



Bridging the Gap: Sex Ratio in Haryana & Kerala Path to Balance

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Abstract— The present study examines the trends and challenges of the sex ratio in Haryana, a state that has recorded lowest figures in India. Using secondary data from the Census of India and Sample Registration System (2015–2023), the paper traces changes in Haryana's sex ratio and explores the social, cultural, and economic factors that continue to influence family preferences for sons over daughters. Although government interventions such as the PC-PNDT (Pre-Conception and Pre-Natal Diagnostic Techniques (Prohibition of Sex Selection Act, 1994), Beti Bachao Beti Padhao, Laadli, and Aapki Beti Hamari Beti have contributed to short-term improvements, particularly around 2019–2020, recent declines show that the problem remains deeply embedded in patriarchal norms, safety concerns, and economic pressures on the family. To provide a contrast, the paper refers to Kerala — the state with the highest sex ratio in the country — where female literacy, healthcare, and social development have consistently created a favourable balance as a role model. By examining Kerala's experience, the study identifies key lessons for Haryana, suggesting that sustainable progress can only come through consistent long-term investments in education, health, safety, and community-level attitude change, ensuring that daughters are valued equally within families and society.

Keywords— Sex Ratio, Census, Sample Registration System, Beti Bachao Beti Padhao, Laadli, Aapki Beti Hamari Beti, Female Literacy, Healthcare, Social Development.



I. INTRODUCTION

The sex ratio, as defined by the Census of India, is the number of females per 1,000 males in a given population (Census of India, 2011). This indicator serves as a sensitive barometer of the social, cultural, and demographic health of a region. It reflects patterns of mortality rate, fertility rate, migration, and gendered social practices. A balanced or female-favourable sex ratio indicates progress towards gender equity, while a consistently low sex ratio indicates gender biases and discrimination. Scholars and policymakers alike have considered sex ratio a critical marker of women's status in society (Hesketh & Xing, 2006). Globally, most populations exhibit slightly more male births than female births, yet in the absence of gender discrimination, women often outnumber men in adulthood due to higher male mortality. However, in many parts of

India, cultural preference for sons combined with the misuse of prenatal diagnostic technologies has historically distorted this natural balance. This phenomenon was particularly pronounced in northern states such as Haryana, Rajasthan some parts of Uttar Pradesh, where the sex ratio fell to alarmingly low levels in the 1990s and early 2000s (Jha et al., 2011). In contrast, states like Kerala have consistently shown female-majority sex ratios, underpinned by higher female literacy, stronger health systems, and relatively egalitarian social structures. The Census of India conducted every ten years provides the most authoritative data to track sex ratio trends. Throughout the last three decadal censuses (1991, 2001, 2011), Kerala maintained its position as a state with one of the highest sex ratios in India; however, Haryana continues to face serious gender imbalance, especially in the child sex ratio (0–6). This

difference makes these two states suitable for a comparative study because it indicates how social development, education, health care, and government policy can impact demographic outcomes. This study assesses sex-ratio data from three censuses and integrates data from the National Family Health Survey (NFHS-5), highlighting the divide between Haryana and Kerala and highlighting policies, strategies, and interventions that will encourage a more balanced demographic structure in Haryana.

II. LITERATURE REVIEW

Jha et al. (2011) employ a comprehensive study and census data to evaluate the prevalence of sex-selective abortions in India. The study found that decreased fertility and easy access to prenatal diagnostic techniques led to poorer child sex ratios in certain areas of Haryana. Solid evidence was presented in the paper that the social preference for boys continued to be an important driver in the formation of skewed ratios.

Hesketh and Xing (2006) examined unusual sex ratios in human groups from a global perspective. They showed that minor male surpluses at birth are typical biologically, but serious imbalances occur when cultural and societal norms get in the way. Their research highlighted long-term repercussions, including possible societal instability and imbalances in the marriage market.

Bhat (2002) investigated fertility decline and its intersection with gender bias in India. He found that in northern states, the desire for smaller families intensified pressure to have at least one male child, leading to higher reliance on sex-selective abortion. His findings are particularly relevant to Haryana, where fertility reduction has coincided with persistently low sex ratios.

Guilmoto (2012) offered a comparative perspective by examining India alongside other Asian countries affected by skewed sex ratios. He argued that the interaction of patriarchal norms, declining fertility, and technological access drives persistent gender imbalances. His analysis suggested that policy measures alone are insufficient without broader socio-cultural change.

Agnihotri (2000) focused on regional patterns of sex ratio in India. By analysing district-level variations, he concluded that states with stronger social development indicators, such as Kerala, consistently maintained more balanced or even female-favourable sex ratios. In contrast, regions with entrenched patriarchy and weaker human development indicators showed declining ratios.

III. RESEARCH OBJECTIVES

- To compare the overall sex ratio of Haryana and Kerala using Census of India data for 1991, 2001 and 2011.
- To analyse the socio-demographic and policy factors responsible for Kerala's sex ratio.
- To examine the present scenario of Haryana's sex ratio and suggest suitable ways, policies and strategies that can be adopted to improve it.

IV. RESEARCH METHODOLOGY

This study is based on a secondary data analysis approach, using authentic and reliable government sources as the primary basis for comparison. The data for the years 1991, 2001, and 2011 has been taken from the Census of India. Additional information has been collected from different sources like National Family Health Survey (NFHS-4 and NFHS-5), reports of the Registrar General of India, and other official government publications to understand recent developments and trends beyond the 2011 Census. By integrating the data from the census with other documents I get comprehensive demographic insights into fertility, mortality, child sex ratio, and sex ratio. This methodology ensures that the research remains grounded in authentic, nationally recognised datasets, allowing for accurate and policy-relevant conclusions.

V. FINDINGS OF THE STUDY

The analysis of sex ratio trends in Haryana and Kerala is contrasting. The decadal census data provides a clear view of how both states have performed over the three decades.

Table 1: Sex Ratio of Kerala and Haryana (Census of India)

STATE	1991	2001	2011
Kerala	1,040	1,058	1,084
Haryana	874	861	879

Haryana's sex ratio has been one of the lowest in the country. The Census of India recorded a sex ratio of 874 females per 1,000 males in 1991, which declined to 861 in 2001 and showed a slight recovery to 879 in 2011. Despite this Haryana is falling below the national average of 943 in 2011. Another serious concern arises with the child sex ratio (0–6 years), which remained critically low in many districts. This imbalance reflects deep-rooted cultural preferences for sons, coupled with the widespread misuse of prenatal diagnostic techniques, especially in the 1990s and early 2000s. Scholars such as Jha et al. (2011) argue that these practices were strongest in states like Haryana, where

economic, social, and cultural systems have historically reinforced the value of male children over females. Whereas Kerala presents a striking contrast. Its sex ratio has not only been consistently above 1,000 but has also improved steadily, rising from 1,040 in 1991 to 1,058 in 2001 and 1,084 in 2011. Researchers attribute Kerala's favourable sex ratio to high female literacy, robust healthcare systems, lower fertility rates, and social norms that value women more equally (Agnihotri, 2000; Bhat, 2002). Unlike Haryana, Kerala's demographic and social environment reduces the incentive for sex selection and enhances female survival at all life stage.

Despite legal frameworks and awareness campaigns, Haryana continues to struggle with a skewed sex ratio at birth in many districts. The reasons are complex and deeply rooted in patriarchal social structures. Haryana is largely a rural state where patriarchal traditions dominate. The paternal family system favours sons, who are seen as heirs and providers, while daughters are often perceived as an economic burden. Cultural practices — particularly marriage rituals and dowry — reinforce the idea that raising a daughter is costly, whereas having a son is considered a blessing. With a large proportion of the population still residing in rural areas, where patriarchal values are stronger, the pace of attitudinal change is slower. Although the developed districts like Gurugram (highest literacy rate in Haryana) and Faridabad known for IT sector and urban hubs of Haryana are also facing the severe issues of poor sex

ratios, suggesting that economic development alone does not erase the prevalent malicious concerns of society. Another rising concern is about women's safety in public spaces which also contribute to reluctance to have daughters. Parents feel anxious about protecting their daughters in a social environment that has not yet ensured equal safety and mobility for women. Although the situation is changing nowadays as the women from Haryana are excelling in education, sports, administration, and other fields, how can we even think about the societal development where women are not safe.

Table 2: Sex Ratio of Haryana (SRS reports 2016 → 2023)

Year	Sex Ratio
2015	876
2016	900
2017	914
2018	914
2019	923
2020	922
2021	914
2022	917
2023	916

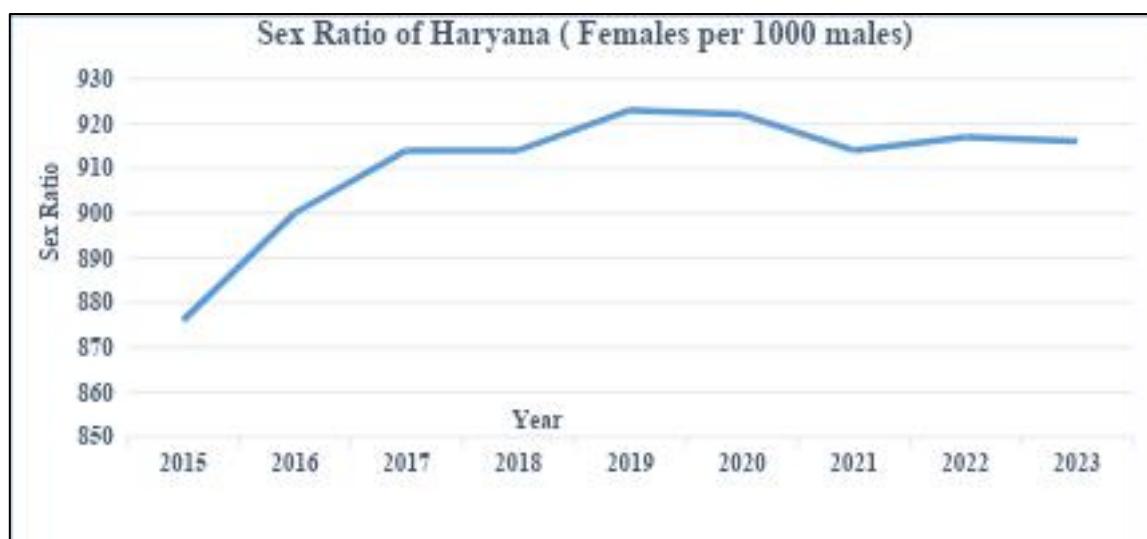


Fig 1: Sex Ratio of Haryana (SRS reports 2016 → 2023)

Between 2015 and 2023, Haryana recorded a gradual increase in the sex ratio and this positive shift was largely due to enforcement of several government acts and policies such as PC-PNDT Act, *Beti Bachao Beti Padhao Abhiyan* (2015) and several incentive schemes of Government of

Haryana such as *Laadli* and *Aapki Beti Hamari Beti*, which provides the economic help and assistance to the parents of girl child. Several community campaigns like *Selfie with Daughter* also played a role in changing the mindsets of people. To conclude we can say that Kerala has consistently

maintained a favourable sex ratio due to its investments in health, education, and social welfare while Haryana continues to face deep-rooted challenges tied to male dominance society, economic conditions of the families, and safety concerns for women. Although Government initiatives in Haryana have yielded some improvements but still there's a lot of scope for further development.

VI. RECOMMENDATIONS

The findings make it clear that Haryana needs to adopt long-term, structural strategies to improve its sex ratio. Kerala's success shows that when girls are given access to good education, strong healthcare, and social respect, the sex ratio naturally balances. Some steps can be taken to improve the sex ratio in Haryana these are:

1. Expansion of scholarships for girl child education, ensure safe school transport, and improve rural school facilities so that families see real value in educating daughters.
2. Access to quality maternal and child healthcare must be strengthened, especially in rural districts.
3. Better safety in public spaces and stronger action against gender-based violence can reduce the fear many families have about raising daughters. By installing streetlights and CCTV cameras in village lanes, bus stops, and near schools or colleges would be helpful in ensuring the safety of women. Haryana already experimented with CCTV in some urban districts like Gurugram, and expanding it to semi-urban and rural blocks would help.
4. Merely establishing laws alone cannot change mindsets. Panchayats, religious leaders, and local women's groups should be actively involved in campaigns that promote the idea that daughters are equal contributors to the family and society. Also, beyond infrastructure, moral education must be instilled in boys regarding respecting women's rights. Running regular workshops in schools and panchayats with local role models can help reduce harassment and change community attitudes.
5. Schemes like *Laadli* and *Aapki Beti Hamari Beti* should be expanded and a good monitoring system should be installed to keep a check on the corruption and it also ensures that benefits truly reach to the needy, so that families feel supported in raising daughters. Beyond financial aid, Haryana should create opportunities for women's employment and entrepreneurship, giving daughters long-term economic value.

VII. CONCLUSION

In conclusion, the comparison of Haryana and Kerala makes it clear that social development plays a decisive role in shaping the sex ratio, alone economic development in an area doesn't help in improving the sex ratio. Kerala's continuous progress reflects how investments in women's education, health services, and equality creates a lasting balance. In contrast, Haryana's uneven performance shows that deep-rooted traditions, safety concerns, and economic pressures continue to influence family choices of having a girl child or not. The government's initiatives have helped at certain points, but recent declines remind us that the problem requires long-term commitment to tackle this serious issue. Haryana must now focus on changing social attitudes, strengthening local interventions of different NGO's, panchayats and other committees, and ensuring that daughters are valued equally in every household because '*Haryana ka Sapna hoga sakar jab hoti har ghar ka adhar.*'

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