

Research Article

## Sex Ratio Complexity in Selected States: A Tentative Observation

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### Abstract

Sex ratio is one of the important indicators reflecting the status of girl child as well as women in Indian society. This paper makes an attempt in examining complex trends of sex ratio at the district level in selected states. State level data may not be considered truly representative as district level data reveals a paradoxical situation. A close examination of 2011 census data reveals that some districts are much below the State average; whereas, other districts show low sex ratio. These trends require explanation different from State level average. It has been argued that sex ratio variations at the district level or even below district level may provide us better insights than the conventional understanding of the State level averages. This may have implications for policy and planning in order to address the social problems of gender discrimination. In this background, we have comparatively analysed seven states of India viz. Haryana, Rajasthan, J&K, Uttar Pradesh, Nagaland, Tamil Nadu and Kerala, as states of north and west are notorious for discrimination against women, the manifestation of which is apparent through the sex ratio of respective states. And now this serious problem is also making its inroad into southern and eastern states too. This phenomenon is supported by advancement in reproductive technologies and their use for sex determination and elimination of unwanted female foetus, which is responsible for adversely increasing gender disparity as reflected through child sex ratio in India, which is negating the notion of woman empowerment rather contributing in declining the status of women and girl child. It has been shown in the paper that in best performing states there are worst performing district, which are comparable to states and districts with low sex ratio and vice-versa.

**Keywords:** Sex ratio, Technology, Patriarchy, Female foeticide, Women empowerment, Culture, Development

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## INTRODUCTION

Sex ratio is defined as the number of females per thousand males in India. Child sex ratio is defined in terms of females per thousand males in 0–6 year age group. It is an important and useful indicator to determine relative excess of deficit of men or women in a given population at that point of time. Sex differentials can be due to difference in mortality rate, migration, sex ratio at birth and at times the undercounting of women at the time of population enumeration. However, the last factor is not of much significance. Historical background of sex ratio of India is that in 1921 it was 972 females per 1000 males. It declined to 934 in 2001. It raises the question of relationship between social development and sex ratio. When one looks at the scenario of female infanticide and socio-economic institutions related to it from the colonial period to present time it has changed now which confronts researchers. Vishwanath mentions about the background of deficit of girl children that female infanticide continued to be related to caste until 1931. After 1931 and in post-independent period there is a whole lot of region wise statistics which shows female infanticide has changed to female foeticide wherever sex determination facilities are available (Vishwanath, 2007). And if we go 20 years back instances of female infanticide were prevalent in north India (Miller, 1997). Now in present scenario instances of female foeticide are much more than that of female infanticide and have spread across almost all Indian states. India has lowest sex ratio and ranks 127 out of 152 countries on gender inequality index. On the Gender Development Index, 132 out of 148 and on the Inequality Adjusted HDI, India loses 28.6% in potential human development due to inequality (UNDP, 2014). Census 2011 presents the sex ratio in India as 940 females per 1000 males, although there is a little improvement from the years 2001 and 1991 where it was 934 and 927, respectively. While 0–6 year age group, sex ratio in India in the year 2001 was 927 females per 1000 males, which further declined in 2011 to 914 females per 1000 males. Variations existing are at state level and States of north and west have performed worse than average overall and 0–6 year age group sex ratio of the country. India is a democratic country where equality is promoted on the basis of rationality. Constitution of India guarantees equity and equality to all citizens and are moving towards social development as life expectancy has increased and literacy rate of the country particularly of female literacy rate is increasing constantly which seems to improve status of woman. Still equality is not maintained and it is not translated into reality in true sense. Instead, reality is all together different from this and status of woman is declining constantly which is evident from increasing deficit of girl child accelerated with the rapid use of sex determination technologies. The question arises that is equality practiced in reality at ground level. For ensuring equality in improving the status and empowering the women, enabling them to play decisive role in society with reference to rural areas, they are given 33% reservation of total number of offices in Panchayats and

municipal by 73rd constitutional amendment. Various other legislations are also made for empowering women this indicate social and political development of the country. But when we see at empirical level these all are proven to be ineffective or less effective to get rid of the problem at a concrete level. Then question is what is barrier in reaching to social development? Therefore, the need is to explore major impediments and address them in a careful and effective way. Social development is completely an inclusive term, which incorporates overall development of a society. Development of a society is determined by the culture of that society. Nevertheless, culture is specific and differs according to particular societies; therefore, every society is influenced by its culture. India is a society having deep-rooted cultural holds, which makes India beautiful and unique in the world on one hand but on the other, culture has its negative aspects too, which are much more dominant and powerful over beauty and uniqueness of India having trapped all social, economic and political spheres. Here, in this paper we are going to have a look on overall and child sex ratio (0–6 year) of all seven states mentioned above and their selected districts as we have captured distinct patterns of sex ratios in the states and among districts of states concerned from census 2011. According to the newly released Civil Registration System (CRS) data published in *The Hindu* the current scenario of sex ratio of registered birth has worsened further falling from 909 girls per 1000 boys in 2011 to 908 in 2012 and 898 in 2013. There is a great urgency for implementation of the law against termination based on prenatal sex determination (Rukmini, 2015).

### State Profile

Some of the BIMARU states are notorious for very low sex ratio. Rajasthan and Uttar Pradesh are among them. However, some of non-BIMARU states/districts are not captured by Ashish Bose *viz.* Kerala, Haryana, J&K, Nagaland and Tamil Nadu. Kerala is good on all indicators of development. However, there are two districts namely Thrissur and Alappuzha which have lowest child sex ratio (0–6 year) in Kerala falling similar to child sex ratio (0–6 year) of Pratapgarh and Banswara districts of Rajasthan, Kargil and Leh (Laddakh) districts of J&K, Balrampur and Santkabir Nagar districts of Uttar Pradesh, Kohima and Dimapur districts of Nagaland, The Nilgiris and Kanniya kumari districts of Tamil Nadu. In spite of being good on social, economic and educational development within Kerala, child sex ratio of (0–6 year) of above-mentioned districts does not indicate towards social development rather shows declining trend in social development and even most importantly declining status of women in respective districts. Within worst performing and low sex ratio states, some districts are better in child sex ratio. But, the state of Kerala socially and educationally the most developed state of India has not a single district showing child sex ratio more than or even equal to overall sex ratio in any of districts. Same is the case with Tamil Nadu as it

is with Kerala and both are southern states of India. Further, the differential trend of sex ratio especially 0–6 year is captured for all the states selected in this paper and also pattern of sex ratio of districts within states is examined to know the differences even at lower level for exploration of the possible measures to combat the problem.

### **i. Census Data on Declining Sex Ratio of Selected States**

#### **Sex Variation: Inter/Intra-States/Districts**

Tables 1 and 2 show that all the districts under study in Rajasthan, J&K, Uttar Pradesh, Nagaland, Tamil Nadu and Kerala have lower child sex ratio which is alarming for future as well as meeting the goals of millennium development appears to be extremely difficult, if not impossible. Tables 1 and 2 further show that districts under study reveal a paradoxical picture of sex ratio. It clearly shows that best performer districts of Rajasthan, Jammu & Kashmir, Uttar Pradesh, Nagaland and Tamil Nadu almost equal to the worst performer districts of Kerala.

Figure 1 is based on Tables 1 and 2. This figure clearly indicates the alarming decline of child sex ratio of most of the districts under study. Some of the districts show an increasing trend; however, males are outnumbering females. It further shows that sex ratio of best performing districts of Rajasthan, J&K, Uttar Pradesh, Nagaland and Tamil Nadu are as good as worst performing districts of Kerala. Thus, the paradoxical sex ratio in the districts under study has been well captured in Figure 1.

**Table 1: Best performer districts of Rajasthan, J&K, Uttar Pradesh, Nagaland and Tamil Nadu**

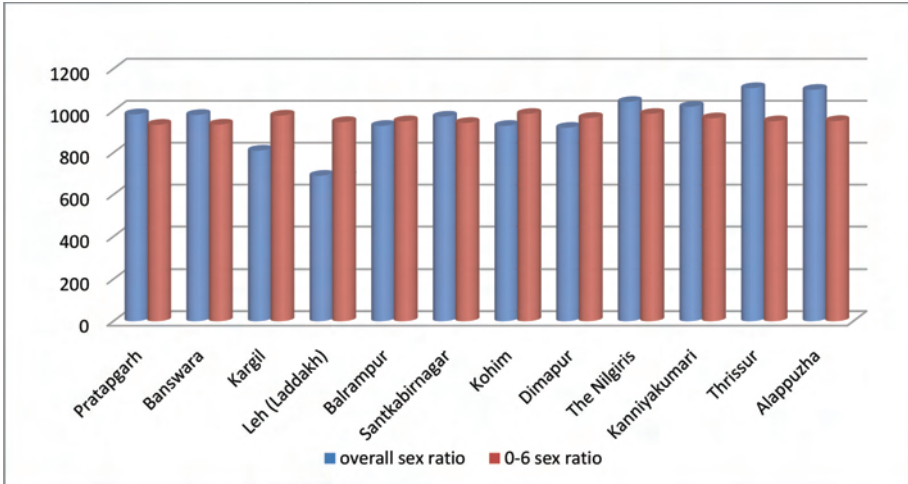
| State         | District       | Overall sex ratio | 0–6 year Sex Ratio |
|---------------|----------------|-------------------|--------------------|
| Rajasthan     | Pratapgarh     | 983               | 933                |
| Rajasthan     | Banswara       | 980               | 934                |
| J&K           | Kargil         | 810               | 977                |
| J&K           | Leh (Laddakh)  | 690               | 946                |
| Uttar Pradesh | Balrampur      | 928               | 950                |
| Uttar Pradesh | Santkabirnagar | 972               | 942                |
| Nagaland      | Kohima         | 928               | 985                |
| Nagaland      | Dimapur        | 919               | 966                |
| Tamil Nadu    | The Nilgiris   | 1042              | 985                |
| Tamil Nadu    | Kanniyakumari  | 1019              | 964                |

Source: Census info India, 2011 based on Table 1.

**Table 2: Worst performer districts of Kerala**

| State  | District  | Overall sex ratio | 0–6 year Sex Ratio |
|--------|-----------|-------------------|--------------------|
| Kerala | Thrissur  | 1108              | 950                |
| Kerala | Alappuzha | 1100              | 951                |

Source: Census info India, 2011 based on Table 2.



**Figure 1: Best performer districts of Rajasthan, J&K, Uttar Pradesh, Nagaland and Tamil Nadu and worst performer districts of Kerala**

Source: Census info India, 2011 based on Tables 1 and 2.

## Haryana

Haryana has lowest Sex Ratio in all categories among all the given States, which has overall 879 and 0–6 year age group 834 females per thousand males. Within Haryana, it is quite notable that overall and 0–6 sex ratios of Mewat district i.e., 907 and 906 females per 1000 males, respectively, are above average state sex ratio and highest in the State. On the contrary, in Mahendragarh district overall sex ratio is above average of state sex ratio i.e., 895. But 0–6 year age sex ratio 775 is lowest in the state. For explanations of these differences, Table 3 and Figure 2 provide satisfactory answer.

## Jammu & Kashmir

In J&K, overall and 0–6 year age group sex ratios are 889 and 862 females per thousand males, respectively. District Samba has lowest 0–6 years sex ratio i.e., 779 females per 1000 males and adult sex ratio for the same district is 886 which

**Table 3: Sex ratio in Haryana districts in 2011**

| Area Name    | Total<br>Sex ratio | Total<br>sex ratio (0–6 year) |
|--------------|--------------------|-------------------------------|
| Ambala       | 885                | 810                           |
| Bhiwani      | 886                | 832                           |
| Faridabad    | 873                | 843                           |
| Fatehabad    | 902                | 854                           |
| Gurgaon      | 854                | 830                           |
| Hisar        | 872                | 851                           |
| Jhajjar      | 862                | 782                           |
| Jind         | 871                | 838                           |
| Kaithal      | 881                | 828                           |
| Karnal       | 887                | 824                           |
| Kurukshetra  | 888                | 818                           |
| Mahendragarh | 895                | 775                           |
| Mewat        | 907                | 906                           |
| Palwal       | 880                | 866                           |
| Panchkula    | 873                | 863                           |
| Panipat      | 864                | 837                           |
| Rewari       | 898                | 787                           |
| Rohtak       | 867                | 820                           |
| Sirsa        | 897                | 862                           |
| Sonipat      | 856                | 798                           |
| Yamunanagar  | 877                | 826                           |
| Haryana      | 879                | 834                           |

Source: Census info India 2011, based on Table 3.

is 3 points lower than state level. Table 4 and Figure 3 are clearly showing the differences within state.

### **Rajasthan**

In Rajasthan, sex ratios of overall and 0–6 year age group are 928 and 888, respectively, in 2011 census. It is interesting to note here that in Dungarpur district overall sex ratio is 994 females per 1000 males, which is above average of the state and even national average. The sex ratio of 0–6 year age group of the same district is 922 females per 1000 males is also above average state level but below

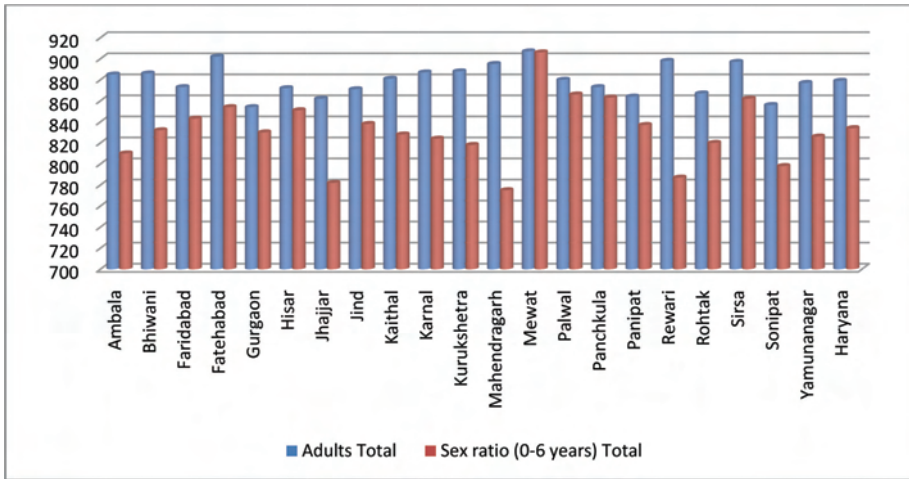


Figure 2: Sex ratio in Haryana Districts in 2011

Source: Census info India 2011, based on Table 3.

overall sex ratio in the district. If we look at Pratapgarh district, it has overall sex ratio 983 above average state level which is among better performing districts in the State. But comparatively 0–6 year age group sex ratio is still lower 833 than overall sex ratio in the district and Dhaultpur district is having lowest overall sex ratio 846 in the state. Sex ratio of 0–6 year age group 857 is relatively higher than overall sex ratio. Similarly, Jaisalmer has lower sex ratio of adults 852. But, 0–6 year age group sex ratio is much higher i.e., 874 than adults. District Barmer is also having the same pattern. While district Jhunjhunu has lower 0–6 sex ratio which is 837 and overall sex ratio is much higher than state i.e., 950 (see Table 5 and Figure 4). These contradictions require plausible explanation by researchers.

### Uttar Pradesh

Overall and 0–6 year age sex ratios of Uttar Pradesh are 912 and 902 females per 1000 males. But Gautam Buddha Nagar district has lowest overall sex ratio 851 per 1000 males in the State and child sex ratio for the same is 843 females out of 1000 males which are slightly higher than district Baghpat having lowest 0–6 year age group sex ratio 841 per 1000 males. There are some districts, which have lower overall sex ratio. But have higher 0–6 year age group sex ratio than overall sex ratio. Though these are below child sex ratio of state level, namely Auriaya has 864 overall and 896 0–6 year age groups. Badaun has 871 overall and 899 0–6 year age groups. Etah has 833 overall and 879 0–6 year age groups. Etawah has 870 overall and 875 0–6 year age groups. Farukhawad has 874 overall and 889 for 0–6 year. Whereas, districts having higher overall sex ratio have lower

**Table 4: Sex Ratio in J&K districts in 2011**

|             | <b>Total<br/>Sex ratio</b> | <b>Total<br/>Sex ratio (0–6 year)</b> |
|-------------|----------------------------|---------------------------------------|
| J&K         | 889                        | 862                                   |
| Anantnag    | 927                        | 841                                   |
| Badgam      | 894                        | 832                                   |
| Bandipore   | 889                        | 892                                   |
| Baramula    | 885                        | 863                                   |
| Doda        | 919                        | 933                                   |
| Ganderbal   | 874                        | 863                                   |
| Jammu       | 880                        | 795                                   |
| Kargil      | 810                        | 977                                   |
| Kathua      | 890                        | 831                                   |
| Kishtwar    | 920                        | 924                                   |
| Kulgam      | 951                        | 885                                   |
| Kupwara     | 835                        | 879                                   |
| Leh(Ladakh) | 690                        | 946                                   |
| Pulwama     | 912                        | 829                                   |
| Punch       | 893                        | 893                                   |
| Rajouri     | 860                        | 865                                   |
| Ramban      | 902                        | 925                                   |
| Reasi       | 890                        | 919                                   |
| Samba       | 886                        | 779                                   |
| Shupiyon    | 951                        | 878                                   |
| Srinagar    | 900                        | 865                                   |
| Udhampur    | 870                        | 886                                   |

Source: Census info India 2011, based on Table 4.

0–6 year age group sex ratio namely Ambedkarnagar, Azamgarh, Deoria, Jaunpur Pratapgarh, etc. Reversal change in the pattern of sex ratio among most of the districts is clearly visible in Table 6 and Figure 5 and we need to find out reasons and then explore measures to overcome them.

### **Nagaland**

According to census 2011 Nagaland has overall sex ratio of 931 females per 1000 males. Sex ratio of 0–6 year age group is 943 females per 1000 males. But five districts have lower 0–6 year age group sex ratio namely Longleng 885 which is lowest, Wokha 912, Phek 913, and Tuensang 933 and Peren 935 females per 1000 males. Table 7 and Figure 6 highlight the trend of sex ratio of all districts.

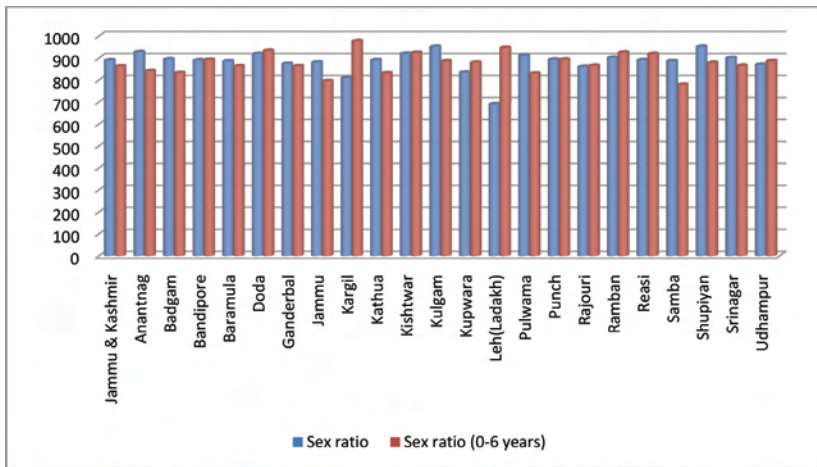


Figure 3: Sex ratio in J&K districts in 2011

Source: Census info India 2011, based on Table 4.

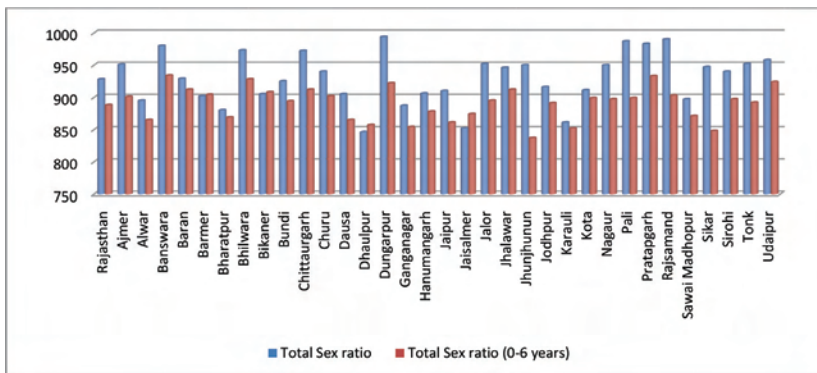


Figure 4: Sex ratio in Rajasthan districts in 2011

Source: Census info India 2011, based on Table 5

### Tamil Nadu

According to census 2011 overall and 0–6 year age group sex ratios of Tamil Nadu are 996 and 943 females per 1000 males. Every district of the state has lower 0–6 year age group sex ratio than overall sex ratio among which Cuddalore district has lowest, i.e., 896 and Ariyalur district has 2nd lowest i.e., 897 0–6 year age group sex ratio. Whereas overall sex ratio of many districts is higher than overall sex ratio of state Table 8 reflects these variations and further it is better captured in Figure 7. Sex ratio of 0–6 year age group in the state is indicative of bias existing against women and female children. The trend suggests that the districts which performed well earlier are witnessing declining trend in sex ratio.

**Table 5: Sex ratio in Rajasthan districts in 2011**

| <b>Area Name</b> | <b>Total<br/>Sex ratio</b> | <b>Total<br/>Sex ratio (0–6 year)</b> |
|------------------|----------------------------|---------------------------------------|
| Rajasthan        | 928                        | 888                                   |
| Ajmer            | 951                        | 901                                   |
| Alwar            | 895                        | 865                                   |
| Banswara         | 980                        | 934                                   |
| Baran            | 929                        | 912                                   |
| Barmer           | 902                        | 904                                   |
| Bharatpur        | 880                        | 869                                   |
| Bhilwara         | 973                        | 928                                   |
| Bikaner          | 905                        | 908                                   |
| Bundi            | 925                        | 894                                   |
| Chittaurgarh     | 972                        | 912                                   |
| Churu            | 940                        | 902                                   |
| Dausa            | 905                        | 865                                   |
| Dhaulpur         | 846                        | 857                                   |
| Dungarpur        | 994                        | 922                                   |
| Ganganagar       | 887                        | 854                                   |
| Hanumangarh      | 906                        | 878                                   |
| Jaipur           | 910                        | 861                                   |
| Jaisalmer        | 852                        | 874                                   |
| Jalor            | 952                        | 895                                   |
| Jhalawar         | 946                        | 912                                   |
| Jhunjhunun       | 950                        | 837                                   |
| Jodhpur          | 916                        | 891                                   |
| Karauli          | 861                        | 852                                   |
| Kota             | 911                        | 899                                   |
| Nagaur           | 950                        | 897                                   |
| Pali             | 987                        | 899                                   |
| Pratapgarh       | 983                        | 933                                   |
| Rajsamand        | 990                        | 903                                   |
| Sawai Madhopur   | 897                        | 871                                   |
| Sikar            | 947                        | 848                                   |
| Sirohi           | 940                        | 897                                   |
| Tonk             | 952                        | 892                                   |
| Udaipur          | 958                        | 924                                   |

Source: Census info India 2011, based on Table 5.

Table 6: Sex ratio in Uttar Pradesh districts, 2011

| Area name              | Total<br>Sex ratio | Total<br>Sex ratio<br>(0–6 year) | Area name                       | Total<br>Sex ratio | Total<br>Sex ratio<br>(0–6 year) |
|------------------------|--------------------|----------------------------------|---------------------------------|--------------------|----------------------------------|
| Agra                   | 868                | 861                              | Jyotiba Phule Nagar             | 910                | 903                              |
| Aligarh                | 882                | 877                              | Kannauj                         | 879                | 898                              |
| Allahabad              | 901                | 893                              | Kanpur Dehat                    | 865                | 897                              |
| Ambedkar Nagar         | 978                | 932                              | Kanpur Nagar                    | 862                | 873                              |
| Auraiya                | 864                | 896                              | Kanshi Ram Nagar                | 880                | 893                              |
| Azamgarh               | 1,019              | 919                              | Kaushambi                       | 908                | 923                              |
| Baghpat                | 861                | 841                              | Kheri                           | 894                | 921                              |
| Bahraich               | 892                | 935                              | Kushinagar                      | 961                | 929                              |
| Ballia                 | 937                | 900                              | Lalitpur                        | 906                | 916                              |
| Balrampur              | 928                | 950                              | Lucknow                         | 917                | 915                              |
| Banda                  | 863                | 902                              | Mahamaya Nagar                  | 871                | 865                              |
| Barabanki              | 910                | 932                              | Mahoba                          | 878                | 892                              |
| Bareilly               | 887                | 903                              | Mahrajganj                      | 943                | 931                              |
| Basti                  | 963                | 929                              | Mainpuri                        | 881                | 884                              |
| Bijnor                 | 917                | 883                              | Mathura                         | 863                | 870                              |
| Budaun                 | 871                | 899                              | Mau                             | 979                | 926                              |
| Bulandshahar           | 896                | 854                              | Meerut                          | 886                | 852                              |
| Chandauli              | 918                | 911                              | Mirzapur                        | 903                | 902                              |
| Chitrakoot             | 879                | 907                              | Moradabad                       | 906                | 916                              |
| Deoria                 | 1,017              | 925                              | Muzaffarnagar                   | 889                | 863                              |
| Etah                   | 873                | 879                              | Pilibhit                        | 895                | 912                              |
| Etawah                 | 870                | 875                              | Pratapgarh                      | 998                | 917                              |
| Faizabad               | 962                | 931                              | Rae Bareli                      | 943                | 926                              |
| Farrukhabad            | 874                | 889                              | Rampur                          | 909                | 924                              |
| Fatehpur               | 901                | 907                              | Saharanpur                      | 890                | 887                              |
| Firozabad              | 875                | 881                              | Sant Kabir Nagar                | 972                | 942                              |
| Gautam Buddha<br>Nagar | 851                | 843                              | Sant Ravidas Nagar<br>(Bhadohi) | 955                | 902                              |
| Ghaziabad              | 881                | 850                              | Shahjahanpur                    | 872                | 903                              |
| Ghazipur               | 952                | 908                              | Shrawasti                       | 881                | 928                              |
| Gonda                  | 921                | 926                              | Siddharthnagar                  | 976                | 935                              |
| Gorakhpur              | 950                | 909                              | Sitapur                         | 888                | 930                              |
| Hamirpur               | 861                | 886                              | Sonbhadra                       | 918                | 925                              |
| Hardoi                 | 868                | 899                              | Sultanpur                       | 983                | 922                              |
| Jalaun                 | 865                | 881                              | Unnao                           | 907                | 920                              |
| Jaunpur                | 1,024              | 918                              | Varanasi                        | 913                | 885                              |
| Jhansi                 | 890                | 866                              | Uttar Pradesh                   | 912                | 902                              |

Source: Census info India 2011, based on Table 6.

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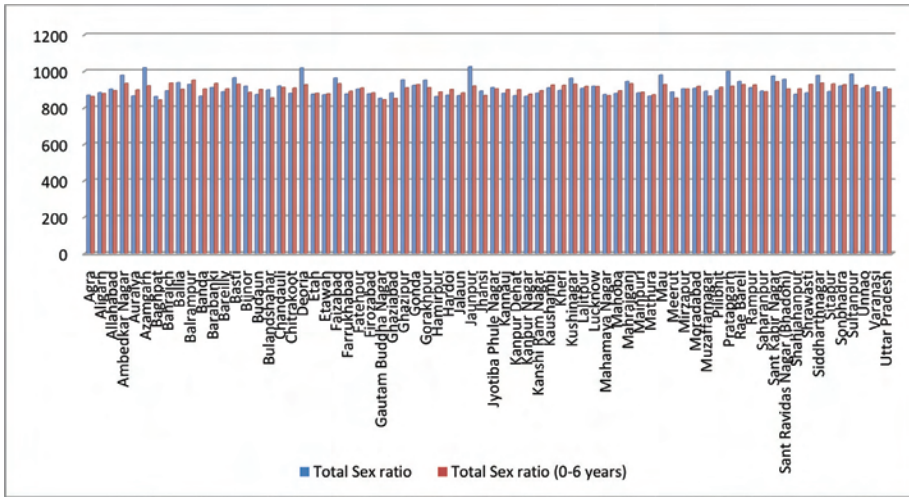


Figure 5: Sex ratio in Uttar Pradesh districts, 2011

Source: Census info India 2011, based on Table 6.

**Kerala**

In Kerala overall and 0–6 year age group sex ratios are 1084 and 964, respectively (census 2011). In all districts of Kerala, females are outnumbering males in overall sex ratio but 0–6 year age group sex ratio is lower in all districts and lowest child sex ratio districts are Thrissur 950 and Alappuzha 951 females per 1000 males.

Table 7: Sex ratio in Nagaland districts in 2011

| Area Name  | Total Sex ratio | Total Sex ratio (0–6 year) |
|------------|-----------------|----------------------------|
| Nagaland   | 931             | 943                        |
| Dimapur    | 919             | 966                        |
| Kiphire    | 956             | 948                        |
| Kohima     | 928             | 985                        |
| Longleng   | 905             | 885                        |
| Mokokchung | 925             | 949                        |
| Mon        | 899             | 912                        |
| Peren      | 915             | 935                        |
| Phek       | 951             | 913                        |
| Tuensang   | 929             | 933                        |
| Wokha      | 968             | 956                        |
| Zunheboto  | 976             | 948                        |

Source: Census info India 2011, based on Table 7.

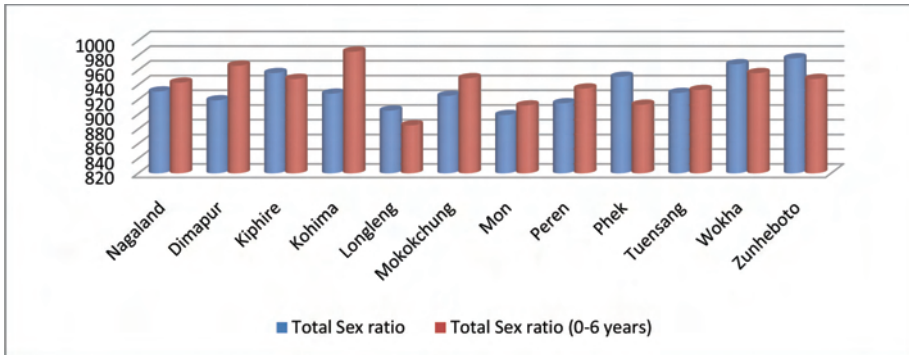


Figure 6: Sex ratio in Nagaland districts in 2011

Source: Census info India 2011, based on Table 7.

Therefore, sex ratio of 0–6 year age group suggests that discriminatory treatment for females in the State and status of women is declining from those of earlier decades. There is a need to understand and further explore causes of the problem (see Table 9 and Figure 8). Although sex ratio of adults remains affected by demographic factor of migration but child sex ratio is always a true picture of the reality per se.

## ii. Access to New Reproductive Technologies and Acceleration of Declining Sex Ratio

Excess female mortality resulting from discrimination and neglecting them is widely reflected in the works of a number of social scientists. But child sex ratio is very likely resulted from the rapid spread of ultra-sonography as it is very simple to conduct test. It is easily available all over the country. The popularity of sex determination techniques has increased in the backdrop of family planning. Couples from almost all sections of population now have access to in determining the desired sex composition of their children. If the first-born child is girl or second is also girl then couples do not delay in resorting to sex determination of foetus and terminate if it is a girl. They justify it arguing that for limiting the family to two children at least one child must be the son if not two and also attach reasons related to economic cost involved in raising more than two children at this time of inflation. Which reflects that patriarchal social system is all-pervasive in India. Other techniques of sex determination such as amniocentesis, Chorionic villi biopsy and sex pre-selection i.e., the Ericsson method are also used in want of male child but these techniques are very costly and can only be used by upper income group so the use of these techniques is not as significant as of ultra-sonography. The emergence of this phenomenon needs to be understood in a wider

**Table 8: Sex ratio in Tamil Nadu districts in 2011**

| <b>Area Name</b> | <b>Total<br/>Sex ratio</b> | <b>Total<br/>Sex ratio (0–6 year)</b> |
|------------------|----------------------------|---------------------------------------|
| Tamil Nadu       | 996                        | 943                                   |
| Ariyalur         | 1015                       | 897                                   |
| Chennai          | 989                        | 950                                   |
| Coimbatore       | 1000                       | 956                                   |
| Cuddalore        | 987                        | 896                                   |
| Dharmapuri       | 946                        | 913                                   |
| Dindigul         | 998                        | 934                                   |
| Erode            | 993                        | 953                                   |
| Kancheepuram     | 986                        | 959                                   |
| Kanniyakumari    | 1019                       | 964                                   |
| Karur            | 1015                       | 939                                   |
| Krishnagiri      | 958                        | 926                                   |
| Madurai          | 990                        | 932                                   |
| Nagapattinam     | 1025                       | 959                                   |
| Namakkal         | 986                        | 914                                   |
| Perambalur       | 1003                       | 913                                   |
| Pudukkottai      | 1015                       | 960                                   |
| Ramanathapuram   | 983                        | 961                                   |
| Salem            | 954                        | 916                                   |
| Sivaganga        | 1003                       | 960                                   |
| Thanjavur        | 1035                       | 957                                   |
| The Nilgiris     | 1042                       | 985                                   |
| Theni            | 991                        | 934                                   |
| Thiruvallur      | 987                        | 946                                   |
| Thiruvarur       | 1017                       | 958                                   |
| Thoothukkudi     | 1023                       | 963                                   |
| Tiruchirappalli  | 1013                       | 947                                   |
| Tirunelveli      | 1023                       | 960                                   |
| Tiruppur         | 989                        | 952                                   |
| Tiruvannamalai   | 994                        | 930                                   |
| Vellore          | 1007                       | 944                                   |
| Viluppuram       | 987                        | 941                                   |
| Virudhunagar     | 1007                       | 955                                   |

Source: Census info India 2011, based on Table 8.

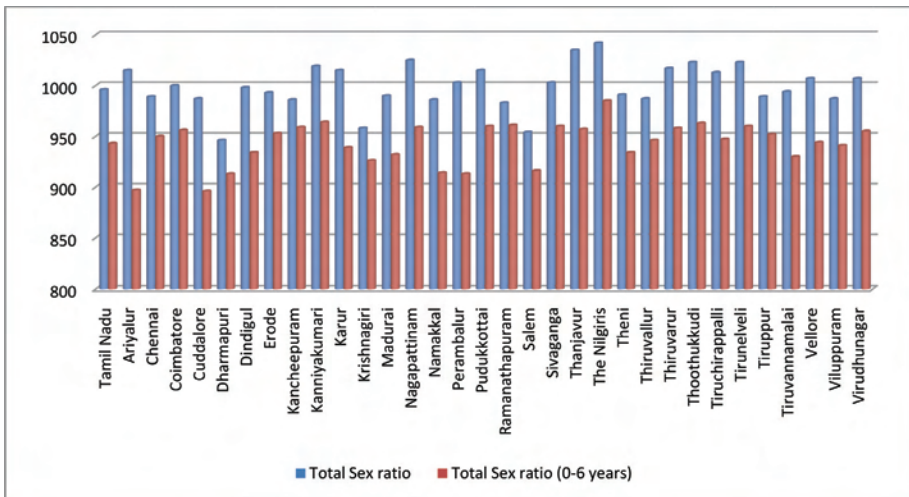


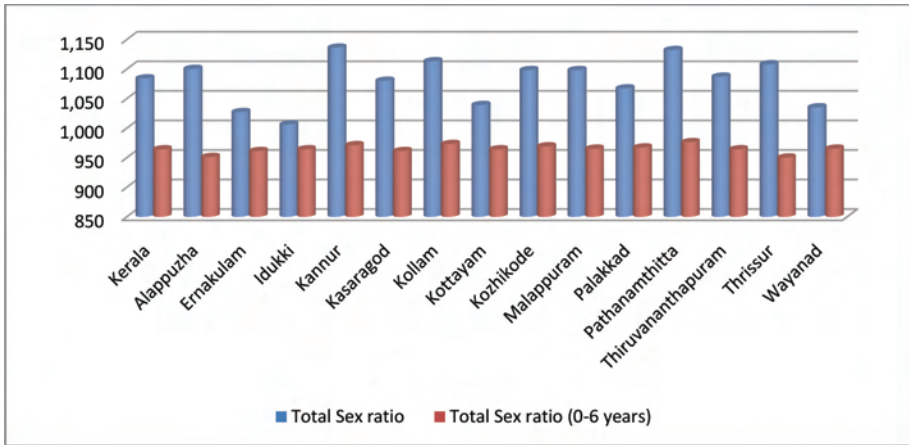
Figure 7: Sex ratio in Tamil Nadu districts in 2011

Source: Census info India 2011, based on Table 8.

Table 9: Sex ratio in Kerala districts in 2011

| Area Name          | Total Sex ratio | Total Sex ratio (0–6 year) |
|--------------------|-----------------|----------------------------|
| Kerala             | 1084            | 964                        |
| Alappuzha          | 1100            | 951                        |
| Ernakulam          | 1027            | 961                        |
| Idukki             | 1006            | 964                        |
| Kannur             | 1136            | 971                        |
| Kasaragod          | 1080            | 961                        |
| Kollam             | 1113            | 973                        |
| Kottayam           | 1039            | 964                        |
| Kozhikode          | 1098            | 969                        |
| Malappuram         | 1098            | 965                        |
| Palakkad           | 1067            | 967                        |
| Pathanamthitta     | 1132            | 976                        |
| Thiruvananthapuram | 1087            | 964                        |
| Thrissur           | 1108            | 950                        |
| Wayanad            | 1035            | 965                        |

Source: Census info India 2011, based on Table 9.



**Figure 8: Sex ratio in Kerala districts in 2011**

Source: Census info India 2011, based on Table 9.

and inclusive framework. India is first to legalise induced abortions under medical termination of pregnancy, MTP Act 1971, including specific reasons for which an abortion is legal to conduct as if pregnancy carries the risk of grave physical injury to a woman, dangerous for her mental health, if pregnancy is a result from a contraceptive failure, from rape, or is likelihood of birth of a child with physical and mental abnormalities. But, indirectly it is seen in some parts of India *viz.* Haryana and Rajasthan that termination of pregnancy was not resorted for reasons specified in MTP rather because of strong son preference, a requirement of patriarchal society, giving way to female selective abortions. On pressure from NGOs and women groups for prohibiting the practice of prenatal diagnosis for knowing the sex of the foetus government of India passed (Pre-Natal Diagnostic Techniques Act 1994) which further get amended in 2002 and in 2003 and renamed as Pre-Conception and Pre-Natal Diagnostic Techniques Act (PCPNDT) 2003 that deals with illegal sex determination. Under this act individual practitioner, clinics or centres cannot conduct tests to determine the sex of the foetus or inform the couple about it. However, in spite of monitoring system for this at state and central level census 2011 reveals that the Act has been violated. What has happened after passing of this act is that open advertisements discontinued. Practice of conducting test and subsequent elimination of the foetus if it is a girl has continued. However, clinics and agents for this have gone underground as evident from the continued decline in 0–6 year child sex ratio (Visaria, 2007). It has been argued by Tulsi Patel that during her field studies conducted in different parts of country it can be sensed there is networking of techno-doctors, health workers and ANMs. ANMs get around 200 or 300 per case for bringing the aspirant to diagnostic

centre for determination. This whole networking is involved in evil motives of money making and capitalism violating the law and human rights of female (Patel, 2007). Dagar points out that economically developed states having advance infrastructure facilities are prone to provide easy access to scientific technologies of sex determination reflect the collusion of development and technology as reflected through depleting number of girl child at birth. So access to technology and development has been unable to transform gender position by changing the gender power equilibrium in society rather intensified the problem. Gender specific policies are working in achieving and promoting the targets specified still unable to check female foeticide (Dagar, 2007).

The extent of use of technology for sex determination is so high that Visaria found: 'In a discussion with women in Haryana it was clearly indicated that majority of women accepted the outcome of first pregnancy whether it was a boy or a girl. However, if first born child is daughter, then the upper caste women were overtly or covertly pressurised to ensure that the second or the third child was a boy and to take appropriate measures' (Visaria, 2007).

Institutionalisation of discrimination is impregnated with a bias, a differentiation and a hierarchy and power hierarchies are expected to be transformed by a change in mindset (Dagar, 2007:102).

### **iii. Declining Sex Ratio as an Anti-Thesis of Women Empowerment**

The Ministry for Women and Child Development was established as a department of the Ministry of Human Resource Development in the year 1985 to drive the holistic development of women and children in the country. The National Commission for Women is a Department within the Ministry of Women and Child Development. It was set up exclusively to help women via the Constitution by reviewing Legal and Constitutional safeguards for women, recommending remedial legislative measures, by facilitating quick redressing of the grievances and by advising the Government of India on all policy matters affecting women. The website allows for online submission of complaints and fast redressing to complaints exclusively for women. Additionally it is also a good resource of information for women and the Commission is committed to help women in need (Government of India, 1992). Female infanticide, foeticide, stereotyping and violence against women are manifestations of gender disparity placing women in adverse situation, which need to be countered by empowerment and ensuring equality to women with men. At international level convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) advocates for the rights of women promoting equality of treatment and opportunity. India ratified the convention, made legislations and promoted equality for protecting the rights of women such as equal access to, equal opportunity in political and

public life, which include right to vote, to stand for election, education, health and employment (CEDAW, 1979). Further, National Policy for Empowerment of Women (2001) identified its certain goals for ensuring equality and basic need strategy for human development through focusing on health, equity in distribution of resources and wealth empowering women. And it identified skewed sex ratio as an implication of gender power hierarchy rendering women in subordination.

‘Gender disparity manifests itself in various forms, the most obvious being the trend of continuously declining female ratio in the population in the last few decades. The underlying causes of gender inequality are related to social and economic structure, which is based on informal and formal norms, and practices’ (Government of India, 2001).

And under UNDP there are 8 MDGs the third MDG is centred towards promoting gender equality and empowering women: Eliminate gender disparity in primary and secondary education, preferably by 2005 and in all levels of education by no later than 2015 (Millennium Development Goals 2015). This goal is fulfilled in Indian context still women lag behind men (UNDP in India). Women have their representation in politics, academics, service sector, etc. But mere representation of few does not empower women as a whole. Because, patriarchal ideologies and mindset are all pervasive. In spite of changes in economic and political relations, empowerment is not an empirical reality. With the advancement taking place forms of gender abuses have changed in changing social context. Socio-cultural factors hinder the phenomenon of women empowerment by affecting the status of woman and female infant, their exclusion and discrimination, which contribute in raising mortality among the infants (Haq 2013). So, the empowerment and entitlement are not going to tackle the problem of deficit of girl child. Because it is the empowered and resourceful class which practice foeticide and discrimination against woman as compared to less educated and the poor. The need is to address gender hierarchies enforcing subordination and super-ordination. The unfavorable status of woman is needed to be confronted in its entirety rather than addressing the practice and expecting it to change the value accorded to the male child (Dagar, 2007). As literacy and education are parts of empowerment, which have contributed in reducing child mortality but the depletion in number of female child continues. Murthi *et al.* (1995) in their analytical study found: ‘Female literacy has a negative and statistically significant effect on child mortality. Female literacy has a negative effect on both male and female child mortality, but the effect on female child mortality is larger. This is why female literacy also has a negative (and statistically significant) effect on FD, the extent of female disadvantage in child survival’.

Cultural ethos laden with patriarchal ideologies in India are much more powerful and are as dominant as to control the mind of people forcing them to act in

adherence with the demand of patriarchal society and this is the patriarchal social system which is negating empowerment of women in India which needs to be incorporated along with the socio-economic, legal and educational measures for empowering women in Indian context (Matin, 1996).

## CONCLUSION

Findings from data suggest that national and state level sex ratio do not make much sense as there are further variations at district level within states for which district and sub-district level studies are required to know the extent of variation among districts which will further be helpful in identifying much affected districts so that accordingly measures can be taken to reduce future risks for the country resulting from declining 0–6 year age group sex ratio. Technological advancement i.e., new reproductive technologies are helping in intensification of problem of sex ratio further endangering the status of women despite provisions and legislations for empowerment of women in India. When we see India as a whole, it seems development is taking place and there is improvement in status of women. But seeing at lower levels this is the illusion of improvement and women still have secondary status in family, community and society.

## REFERENCES

- CEDAW, 1979. The Convention on the Elimination of All Forms of Discrimination Against Women. Census info India 2011. Available at: [www.un.org/womenwatch/daw/cedaw](http://www.un.org/womenwatch/daw/cedaw).
- Dagar R, 2007. Rethinking female foeticide: perspective and issues. In *Sex-selective Abortion in India: Gender Society and New Reproductive Technologies*, ed. Patel T. pp. 91–131. New Delhi: Sage Publications.
- Government of India, 1992. National Commission for Women: The Mandate of Commission. Available at: [www.ncw.nic.in](http://www.ncw.nic.in).
- Government of India, 2001. National Policy for the Empowerment of Women. Available at: [www.wcd.nic.in/empowerment.htm](http://www.wcd.nic.in/empowerment.htm).
- Haq E, 2013. *Cultural Basis of Infant Mortality in India*. New Delhi: Icon Publication.
- Matin A, 1996. In quest of indigenous approach to women studies in India. In *Art and Culture: Endeavours in Interpretation*, eds. Qaisar AJ and Verma SP. pp. 193–202. New Delhi: Abhinav Publications.
- Millennium Development Goals, 2015. India Country Report, Ministry of Statistics and Implementation, Government of India.
- Miller BD, 1997. *The Endangered Sex: Neglect of Female Children in Rural North India*. Delhi: Oxford University Press.
- Murthi M, Guio AC, Dreze J, 1995. Mortality, fertility and gender bias in India: a district level analysis. DEP No. 61 Development Economics Research Programme Suntory-Toyota International Centre for Economics and Related Disciplines, London School of Economics. Houghton Street, London.

- Patel T, 2007. *Sex-selective Abortions in India: Gender, Society and New Reproductive Technologies*. New Delhi: Sage Publications.
- Patel V, 2011. Gender equality and human rights in India. *Social Modernity*, Vol. 1, No. 2, ISSN 2229–6050.
- Rukmini S, 2015. Sex ratio falls to 898 girls per 1,000 boys. *The Hindu*. Available at: <http://www.thehindu.com..>
- UNDP, 2014. Human development report calls on countries to take steps now to protect hard won gains. Available at: <http://hdr.undp.org/en/2014-report>.
- Visaria L, 2007. Deficit of girls in India: can it be attributed to female selective abortion? In, *Sex-Selective Abortion in India: Gender Society and New Reproductive Technologies*, ed. Patel T. pp. 61–79. New Delhi: Sage Publications.
- Vishwanath LS, 2007. Female infanticide, property and colonial state. In *Sex-Selective Abortion in India: Gender Society and New Reproductive Technologies*, ed. Patel T, pp. 269–285. New Delhi: Sage Publications.
- Volutatur, cusandi odis quuntinctat quae. Ut maximposae invenda ecusani tatorit magnihic te sam, volorestia simpore rruptatas aut eum et a quo ipsae. Aximus esequis ma is est ventem des et faceste ctisquo culparum renihit duciisq uatemposte parum audit mo volum evendunt volut dolo odigeni hilitaqui nihil ipsam hilis poreperiat que et fugia dit est, imus et eum simaionsed mi, consend esendic tet quatum