

## Gender Imbalance and Women Empowerment: Some Policy Challenges in the Twelfth Plan

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“ .....Shatter this age-long shame of ours,  
And raise our head  
Into the boundless sky,  
Into the generous light,  
Into the air of freedom.” Rabindranath Tagore

### Abstract

*The Twelfth Five Year Plan of India, scheduled to begin from April 2012, is supposed to face many policy challenges particularly in the fields of inclusive growth. This paper aims at pointing out the problems related to gender imbalance and women empowerment, as experienced by the Indian economy during the previous plan periods in general and during Eleventh Plan in particular. It also wants to show how far these issues would pose a challenge to the policy framework of the Twelfth Plan. The question of gender balance is often analyzed with the help of sex ratio. The sex ratio in India has been historically negative or in other words, unfavourable to females. It is believed that several factors such as old practice of neglect of girl child and female infanticide, higher mortality rate among the female children, advent of new technology for the determination of the sex of foetus, women literacy rate, poverty rate, workforce participation rate among the women, etc. are responsible for influencing overall sex ratio and the child sex ratio in our country. The analysis has been based upon some secondary data sources, particularly the population census (2011) data.*

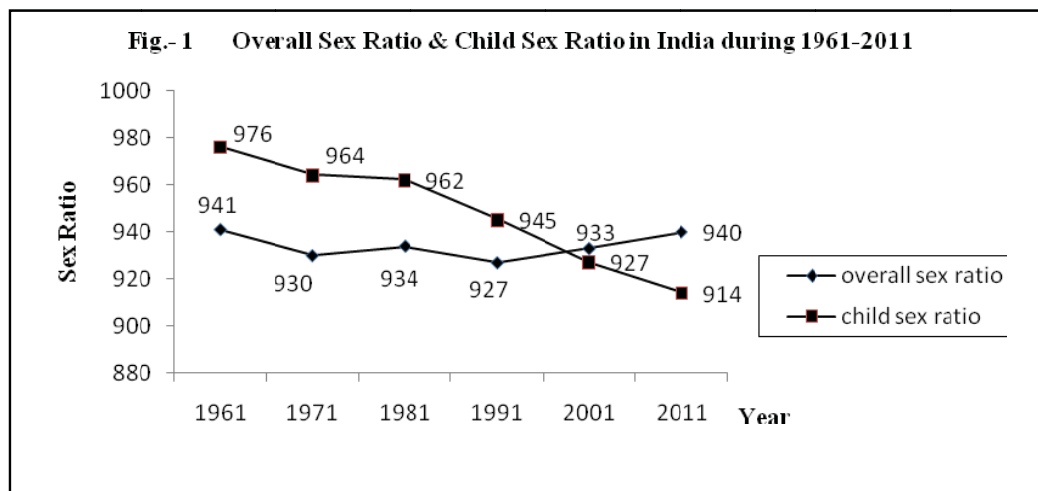
### I. Introduction

The Twelfth Five Year Plan of India, scheduled to begin from April 2012, is supposed to face many policy challenges particularly in the fields of inclusive growth. The inflation and financial risks on account of global developments can defeat the financial allocations ( Reddy, 2011) for the achievement of plan targets. The financing of the plan with macroeconomic balance becomes a crucial issue before the planners. Generally any evaluation of the performance of the previous plan is made by the planners in terms of the GDP growth. So far as the growth target is concerned, the Eleventh Plan aimed at 9 per cent growth rate per annum, but the actual growth rate had been around 8.2 per cent. Planners, however, consider this as a remarkable success since this has been achieved in the midst of a critical global financial situation during the Eleventh Plan period. However, the economic development of a country should not be judged only in terms of the growth rate in GDP. Development is multidimensional and the planners admit that it is difficult to

assess performance on inclusiveness having such multidimensional feature (Ahluwalia, 2011). This paper aims at pointing out the problems related to gender imbalance and women empowerment, as experienced by the Indian economy during the previous plan periods in general and during Eleventh Plan in particular; and it wants to find out how far these issues would pose a challenge to the policy framework of the Twelfth Plan.

## II. Gender imbalance

The question of gender balance is often analyzed with the help of sex ratio. The sex ratio in India has been historically negative or in other words, unfavourable to females.



If we review the trend of overall sex ratio (OSR) and the child sex ratio (CSR) (i.e., the number of female child per 1000 child within the age group of 0-6 years) in India during 1961-2011, we find that the CSR has gradually declined from a level of 976 in 1961 to a low level of only 914 in 2011. On the other hand, the OSR which was 941 in 1961, declined to 927 in 1991 and then gradually reached at such a level (940) in 2011 which was almost equal to that achieved in 1961. It is believed that several factors such as old practice of neglect of girl child and female infanticide, higher mortality rate among the female children, advent of new technology for the determination of the sex of foetus, women literacy rate, poverty rate, workforce participation rate among the women, etc. are responsible for influencing OSR and CSR in our country.

The persistent survival disadvantage that women experience in India from the early infancy to their reproductive stage is well established. The age-specific death rates estimated by India's Sample Registration System have shown that women in the past and even today continue to experience higher mortality rate within the age group of both 0-6 years and above (up to the age of 39 years) compared to their male counterparts. Such higher mortality rate among the women has been due to some social practices such as not providing timely healthcare to girls and women in the event of illness as well as during the anti-natal stages. Several research studies carried out since 1970s have shown the presence of some cultural practices and social taboos that undervalue

daughter or women in Indian society [Wyon & Gordon, 1971; Miller, 1981; Das Gupta, 1987; Visaria, 1988; Basu, 1989; Rastogi & Raj Kumari, 1992].

#### Gender Imbalance and Women Empowerment

Some studies show that sex ratios were persistently lower in the Northern states and higher in the Southern states of India. Such regional dichotomy in the demographic structure of India was confirmed by Dyson and Moore (1983). The major Indian states were then grouped into demographic regimes divided by a diagonal line that approximated the contours of Satpura hill range, extending Eastward to join the Chhotonagpur hills and Southern Bihar. However, such traditional north-south divide has to be modified in view of the declining CSR in almost all states during 2001-11 (Table-1). The deficit of young girls has been evident in some traditionally and historically masculine states like Haryana and Punjab. But the drastic fall in the CSR in many other states particularly since 1991 cannot be explained solely by the discrimination against girls which has been practiced in these regions for decades. Many researchers in this field are of the opinion that with the advent of new technology for the determination of the sex of foetus (such as portable ultra sonogram machine), it has become easier for parents to avoid having daughters. As a result, the 'pre-birth deficit' of girl child has become more prominent than 'post-birth deficit' (Visaria, 2008; Srinivasan & Bedi, 2009). Parents started replacing the old practice of neglect of girl child and female infanticide by opting for pre-birth elimination of daughters with the help of new technology. Several micro-level studies conducted in Punjab, Haryana, Himachal Pradesh and Gujarat show that the deficit of girl child was much higher among women who were educated beyond the primary level, who belonged to upper castes, whose families had substantial landed properties, who were not engaged in any gainful work and who could pay the provider (or the private medical practitioner or organization) for this illegal procedure or abortion (Visaria, 2004; Bose & Shiva, 2003). At the same time, there has been strong evidence that even families belonging to the backward social groups or with less education, had a tendency to gather information on the sex of the foetus. This indicates that this practice has been spreading across all social groups (Visaria, 2008).

Some researchers have hinted upon the aspect of inter-generational transfer of resources as one of the determining forces behind the falling CSR in many parts of India (John et. al., 2009). With the persisting structures of patrilineal descent, patrilineal inheritance and post-marital residence pattern, young couples are supposed to go to live with the husband's family; thus, sons continue the family line and inherit the property. Married daughters are not expected to support their parents at their old age. Side by side, growing demand for lavish dowries and increasing expectations of expensive weddings for daughters imply a net 'outflow' of fund or a 'financial burden' upon the parents. In addition, there are fears that with extended dowry and perceived increase in marital breakdown, support to daughters will not end with their marriage (causing further drain on family resources). All these factors stimulate the aversion for daughters. It also seems that women themselves have internalized the patriarchal values to such an extent that even when they say that daughters take better care of parents in old age or are more emotionally attached to the mothers, their statements do not match their desires (Visaria, 2008).

Thus, greater parental preference for male child can lead to a substantial fall in ratio of women to men. According to Prof. Amartya Sen, this ratio remains typically around 1050-1060 in Europe and North America (e.g., this ratio remained about 1020 in U.S.A and 1170 in Russian Federation in 2011). However, this ratio is as low as 940 in South and West Asian countries. This is particularly due to the incidences of aborting female fetuses during pregnancy, neglect of female child and even infanticide. From this trend, it becomes clear that legal actions of the government

**Table-1 Overall Sex Ratio and Child Sex Ratio (in the age group of 0-6 yrs) across the States & UTs of India**

Sl. No.	State/UT	Overall Sex Ratio			Child Sex Ratio (age group of 0-6 yrs)			Literacy rate (2011)		% of people below poverty line (2004-05)
		2001	2011	Decadal change	2001	2011	Decadal change	Male	Female	
1	UP	898	908	1.11	916	899	- 1.85	79.24	59.26	32.8
2	Maharashtra	922	925	0.32	913	883	- 3.28	89.82	75.48	30.7
3	Bihar	919	916	- 0.33	942	933	- 0.95	73.39	53.33	41.4
4	West Bengal	934	947	1.39	960	950	- 1.04	82.67	71.16	24.7
5	Andhra Pradesh	978	992	1.43	961	943	- 1.87	75.56	59.74	15.8
6	Madhya Pradesh	919	930	1.19	932	912	- 2.14	80.53	60.02	38.3
7	Tamil Nadu	987	995	0.81	942	946	+ 0.42	86.81	73.86	22.5
8	Rajasthan	921	926	0.54	909	883	- 2.86	80.51	52.66	22.1
9	Karnataka	965	968	- 0.31	946	943	- 0.32	82.85	68.13	25.0
10	Gujarat	920	918	- 0.22	883	886	+ 0.34	87.23	70.73	16.8
11	Orissa	972	978	0.62	953	934	- 1.99	82.40	64.36	46.4
12	Kerala	1058	1084	2.45	960	959	- 0.10	96.02	91.98	15.0
13	Jharkhand	941	947	0.64	965	943	- 2.28	78.45	56.21	40.3
14	Assam	935	954	2.03	965	957	- 0.83	78.81	67.27	19.7
15	Punjab	876	893	1.94	798	846	+ 6.01	81.48	71.34	8.4
16	Chhattisgarh	989	991	0.20	975	964	- 1.13	81.45	60.59	40.9
17	Haryana	861	877	1.85	819	830	+ 1.34	85.38	66.77	14.0
18	Delhi	821	866	5.48	868	866	- 0.23	91.03	80.93	14.7
19	Jammu & Kashmir	892	883	- 1.00	941	859	- 8.71	78.26	58.01	5.4
20	Uttarakhand	962	963	0.10	908	886	- 2.42	88.33	70.70	39.6
21	Himachal Pradesh	968	974	0.61	896	906	+ 1.11	90.83	76.60	10.0
22	Tripura	948	961	1.37	966	953	- 1.34	92.18	83.15	18.9
23	Meghalaya	972	986	1.44	973	970	- 0.31	77.17	73.78	18.5
24	Manipur	974	987	1.33	957	934	- 2.40	86.49	73.17	17.3
25	Nagaland	900	931	3.44	964	944	- 2.07	83.29	76.69	19.0
26	Goa	961	968	0.73	938	920	- 1.92	92.81	81.84	13.8
27	Arunachal Pradesh	893	920	3.02	964	960	- 0.41	73.69	59.57	17.6
28	Puducherry	1001	1038	3.69	967	965	- 0.21	92.12	81.22	22.4
29	Mizoram	935	975	4.28	964	971	+ 0.73	93.72	89.40	12.6
30	Chandigarh	777	818	5.28	845	867	+ 2.60	90.54	81.38	7.1
31	Sikkim	875	889	1.60	963	944	- 1.97	87.29	76.43	20.1
32	Andaman & Nicobar	846	878	3.78	957	966	+ 0.94	90.11	81.84	22.6
33	Dadra & N. Haveli	812	775	- 4.55	979	924	- 5.62	86.46	65.93	33.2
34	Daman & Diu	710	618	- 1.29	926	909	- 1.83	91.48	79.59	10.5
35	Lakshadip	948	946	- 0.21	959	908	- 5.32	96.11	88.25	16.0
	INDIA TOTAL	933	940	0.75	927	914	- 1.40	82.14	65.46	27.5

Source: (i) Population Census (2011), Provisional Population Total, Office of the Registrar General and Census Commissioner, Govt. of India; (ii) Pal (2010)- 'Poverty & Living Standard in India- An Inter-State Analysis, Artha Beekshan, Vol. 19, No. 2, Sept 2010, pp-100.

in the form of the enactment of Pre-Conception and Pre-natal Diagnostic Techniques Act (1994) failed to check female foeticide since 1996.

### III. Some controversial results

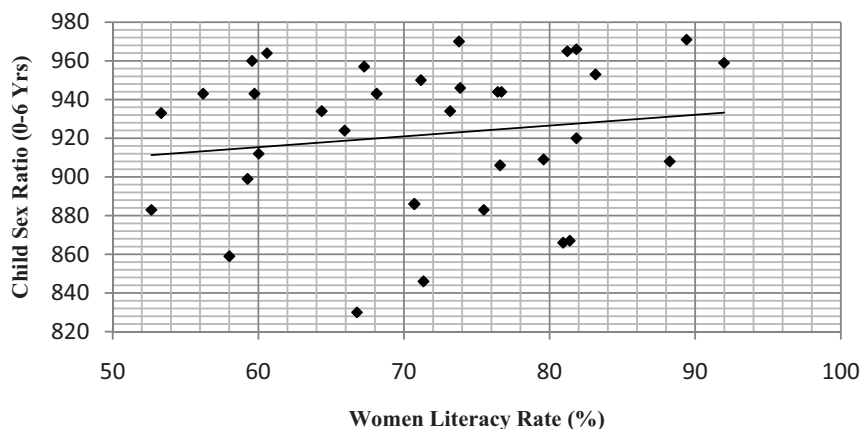
It is interesting to note that the female literacy rate has continuously increased in our country since independence and the male-female gap in literacy rate has also declined particularly since 1981 (Table-2).

**Table-2 Trend of Literacy Rate in India during 1951-2011**

Census Year	Literacy rate (%)			Male-Female Gap in Literacy Rate
	Male	Female	All people	
1951	27.16	8.86	18.33	18.30
1961	40.40	15.35	28.30	25.05
1971	45.96	21.97	34.45	23.98
1981	56.38	29.76	43.57	26.62
1991	64.13	39.29	52.21	24.84
2001	75.26	53.67	64.83	21.59
2011	82.14	65.46	74.04	16.68

Source: Population Census (2011), Provisional Population Total, Office of the Registrar General and Census Commissioner, Govt. of India

**Fig.-2 Relationship between Women Literacy rate & Child Sex Ratio Across States & UTs in India in 2011**



For the purposes of Census, a person aged seven and above, who can both read and write with understanding in any language, is treated as literate (this process is being followed since 1991 census; prior to 1991 census, children below the age of 5 years were treated as illiterates). A person, who can only read but cannot write, is not considered to be literate. Naturally, it is difficult to establish any correlation between the rise in this official 'literacy rate' and the awareness regarding the bad impacts of gender-based discrimination in our society. However, in our study

we have observed a positive correlation between the women literacy rate (WLITR) and the child sex ratio (CHSEX) across the states and UTs in India in 2011 (See Fig.-2). The linear regression equation showing this relation is given below:

$$\text{CHSEX} = 881.88 + 0.558 * \text{WLITR}$$

(\*t = 0.883 significant at 38 % level)

The basic reasons behind such improvement in CSR particularly in the Southern states (say, in Kerala) were higher female literacy rate, state-funded expansion of basic education, greater participation of women in gainful works, favourable law of inheritance in some parts of Kerala, etc. Some recent research works have also indicated that women's control over landholdings was much higher in some of the Southern and North-Eastern states of India. In Kerala, women operated about 21 per cent of landholdings and 18 per cent of land area. In Andhra Pradesh, the corresponding figures were 20 per cent and 17 per cent respectively, while in Tamil Nadu they were 18.1 per cent and 15.1 per cent respectively (Srivastava & Srivastava, 2010).

One of the important determinants of inclusive growth during the plan period is the reduction in the percentage of people below the poverty line. It seems that the problem of declining child sex ratio can be checked through a reduction in the poverty rate in any region. That is to say, an affluent family is not supposed to discriminate between the male and female child. While establishing a statistical relationship between the poverty rate (based on 2004-05 NSSO result) and child sex ratio across different states and UTs in India in 2011 (Table-1), we have found a positive relationship. The linear regression equation showing this relationship is given below:

$$\text{CHSEX} = 901.74 + 0.907 * \text{POVRT}$$

(\*t = 1.52 significant at 13 % level)

It implies that even when the percentage of people below the poverty line declines in any state, the CSR is also found to have a lower value (i.e., that state or region may not improve its position in terms of a reduction in gender imbalance). Higher per capita income can go hand in hand with higher income inequality and poverty in any region and the containment of poverty rate in any region may be a necessary condition for checking the falling trend in the child sex ratio but it cannot be treated as sufficient condition for achieving that goal. Hence, the parental preference for male child is not reduced with an improvement in the financial condition of a family, rather it increases. Thus, policies framed for solving the problem of poverty are not expected automatically to solve the problem of gender imbalance.

It appears that the relatively affluent families of urban areas are availing 'pre-conception and pre-natal diagnostic techniques' more than the poor families living particularly in rural areas.

Some researchers are also of the opinion that decision on aborting a foetus may not be all male decisions. It may have a close connection with female engagement in economic activities in urban areas, especially among high salaried women jobs, where workplace may not be all that friendly for women. They may be restricted from reproductive activities, because of job responsibility. The census data (2011) also indicates that CSR remains higher for rural India compared to the urban areas of most of the States and UTs (Table-3). It implies that the cases of pre-birth elimination of daughters have been higher in urban areas where the parents get easy access to the new technology for the determination of the sex of foetus.

**Table-3 Child Sex Ratio in Rural & Urban Areas of India in 2011**

State/ UT	India/State/Union Territory	Child Sex Ratio (0-6 Years)		
		Total	Rural	Urban
1	2	3	4	5
	<b>INDIA</b>	<b>914</b>	<b>919</b>	<b>902</b>
01	Jammu & Kashmir	859	860	854
02	Himachal Pradesh	906	909	878
03	Uttarakhand	886	894	864
04	Haryana	830	831	829
05	Delhi	866	809	868
06	Rajasthan	883	886	869
07	Uttar Pradesh	899	904	879
08	Bihar	933	935	906
09	Sikkim	944	952	917
10	Arunachal Pradesh	960	964	944
11	Tripura	953	955	945
12	Meghalaya	970	972	957
13	West Bengal	950	952	943
14	Jharkhand	943	952	904
15	Orissa	934	939	909
16	Chhattisgarh	964	972	932
17	Madhya Pradesh	912	917	895
18	Gujarat	886	906	852
19	Daman & Diu	909	925	903
20	Dadra & Nagar Haveli	924	961	878
21	Karnataka	943	945	941
22	Goa	920	924	917
23	Kerala	959	960	958
24	A & N Islands	966	975	947

Source: Population Census (2011), Provisional Population Total, Office of the Registrar General and Census Commissioner, Govt. of India.

The relationship between the HDI or GDI scores and the child sex ratio across different states and UTs has also indicated somewhat puzzling results. It is generally assumed that gender based discrimination is lower in a state with better GDI (Gender Oriented Development Index) score. The relationship between the GDI score and the child sex ratio across the states and UTs has, however, been found to be negative. The relevant regression equations are shown below:

$$CHSEX = 923.91 - 3.34 * GDI$$

(\*t = - 0.036 significant at 90 % level)



Hence, this result implies that even if any state or UT scores better in terms of GDI values, its performance with regard to child sex ratio may be poor. For instance, Delhi scores far better than UP with regard to GDI value, but the child sex ratio in Delhi is lower than that in UP (Table-4). In fact, the GDI estimate does not take into account the factor such as 'parental preference for male or female child'. Naturally, better position in GDI ranking cannot eliminate the possibility of parental preference for male child.

**Table-4 The GDI Scores of different States and UTs of India in 2006**

State/UT	GDI Value (2006)	State/UT	GDI Value (2006)
UP	0.509	Jammu & Kashmir	0.568
Maharashtra	0.677	Uttarakhand	0.647
Bihar	0.479	Himachal Pradesh	0.664
West Bengal	0.622	Tripura	0.626
Andhra Pradesh	0.574	Meghalaya	0.624
Madhya Pradesh	0.516	Manipur	0.699
Tamil Nadu	0.655	Nagaland	0.697
Rajasthan	0.526	Goa	0.747
Karnataka	0.611	Arunachal Pradesh	0.642
Gujarat	0.624	Puducherry	0.706
Orissa	0.524	Mizoram	0.687
Kerala	0.745	Chandigarh	0.763
Jharkhand	0.558	Sikkim	0.659
Assam	0.585	Andaman & Nicobar Islands	0.692
Punjab	0.663	Dadra & Nagar Haveli	0.673
Chhattisgarh	0.542	Daman & Diu	0.677
Haryana	0.632	Lakshadweep	0.635
Delhi	0.701	<b>All India</b>	<b>0.590</b>

Source: 'HDI & GDI Estimates for India and the States/UTs: Results and Analysis', website.

Women empowerment, which is also supposed to be an important determining factor in this respect, depends to a large extent on the workforce participation rate (WPR) among the women. We can use the NSSO data as supplementary information for estimating the gender-based discrimination in the work place. While economic forces are mainly responsible for men's participation in gainful works, the forces which determine the women's participation in work are diverse in nature and they include religious, cultural, social, demographic and reproductive factors. The WPR among the women was about 16.6 per cent in urban areas and that of men was 54.9 per cent during 2004-05. In rural areas, these percentages were 32.7 and 54.6 respectively. There has been no significant change in this pattern of WPR during 1972-73 to 2004-05 excepting for an increase in the employment opportunities for women in urban areas (Srivastava & Srivastava, 2010). The cross section analysis of 2004-05 NSSO data indicates that the WPR remains higher among the SC and ST women. They are supposed to be the most marginalized and impoverished sections in our society and the women from these groups have little choice but to work even at a very low wages. A category-wise and sector-wise distribution of the workforce for the period 2004-05 also shows that among casual workers, 90 per cent women are engaged in agriculture and only 10 per cent in non-agricultural works. Among the regular workers, however, just the reverse



is observed. But the wages are found to be higher for male workers in all categories of work. This disparity is highest for the regular workers engaged in non-agricultural works (where female-male wage ratio is 0.57, i.e., the wage rate for a female worker is about 57 per cent of that earned by a male worker).

The women workforce is more concentrated in agriculture where the wage rates are the lowest. Thus, higher WPR *per se* does not ensure high level of living. It is also believed that the implementation of programmes like NABARD's programme on financing the Self-Help Groups (SHGs) in 1992, the Sampoorna Gramin Swarojgar Yojana (SGSY) in 1999, the National Rural Employment Guarantee Act (NREGA) in 2006, etc. had definitely increased the scope of income opportunities among the women workforce particularly in rural areas. However, the success rates of all these programmes in terms of their impacts on the gender balance in the demographic structure are questionable.

#### IV. Conclusion

We have analysed some aspects of gender imbalance in the demographic structure of India based particularly upon the census data. What we realize is some stark contrasts in our plan programmes and their end results in terms of gender-based discrimination. We feel that while empowering the women, programmes or policies should not only be confined in the expansion of their income earning capabilities alone ;rather such empowerment programme should be viewed from a broader perspective emphasizing particularly upon enlightenment and awareness regarding equal potentialities of male and female children. Such awareness programmes should be made as an integral part of the women empowerment programme so that parental preference can gradually be reversed in favour of the female child.

We believe that the Twelfth Plan is going to face the real challenges while framing policies which would seriously address these issues. Any failure in this front would only mean economic growth without any perceptible advancement in economic development.

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