outcome of low educational and skill attainment levels among them and also lower availability of job avenues for their absorption. Despite the high levels of industrialisation in the region not many women are being employed in the accounted for spheres of work. No doubt, a larger number of both women and even men must be involved in the informal, unaccounted work spheres that do not get captured in these statistics (see NCSEW, 1988; Punalekar, 1990; Visaria and Unni, 1992).

6.2.2 Worse Districts

Seventeen of the 20 worse districts with respect to SR>6 belong to M.P. Two coastal Maharashtra districts of Greater Bombay and Thane; and one eastern Gujarat district of Surat are among this list of backward districts. The regions to which the districts belong are Vindhya, north and central M.P. Surguja is the only Chattisgarh district in this list. The urban sex ratios among population above six years are more imbalanced than rural areas. The worst – Sidhi of M.P. – reports a SR>6 of 725 (see List UW1).

List UW1: The 20 Worse Urban Western India Districts by Demographic Indicators

Sex Ratio among Population above 6 years					Sex Ratio among Scheduled Castes				
Rank	District	State	Region	SR>6	Rank	District	State	Region	SRSC
1	SIDHI	M.P	Vindhya	725	1	BHIND	M.P	North	801
2	GREATER BOMBAY	MA	Coastal	801	2	MORENA	M.P	North	807
3	MORENA	M.P	North	815	3	GWALIOR	M.P	North	826
4	BHIND	M.P	North	817	4	DATIA	M.P	North	848
5	THANE	MA	Coastal	823	5	SIDHI	M.P	Vindhya	854
6	GWALIOR	M.P	North	834	6	CHHATARPUR	M.P	Vindhya	862
7	SURAT	GU	Eastern	835	7	RAISEN	M.P	Central	863
8	SHIVPURI	M.P	North	835	8	TIKAMGARH	M.P	Vindhya	867
9	RAISEN	M.P	Central	839	9	PANNA	M.P	Vindhya	872
10	REWA	M.P	Vindhya	842	10	VIDISHA	M.P	Central	873
11	SARGUJA	M.P	Chattisgarh	849	11	SHIVPURI	M.P	North	873
12	SHAHDOL	M.P	Vindhya	849	12	DAMOH	M.P	Central	875
13	CHHATARPUR	M.P	Vindhya	849	13	SAGAR	M.P	Central	878
14	PANNA	M.P	Vindhya	853	14	GREATER BOMBAY	MA	Coastal	880
15	SAGAR	M.P	Central	860	15	RATNAGIRI	MA	Coastal	883
16	GUNA	M.P	North	862	16	AHMADABAD	GU	Plains Northern	887
17	SATNA	M.P	Vindhya	864	17	GUNA	M.P	North	890
18	DATIA	M.P	North	868	18	SHAHDOL	M.P	Vindhya	891
19	SEHORE	M.P	Central	869	19	SEHORE	M.P	Central	893
20	VIDISHA	M.P	Central	869	20	NARSIMHAPUR	M.P	South	895

Child Sex Ratio				
Rank	District	State	Region	CSR
1	GANDHINAGAR	GU	Plains Northern	862
2	BHIND	M.P	North	868
3	MORENA	M.P	North	871
4	MAHASANA	GU	Plains Northern	878
5	GWALIOR	M.P	North	885
6	AURANGABAD	MA	Inland central	888
7	SURENDRANAGAR	GU	Dry Area	891
8	AHMADABAD	GU	Plains Northern	895
9	DATIA	M.P	North	895
10	KHEDA	GU	Plains Northern	903
11	PANCH MAHALS	GU	Eastern	906
12	TIKAMGARH	M.P	Vindhya	907
13	SABAR KANTHA	GU	Eastern	909
14	SATARA	MA	Inland Western	910
15	KOLHAPUR	MA	Inland Western	911
16	SANGLI	MA	Inland Western	911
17	JAMNAGAR	GU	Saurashtra	912
18	BHAVNAGAR	GU	Saurashtra	912
19	NARSIMHAPUR	M.P	South	913
20	RAJKOT	GU	Saurashtra	914

Source: Calculated from Census of India, 1991.

In terms of child sex ratio, the balance is relatively better with the range of CSR among the worse 20 districts being 862 - 914. It is also balanced in terms of the state coverage as opposed to the SR>6 list, with 10 districts of Gujarat, 6 of MP and rest from Maharashtra. The Maharashtra districts mostly belong to inland western region, while for M.P. it is the northern districts. In Gujarat, the districts of northern plains and Saurashtra are listed in this set.

Among SCs, the low sex ratios are noted for M.P., in the regions of north, central and Vindhya. Coastal Maharashtra's Greater Bombay and Ratnagiri are listed here. Ahmedabad of northern plains of Gujarat is the sole district belonging to this state.

Among the urban districts with poor female literacy rates, the districts of M.P. belonging to Vindhya, north, Malwa and central parts are listed. Two districts of Maharashtra of inland central region – Parbhani and Jalna - are also identified with relatively lower FLIT. However, it may be highlighted here that urban FLIT rates are far higher than the rural situation. The range of 20 most backward districts in terms of FLIT is 42-54 (see List UW2).

List UW2: The 20 Worse Urban Western India Districts by Educational Indicators

Female Literacy						Gender Gap in Literacy Rates				
Rank	District	State	Region	FLIT		Rank	District	State	Region	LGAP
1	TIKAMGARH	M.P	Vindhya	42		1	MORENA	M.P	North	32
2	MORENA	M.P	North	43		2	BHIND	M.P	North	31
3	BHIND	M.P	North	46		3	SHAJAPUR	M.P	Malwa	30
4	RAJGARH	M.P	Malwa	46		4	RAJGARH	M.P	Malwa	30
5	SHAJAPUR	M.P	Malwa	48		5	SIDHI	M.P	Vindhya	29
6	SHAHDOL	M.P	Vindhya	48		6	SHIVPURI	M.P	North	29
7	DATIA	M.P	North	49		7	MANDSAUR	M.P	Malwa	28
8	GUNA	M.P	North	50		8	DEWAS	M.P	Malwa	28
9	SIDHI	M.P	Vindhya	50		9	REWA	M.P	Vindhya	27
10	SHIVPURI	M.P	North	50		10	GUNA	M.P	North	27
11	PANNA	M.P	Vindhya	50		11	BANAS KANTHA	GU	Dry Area	27
12	REWA	M.P	Vindhya	50		12	SATNA	M.P	Vindhya	26
13	CHHATARPUR	M.P	Vindhya	50		13	DATIA	M.P	North	26
14	SATNA	M.P	Vindhya	51		14	SHAHDOL	M.P	Vindhya	26
15	PARBHANI	MA	Inland central	52		15	RAIGARH	M.P	Chattisgarh	26
16	RAISEN	M.P	Central	52		16	RAJNANDGAON	M.P	Chattisgarh	26
17	DEWAS	M.P	Malwa	52		17	BID	MA	Inland central	26
18	SEHORE	M.P	Central	53		18	PARBHANI	MA	Inland central	26
19	WEST NIMAR	M.P	South western	54		19	LATUR	MA	Inland central	25
20	JALNA	MA	Inland central	54		20	TIKAMGARH	M.P	Vindhya	25

Source: Calculated from Census of India, 1991.

Maximum gender differences in literacy are also noted among districts of M.P. in the north, Malwa and Vindhya regions. Two districts of Chattisgarh - Raigarh and Rajnandgaon - are noted in the high disparity list despite the absence of the region in the poor FLIT list. This implied that despite women of Chattisgarh being recipients of better literacy, there are instances of discrimination across gender. In other words, the practice of giving preferential treatment for boy's education even at the cost of the girls education is witnessed even here.

As noted in the rural context, even among the urban districts, both lists of worse mortality rates among females, infants and children, identify all M.P. districts. Even

among the gender differences in mortality rates, only four of the Gujarat districts figure (see List UW3). That is, in all four mortality rates based indicators, there are no districts of Goa or Maharashtra among the worse districts.

List UW 3: The 20 Worse Urban Western India Districts by Mortality Indicators

Infant Mortality Rates among Females

Rank	District	State	Region	IMRF
1	GUNA	M.P	North	124
2	CHHATARPUR	M.P	Vindhya	120
3	TIKAMGARH	M.P	Vindhya	115
4	NARSIMHAPUR	M.P	South	112
5	REWA	M.P	Vindhya	109
6	JHABUA	M.P	Malwa	108
7	SHIVPURI	M.P	North	103
8	SATNA	M.P	Vindhya	103
9	WEST NIMAR	M.P	South western	101
10	RAJGARH	M.P	Malwa	100
11	BHIND	M.P	North	95
12	DATIA	M.P	North	92
13	RAISEN	M.P	Central	92
14	BETUL	M.P	South western	91
15	SEHORE	M.P	Central	87
16	PANNA	M.P	Vindhya	86
17	MANDSAUR	M.P	Malwa	86
18	CHHINDWARA	M.P	South	86
19	SHAJAPUR	M.P	Malwa	82
20	VIDISHA	M.P	Central	81

Gender Differences in Infant Mortality Rates

Rank	District	State	Region	IMRD
1	BHAVNAGAR	GU	Saurashtra	51
2	WEST NIMAR	M.P	South western	33
3	BHIND	M.P	North	32
4	NARSIMHAPUR	M.P	South	29
5	DATIA	M.P	North	26
6	REWA	M.P	Vindhya	24
7	GUNA	M.P	North	22
8	SHAJAPUR	M.P	Malwa	20
9	MAHASANA	GU	Plains Northern	17
10	BANAS KANTHA	GU	Dry Area	15
11	SURAT	GU	Eastern	14
12	CHHATARPUR	M.P	Vindhya	14
13	INDORE	M.P	Malwa	14
14	TIKAMGARH	M.P	Vindhya	12
15	GWALIOR	M.P	North	11
16	SATNA	M.P	Vindhya	11
17	CHHINDWARA	M.P	South	10
18	VIDISHA	M.P	Central	9
19	DEWAS	M.P	Malwa	8
20	JHABUA	M.P	Malwa	8

Child Mortality Rates among Females

Rank	District	State	Region	CMRF
1	GUNA	M.P	North	203
2	CHHATARPUR	M.P	Vindhya	194
3	TIKAMGARH	M.P	Vindhya	180
4	NARSIMHAPUR	M.P	South	176
5	JHABUA	M.P	Malwa	163
6	REWA	M.P	Vindhya	162
7	SHIVPURI	M.P	North	158
8	SATNA	M.P	Vindhya	152
9	RAJGARH	M.P	Malwa	152
10	BHIND	M.P	North	136
11	DATIA	M.P	North	133
12	RAISEN	M.P	Central	133
13	BETUL	M.P	South western	132
14	MORENA	M.P	North	126
15	SEHORE	M.P	Central	124
16	PANNA	M.P	Vindhya	122
17	MANDSAUR	M.P	Malwa	122
18	CHHINDWARA	M.P	South	119
19	VIDISHA	M.P	Central	113
20	SHAJAPUR	M.P	Malwa	111

Gender Differences in Child Mortality Rates

Rank	District	State	Region	CMRD
1	NARSIMHAPUR	M.P	South	64
2	BHAVNAGAR	GU	Saurashtra	63
3	GUNA	M.P	North	57
4	BHIND	M.P	North	56
5	DATIA	M.P	North	51
6	CHHATARPUR	M.P	Vindhya	41
7	TIKAMGARH	M.P	Vindhya	33
8	MORENA	M.P	North	32
9	REWA	M.P	Vindhya	32
10	MAHASANA	GU	Plains Northern	30
11	BANAS KANTHA	GU	Dry Area	29
12	SATNA	M.P	Vindhya	26
13	INDORE	M.P	Malwa	26
14	JHABUA	M.P	Malwa	25
15	SURAT	GU	Eastern	24
16	RAJGARH	M.P	Malwa	24
17	SIDHI	M.P	Vindhya	21
18	SHAJAPUR	M.P	Malwa	20
19	RAISEN	M.P	Central	20
20	CHHINDWARA	M.P	South	19

Source: Calculated from Rajan and Mohanachandran, 1998.

Mortality rates are high among females in the north, Vindhya, central, Malwa and some south and south western region districts of M.P. Chattisgarh is the only region not represented in any of the four mortality indicators based lists. Districts of Gujarat which are identified among gender gaps in mortality rates are Bhavnagar of Saurashtra, Mahesana (northern plains), Banaskantha (Dry Area) and Surat of eastern Gujarat. These are the districts where the levels of discrimination against girls in terms of health care and nutrition seem to be relatively higher.

The list of backward districts with regard to MAMF has only districts of M.P. belonging to the Vindhya, north, Malwa and central regions. There are districts whose averages go down to 16 years even in the urban areas (see List UW4).

List UW 4: The 20 Worse Urban Western India Districts by Mean Age at Marriage

Rank	District	State	Region	MAM
1	TIKAMGARH	M.P	Vindhya	16.02
2	BHIND	M.P	North	16.41
3	SHAHDOL	M.P	Vindhya	16.57
4	MORENA	M.P	North	16.59
5	REWA	M.P	Vindhya	16.63
6	SHAJAPUR	M.P	Malwa	16.64
7	CHHATARPUR	M.P	Vindhya	16.66
8	RAJGARH	M.P	Malwa	16.66
9	SATNA	M.P	Vindhya	16.75
10	DATIA	M.P	North	16.76
11	SIDHI	M.P	Vindhya	16.93
12	SAGAR	M.P	Central	16.94
13	PANNA	M.P	Vindhya	16.95
14	SHIVPURI	M.P	North	16.98
15	DEWAS	M.P	Malwa	17.05
16	RAISEN	M.P	Central	17.05
17	GUNA	M.P	North	17.08
18	MANDSAUR	M.P	Malwa	17.09
19	DAMOH	M.P	Central	17.14
20	SEHORE	M.P	Central	17.21

Source:Census of India, 1991.

List UW 5: The 20 Worse Urban Western India Districts by Economic Indicators

Female Work Participation Rate						Gender Differences in Work Participation Rates				
Rank	District	State	Region	FWPR		Rank	District	State	Region	WGAP
1	BHIND	M.P	North	3		1	SURAT	GU	Eastern	60
2	MORENA	M.P	North	3		2	SIDHI	M.P	Vindhya	56
3	SARGUJA	M.P	Chattisgarh	5		3	RAJKOT	GU	Saurashtra	55
4	BANAS KANTHA	GU	Dry Area	6		4	JAMNAGAR	GU	Saurashtra	54
5	PANCH MAHALS	GU	Eastern	6		5	BHAVNAGAR	GU	Saurashtra	53
6	DATIA	M.P	North	6		6	KACHCHH	GU	Dry Area	53
7	RAJKOT	GU	Saurashtra	6		7	AMRELI	GU	Saurashtra	53
8	SHIVPURI	M.P	North	6		8	THANE	MA	Coastal	53
9	JAMNAGAR	GU	Saurashtra	6		9	BHARUCH	GU	Eastern	52
10	GWALIOR	M.P	North	6		10	BANAS KANTHA	GU	Dry Area	52
11	MAHASANA	GU	Plains Northern	6		11	AHMADABAD	GU	Plains Northern	52
12	BHAVNAGAR	GU	Saurashtra	7		12	MAHASANA	GU	Plains Northern	52
13	KHEDA	GU	Plains Northern	7		13	VALSAD	GU	Eastern	52
14	AHMADABAD	GU	Plains Northern	7		14	PANCH MAHALS	GU	Eastern	51
15	JUNAGADH	GU	Saurashtra	7		15	JUNAGADH	GU	Saurashtra	51
16	SIDHI	M.P	Vindhya	7		16	VADODARA	GU	Eastern	51
17	SABAR KANTHA	GU	Eastern	7		17	SURENDRANAGAR	GU	Dry Area	50
18	HOSHANGABAD	M.P	South western	7		18	KHEDA	GU	Plains Northern	50
19	GANDHINAGAR	GU	Plains Northern	7		19	MORENA	M.P	North	50
20	BHARUCH	GU	Eastern	8		20	GREATER BOMBAY	MA	Coastal	50

Source: Calculated from Census of India, 1991.

Among the FWPR list, 12 of Gujarat districts stand out. The rest are districts belonging to M.P. especially that of north region. One district - Surguja of Chattisgarh is also listed among the low FWPR districts. Since the range of women's participation in the entire west is 3 to 22, it is understandable that the gender differences would reveal a significant gap (see List UW5). In the gender gap in WPR list, 2 districts each of Maharashtra and M.P. are noted. In the case of Maharashtra, it

is the coastal districts of Greater Bombay and Thane that are listed for higher gaps in WPRs across men and women. These are the districts which have recorded the lowest sex ratios too. The high in-migration of males in search of employment to these areas can be an important factor in explaining these indicators. However, the same is not the case with other indicators. Which may require a more in depth probing that can shed light on these aspects of gender development. In the next section, a synthesis of these highlights of analysis undertaken here is presented.

7. Synthesis of the Regional Analysis

The analysis as shown in the previous sections covers diverse aspects of women's development. In this section for the final synthesis of our findings on the performances of the districts belonging to the western states, the better and worse district lists for total (rural + urban) areas are used to indicate what patterns of gender development emerge.

Goa is found only in the better performing sets, with South Goa standing out in 8 of the 14 lists, while North Goa is listed in 7 of them. Among the regional classification used, only Goa is out of the worse districts list, while north M.P. does not figure in the better districts list. Apart from that, all other regions are represented in one or more lists for better or worse performance.

The three dry area districts of Gujarat are found in both sets, however only Banaskantha significantly stands out for worse performance in 8 indicators. Literacy among females and their work participation are poor and most women have a high TFR. Although the sex ratio balance is not very alarming, gender differences in mortality are on the higher side. This is despite the fact that in this region girls get married at a later age. All three of these districts are listed in the better age at marriage among females list.

The entire eastern Gujarat region has better performance with regard to many indicators, only three of them get listed among the worse districts for a couple of indicators. While the better districts are so for different sets of indicators, among the worse - Vadodara and Surat are listed for gender differences in WPRs and Panchmahals is among the districts where high levels of gender gap in literacy are noted.

All the four districts of northern plains of Gujarat are listed for worse indicators – greater imbalance among the CSR, low FWPR which is significantly lower than male counterparts WPRs. Two of the relatively more urbanised districts – state capital Ahmedabad and Gandhinagar have better literacy levels among women and lower TFRs. The capital city by virtue of having better infrastructure and access to health care reports a lower mortality rate for female infants and children.

The Saurashtra region of Gujarat depicts the widest swings across different indicators. All 5 districts belonging to this region are listed both among the better

and worse sets by different indicators. Amreli reports low mortality rates, higher age at marriage, lower levels of differences in literacy across boys and girls and relatively balanced sex ratios among adults and SCs. However, this district is listed as one of the 20 worse ones in the entire west in terms of FWPR and WGAP. Thus, disparity in performance of the districts of two regions – Dry Area and Saurashtra – on different fronts is a hallmark of the situation among these 4 western states.

Except for a few better performances, all districts of central M.P. are noted among the worse districts of the west. Bhopal by virtue of better literacy rates and lower gender disparity in literacy levels is listed among the better districts. Similarly, Sehore reports lower disparity across gender in mortality rates. These are the two districts which report some better dimensions of women's status as well.

List 7: Worst and Best Districts of the West

No.of Indicators Listed by	State	Names of Districts
WORST		
12	MP	Morena, Bhind, Datia, Guna
11	MP	Shivpuri
10	MP	Tikamgarh, Chattarpur, Panna
9	MP	Vidisha
8	GU	Banaskantha
	MP	Sehore
7	MP	Sagar, Satna, Rewa, Rajgarh, Raisen, Hoshangabad
6	MP	Gwalior, Jhabua
5	GU	Mahesana
	MP	Damoh, Sidhi, Indore, Narsimhapur
BEST		
9	MA	Sindhudurg
8	Goa	South Goa
	GU	The Dangs, Valsad
	MP	Rajnandgaon
	MA	Greater Bombay, Raigarh, Bandara, Gadchiroli
7	Goa	North Goa
	MP	Bastar
	MA	Ratnagiri, Nagpur
6	GU	Amreli, Ahmedabad
	MP	Durg, Raipur
	MA	Thane, Satara, Kolhapur
5	GU	Rajkot, Surat
	MP	Bilaspur, Raigarh, Mandla, Balaghat
	MA	Nashik, Ahmednagar, Pune, Yavatmal

Vidisha of central Bhopal is listed among the 20 worse western districts in 9 of the

indicator lists. Sehore, by 8 indicators and Sagar and Raisen, by 7 indicators. Either health or education related indicators display a poor performance or sex ratios are imbalanced against females. Low age at marriage and high fertility rates are also among the factors that account for poor situation of women in this region.

Chattisgarh by and large has a positive performance, with all 7 of the districts being listed in the 20 better districts. The five districts which are among the worse districts are listed only for one or more indicators. Majority of Chattisgarh districts are listed for higher gender gaps in literacy. Bastar of the same region however, despite its low female literacy does not display gender gaps in this sphere.

Malwa region of M.P is predominantly worse despite 5 of its districts listed in the better districts lists. Except Ujjain all other districts are listed among the worse districts. Linked to this area geographically, is the northern part of M.P. This is the only part of the state where bad performances prevail for a majority of the indicators. It may be emphasised that by none of the chosen dimensions of gender development do any of the north M.P. districts fare well. Thus, Morena, Bhind, Datia, Guna and Shivpuri are among the worst districts is the entire West (see List 7).

The seven Vindhya districts adjacent to the north of M.P. are close to their neighbours in terms of gender development with all the districts performing poorly. Tikamgarh, Chattarpur and Panna are the 3 Vindhya districts of M.P. which are listed in 10 of the 14 indicator lists for poor levels of gender development. The two Vindhya districts listed for better performance in the west are Shahdol and Sidhi – both record a more balanced child sex ratio. Shahdol reports low disparity in mortality rates among males and females for both infants and children as well.

Betul is the only district of south-western M.P. which figures in 3 of the 14 indicator lists for a more balanced sex ratio among children and STs as well as for higher FWPR. This is the district bordering south M.P. districts where a similar scenario is witnessed. All districts of the south-west however are identified in the backward districts by one or more indicators. The worst among the region is Hoshangabad with poor health and demographic indicators. All four mortality indicators reveal its backwardness. As for sex ratios, except for children, all other categories reflect imbalances.

The southern M.P. – Mandla, Balaghat and Seoni – have better sex ratios, while Narsimhapur and Chindwara of the same region are highlighted as backward by their mortality indicators.

In all, for M.P., the districts that figure among the worse ones are 39, while the better ones total to 21 only. Chattisgarh and south regions of M.P. figure in the better lists, while north, Vindhya and Malwa regions have a poorer performance. The districts of these regions are all geographically linked to each other and hence also likely to exhibit certain other similarities in socio-cultural practices.

In case of Maharashtra, the districts which record a better performance are more than double the number of districts listed as backward. Eastern, inland western and coastal regions are the better ones while many districts of inland central, inland western and inland eastern perform poorly by a number of indicators. Greater Bombay and Thane of coastal Maharashtra are the two districts that figure in the worse lists. While both districts have low SR>6, Greater Bombay also notes low FWPR and WGAP.

Bhandara and Gadchiroli of eastern Maharashtra are among the better performing districts that are listed by 8 of the 14 indicators. Chandrapur is the third eastern Maharashtra district also identified by three indicators. All these three eastern Maharashtra districts figure in the high FWPR and low WGAP lists. All the demographic indicators reflecting a more equitable gender balance in their populations list the earlier two districts.

Of the 7 inland central districts of Maharashtra, 5 districts each are listed both for better and worse indicators. All the five districts display high FWPR and some of them even reflect lower gender gaps in WPRs. Four of these 5 districts are located in both lists, better and worse ones by different indicators. Latur of the same region, however, does not figure in any of the indicator lists – better or worse.

All inland eastern districts figure among the better districts. However, three of them are also found in the backward districts lists for low SRST. Yavatmal and Buldana are noted for higher FWPR and low disparity across gender in WPRs, while the other 4 districts of inland eastern region Akola, Amravati, Nagpur and Wardha report higher female literacy levels. Except for Akola, the other three districts also report low gender differences in literacy levels.

The other two regions of Maharashtra – inland northern and inland western - have 3 and 6 districts respectively and all of them are noted in one or more better performances among the 14 indicators. Nashik, Dhule and Jalgaon are the three districts of inland northern Maharashtra, while Nashik reports low difference in mortality rates across boys and girls, and better FWPR, Jalgaon is limited to the 2 mortality difference indicators. In addition to this, Jalgaon on the adverse side, is among the 20 worse districts of the west in terms of low child sex ratios. The only indicator by which Dhule is listed in the better performing districts is sex ratio among STs.

Sangli of the inland western region of Maharashtra as in the case of Jalgaon in the earlier inland northern region is the only one of six districts from this region with low CSRs. Discriminatory practices of son preference leading to resort of modern scientific technologies to eliminate female foetuses and so on may be the explanation for such discrepancies in sex ratios in these areas. Activists groups from Maharashtra were among the pioneers who raised and fought against these sex determination tactics that were being adopted to serve the male offspring hungry masses.

Kolhapur and Satara are identified as better districts by 6 indicators, Ahmedabad and Pune are noted for 5 of 14 indicators within this inland western region, Sangli and Solapur reports a lower mortality figure among female infants and children, as well as lower TFR. Apart from these two dimensions of TFR and lower female mortality, better female literacy levels are also recorded for Kolhapur and Satara of the inland western region of Maharashtra.

On the whole, Goa and Maharashtra have a far better performance even at the district level as compared to Gujarat and M.P. Nevertheless, the disparities even among the state in district level performances reveals the necessity for such a disaggregated analysis as has been illustrated in this report.

8. Concluding Remarks

The analysis of the western states may hint at a translation of income based economic development into gender development, since the better off states of Goa and Maharashtra perform better in terms of women's well-being. However, a further probe into regions and districts provides insights that question any such simplistic generalisation that may be drawn from state level analysis.

Does income based economic development have any effect at all on the status of women? Based on this analysis, it can be stated that improved levels of economic development do seem to exercise some influence on the literacy and health-related dimensions of women's well-being. Whether it is due to the presence of better infrastructure or due to a higher level of consciousness about the importance of education and seeking health care even for girls or some other factors cannot be conclusively stated, yet there is certainly some positive impact. Goa, parts of Maharashtra and parts of Gujarat report higher levels of literacy among females, lower mortality rates as well as lower disparity in these two dimensions across men and women. The performance of these districts, however, may not be as good for other indicators of gender development.

What this regional analysis manages to reveal is the different segments/pockets within these states which are developed and those which are not so developed. For instance, parts of Maharashtra – coastal, inland eastern, inland western – are the regions where female literacy is better. However, inland central districts of Maharashtra that do not get highlighted among the 20 higher FLIT districts, are noted for having a high level of disparity in literacy levels. While it may be that this region of Maharashtra is a relatively backward area, what needs to be pointed out here is the fact that economically better off parts of M.P. such as Indore, Ujjain, Gwalior, Jabalpur (four of the districts which have a RID value above 100 – which is the India average) do not record corresponding progress in women's development. This highlights the significance of undertaking a regional analysis to reveal not only different contiguous districts but also identify patterns of relations that hold in some cases but do not apply in other instances.

While a correlation exercise for all the districts would have shown whether any set of indicators are related or not and how significant the association is, this would not be able to reveal the quirks in the specific districts or regions that may be there. For instance, some very strong associations are witnessed in the case of selected districts – Banaskantha of Gujarat and Morena of M.P. – have low literacy and work participation rates among females along with high fertility rates. The relation that is referred to in the literature generally highlights the positive effect of female literacy on the fertility rates and the lower fertility levels are related to higher levels of labour market participation (see Basu, 1992; Jeffery and Basu (eds.), 1996). The association between poor literacy among women and higher fertility levels can be seen in case of northern M.P. – Guna and Morena; and Banaskantha of Gujarat. Since these relations are not so strong for other districts no conclusive generalisations are possible. It may be that some specific local factors may be responsible for these associations to hold in these districts.

The literature draws an association between education especially among women and the lowering of discrimination against girls (see Cleland and Harris, 1998 and the references cited therein; Das Gupta, 1987; Tulasidhar, 1992). Although some plausible arguments are offered, it is neither entirely clear nor certain how this relation works. Improvements in women's literacy having a positive impact of reducing differences across male and female mortality rates are noted for Kolhapur, Thane, Pune, Greater Bombay and Raigarh of Maharashtra. On the other hand, low female literacy rates accompanying higher levels of discrimination in health related indicators are highlighted for many of the districts of M.P. mainly from the north, Malwa and Vindhya regions.

Similarly, the literature also points out the relation between working mothers and child survival, especially lower levels of gender based discrimination which works towards improving the chances of girl's survival (see Krishnaji, 1997b; Basu and Basu, 1991). The areas within the western region where these relations seem to be operative are parts of Chattisgarh and Maharashtra, the Dangs of Gujarat and eastern Maharashtra. Most of these districts are inhabited by tribals. However, since the relations do not hold in other districts where tribals live, these hypothesis of tribals being more egalitarian cannot be conclusively stated based on the present analysis alone. For this, further explorations will be required.

Another aspect of women's survival that is associated with the economic status of women is the demographic balances. Higher levels of economic participation among females are often seen to go along with more balanced sex ratios and vice versa. In areas where female labour is valued or put to use, this factor seems to influence the survival of girls and their chance of receiving better health care too. This may be true for parts of Chattisgarh, south M.P. and eastern Maharashtra. Tribal area Dangs of Gujarat also reflects this association. On the other hand, in part of Gujarat (northern plains) and M.P. (north Malwa and Vindhya) lower female work participation rates and imbalanced child sex ratios reflecting lesser girls in the 0-6 years population is witnessed. Once again, these relations do not hold across all districts and therefore it

is difficult to say which factors exercise greater impact in which areas. For instance, the over-arching presence of son preference may negate the positive influence of economic empowerment and the impact may vary across areas.

To sum up, it may be stated that while some relations can be clearly identified and associated with districts and sometimes, contiguous regions, such as the gender backwardness in the case of north, Malwa and Vindhya M.P., to the extent these relations do not hold in other pockets, such a regional analysis is of utmost importance. It is only through such an exercise that districts/regions can be identified for a further probe to be undertaken to improve our understanding on these complex aspects of gender relations and inequalities.

Appendix – 1: Changes over the decade 1991-2001

Among the western region states, only Goa remained unchanged over the decade 1991-2001 in terms of number of districts, with two districts. All other states have increased the number of districts by adding new districts through bifurcation of existing districts. From 96 districts belonging to four states in 1991, the western region consists of 5 states with 123 districts in 2001 (see Table A).

Table A: Statewise Number of Districts – 1991-2001

States (in 2001)	No. of Districts		New Districts created
	2001	1991	
Goa	2	2	-
Gujarat	25	19	6
Chattisgarh	16	45	9
Madhya Pradesh	45		7
Maharashtra	35	30	5
Total	123	96	27

Table B: New Districts carved out by 2001

New District	Carved out from	New District	Carved out from
CHATTISGARH		**MADHYA PRADESH**	
Koriya	Surguja	Sheopur	Morena
Jashpur	Raigarh	Barwani	West Nimar
Korba	Bilaspur	Harda	Hoshangabad
Janjgirchampa		Neemuch	Mandsaur
Kawarda	Rajnandgaon	Katni	Jabalpur
Mahasamund	Raipur	Umaria	Shahdol
Dhamtari	Bastar	Dindori	Mandla
Kanker			
Dantewada		**GUJARAT**	
MAHARASHTRA		Patan	Mahesana & Banaskantha
Nandurbar	Dhule	Anand	Kheda
Mumbai(Suburban)	Mumbai	Dohad	Panchmahals
Washim	Akola	Porbandar	Junagadh
Hingoli	Parbhani	Narmada	Bharuch & Vadodara
Gondiya	Bhandara	Navsari	Valsad

The major change is the creation of a new state – Chattisgarh – by bifurcating Madhya Pradesh. Seven districts of southern M.P. - Surguja, Raigarh, Bilaspur, Rajnangaon, Raipur, Durg and Bastar from the state of Chattisgarh. By 2001, these districts were further subdivided to create 9 new districts. The number of new districts created in Gujarat were six, in M.P. - seven and in Maharashtra – five by 2001 as compared to 1991. Table B provides information on the districts from which the new ones have been carved out.

Appendix 2

Western States Districts by Region

S.No.	State	District	Region	S.No.	State	District	Region
1	Goa	NORTH GOA	Goa	49	MP	BHOPAL	Central
2	Goa	SOUTH GOA	Goa	50	MP	SEHORE	Central
3	GU	JAMNAGAR	Saurashtra	51	MP	RAISEN	Central
4	GU	RAJKOT	Saurashtra	52	MP	BETUL	South western
5	GU	SURENDRANAGAR	Dry Area	53	MP	HOSHANGABAD	South western
6	GU	BHAVNAGAR	Saurashtra	54	MP	JABALPUR	South
7	GU	AMRELI	Saurashtra	55	MP	NARSIMHAPUR	South
8	GU	JUNAGADH	Saurashtra	56	MP	MANDLA	South
9	GU	KACHCHH	Dry Area	57	MP	CHHINDWARA	South
10	GU	BANAS KANTHA	Dry Area	58	MP	SEONI	South
11	GU	SABAR KANTHA	Eastern	59	MP	BALAGHAT	South
12	GU	MAHASANA	Plains Northern	60	MP	SARGUJA	Chattisgarh
13	GU	GANDHINAGAR	Plains Northern	61	MP	BILASPUR	Chattisgarh
14	GU	AHMADABAD	Plains Northern	62	MP	RAIGARH	Chattisgarh
15	GU	KHEDA	Plains Northern	63	MP	RAJNANDGAON	Chattisgarh
16	GU	PANCH MAHALS	Eastern	64	MP	DURG	Chattisgarh
17	GU	VADODARA	Eastern	65	MP	RAIPUR	Chattisgarh
18	GU	BHARUCH	Eastern	66	MP	BASTAR	Chattisgarh
19	GU	SURAT	Eastern	67	MA	GREATER BOMBAY	Coastal
20	GU	VALSAD	Eastern	68	MA	THANE	Coastal
21	GU	THE DANGS	Eastern	69	MA	RAIGARH	Coastal
22	MP	MORENA	North	70	MA	RATNAGIRI	Coastal
23	MP	BHIND	North	71	MA	SINDHUDURG	Coastal
24	MP	GWALIOR	North	72	MA	NASHIK	Inland Northern
25	MP	DATIA	North	73	MA	DHULE	Inland Northern
26	MP	SHIVPURI	North	74	MA	JALGAON	Inland Northern
27	MP	GUNA	North	75	MA	AHMEDNAGAR	Inland Western
28	MP	TIKAMGARH	Vindhya	76	MA	PUNE	Inland Western
29	MP	CHHATARPUR	Vindhya	77	MA	SATARA	Inland Western
30	MP	PANNA	Vindhya	78	MA	SANGLI	Inland Western
31	MP	SAGAR	Central	79	MA	SOLAPUR	Inland Western
32	MP	DAMOH	Central	80	MA	KOLHAPUR	Inland Western
33	MP	SATNA	Vindhya	81	MA	AURANGABAD	Inland central
34	MP	REWA	Vindhya	82	MA	JALNA	Inland central
35	MP	SHAHDOL	Vindhya	83	MA	PARBHANI	Inland central
36	MP	SIDHI	Vindhya	84	MA	BID	Inland central
37	MP	MANDSAUR	Malwa	85	MA	NANDED	Inland central
38	MP	RATLAM	Malwa	86	MA	OSMANABAD	Inland central
39	MP	UJJAIN	Malwa	87	MA	LATUR	Inland central
40	MP	SHAJAPUR	Malwa	88	MA	BULDANA	Inland Eastern
41	MP	DEWAS	Malwa	89	MA	AKOLA	Inland Eastern
42	MP	JHABUA	Malwa	90	MA	AMRAVATI	Inland Eastern
43	MP	DHAR	Malwa	91	MA	YAVATMAL	Inland Eastern
44	MP	INDORE	Malwa	92	MA	WARDHA	Inland Eastern
45	MP	WEST NIMAR	South western	93	MA	NAGPUR	Inland Eastern
46	MP	EAST NIMAR	South western	94	MA	BHANDARA	Eastern
47	MP	RAJGARH	Malwa	95	MA	CHANDRAPUR	Eastern
48	MP	VIDISHA	Central	96	MA	GADCHIROLI	Eastern

Source: NIRD, 1999.

References

Acharya, Sarthi (1996), "Access to Primary Education : Rural Maharashtra", Studies on Human Development in India, Discussion Paper Series No. 19, *UNDP*, December.

Agarwal, Bina (1985), "Work Participation of Rural Women in Third World - Some Data and Conceptual Biases", *Economic and Political Weekly*, December 21-28.

Agnihotri, S.B. (1995), "Missing Females - A Disaggregated Analysis", *Economic and Political Weekly*, August 19.

Agnihotri, S.B. (2000), *Sex Ratio Patterns in the Indian Population –A Fresh Exploration*, Sage, New Delhi.

Bardhan, Kalpana (1985), "Women's Work, Welfare and Status : Forces of Tradition and Change in India", *Economic and Political Weekly*, Vol. 20, No. 50, December 14 & 21-28.

Baster, N. (1972), 'Development Indicators: An Introduction', in N. Baster (ed.), *Measuring Development*, Frank Cass, London, pp. 1-20.

Basu, A. (1989), "Is Discrimination in Food Really Necessary for Explaining Sex Differentials in Childhood Mortality?", *Population Studies*, Vol. 43, No.2, July.

Basu, A. (1992), *Culture, the Status of Women and Demographic Behaviour*, Clarendon Press, Oxford.

Basu, A.M. and Kaushik Basu (1991), "Women's Economic Role and Child Survival: The Case of India", *Health Transition Review*, Vol. 1, No.1.

Bhat, P.N. Mari (2002), "On the Trail of 'Missing' Indian Females", I and II, *Economic and Political Weekly*, December 21 and 28.

Census of India (1991a), *District Primary Census Abstract*, digiticised data from the office of the Registrar General of India, New Delhi.

Census of India (1991b and 2001), *Primary Census Abstract and Provisional Population Totals*, Office of the Registrar General of India, New Delhi.

Census of India (1991-Goa), *District Census Handbook* and *Census Atlas*, Directorate of Census Operations, Goa.

Census of India (1991-GU), *Provisional Population Totals* and *Census Atlas*, Directorate of Census Operations, Gujarat.

Census of India (1991-MA), *District Census Handbook* and *Census Atlas*, Directorate of Census Operations, Maharashtra.

Census of India (1991-MP), *District Census Handbook* and *Census Atlas*, Directorate of Census Operations, Madhya Pradesh.

Cleland, John and Katie Harris (1998), 'The Effect of Maternal Education on Child Health and Survival – Do Girls Benefit?' in UN (1998).

CMIE (1993), *Profiles of Districts*, Centre for Monitoring Indian Economy, Bombay, November.

CSO (2001), *Compendium of Environment Statistics-2000*, Central Statistical Organisation, Ministry of Statistics and Programme Implementation, Government of India.

CSWI (1975), *Towards Equality*, Report of the Committee on Status of Women in India, Ministry of Education and Social Welfare, Government of India, Delhi.

CWDS (1990), "The Indian State and Gender Justice", *The Administrator*, Vol. 35, No. 1, January-March.

Das Gupta M. and P.N. Mari Bhat (1997),"Fertility Decline and Increased Manifestation of Sex Bias in India", *Population Studies, 51.*

Das Gupta, Monica (1987), "Selective Discrimination Against Female Children in Rural Punjab, India", *Population and Development Review*, 12, No.1, March.

Debroy, Bibek and Laveesh Bhandari (eds.) (2003), *District-level Deprivation in the New Millennium*, New Delhi: Konark.

Desai, S.P (1997), *A Portrait of Population – Goa*, Census of India 1991, Deputy Director of Census Operations, Goa.

Dholakia, Ravindra H. (2003), "Regional Disparity in Economic and Human Development in India", *Economic and Political Weekly*, Vol.38, No.39.

Dreze, J and A.K. Sen (1995), *India:Economic Development and Social Opportunity*, Oxford University, New Delhi.

Duvvury, Nata (1989), "Women in Agriculture : A Review of the Indian Literature", *Economic and Political Weekly*, October 28.

Fernandes, Walter and Vijay Paranjape (eds.) (1997), *Rehabilitation Policy and Law in India*, Indian Social Institute, New Delhi and ECONET, Pune.

FSI (1999), *The State of Forest Report*, Forest Survey of India (cited in CSO, 2001).

GOI (1995), *The State of Environment*, Ministry of Environment and Forests, Government of India.

Gracias, Fatima da Silva (1996), *Kaleidoscope of Women in Goa 1510-1961*, Concept, New Delhi.

Haddad, L and R. Kanbur (1990), "How Serious is the Neglect of Intra-Household Inequality", *The Economic Journal*, 100: pp. 866-888.

Haq, Mahbub-ul (1997), *Human Development in South Asia*, Oxford University Press, Karachi.

Hirway, Indira and Darshini Mahadevia (1996), "Critique of Gender Development Index : Towards an Alternative", *Economic and Political Weekly*, October 26.

IIPS (1995 and 2000), *National Family Health Survey (MCH and Family Planning), India, 1992-93 and 1998-99*, International Institute for Population Sciences, Bombay.

Jeffery, R and A.M. Basu (eds.) (1996), Girl's Schooling, Women's Autonomy and Fertility Change in South Asia, Sage, New Delhi.

Jejeebhoy, Shireen J. (1993), "Family Size, Outcomes for Children, and Gender Disparities - Case of Rural Maharashtra", *Economic and Political Weekly*, August 28.

Kelley, A. C. (1991), "The Human Development Index: Handle with Care", *Population and Development Review*, Vol. 17, No. 2.

Khan, M.E., et al. (1983), "Women and Health - A Case Study of Sex Discrimination", Paper presented at the Joint ICMR, Ford Foundation Workshop on *Child Health, Nutrition and Family Planning*, Bangalore, Nov. 9-11, 1983.

Khan, M.E., R. Anker, S.K.G. Dastidar and S. Bharathi (1991), 'Inequalities between Men and Women in Nutrition and Family Welfare Services: An Indepth Enquiry in an Indian Village', in J. Caldwell and G. Santow (eds.) *Selected Readings in the Cultural, Social and Behavioural Determinants of Health*, Australia National University, Canberra.

Krishnaji, N. (1987), "Poverty and Sex Ratio: Some Data and Speculations", *Economic and Political Weekly*, Vol. 22, No. 23.

___ (1997a), "Human Development Index – A Critique", *Economic and Political Weekly*, August 30.

Krishnaji, N. (1997b), 'Working Mothers and Child Survival in Rural India' in Ranabir Samaddar (ed.*), Women in Asia-Work, Culture and Politics in South and Central Asia,* Vikas, Delhi.

Kundu, A. and M. Sahu (1991), "Variations in Sex Ratio : Development Implications", *Economic and Political Weekly*, Vol., 26, Issue 41.

LeGrand, T. (1992), *Annotated Bibliography on Sex Differentials in Infant and Child Mortality in the Developing World*, Document de Travail, No. 22, Universite de Montreal, Department de Demographie (cited in UN (1998)).

Levinson, F.J. (1974), *Morinda: An Economic Analysis of Malnutrition among Young Children in Rural India*, Cambridge, Massachusetts, Cornell University Press.

Mazumdar, V. (1994), *Amniocentesus and Sex Selection*, CWDS Occassional Paper No. 21.

Mazumdar, Vina and N. Krishnaji (eds) (2001), *Enduring Conundrum: India's Sex Ratio – Essays in honour of Asok Mitra,* Centre for Women's Development Studies, Rainbow, Delhi.

McNay, Kirsty (1995), "Fertility and Frailty - Demographic Change and Health Status of Indian Women", *Economic and Political Weekly*, October 28.

McGranahan, D.V., C. Richard-Proust, M.V. Sovani, and M. Subramanian (1972), *Contents and Measurement of Socio-Economic Development,* Praeger, New York.

Mehta, Aasha Kapur (1996), "Recasting Indices for Developing Countries: A Gender Empowerment Measure", *Economic and Political Weekly*, October 26.

Mendonca-Noronha, Silvia Maria de (2000), "Tertiary Sector and Employment Generation in Goa", *Indian Journal of Labour Economics*, Vol. 43, No. 4, October-December.

Morris, D. Morris and Michelle B. McAlphin (1982), *Measuring the Condition of India's Poor: The Physical Quality of Life Index*, Promilla and Co., New Delhi.

Morris, M.D. (1979), *Measuring the Condition of the World's Poor,* Pergamon, New York.

Murthi, M., Anne Catherine Guio and Jean Dreze (1995), *"Mortality, Fertility and Gender Bias in India : A District Level Analysis",* DEP No. 61, June, London School of Economics, London.

Nayar (1993), *Universal Primary Education of Rural Girls in India,* National Council for Educational Research and Training, New Delhi.

NCSEW (1988), *Shramshakti*, Report of the National Commission for Self-Employed Women, Government of India, Delhi.

NIRD (1999), *India Rural Development Report – 1999*, National Institute of Rural Development, Hyderabad.

OECD (1976), *Measuring Social Well-Being: A Progress Report on the Development of Social Indicators,* Organisation for Economic Co-operation and Development, Paris.

Punalekar, S.P. (1990), *Female Casual Labourers in Urban Gujarat*, Occasional Paper, Centre for Social Studies, Surat.

Rajan, S. Irudaya and P. Mohanachandran (1998), "Infant and Child Mortality Estimates - Part I", *Economic and Political Weekly*, Vol. 33, No. 19, May 9-15.

Rustagi, P. (2000), *Gender Development Indicators: Issues, Debates and Ranking of Districts*, CWDS Occasional Paper No. 33, Centre for Women's Development Studies, New Delhi.

Rustagi, P. (2003), *Gender Biases and Discrimination Against Women: What Do Different Indicators Say*?, UNIFEM and CWDS, New Delhi.

Sachs, Jeffery D., Nirupam Bajpai and Ananthi Ramaiah (2002), *Understanding Regional Economic Growth in India*, CID Working Paper No.88, Harvard University, March.

Seeta Prabhu, K. et. al., (1996), "Gender-related Development Index for Indian States : A Preliminary Exercise", in Rao, Nitya et.al. (eds.), *Sites of Change - The Structural Context for Empowering Women in India, FES & UNDP*, New Delhi.

Seetharam, Mukkavilli (undated), "Gender Profile - GUJARAT", Prepared by PRASNA Society for Participatory Research and Consultancy), Hyderabad for *Royal Netherlands Embassy*, New Delhi.

Sen, A. (1987), *The Standard of Living,* Tanner Lectures, Clare Hall, Cambridge.

Sharma, B.D. (1990), *Report of the Commissioner for Scheduled Castes and Scheduled Tribes*, Twentyninth Report, 1987-89, GOI, Delhi.

Stromquist, Nelly. P. (ed.) (1998), *Women in the Third World - An Encyclopedia of Contemporary Issues,* Garland Puhlishing, New York and London.

Timaeus, Ian, Katie Harris and Francesca Fairbairn (1998), 'Can Use of Health Care Explain Sex Differentials in Child Mortality in the Developing World?' in U.N., (1998).

Tinker, I (ed) (1990), *Persistent Inequalities – Women and World Development,* Oxford University Press, New York.

Tulasidhar, V.B. (1992), *Maternal Education, Female Labour Force Participation and Child Mortality: Evidence from Indian Census,* Working Paper, National Institute of Public Finance and Policy, New Delhi.

UN (1998), *Too Young To Die: Genes or Gender*?, Department of Economic and Social Affairs, Population Division, United Nations, New York.

UNDP (Various reports from 1990-1999), *Human Development Report,* United Nations Development Programme, Oxford University Press, New Delhi.

UNESCO (1981), *Women and Development: Indicators of their Changing Role,* UNESCO Socio-Economic Studies 3, Paris.

Visaria, L. (1985), "Infant Mortality in India, Level, Trends and Determinants", *Economic and Political Weekly*, Vol. 20, Nos. 32,33,and 34, Aug. 10, 17 and 24, pp. 1352-1359, 1399-1405 and 1447-1450.

Visaria, L. (1988), 'Sex Differentials in Nutritional Status and Survival during Infancy and Childhood: Review of Available Evidence', Paper presented at the Conference on *Women's Position and Demographic Change is the Course of Development,* Asker, Norway, 15-18 June.

Visaria, Leela. (1993), "Regional Variations in Female Autonomy and Fertility and Contraception in India", Working Paper No. 50, *Gujarat Institute of Development Research*, Ahmedabad.

Visaria, Pravin and Jeemol Unni (eds.) (1992), *Self-Employment Women Population and Human Resource Development*, Gujarat Institute of Development Research, Ahmedabad.

Waldron, Ingrid (1998), 'Factors Determining the Sex Ratio at Birth', in UN (1998).