



Munich Personal RePEc Archive

Gender Disparities in Haryana: Extents and Spatial Patterns

Narayan, Laxmi

Government Post Graduate College, Mahendergarh, Haryana, India

April 2015

Online at <https://mpra.ub.uni-muenchen.de/67356/>

MPRA Paper No. 67356, posted 22 Oct 2015 17:19 UTC

Gender Disparities in Haryana: Extents and Spatial Patterns

Laxmi Narayan
Government Post Graduate College,
Mahendergarh, Haryana(India)

GENDER DISPARITIES IN HARYANA: EXTENTS AND SPATIAL PATTERNS

Abstract

The paper analyses and describes the extent of gender disparities in Haryana, particularly in respect of sex ratio, literacy and participation in economic activities. Significant gender disparities were evidenced by sex ratio, literacy rate and women participation rate. The paper found that districts having lower gender gap in literacy were able to increase sex ratio more than the districts having higher gender gap in literacy. This is also corroborated by negative correlation coefficient between the two. High level of gender gap were found in female WPR. A negative and high degree of correlation between gender gap in literacy and gender gap in WPR indicates that high gender gap in literacy is associated with lower gender gap in WPR and vice-versa. The existence of spatial patterns in gender disparities hints at the foreplay of social, cultural and geographical factors on gender disparities rather than administration efforts.

Keywords: Haryana, Gender Gap, Male-female Literacy Gap, Regional Disparities.

JEL Codes: J11, J16.

Gender Disparities in Haryana: Extents and Spatial Patterns

1. INTRODUCTION

Gender inequity is prevalent in all societies across the globe though its degree varies. Gender discrimination remains a major barrier to human development. Girls and women have made major strides since 1990 but they are yet to achieve gender justice. Women experience various types of disadvantage and discrimination in health, education and employment with negative repercussions for development of their capabilities and their freedom of choice (UNDP, 2014). Human Development Report, 2014 highlights that worldwide female HDI value averages about 8 percent lower than the male HDI value. Globally, women are disadvantaged in national political representation. Poor reproductive health services are a major contributor to gender inequality, especially in developing countries. They also lag behind men in labour market participation. They face discrimination from social institutions—such as early marriage, discriminatory inheritance practices, higher burdens of unpaid care work, violence against women, son preference and restrictions on access to public space and productive resources.

India ranked 127 out of 153 countries on gender inequality index and 132 rank on gender adjusted human development index out of 153 countries (UNDP, 2014). In 2014 India ranked 114th out of 142 countries on World Economic Forum's Gender Gap Index (GGI). It ranked 134th on economic participation and opportunities, 126th on education attainment and miserably low at 141st on health and survival. Since 2006, India has experienced the largest decrease (in absolute and relative value) on its Health and Survival sub-index score because of drop in its sex ratio at birth score. In fact, it is the second-lowest performing country on Health and Survival, just ahead of Armenia. India has the highest difference between women and men on the average minutes spent per day on unpaid work—a difference of 300 minutes. It has one of the lowest percentages of firms with female participation in ownership. Not only there are considerable gender inequalities in India but their form, structure and extent vary across regions. The present paper aims to understand the extent of gender disparities in a economically progressive state of Haryana.

Prime Minister while launching National Programme 'Beti Bachao, Beti Padhao' (save girl child, educate her) expressed his anguish by stating that we have no right to call ourselves 21st century citizens as long as we have an 18th century mindset. The selection of Haryana for launching the scheme is more appropriate as women in Haryana are a subordinated, subjugated and deprived lot as evidenced by adverse and appallingly low sex ratio, low female literacy and poor female health. Haryana has made considerable economic progress since its inception in 1966. With a splendid economic growth, one of the highest per capita income index, sound industrial infrastructure, strong manufacturing base, advanced agriculture sector and vibrant service sector, Haryana is one of the highly economically developed and industrialised states of India. Today, it enjoys the unique distinction of having provided electricity, metalled roads and potable drinking water to all its villages within record time. But despite making significant progress, its social indicators are not commensurate with its economic prosperity specifically in

health and education. Education and health indicators of Haryana are lower than other economically well off states and in some cases even less than national average (Narayan, 2012). The status of women in Haryana continued to be less than desirable due to various historical, social and cultural factors.

Even in government employment, we found wide gender gaps. Out of 4763 class-I officers in Haryana only 1061 (22.3 percent) are women. Similarly women are only 28 percent of the class-II officer and 21.4 percent of class-III officers (*Statistical Abstract of Haryana-2013-14*). In some of the departments, women's representation is alarmingly low. For example irrigation, PWD(B&R) and PWD(Public Health) departments have 140, 101 and 84 male class-I officers but no female class-I officer. Similarly other department such as Panchayati Raj (27 males), Industrial Training & Vocational Education (22 males), Industries and Commerce (20 males) have no female class-I officers. Present paper makes an attempt to understand the spatial variations in the gender disparities in Haryana so as to understand the underlying factor affecting gender equalities.

2. LITERATURE SURVEY

The gender disparities in Haryana are visible in every sphere of life specially in political, economic, social and cultural aspects. The available empirical studies highlighted these disparities and discriminations. Chowdhary (1994) in her study found that despite socio-economic changes, economic prosperity, liberalization and enabling legislations, Haryana has not experienced any significant democratizing movement which may have had a positive impact on gender relations. Dahiya and George (1996) in their field research found rampant female foeticide in Haryana. The study concluded that female foeticide is not an isolated phenomenon but one of several way in which patriarchy demeans women; others being violence against women, women-unfriendly inheritance practices, customary marriage conventions which result in significant proportion of women being married before 18 years of age. The study established that parents tend to be calculative in choosing the sex of the next child, and the decision is based on the birth order, sex sequence of previous children and the number of sons. Some families resort to aborting even the first pregnancy if the foetus is female. Ahlawat (1995) analysed status of women in Haryana and found gender discrimination in availing health facilities and medical care. The study observed that often in the case of daughters, parents avoided taking medicines for them. This is corroborated by the fact that 76.8 percent of male children receive treatment against 23.2 percent in the case of female children.

National Family Health Survey (NFHS) reports also indicated low health of women in Haryana. NFHS-2 conducted in 1998-99 revealed that in Haryana 47 percent of women have some degree of anemia and almost two in every five currently married women reports at least one reproductive health problem. National Family Health Survey (NFHS-3) conducted in 2005-06 revealed fifty-six per cent of women in Haryana are anemic, including 38 per cent with mild anemia, 17 per cent with moderate anemia, and 2 per cent with severe anemia. The gender gap is also visible in political participation of women though one-third of the seats are reserved for women. But the participation of women in Haryana had been only notional without any effective voice of the women elected representative (Gupta, 1999; Shanta, 1999; Singh & Bhan, 2001; Singh, 2001; Panwar, 2001; Chand, 2004). These empirical studies found that lack of education and political awakening, absorption in domestic work, proxy system, social attitudes and

pervasiveness of social structures are some of the reasons obstructing active and effective participation of elected women representatives. Studies made by Nelly (1992), Jacobs (1996), Balachandirane (2003), Marie et. al (2009) deals with the gender inequality in education. They have found out that in almost every country illiteracy rates are higher among women than men.

Many composite indices are constructed by international organization such as UNDP's Gender-related Development Index (GDI) and the Gender Inequality Index (GII). Gender Inequality Index(GII) is a composite measure reflecting inequality in achievement on three dimensions: reproductive health, empowerment and the labour market. Reproductive health is measured by two indicators: the maternal mortality ratio and the adolescent birth rate. Empowerment is measured by the share of parliamentary seats held by women and the share of population with at least some secondary education. Labour market is measured by participation in the labour force. A low GII value indicates low inequality between women and men, and vice-versa(UNDP, 2014). Gender Development Index(GDI) measures disparities in HDI by gender. GDI is the ratio of female to male HDI. The closer the ratio is to 1, the smaller the gap between women and men. The index computes difference between male and female score on following components (i) life expectancy at birth (ii) mean years of schooling (iii) expected years of schooling and (iv) estimated gross national income per capita. Similarly the World Economic Forum has developed Gender Gap Index (GGI) for measuring gender disparities. The index is a composite measure of four components namely economic participation and opportunities, education attainment, health and survival and political empowerment.

3. METHODOLOGY

Gender inequality is not one homogeneous phenomenon, but a collection of different interlinked problems. As discussed above many indicators of disparities are used for analyzing gender disparities across and within countries but for present study we would use only three indicators of gender disparities within Haryana. The choice of indicators is dictated by purpose of the study and availability of data at district level. The three indicators selected for the study are (i) sex ratio (ii) literacy rates and (iii) workforce participation rate for the years 2001 and 2011 from census data. Beside availability of data, these three indicators are significant in themselves. The sex ratio captures the attitude of society differential and indifferent attitude to women and girls. The paper analysed gender inequality and deprivations as reflected in the human sex ratio. The sex ratio in India has been historically in favor of men and adverse to women. Increasing incidence of sex selective abortions and female foeticide are manifestation of wide spread female discrimination. Another important expression of gender disparities is the literacy levels of male and female. Girls and women are discouraged to have formal education due to social and economical factors. Education level attained by females in comparison to male is selected as an indicator to measure the gender gap in education. Workforce Participation Rate (WPR) also reflect gender discrimination in income earning opportunities. The study compares gender gaps in these three indicators at two point of time, that is, 2001 and 2011.

The paper then look at the changes in gender gap on each of the selected indicator to understand the extent of gender gap in 2001 and 2011 and also the progress made by state in reducing this gender gap during period 2001 to 2011. Then we looked into the spatial distribution of the gender gap and changes in gender gap on all three selected parameters. The values are plotted on the map of Haryana so as to delineate the spatial patterns and identifying the

underlying causes of the observed patterns. The study uses simple tools such as ratio, percentage, averages, correlation and coefficient of variation for understanding the extent and distribution of gender gap. The graphs and charts are used for easy comprehension and identification of patterns across regions.

4. RESULTS AND DISCUSSIONS

4.1 Sex Ratio

Sex ratio can be used as an important indicator of gender disparities in a society. Sex ratio defined as the number of females per 1000 males in the population, measures the extent of prevailing equity between males and females. It reflects interplay of sex differentials in mortality, sex selective migration and sex ratio at birth. The falling sex ratio is a reflection of the existing gender bias. Discrimination and neglect of the girl child, could be in terms of inadequate nutrition, denial or limited access to education and health, and domestic violence. In one of its worst forms, it leads to complete rejection of daughters even before birth, as practiced through sex selection. Child sex ratio reflects both, pre-birth biased sex selection discrimination and post birth discrimination against girls (UNFPA, 2011). From a gender equality perspective, sex selection is a reflection of discrimination against girls and subordination of women as a group. Discrimination and neglect of the girl child, could be in terms of inadequate nutrition, denial or limited access to education and health, and domestic violence. Contrary to what many believe, fewer girls in a society will not enhance their status. Instead, it could lead to increased violence against women, rape, abduction, trafficking and a reappearance of practices such as polyandry. The decreasing sex ratio in this child population perhaps has a cascading effect on population over a period of time leading to diminishing sex ratio in the country. In view of the above, the paper analyses overall sex ratio and child sex ratio for various districts of Haryana.

Table-1: Gender Disparities indicated by Sex-Ratio

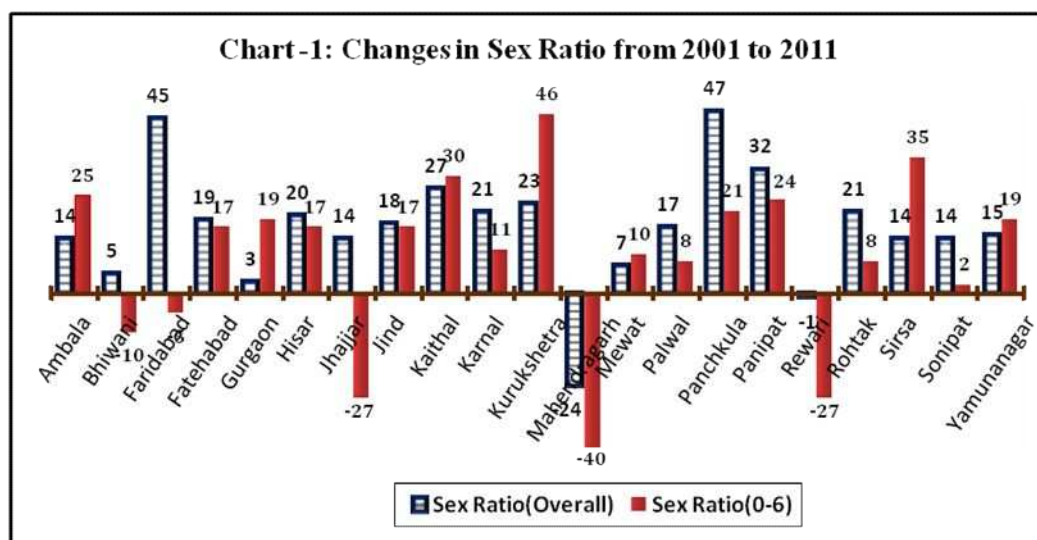
Sl. No.	Disparities	Sex Ratio		Sex Ratio (0-6)		Change	
		2001	2011	2001	2011	Sex Ratio	0-6 sex ratio
1	Ambala	868 (7)	882 (9)	782 (20)	807 (16)	14	25
2	Bhiwani	879 (6)	884 (8)	841 (4)	831 (10)	5	-10
3	Faridabad	826 (20)	871 (13)	847 (3)	842 (7)	45	-5
4	Fatehabad	884 (4)	903 (2)	828 (7)	845 (6)	19	17
5	Gurgaon	850 (15)	853 (20)	807 (14)	826 (11)	3	19
6	Hisar	851 (14)	871 (14)	832 (5)	849 (5)	20	17
7	Jhajjar	847 (16)	861 (18)	801 (16)	774 (21)	14	-27
8	Jind	852 (13)	870 (15)	818 (1)	835 (8)	18	17
9	Kaithal	853 (12)	880 (10)	791 (18)	821 (13)	27	30
10	Karnal	865 (9)	886 (7)	809 (1)	820 (14)	21	11
11	Kurukshetra	866 (8)	889 (6)	771 (21)	817 (15)	23	46
12	Mahendragarh	918 (1)	894 (5)	818 (9)	778 (20)	-24	-40
13	Mewat	899 (2)	906 (1)	893 (1)	903 (1)	7	10
14	Palwal	862 (10)	879 (11)	854 (2)	862 (2)	17	8

15	Panchkula	823 (21)	870 (16)	829 (6)	850 (4)	47	21
16	Panipat	829 (19)	861 (19)	809 (13)	833 (9)	32	24
17	Rewari	899 (3)	898 (3)	811 (11)	784 (19)	-1	-27
18	Rohtak	847 (17)	868 (17)	799 (17)	807 (17)	21	8
19	Sirsa	882 (5)	896 (4)	817 (10)	852 (3)	14	35
20	Sonipat	839 (18)	853 (21)	788 (19)	790 (18)	14	2
21	Yamunanagar	862 (11)	877 (12)	806 (15)	825 (12)	15	19
HARYANA		861	877	819	830		
Range		95	53	122	129		
Coeff. of Variation		0.276	0.550	0.184	0.184		

Source: Census-2011

Note: Figures in bracket are the rank of the respective district.

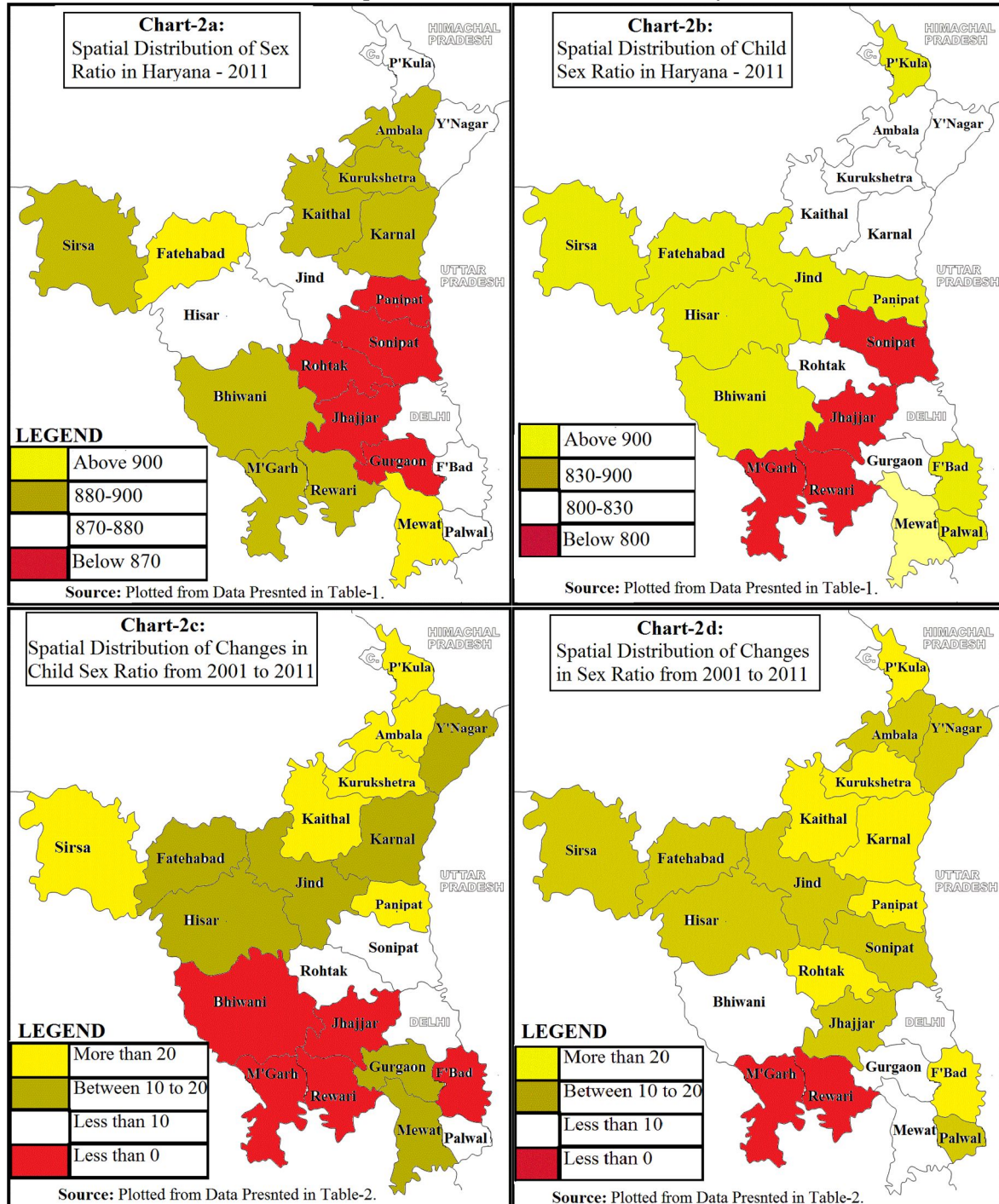
Table-1 shows that comparatively poor regions of the state have better sex ratio. Mahendergarh had best sex ratio in 2001 with 918 females per 1000 males followed by Mewat (899), Rewari (899), Fatehabad (884) and Sirsa (882). Lowest sex ratio was in Panchkula (823) closely followed by Faridabad (826), Panipat (829) and Sonipat (839). In 2011, the five best performers remained same but their order changed. Mewat (906) topped the list followed by Fatehabad (903), Rewari (898), Sirsa (896) and Mahendergarh (894). Sonipat and Gurgaon(853) remained at bottom closely followed by Jhhajar and Panipat(861). As far as child sex ratio is concerned, in 2011 Mewat has highest child sex ratio (903) followed by Palwal (862), Sirsa (852), Panchkula (850) and Hisar (849) whereas Jhajjar (774) has lowest child sex ratio followed by Mahendragarh (778), Rewari(784) and Sonipat (790).



Last two columns of the table-1 and chart-1 depicts spatial pattern of changes in sex ratio from 2001 to 2011. The data reveal that except Mahendergarh (decreased by 24 per 1000) and Rewari (decreased by 01 per 1000) all district shown improvement in overall sex ratio. Chart-1 clearly shows a significant and alarmingly drop in sex ratio of Rewari and Mahendergarh. There is an urgent need to intervene in these two districts. The drop in child sex ratio in Jhajjar and

Bhiwani also put a question mark on the society efforts to eliminate gender biases and male child preference in Haryana particularly in these four districts.

Chart-2: Spatial Patterns of Sex Ratio in Haryana



The data presented in Chart-2 shows spatial pattern of gender disparities indicated by sex ratio. Chart-2a depicts a spatial pattern in sex ratio with central eastern districts of Panipat, Sonipat, Rohtak, Jhajjar and Gurgaon have very low sex ratio. Chart-2b shows that child sex ratio in the age group 0-6 years has been low in a strip starting from southwestern districts of Mahendergarh and Rewari moving eastward along Jhajjar and Sonipat. Very low child sex ratio in the districts of Jhajjar and Sonipat along with already low sex ratio in these districts is likely to result in lower overall sex ratios in these districts. The impact of this low child sex ratio on overall sex ratio would last for a very long time period.

Table-2: Spatial Distribution of Changes in Sex Ratio from 2001-2011

Changes	Extent	Overall Sex Ratio	Child Sex Ratio(0-6)
High Gainers	More than 20	Panchkula, Faridabad, Panipat, Kaithal, Kurukshetra, Karnal and Rohtak	Kurukshetra, Sirsa , Kaithal, Ambala, Panipat and Panchkula
Medium Gainers	Between 10 to 20	Hisar , Fatehabad , Jind, Palwal, Yamunanagar, Ambala , Jhajjar, Sirsa and Sonipat	Yamunanagar, Gurgaon, Hisar, Fatehabad, Jind, Karnal and Mewat
Low Gainers	Less than 10	Mewat, Bhiwani and Gurgaon	Rohtak, Palwal and Sonipat
Losers	Less than 0	Rewari and Mahendergarh	Faridabad, Bhiwani, Jhajjar, Rewari and Mahendragarh

Source: Based on data presented in Table-1

Central government and state governments have adopted various legal and social measures to sensitise society about the consequences of low sex ratio and need of maintaining delicate natural equilibrium between sexes. To understand the impact of these measures on child sex ratio and overall sex ratio, Chart-2c portrays changes in child sex ratio from 2001 to 2011. Contrary to the expectations, the child sex ratio has reduced drastically in the districts of Mahendergarh, Jhajjar and Rewari. The child sex ratio has also declined in the districts of Faridabad and Bhiwani. These districts lies in southern part of Haryana. Most of the gains in Child Sex ratio was observed in the northern part of Haryana, with Kurukshetra, Kaithal and Sirsa showing significant increase in child sex ratio. Most disturbing trend in sex ratio was in reduction in overall sex ratio in the districts of Mahendergarh and Rewari. These two districts had high sex ratio in 2001 but both shown decrease in overall sex ratio. Overall picture that emerges from spatial pattern depicted in chart-2 indicates considerable regional disparities in Haryana.

4.2 Literacy Rate

Date presented in Table-3 shows highest male literacy in 2011 is in the southern districts of Rewari, Mahendergarh and Gurgoan whereas Mewat, Fatehabad and Sirsa have lower male literacy rate. As far as female literacy rate is concerned Gurgaon, Ambala and Panchkulla are ranked higher whereas Fatehabad, Palwal and Mewat are ranked lower. The measure of gender disparities is revealed by difference in male-female literacy rates. In 2001, male-female literacy gap was highest in Mewat (37.3 percent) followed by Palwal (34.3 percent) and Mahendergarh (30.6 percent) indicating wide gender disparities in literacy rates in these districts. The Gap is lowest in Ambala (14.9 percent) followed by Panchkula (15.2 percent) and Yamunanagar (15.4

percent). Almost same situation existed in 2011 with Mewat, Palwal and Mahendergarh remaining districts with higher disparities whereas Panchkula, Ambala and Gurgaon having lesser gap. To understand the progress made by various districts in reducing gender gap in literacy, we have presented changes in gender gap for the period 2001 to 2011 in last column of table-3 and chart-3. Chart-3 depicts that no definite relationship exist between level of literacy and reduction in gender gap during the period.

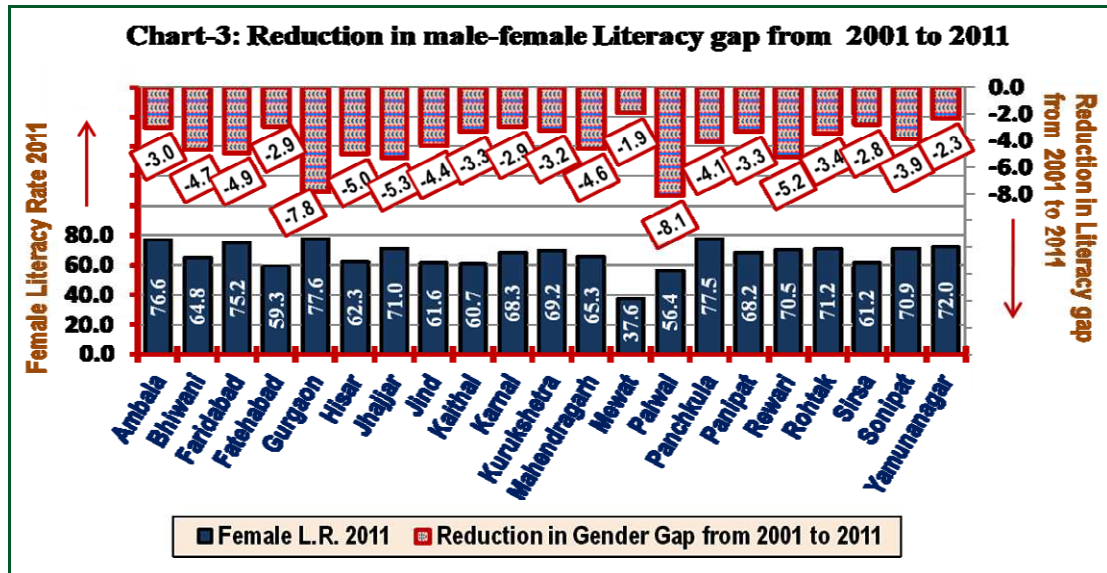
Table-3: Gender Disparities Indicated by Literacy Rates

State/Districts	Literacy Rate (Males)		Literacy Rate (Females)		Gender Gap in Literacy Rate		Reduction in Gender Gap from 2001-11
	2001	2011	2001	2011	2001	2011	
Ambala	82.3(8)	88.5(8)	67.4(2)	76.6(1)	14.9(1)	11.9(2)	3.0
Bhiwani	80.3(10)	87.4(10)	53.0(14)	64.8(3)	27.3(17)	22.6(18)	4.7
Faridabad	85.1(3)	89.9(4)	65.5(4)	75.2(14)	19.6(6)	14.7(6)	4.9
Fatehabad	68.2(20)	78.1(20)	46.5(19)	59.3(4)	21.7(11)	18.8(14)	2.9
Gurgaon	88.0(2)	90.3(3)	67.5(1)	77.6(19)	20.5(8)	12.7(3)	7.8
Hisar	76.6(14)	82.8(15)	51.1(15)	62.3(15)	25.5(6)	20.5(15)	5.0
Jhajjar	83.3(5)	89.4(5)	59.6(10)	71.0(7)	23.7(14)	18.4(11)	5.3
Jind	73.8(17)	82.5(17)	48.5(17)	61.6(16)	25.3(5)	20.9(16)	4.4
Kaithal	69.2(19)	79.3(18)	47.3(18)	60.7(18)	21.9(12)	18.6(13)	3.3
Karnal	76.3(15)	83.7(13)	58.0(11)	68.3(11)	18.3(5)	15.4(7)	2.9
Kurukshetra	78.1(13)	83.5(14)	60.6(9)	69.2(10)	17.5(4)	14.3(5)	3.2
Mahendragarh	84.7(4)	91.3(2)	54.1(13)	65.3(13)	30.6(19)	26.0(19)	4.6
Mewat	61.2(21)	73.0(21)	23.9(21)	37.6(21)	37.3(21)	35.4(21)	1.9
Palwal	75.1(16)	82.6(16)	40.8(20)	56.4(20)	34.3(20)	26.2(20)	8.1
Panchkula	80.9(9)	88.6(7)	65.7(3)	77.5(2)	15.2(2)	11.1(1)	4.1
Panipat	78.5(12)	85.4(11)	58.0(12)	68.2(12)	20.5(9)	17.2(8)	3.3
Rewari	88.4(1)	92.9(1)	60.8(7)	70.5(9)	27.6(18)	22.4(17)	5.2
Rohtak	83.2(6)	88.4(9)	62.6(6)	71.2(6)	20.6(10)	17.2(9)	3.4
Sirsa	70.1(18)	78.6(19)	49.9(16)	61.2(17)	20.2(7)	17.4(10)	2.8
Sonipat	83.1(7)	89.4(6)	60.7(8)	70.9(8)	22.4(13)	18.5(12)	3.9
Yamunanagar	78.8(11)	85.1(12)	63.4(5)	72.0(5)	15.4(3)	13.1(4)	2.3
HARYANA	78.5	85.4	55.7	66.8	22.8	18.6	4.2
Range	27.2	19.9	43.6	40.0	22.4	24.3	6.2
Coeff. of Var.	0.089	0.060	0.188	0.136	0.262	0.304	0.385

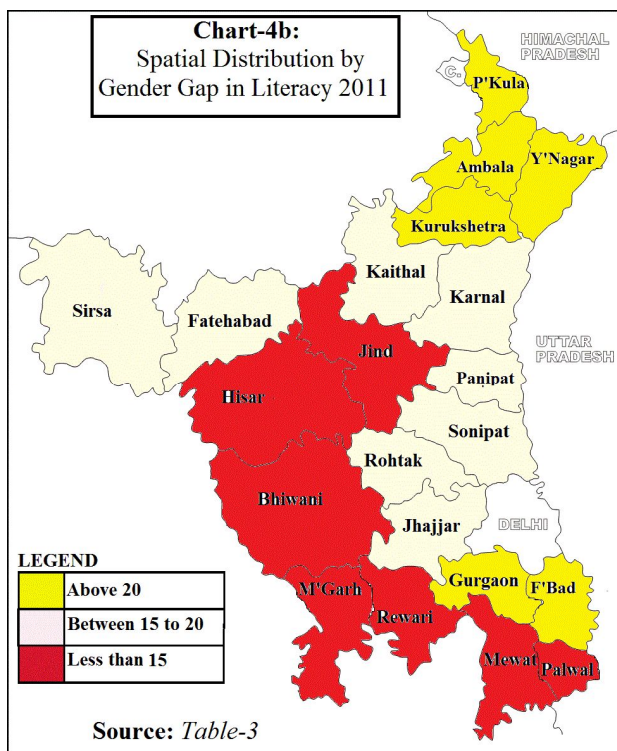
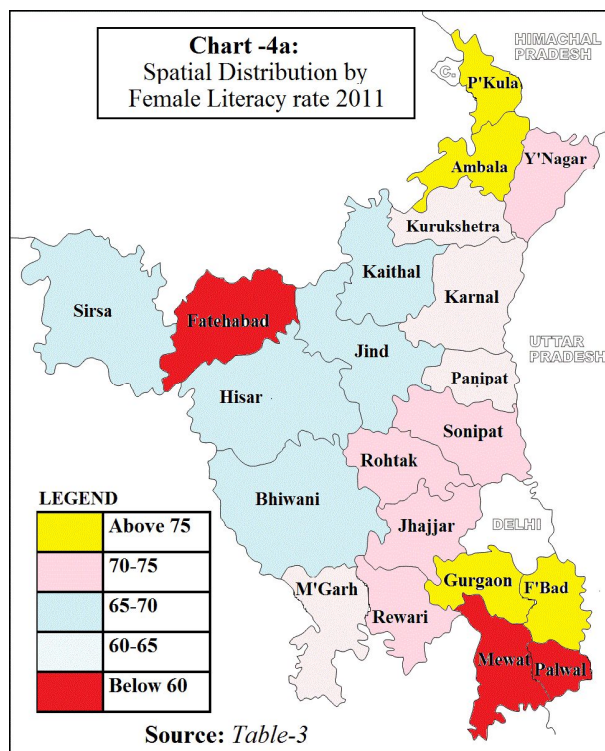
Source: Census-2011.

Distribution of districts by female literacy shows that economically prosperous districts Panchkula, Ambala, Gurgaon and Faridabad have higher female literacy rate whereas Palwal, Mewat and Fatehabad have literacy rate less than 60 percent. To understand gender inequalities in education we look at district wise male-female literacy rates. Column-7 of the table-3 reveals significant gender gap in literacy rates. Chart-4b depicts spatial pattern of gender gap. The gap is more in the southern districts of the state and is comparatively less in the northern districts of the

states. A clear spatial pattern can be seen from chart. A cursory look at chart-4a and chart-4b shows that gender gap is high in the districts where female literacy rate is low. This is corroborated by negative and high correlation coefficient between gender gap in literacy and female literacy rate ($r = -0.587$).



A disturbing trend was observed in case of Rewari and Mahendragarh, where female literacy rate and literacy gap is very high despite high level of male literacy (ranked 1st and 2nd). The gender gap in literacy rate is low in case of economically well-off districts.

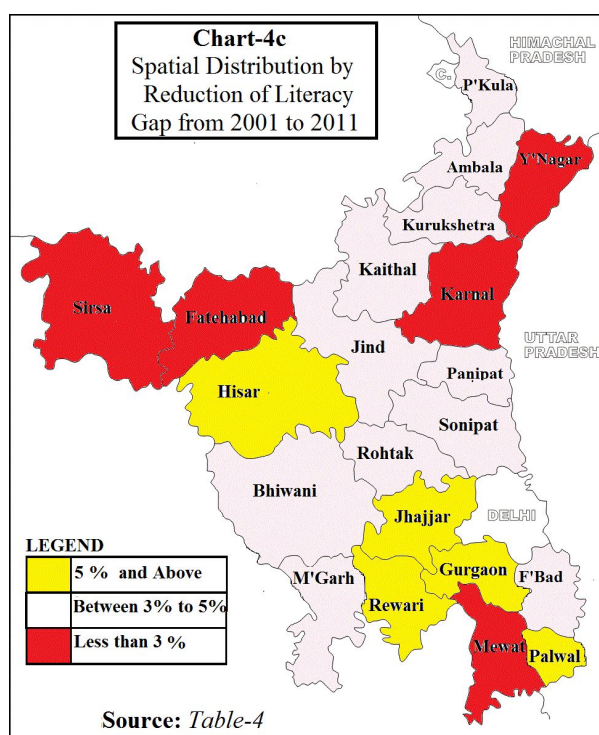


To understand the effect of government policies and programme in the decade from 2001 to 2010 it is pertinent to look at reduction in gender gap among the districts of Haryana. We found no definite relationship between reduction in literacy gap and level of literacy ($r = 0.218$) or with level of literacy gap in 2001 ($r = 0.314$) and 2011 ($r = 0.051$). The spatial distribution of reduction of literacy gap plotted on map (chart-4c) shows southern districts Palwal, Gurgaon, Jhajjar and Rewari could reduce the gap by more than 5 percent points.

Table-4: Spatial Distribution by Reduction in Gender Gap in Literacy

Changes	Extent	Districts
High	5 % and Above	Palwal, Gurgaon, Jhajjar, Rewari and Hisar
Medium	Between 3% to 5%	Faridabad, Bhiwani, Mahendragarh, Jind, Panchkula, Sonipat, Rohtak, Kaithal, Panipat, Kurukshetra and Ambala
Low	Less than 3 percent	Fatehabad, Karnal, Sirsa, Yamunanagar and Mewat

Source: Based on Data Presented in Table-3.



4.3. Workforce Participation Rate

According to census 2011 Workforce Participation Rate (WPR) for female in Haryana is 17.79 percent whereas WPR for male 50.44 percent indicating gender gap of 35.17 percent. The WPR for female in urban area (12.1 percent) is significantly lower than (20.8 percent). Haryana's workforce force participation rate for women fell drastically from 27.2 percent in 2001 to 17.8 percent in 2011. Data presented in table-5 shows all around decline in female participation rates from 2001 level. In many districts, the decline has been more than 10 percent. This conform to the broad trends in India with all around decline in Female WPR (Rangarajan et al., 2011; Kaanan & Raveendarn, 2012; Bhalla & Kaur, 2013). An ILO report (*Global Employment Report, 2013*) also pointed out that despite very rapid economic growth in

India in recent years, we are facing declining female labour force participation rates across all age groups, across all education levels, and in both urban and rural areas. The report highlighted that in India the participation rate for women fell from 37.3 percent in 2004–05 to 29.0 per cent in 2009–10. Moreover, there is a large gap in the labor force participation rates of men and women in India. The economists inferences from the widespread decline in female WPR in India are not undisputed. While Rangarajan et.al (2011) established it as a positive effect caused mainly due to movement of women from work to education Kannan & Raveendarn (2012) blamed it on crowding out of women labour in the face of agricultural stagnation and slow down

of economic growth. Bhalla and Kaur (2013) found some evidence of a depressing effect of the emerging middle class on female labor force participation. The decline in women's WPR have important macro economic implications and it affects women's well being and utilization of their valuable human resources. Besides structural and economic factors female WPR is significantly influenced by social norms governing gender roles and responsibilities.

Table-5: Gender Disparities Indicated by WPR

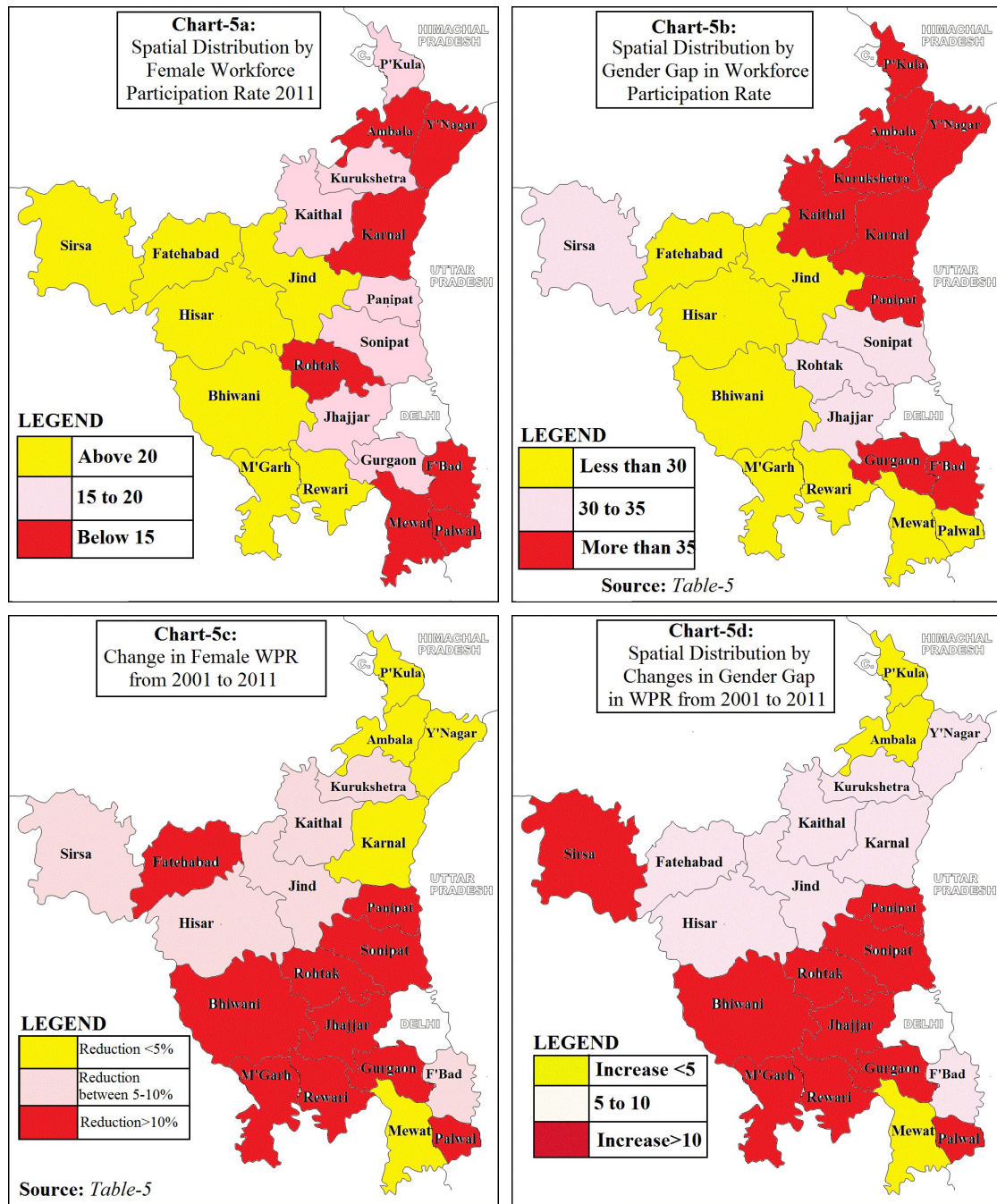
		WPR 2001			2011			Changes from 2001 to 2011	
		Male	Female	Gap	Male	Female	Gap	Female WPR	Gender Gap
1	Ambala	50.9	10.2	40.7	53.5	9.8	43.6	-0.4	2.9
2	Bhiwani	49.2	35.4	13.8	49.7	25.1	24.6	-10.3	10.8
3	Faridabad	48.3	20.9	27.4	49.4	12.1	37.2	-8.8	9.8
4	Fatehabad	54.4	34.4	20.0	53.2	23.6	29.6	-10.8	9.6
5	Gurgaon	46.8	27.7	19.1	53.0	16.1	36.9	-11.6	17.8
6	Hisar	51.9	33.2	18.7	52.4	25.0	27.4	-8.2	8.7
7	Jhajjar	51.4	35.7	15.7	48.6	17.2	31.3	-18.5	15.6
8	Jind	51.6	34.8	16.8	51.7	25.0	26.7	-9.8	9.9
9	Kaithal	50.9	25.8	25.1	51.3	16.1	35.1	-9.7	10.0
10	Karnal	50.2	19.0	31.2	51.6	14.8	36.8	-4.2	5.6
11	Kurukshetra	51.2	21.4	29.8	52.6	15.0	37.5	-6.4	7.7
12	Mahendragarh	48.0	38.2	9.8	47.9	24.3	23.6	-13.9	13.8
13	Mewat	38.6	15.6	23.0	39.3	12.6	26.7	-3.0	3.7
14	Palwal	42.6	24.5	18.1	43.5	13.9	29.6	-10.6	11.5
15	Panchkula	54.5	18.2	36.3	55.0	17.8	37.2	-0.4	0.9
16	Panipat	51.0	25.8	25.2	50.8	15.0	35.8	-10.8	10.6
17	Rewari	49.7	36.8	12.9	49.6	24.0	25.6	-12.8	12.7
18	Rohtak	49.3	27.8	21.5	48.0	14.9	33.1	-12.9	11.6
19	Sirsa	53.0	30.7	22.3	54.1	21.6	32.5	-9.1	10.2
20	Sonipat	49.7	30.4	19.3	50.1	19.8	30.3	-10.6	11.0
21	Yamunanagar	50.1	11.7	38.4	52.9	8.3	44.7	-3.4	6.3
HARYANA		50.3	27.22	39.62	50.4	17.8	32.6	-16.1	10.3
Range		15.9	28	30.9	15.7	16.8	21.1	18.1	16.9
Coeff. of Var.		0.228	0.300	0.271	0.233	0.314	0.281	0.250	0.240

Source: Computed from data obtained from Primary Census Abstract-2001 and 2011.

The level of female workforce participation rate and gender gap in WPR has shown significant variation across the districts of Haryana. The WPR of Bhiwani(25.1 percent) is 3 times more than the WPR of Yamunanagar(8.3 percent). The level of WPR clearly shows an spatial pattern. South and Southwest districts Bhiwani, Mahendergarh, Rewari, Hisar, Sirsa, Fatehabad and Jind has shown significantly higher female WPR whereas northern and eastern districts have low Female WPR. With regards to gender gap in WPR, northern districts are in red

zone indicating high gender gap in WPR(Chart-5b). General picture that emerges from chart-5a and chart-5b depicts that southern part has better female WPR and low gender gap in WPR. But the changes between 2001 to 2011 indicate that northern district had performed better both in terms of change in Female WPR and change in gender gap between Male WPR and Female WPR.

Chart-5: Spatial Pattern of Female Workforce Participation Rate in Haryana



5. Conclusions

Haryana emerged as an economically progressive state with a vibrant economy. The state had undergone significant changes since its creation in 1966. But the status of women in the state is and has been a cause of concern with low sex ratio and even lower child sex ratio, low female literacy, sex selective abortions, low economic participation, heavy burden of unpaid home care work, high child and maternal mortality rates, restrictions related to public space and low reproductive health status. The main objective of the paper was to analyse and describe the extent of gender disparities in Haryana, particularly in respect of sex ratio, literacy and participation in economic activities. We found significant gender disparities as evidenced by sex ratio, literacy rate and women participation rate. Paper found significant disparities in sex ratio, child sex ratio and in changes from 2001 to 2011. Reduction of sex ratio in Mahendergarh and Rewari along with low and declining sex ratio poses some serious questions to the society particularly to those who are concerned with it. There is an urgent need of intervene in these two districts along with Jhajjar and Sonapat. The gender gap in literacy is also higher in these two districts. We found that districts having lower gender gap in literacy were able to increase sex ratio more than the districts having higher gender gap in literacy. This is also corroborated by negative correlation coefficient between the two ($r = -0.5$). We also found very high level of gender gap in female WPR. A negative and high degree of correlation (-0.783) between gender gap in literacy and gender gap in WPR indicates that high gender gap in literacy is associated with lower gender gap in WPR and vice-versa. The data plotted in charts also indicated that the gender inequalities are more in southern part of the state and they are increasing whereas gender inequalities are less in northern Haryana. The existence of spatial patterns in gender disparities hints the foreplay of social, cultural and geographical factors on gender disparities rather than administration efforts.

REFERENCES

- Ahlawat, Neerja (1995). Status of Women in Haryana. *Guru Nanak Journal of Sociology*, Amritsar.16 (1): 93-107.
- Balatchandirane G.(2003) Gender Discrimination in Education and Economic Development: A Study of South Korea, China and India. *International Studies*, 40(4).
- Bhalla, S. & Kaur, R. (2011). Labour Force Participation of Women in India: Some Facts, Some Queries. *LSE Asia Research Center*, Working Paper No. 40.
- Chand Pramod, (2004) Impact of 73rd Amendment on Women Panchayati Raj Leadership in Haryana. In Singh, S. (ed.) *Decentralized Governance in India: Myth and Reality*, pp. 167-170, New Delhi: Deep and Deep Publications.
- Chowdhary, P. (1994). *The Veiled Women. Shifting Gender Equations in Rural Haryana*. New Delhi: Oxford University Press.
- Dahiya, R.S. & Goerge, S. (1996). Female Foeticide in Rural Haryana. *The State Resources Center*, Haryana.

- Gupta, S. (1999). Panchayats as Vehicle of Participated Democracy. *Politics*, 3(10).
- Government of Haryana(2014) *Statistical Abstract of Haryana-2013-14*. Government of Haryana.
- Hirway, I. (2012). Missing Labour Force –An Explanation. *Economic and Political Weekly*, 47 (37):67-72.
- IIPS(1998). *National Family Health Survey-2 Report*. Mumbai: International Institute for Population Sciences.
- IIPS(2006). *National Family Health Survey-3 Report*. Mumbai: International Institute for Population Sciences
- Jacobs, J.A. (1996). Gender Inequality and Higher Education. *Annual Review of Sociology*, 22:153-185.
- Kannan, K.P & Reveendran, G. (2012). Counting and Profiling the Missing Labour Force. *Economic & Political Weekly*, 47(6):43-59.
- Narayan, L.(2012). Haryana in National Perspective – Vulnerabilities in Health and Education. *Kautilya Har. Eco. Jr.*, 2(1): 73-80.
- Panwar, M. (2001). Women Sarpanches – A Case Study of Haryana. *Kurukshetra*, 50(2).
- Rangarajan, C., Kaul, P.I. & Seema (2011). Where is the missing labour force? *Economic and Political Weekly*, 46(39):68-72.
- Shanta, E.K. (1999). Political Participation of Women in Panchayati Raj. *Politics*, 3(10).
- Raj, S. & Chander, B. (2001). Women's Empowerment for Gender Equality – A Functional Analysis. *Kurukshetra*, 49(11).
- Singh, S.N. (2001). *Prospectus for Women Empowerment: Dynamics of Enablement*, New Delhi: Commonwealth Publishers.
- Nelly P.S.(1992). Women and Literacy: Promises and Constraints. *Annals of the American Academy of Political and Social Science*. 520: 54-65.
- UNDP(2014) *Human Development Report-2014*. United Nations Development Programme
- UNFPA(2011) *Note on Prenatal Sex Selection*, available at <http://countryoffice.unfpa.org/india/drive/Noteonprenatalsexselection.doc>
- Joe, V., Vijay, A. & Panniyammakal, J.(2008) Beyond the Numbers: Factors Distorting Sex Ratio at Birth. *Indian Journal of Gender Studies*, 15(1):115–125.
- Waldran, I.(1980). *Factors Determining the Sex Ratio at Birth*. University of Pennsylvania, pp 53-63..
- WEF (2014). *The Global Gender Gap Report-2014*. Basel: World Economic Forum.