

# Declining Sex Ratio And Its Impact On Socio-Economic Condition Of Nashik District, Maharashtra

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## Abstract

Comparing the size of the sex category with a ratio is a common way to discuss sex ratios. The analysis of population sex ratios aids in determining the unique needs of men and women. Understanding the differences between rural and urban areas in a given area's sex ratio aids in identifying the unique needs of the local populace. Population sex ratio research is crucial for planning labour forces, regional urban areas, the economy, and development. In India, the overall sex ratio (OSR), which was 947 in 2001 and grew to 948 in the most recent census, has been steadily rising. It demonstrates that throughout the past ten years, the number of children (0–6 years) has grown at a pace of 2%. Out of the fifteen tehsils in the Nashik district at this time. The child sex ratio has decreased in eight tehsils. Additionally, the spatial distribution of CSR differs throughout tehsils. decline in the child sex ratio demonstrates the societal foeticide of sons. A significant contribution to the decline in the child-sex ratio is made by health facilities that use PNDT techniques for sex determination.

**Key Words:** Population, Decadal Growth, Sex ratio, Child-Sex Ratio, Variation.

## Introduction

The term "sex ratio" refers to the proportion of females to males, measured in 1000. Finding the population of women and the ratio of women to males can be done with great benefit by using the sex ratio. The world's sex ratios are computed in the majority of developed nations by dividing the male population by the female population, however, in India, the ratio is determined by multiplying the female population by the male population and dividing the result by 1000. When men outnumber women in the sex ratio, it is referred to as the "masculinity ratio." However, when women are divided by men in the ratio—as is the case in India—it is referred to as the "femininity ratio." The sex ratio can be calculated for the entire population as well as for age groups or classes within that population at various age levels. Sex ratios are used to express the numerical depiction of a population's sex makeup. Different countries express sex composition in different ways. While it is expressed as a percentage in some nations, such as the USA, New Zealand, and Russia, it is expressed as the number of females behind every thousand males in India.

The global sex ratio was 986 girls for every 1,000 males in 2001, and by the time of the 2011 census, it had dropped to 984. The Russian Federation has the highest female to male ratio in the world, with 1167 females for every 1,000 males, while China has the lowest ratio, with 926 females for every 1,000 males. India's overall sex ratio (OSR) was 934 females per 1,000 males in 1981, 927 females per 1,000 males in 1991, and 940 females per 1,000 males in 2011, a little increase.

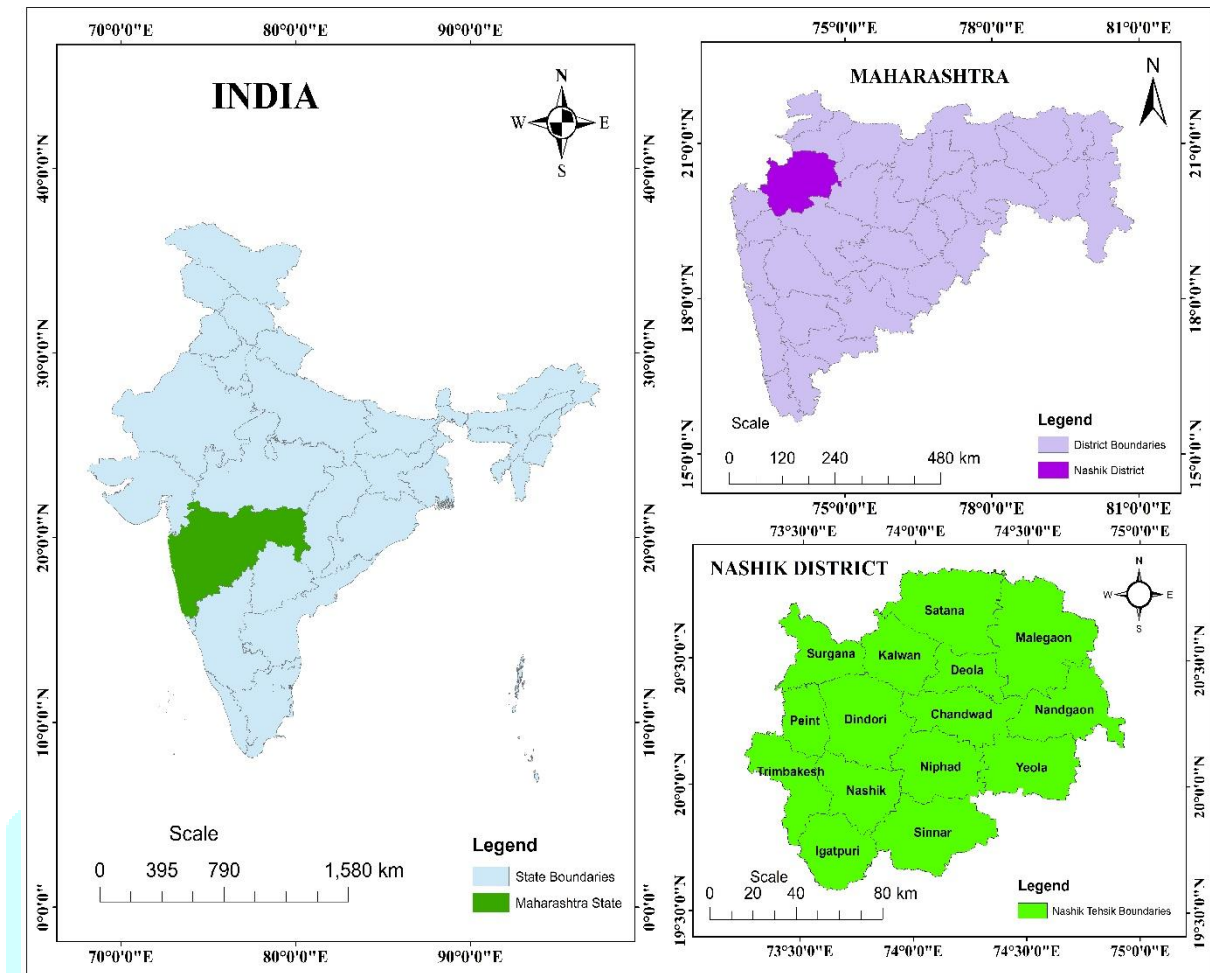
In India, the ratio of girls to men has been roughly 930 to 1000 for the past 50 years. The harsh treatment given to the girl child at the moment of delivery is thought to be the main reason behind India's declining female birth rate. During the years of India's independence, the country's gender ratio was about average; but, after that, it began to gradually decline. Kerala has the highest number of 1084 females to every 1000 males, while Haryana has the lowest rate of sex ratio in India, with 877 girls for every 1,000 males. (Paul, K., & Saha, S. 2015).

With 937 females for every 1,000 males, Maharashtra state is ranked thirteenth overall in terms of sex ratio. The state's sex ratio decreased to 934 females in 1991 and then to 922 females in 2001. The OSR indicates a minor increase of 3 females and a rich ratio of 925 females per 1,000 males. The Nashik district's sex ratio was 901 females per thousand males in the 2011 census, compared to 932 females per thousand males in the 2001 census. The goal of this study is to evaluate the pattern and trend of the municipalities in the Nashik district's dropping child-to-sex ratio.

### **Study Area:**

Nashik City, situated in the northwest part of Maharashtra, India, encompasses diverse physiography with hills and is located on the banks of the Godavari River. The total area is 341.90 Sq.Km. which is 2nd largest in Maharashtra after Mumbai. It is a district headquarters located on the banks of the Godavari River and is at 565 meters above mean sea level. The city experiences a tropical wet and dry climate, characterized by hot summers with temperatures ranging from 25°C to 42°C, monsoon rains from July to September, and cool winters with temperatures between 7°C and 25°C. The soil profile includes black soil (vertisols), red soil (alfisols), and alluvial soil along the riverbanks, contributing to agricultural diversity. According to the 2011 census, the population of Nashik city is 1579543 persons. Out of which 831171 (52.62 percent) are male and 748372 (47.38 percent) are female. reflecting the region's demographic composition.

### Location Map



**Fig. No. 1**

#### Objective

1. To study the tehsil-wise child sex ratio in the study region.
2. To assess the level and trend of child sex ratio in the study area.

#### Methodology

The data used in this study came from secondary sources. The Nashik district census handbook for the years 2001 to 2011 was used to calculate the data on the sex ratio and child sex ratio. The following formula is used to compute the overall sex ratio and child sex ratio (0–6 age) using census data from the previous 20 years, and the results are interpreted.

$$\text{Sex Ratio} = \frac{\text{Number of Female}}{\text{Number of Male}} \times 1000$$

$$\text{Child Sex Ratio} = \frac{\text{0-6 Child Female Population}}{\text{0-6 Child Male Population}} \times 1000$$

**Result and Discussion:****Table No. 1 Total Population & Child Population (0-6)**

<b>Tehsils</b>	<b>Total Population (2011)</b>	<b>Child Population (0-6)</b>	<b>Total Male (0-6)</b>	<b>Total Females (0-6)</b>	<b>Rural</b>	<b>Urban</b>
Surgana	1,75,816	28,140	14,357	13,783	27,305	835
Kalwan	2,08,362	30,940	16,132	14,808	30,940	00
Deola	1,44,522	19,376	10,429	8,947	19,376	00
Baglan	3,74,435	52,330	27,984	24,346	48,073	4257
Malegaon	9,55,594	1,47,238	76,994	70,244	52,977	94,261
Nandgaon	2,88,848	40,611	21,461	19,150	28,182	12429
Chandvad	2,35,849	31,121	16,823	14,298	28,035	3086
Dindori	3,15,709	43,567	22,866	20,701	43,567	00
Peint	1,19,838	18,272	9,189	9,083	18,272	00
Trimbakeshwar	1,68,423	26,691	13,534	13,157	25,353	1338
Nashik	17,55,491	2,10,362	1,12,595	97,767	25,009	1,85,353
Igatpuri	2,53,513	34,452	17,923	16,529	27,878	6,574
Sinnar	3,46,390	45,442	24,388	21,054	36,877	8565
Niphad	4,93,251	62,999	33,996	29,003	53,827	9,172
Yevla	2,71,146	36,394	19,379	17,015	30,389	6005

**Source: Computed by Researcher**

Table No. 1 makes it clear that, based on residency and sex-wise child population statistics, there are 8.27 million children in the Nashik district between the ages of 0 and 6 as per the 2011 census. Of them, 4.38 million are male and 3.89 million are female. Following Nashik, which had the greatest recorded population of both men and women, were Malegaon, Niphad, Baglan, Sinnar, Dindori, and Nandgaon. Peint tehsil recorded the lowest number of male and total child population. population of female children as well.

**Table No. 2 Growth Rate of Child Population (0-6)**

<b>Tehsils</b>	<b>Child Population (0-6) 2001</b>	<b>Child Population (0-6) 2011</b>	<b>Decadal Growth</b>	<b>Decadal Growth Rate</b>
Surgana	28,755	28,140	-615	-2.14
Kalwan	28,644	30,940	2,296	8.02
Deola	19,732	19,376	-356	-1.80
Baglan	46,425	52,330	5,905	12.72
Malegaon	1,34,089	1,47,238	13,149	9.81
Nandgaon	36,162	40,611	4,449	12.30
Chandvad	33,425	31,121	-2,304	-6.89
Dindori	43,812	43,567	-245	-0.56
Peint	16,676	18,272	1,596	9.57
Trimbakeshwar	26,321	26,691	370	1.41
Nashik	1,84,978	2,10,362	25,384	13.72
Igatpuri	39,484	34,452	-5,032	-12.74
Sinnar	47,361	45,442	-1,919	-4.05
Niphad	64,954	62,999	-1,955	-3.01
Yevla	38,580	36,394	-2,186	-5.67

**Source: Computed by Researcher**

Table No. 02 makes it clear that the kid population's decadal growth rate from 2001 to 2011 was 2.05 percent. Of the seventeen tehsils in the Nashik district, Nashik District recorded the highest growth rate (13.72%). Baglan (12.72%), Nandgaon (12.30%), Malegaon (9.81%), and Peint (9.57%) followed. Kalwan ranks sixth with an 8.02 percent decadal growth in the child population between 2001 and 2011. With 1.41 percent of children born during this time, Trimbakeshwar Tehsil marks the lowest decadal growth rate in kid population.

### **Child Sex Ratio**

The male-to-female ratio of children can be used to predict the future state of the sex ratio. Pre-sex determination testing is the reason behind the global decline in the female birth rate. Data on the gender distribution of children were first collected by the Indian Census in 1991. There were 945 female children for every 1,000 male children in the 1991 census. This number decreased to 927 in the 2001 census, and 914 female children were counted in 2011, indicating a drop in India's child sex ratio.

**Table No. 3 Variation in Child Sex Ratio (0-6)**

Tehsils	Child Sex Ration (2001)	Child Sex Ration (2011)	Variation
Surgana	975	960	-15
Kalwan	949	918	-31
Deola	897	858	-39
Baglan	912	870	-42
Malegaon	941	912	-28
Nandgaon	908	892	-16
Chandvad	921	850	-71
Dindori	950	905	-45
Peint	986	988	2
Trimbakeshwar	978	972	-6
Nashik	888	868	-19
Igatpuri	960	922	-38
Sinnar	911	863	-47
Niphad	888	853	-34
Yevla	913	878	-35

**Source: Computed by Researcher**

### Variation in Child Sex Ratio

The number of girls per thousand boys in the 0–6 age period is known as the child-sex ratio. If we take a quick look at table No. 3, the column displaying the variation in the child-to-sex ratio in the Nashik District indicates a downward trend. The child-to-sex ratio variation figures are puzzling. In this regard, the child-to-sex ratio has increased in just one tehsil out of the fifteen in the Nashik district. This tehsil is Peint (+2). The other fourteen tehsils report a declining trend in the child sex ratio; Chandvad (-71) leads in this regard, followed by Sinnar (-47) and Dindori (-45). The child sex ratio is trending downward in Surgana (-15), Nandgaon (-16), and Trimbak (-2).

The most unsettling findings from the 2011 census by far are the increasing gender disparities in the youngest age range (0–6), which point to female foeticide. Even though the number of girls is still down, the 2011 census indicates that the drop has slowed down somewhat; it is currently down by two points. Moreover, Chandvad, Dindori, Sinnar, and Baglan are the tehsils in the Nashik district that were most severely damaged in 2011. The child sex ratio declines by more than 40 points in these districts. based on the 2011 Census. Out of the fifteen tehsils in Nashik, the average child sex ratio is 908; only five districts have ratios higher than this: Peint (988), Trimabakeshwar (972), Surgana (960), Igatpuri (922), and Kalwan (918). Ten tehsils in the Nashik District have child sex ratios that are lower than the state average (908). With 850 females for every 1,000 males in the age range of 0 to 6, Chandvad is the lowest tehsil in this class category. Other tehsils are Niphad (853), Deola (858), and Sinnar (863).



## Socio-Economic Impact of Child Sex Ration in Nashik District

Significant implications arise in terms of social, demographic, and cultural aspects due to the sharp decline in the child-to-adult ratio in Nashik District. It is a broad indicator that reflects the fundamental realities of the social fabric. In addition, the child-to-sex ratio is a useful metric for studying how girls respond in social situations. The gender distribution of the child population today affects future important events such as the marriage rate, labor force involvement, age structure, births and deaths, migration, and replacement, among others. Detrimental socioeconomic effects and a large demographic imbalance are caused by the lack of girl children.

The socioeconomic status of the father of the family head is favorably connected with the family's current socioeconomic status. As their standing rises, family chiefs produce a higher offspring sex ratio. Low-status heads of families have more grandkids through their daughters, whereas high- or middle-status heads of families tend to have more grandchildren overall. Therefore, it seems that the prediction made by the hypothesis is accurate. The condition of men is far more closely associated with successful reproduction than that of women, and the level of maturity of their offspring is favourably correlated with the state of the parents during parental investment. Males with good looks tend to generate more beautiful females, whereas females with poor looks typically produce more ugly males.

### Conclusions

The current study unequivocally highlights the significant regional and temporal variance in the child population and CSR at the district level in the district of Nashik. Over time, certain districts saw positive growth in CSR, while others saw negative growth. The main reason for the latter is that preferences. Certain medical facilities, such as PNDT and sonography, are also contributing to the decline in CSR. It conveys a critical message about our demographics and culture. A substantial drop in the child-to-adult ratio in Nashik District has significant social, demographic, and cultural ramifications. It is a broad measure that captures the essential elements of the social structure. Furthermore, the child-to-sex ratio is a valuable indicator for researching how girls behave in social settings. Future significant events including the marriage rate, labor force participation, age structure, births and deaths, migration, and replacement are all impacted by the gender distribution of the kid population today. The dearth of girl children has negative socioeconomic implications and contributes to a significant demographic imbalance.

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