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Situation of Gender-Biased Sex Selection in Nepal

Tulasa Devi Dulal[1]

Abstract

About 140 million women are believed to be "missing" around the world due to the result of son preference. Gender-biased sex selection (GBSS) in favor of sons is a manifestation of gender inequality that is deeply embedded in our society by tradition, culture, religion, social, economic and legal injustices that undervalue girls and women. This paper tries to discuss on the gender-biased sex selection (GBSS) in favor of sons. Similarly, the study is based on descriptive as well as analytical research design. The sources of information have been based on secondary data. The facts and figures have been presented into tabular form. Several districts showed significantly skewed sex ratio at birth (SRBs) at 110 or above with Kaski, Arghakhanchi and Bhaktapur, province one and Lumbini province having the highest SRBs in Nepal. Youngest age groups at the bottom under 30 years of 5year age groups of female population are low in 2021 census. The Nepali context makes pervasive use of sex-selection likely as strong son preference. Sons are seen as economic, social and religious assets and in some parts of the country while females are seen as a burden due to the expenses involved in marriage. Fertility decline means that couples feel pressure to bear a son at a low parity. The technology of sex-selective abortion is accessible to the Nepalis. Even though prenatal sex determination and abortion based on sex selection are prohibited and may incur severe penalties in Nepal under the current abortion law passed in 2002. Nepal provides abortion was legalized in 2002 and prior to that, there was no evidence of sex-selective abortion. SSA was made a punishable offence when exceptions for legal abortion were introduced by the eleventh amendment to the Nepal's Muluki Ain in 2002. Consequences of the 'missing females' become long term demographic impact and also result in 'excess males' who struggle to marry in society.

Key Words: Sex selective abortion, son preference, abortion policy, missing girls, demographic impacts**.**

Introduction

Skewed sex ratio favoring males is a concerning signal, often associated with a higher risk of female fetal mortality. This issue is particularly prevalent in regions where parents selectively choose the gender of their children. Prenatal sex selection is to be condemned, as a phenomenon which finds its roots in a culture of gender inequality and reinforces a climate of violence against women. It has

1. Mrs. Dulal is the Faculty Member of Population Studies, Patan Multiple Campus

harmful consequences, including population imbalances, a rise in criminality and social unrest and an increased risk of human rights violations such as trafficking for the purposes of marriage or sexual exploitation (Council of Europe, 2011).

Sex-selective abortion is the practice of terminating a pregnancy based upon the predicted sex of the infant. The selective abortion of female fetuses is most common where male children are valued over female children, especially in parts of East Asia and South Asia, middle east Asia (particularly in countries such as People's Republic of China, India and Pakistan), as well as in the Caucasus, Western Balkans, and to a lesser extent North America (Goodkind & Daniel, 1999).

Gender and sex distribution in human populations acts as a crucial demographic indicator, shedding light on socio-economic and cultural dynamics. It's pivotal for assessing gender equality and a vital sociological metric. The sex ratio is the number of males for every 100 females in a population. A sex ratio above 100 means there is more males than females. A sex ratio below 100 means there is more females than males. A sex ratio of 100 means there are equal numbers of females and males (Piyush, 2023).

Qatar has the highest sex ratio (299.328), with three males per woman, followed by the United Arab Emirates, having 222 men per 100 women. Third-ranked Oman (193.465), too, has almost two males per woman. The top three and Bahrain (184.544), Maldives (171.309) and Kuwait (158.537), Saudi Arabia (137.129), have male to female ratio above 150. In the list of top ten countries having the highest males/females, eight countries belong to Asia **and two to** Africa. (UN, 2021).

The preference of many parents for sons, combined with the use of modern reproductive technologies and declining fertility, has skewed the normal ratio between male and female births in several countries, mostly in the South Caucasus and parts of South-Eastern Europe. As a result, an estimated 171,000 girls are already "missing" in the region, and there has been a growing surplus of men. In the Eastern Europe and Central Asia region, birth registration documents provide statistical evidence of prenatal sex selection in favor of boys in Azerbaijan (116.8 boys born for every 100 girls, an imbalance surpassed only by China, with 117.8), Armenia (114.8), Georgia (113.6), Albania (111.7), and Bhutan (113.701). Out of 201 countries/regions estimated by United Nations, 125 have more females than males. Fourteen countries have a male ratio of less than 90, and 41 has less than 95. (Global health, 2018).

Research conducted in the region suggests that gender-biased sex selection occurs in a diverse range of countries that have three elements in common: a

strong preference for male offspring, declining fertility rates and access to modern ultrasound technologies. The practice has far-reaching negative consequences, as it endangers the health and rights of women and girls, perpetuates a culture of gender inequality and jeopardizes sustainable social development and stability. (UNFPA, 2022)

According to demographic scholarship, the expected birth sex ratio range is 103 to 107 males to 100 females at birth. Amartya Sen compared the birth sex ratio in Europe (106) and United States (105) with those in Asia (107+) and argued that the high sex ratios in East Asia, West Asia and South Asia may be due to excessive female mortality (Sen, 1990). The normal sex ratio at birth ranges from 102 to 106 males per 100 females. However, ratios much higher than normal – sometimes as high as 130 – have been observed, especially in countries with deep-rooted gender inequality and patriarchal family values.

The world has seen a vast expansion in the availability of effective, modern contraceptives — one of the greatest public health achievements in recent history. Why, then, are nearly half of all pregnancies unintended? In 1994, the Programme of Action of the International Conference on Population and Development (ICPD) recognized that the empowerment, full equality and autonomy of women were essential to social and economic progress. Today, these aims are among the cornerstones for achieving the 2030 Agenda for Sustainable Development. It explicitly recognizes the role of sexual and reproductive health and gender equality in unlocking a more prosperous future, and contains specific indicators linked to women and adolescent girls' agency in making informed decisions regarding sexual relations, contraceptive use and reproductive health care. (UNFPA, 2022)

In 1994, over 180 states signed the Programme of Action of the International Conference on Population and Development, agreeing to "eliminate all forms of discrimination against the girl child". In 2011 the resolution of PACE's Committee on Equal Opportunities for Women and Men condemned the practice of prenatal sex selection. Many nations have attempted to address sex-selective abortion rates through a combination of media campaigns and policy initiatives (UNFPA, 2014).

In the context of Nepal, Arghakhanchi, the most affected district, one in every six girl births were 'missing' in census data 2011. In the Kathmandu Valley, Nepal's main urban center, around 115 boys are born for every 100 girls. Without sex selection we would expect only 105 boys born for every 100 girls. The Constitution of Nepal (2015) guarantees the right to safe motherhood and reproductive health of women as a fundamental right. In addition, the Safe Motherhood and Reproductive

Health Rights (SMRHR) Act (2018) was enacted to guarantee the fundamental right which comprehensively cover all matters pertaining safe motherhood, family planning, reproductive health related morbidity, and safe abortion (GoN, 2015).

Objectives:

The overall objective of this study is to review the international and national situation of gender bias sex- selections. The specific objectives of this studies are to review national scenario of gender bias sex- selections and policy acts enacted by the Muluki Ain of Nepal.

Methodology

The study of gender bias sex- selections in Nepal is descriptive as well as analytical in nature. Sources of information have been taken from different publish and un published sources such as research papers, journal articles, internet website and survey reports, especially Nepal census 2011 and 2021 census data were reviewed with desk review method. The study also provides useful guidelines for policy planning and risk assessment with higher possibilities of SRB imbalance in Nepal.

Result and Discussion

Gender Biased Sex Selection (GBSS) in favor of sons is a manifestation of gender inequality in Nepal. The historically prevailing gender stereotype prioritizes sons and considers them to be a source of economic support and old age security for parents. Also, the prevailing religious belief allows only sons to perform last rites for parents. This inequality is deeply embedded in the tradition, culture, religion, social, economic and legal injustices that undervalue girls and women. Consequently, having a son in a family is socially perceived as a matter of pride (UNFPA, 2020).

Nepal has been showing signs of skewed or distorted sex ratios at birth in some districts of Terai and hilly regions. Among the children below 10 years of age in the country, male children exceeded female children by 2.2 per cent. In urban Nepal, 5.6 per cent more male than female children were recorded as compared with 1.7 per cent more male than female children in rural Nepal. Beyond the immediate issue of non-acceptance of the girl child by the family, this has other far-reaching dire consequences, affecting the wellbeing of both the child and the mother throughout their entire life-cycle (UNFPA & CREHPA, 2020).

In the context of Nepal, drawing on census data from 2011 and follow-on survey data from 2016, the social scientists estimate that roughly one in 50 girl births were 'missing' from records (i.e. had been aborted) between 2006-11 (22,540 girl births in

total). For certain areas of the country, the practice was more widespread. Abortion in Nepal was only legalized in 2002, further facilitated by the Comprehensive Abortion Care services provided by the government from 2004, and the introduction of medical abortion in 2009. As per The Right to Safe Motherhood and Reproductive Health Act, 2018, abortion is permitted up to 12 weeks of gestational age on the request of the pregnant woman, up to 18 weeks of gestational age in the case of rape or incest and at any gestational age if the pregnancy is detrimental to the woman's health and life or if there is foetal impairment (CREHPA, 2021).

The Constitution of Nepal 2015 also guarantees the right to equality as one of the fundamental rights and specifically prohibits discrimination in the application of the general laws including on the grounds of sex, marital status and pregnancy. The Act relating to Children (2018) also specifically prohibits any type of discrimination between son and daughters. Under the Nepalese legal system, Sex Selective Abortion (SSA) was made a punishable offence when exceptions for legal abortion were introduced by the eleventh amendment to the Nepal's Muluki Ain in 2002.

According to the data from Bheri Hospital last year, the number of newborn sons is higher than newborn girls in Banke. The hospital data shows 2,430 females and 2,742 males were born in the fiscal year 2019-2020. Likewise, 1,779 females and 2,060 males were born in Banke district in the fiscal year 2020-2021 (**Gahatraj** & **Chaudhary, 2022).**

Skewed SRBs in hospitals could be explained by sex selective abortion. The highest Sex Ratio at Birth at Western Regional and Bharatpur hospital, with the ratio of 121 and 120, Veri Zonal hospital, 116, BPKIHS hospital,117, Koshi Zonal hospital 107 and Lumbini Zonal hospital, 118 male births per 100 female births, respectively. The Sex Ratio at Birth in overall sample is also significantly higher than the national average of 107—they find that 117 male births took place in the study hospitals for every 100 female births (BMJ, 2019).

The 2011 census data shows that the sex ratio of the population less than one year of age (sex ratio at birth, SRB is abnormally higher in urban areas (111) compared to rural areas (106), Similarly among the five regions, the sex ratio of the population is the highest in western regions (110).

Table 1: Sex ratio of population less than one year of age, Nepal, 2011

SN	Regions	Sex ratio at birth
1	Eastern region	105.8
2	Central region	106.2

3	Western region	109.7
4	Mid-western region	104.0
5	Far western region	105.7
6	Terai	106.7
7	Hill	106.7
8	Mountain	102.6
9	Rural	105.6
10	Urban	111.8
11	Nepal	106.4

Source: UNFPA, 2017

Sex ratio of population less than one year as shown the higher in urban (111.8) followed by western region (109.7). Other regions have been leading in male population. However, the census data show an unnatural rise in SRB in certain area of Nepal which indicates discrimination against girls and may have significant implications for future population dynamics in the country.

Table 2: Districts with abnormal Sex ratio of population less than one year of age, Nepal, 2011

SN	District	Sex ratio at birth
1	Arghakhanchi	126.6
2	Bhaktapur	122.8
3	Kaski	116.8
4	Lalitpur	114.4
5	Palpa	114.1
6	Kathmandu	113.3
7	Rupendehi	113.0
8	Kanchanpur	111.4
9	Gulmi	111.0
10	Saptari	110.6
11	Jhapa	110.2
12	Parbat	109.6

Source: UNFPA, 2017

Table 2 shows that a total of 12 district with a sex ratio (of population less than 1 year) that exceeds 110 males per 100 females, based on the 2011 censud data. The majority of these districts, including Bhaktapur, Kaski, Lalitpur and Kathmandu are highly urbanized where the access to pre-natal sex selection technologies and fertility rates have dropped with many families opting for one child with a strong son preference. Hence it is likely that these skewed sex ratio in the districts are due to sex selective abortion.

The Demographic health survey 2016 data shows that the regional and provincial level and rural urban sex ratio at birth in Nepal. The data shows that Lumbini and Bagmati province has the highest conditional sex ratio in Nepal.

Table 3

Sex ratio at birth and conditional sex ratio of second birth when first born was female by province, 2016 Nepal DHS data.

Province	CSR (conditional sex ratio)	95% CI	Number	SRB (sex ratios at birth)	95% CI	Number
Province 1*	122	(93 to 160)	443	111	(103 to 120)	1380
Province 2*	93	(75 to 115)	703	107	(101 to 114)	2313
Bagmati	140	(108 to 182)	442	102	(95 to 111)	1037
Gandaki	96	(67 to 137)	221	104	(92 to 117)	1057
Lumbini	136	(106 to 174)	480	109	(101 to 118)	1718
Karnali	97	(63 to 148)	171	105	(96 to 116)	1818
Sudurpashchim	140	(97 to 200)	238	106	(97 to 117)	1620
Urban	121	(105 to 141)	909	105	(99 to 111)	6250
Rural	107	(92 to 123)	589	108	(103 to 114)	4693
All Nepal	115	(103 to 128)	1498	106	(102 to 111)	10943

Source: BMJ, Open (2021)

This study provides new evidence that there are skewed sex ratios in specific areas of Nepal. It is highly likely that these skewed ratios are caused by Sex Selective Abortions. The Sex Ratio at Birth is not significantly different from the expected value in any of the seven provinces of Nepal. However, significantly elevated conditional sex ratio CSRs can be seen in Bagmati Province (CSR=140) and Lumbini Province (CSR=136). The CSR in urban areas is 121 compared with 107 in rural areas, though the 95% CI for urban areas is 105–141. The CSR for the whole of Nepal is 115 compared with an SRB of 106, but the overall CSR is not significantly higher than the expected figure. The data shows the elevated CSRs in Bagmati and Lumbini Provinces are highest conditional sex ratio. Bagmati

Province contains the Kathmandu Valley, where the largest number of sex selective abortions were estimated to have taken place in the census data. Lumbini Province contains four districts with skewed sex ratios including Arghakhanchi, which had the highest SRB of any district according to census data in 2011 (Puri, 2021).

Sex-selective abortions are reportedly rampant in Nepal. The negative impacts of such abortions have manifested in the recently concluded national census 2021, with a decreasing number of baby girls as opposed to boys. Out of the total 412,935 newborns, 218,074 account for boys (52.8 percent), and 194,861 girls (47.3 percent), according to the census (Census, 2021).

The male and female populations are broken down into 5-year age groups represented as horizontal bars along the vertical axis, with the youngest age groups at the bottom under 30 years of age groups of female population are low and the oldest at the top. The shape of the population pyramid gradually evolves over time based on fertility, mortality, and international migration trends (Census, 2021). The census data clearly shows the increasing trends of excessive males' population in youngest group in Nepal causes are sex selective abortion in Nepal.

Table 4: Ratio of population 5 year of age groups, Nepal, 2021

SN	Age Group	Female Popn	%	Male Popn	%
1	0-4	1,148,758	5.0	1,290,525	5.2
2	5-9	1,323,022	5.5	1,443,405	5.9
3	10-14	1,413,911	5.8	1,495,954	6.0
4	15-19	1,471,881	5.2	1,454,523	6.0
5	20-24	1,482,042	4.8	1,301,018	4.9
6	25-29	1,337,107	3.6	1,122,242	3.7
7	30-34	1,168,736	3.2	978,976	3.0
8	35-39	1,104,561	3.6	936,931	3.1
9	40-44	919,339	2.7	828,493	2.5
10	45-49	748,515	2.2	687,525	2.2
11	50-54	721,358	1.7	692,494	2.0
12	55-59	538,386	1.4	537,558	1.5
13	60-64	489,642	1.5	465,962	1.4
14	65-69	391,929	1.3	379,689	1.3
15	70-74	317,316	1.1	292,054	1.2

16	75-79	182,205	1.2	170,998	1.2
17	80-84	83,241	0.6	78,315	0.7
18	85-89	41,438	0.2	36,888	0.3
19	90-94	17,215	0.1	13,191	0.1
20	95+	10,424	0.03	6,810	0.02

Source: CBS, 2022

According to the Census Report 2021, the population of Nepal has reached 29,192,480, which is an increase of 2,697,976 compared to a population of 26,494,504 ten years ago. Since 2011, Nepal's population has grown by 10.18%. The total population is 14,291,311 males (49%) and 14,901,169 females (51%). The sex ratio for males per 100 females is 95.91, slightly higher than 94.16 from the last census demonstrating a slight increase in the male population. However, the average annual growth rate is 0.93%, a decrease from the data reported in the Census Report of 2001-2011, which presented a growth rate of 1.35% (CBS, 2022). While there are more females in the total population, a slight increase in the population of males since 2011 has been observed. *To analyze the declining population growth, including migration, urbanization, and declining rural population.* Despite the pandemic, more than 240,000 labor permits were granted in 2021 alone, which are higher number are males and they do not include workers moving to India (Shrestha, 2022).

Abortion in Nepal was only legalized in 2002, further facilitated by the Comprehensive Abortion Care services provided by the government from 2004, and the introduction of medical abortion in 2009 (Puri, 2023). This recent legalization means that, unlike its neighbors India and China, the use of SSA has received relatively little attention in either the research or the policy context. However, in the wake of legalization and increasing availability of prenatal sex-determination technologies it is feared that sex-selection will spread to different sections of the population, though it has so far been concentrated among richer, more educated, urban groups. The Nepali context makes pervasive use of sex-selection likely as strong son preference on both religious and socio-economic grounds paired with ongoing fertility decline means that couples feel pressure to bear a son at a low parity. Earlier studies suggested that this son preference led to women bearing more children than their preferences in order to ensure bearing a son. However, as the quality of antenatal care continues to improve and ultrasonography (USG), along with other prenatal sex determination technologies, becomes ever more widely available, SSA is likely to replace the strategy of having more children in order to ensure a son (BMJ, 2021).

Countries that have ratified international treaties such as the Convention on the Rights of the Child have a duty to end the harm. Many have responded with laws, but laws alone are not enough. It is often seen as a result of discriminatory social views which consider females inferior to males. Gender-based violence, religious bigotry behind gender identity and discrimination in power relations have made this issue very sensitive; we need to work towards raising awareness in society about the causative factors that lead to female feticide.

Conclusions

The practice of prenatal sex selection has been condemned internationally. But son preference also remains common in the Eastern Europe and Central Asia region, resulting in heavily imbalanced sex-at-birth ratios in parts of the South Caucasus and South-East Europe, as many more boys are born there than girls. The overall SRB was estimated to be 110 in 2012–2021, but this was not significantly higher than 105. In Arghakhanchi, the most affected district, one in every six female births were 'missing' in the census data. The analysis found that sex-selective abortion was geographically concentrated around Kathmandu valley and Lumbini province, with 53% of missing females found in 11 out of 75 districts. As fertility falls and urbanization increases, there is more access to prenatal sex identification technology in Nepal.

This pattern certainly suggests that some form of prenatal sex selection against girls is occurring. Abortions due to the results of sex determination tests are illegal in Nepal and carry a prison sentence. But these laws are not effectively enforced. Nepal has a son preference. Sons are seen as economic and social assets and in some parts of the country while females are seen as a burden due to the expenses involved in marriage. Young mothers ‘reluctantly admit to needing a son’. Sons are regarded as economic assets and are highly sought after for continuing the family name, providing elderly care to parents, bringing a daughter in-law into the family and are integral to performing Hindu rituals such as funeral rites. Daughters, however, are often regarded as an economic burden because of the dowry system and the tradition of leaving their parents’ family home to join the husband’s family after marriage. Unconscious gender bias appears to have a greater negative impact on women when decisions are made in the absence of formal rules. Unconscious bias can also impact how employers view prospective employees who are parents.

The continuing trend of skewed SRBs is concerning as the long-term demographic consequences are potentially severe; as these cohorts reach adulthood the ‘missing females’ also result in ‘excess males’ who struggle to marry, and some research suggests that their consequent marginalization in a society where marriage is universal may result in anti-social behavior and violence. A number of assumptions

have been made about the effects of the male surplus on these men who are unable to marry. It has also been assumed that a combination of psychologic vulnerability and sexual frustration may lead to aggression and violence in these men.

It can be suggested that can be done to reduce sex selection now, which will benefit the next generation. Realization of the potentially disastrous effects of this distortion in the sex ratio has led governments to take action. There are two obvious policy approaches: to outlaw sex selection and to address the underlying problem of son preference. Secondly, it has been argued that changes in these laws in Nepal could fundamentally influence attitudes about the value of women, which could lead, in turn to a decrease in the sex ratio.

References

Council of Europe (2011). Parliamentary Assembly of the Council of Europe. https://assembly.coe.int.

Global health (2018). Prevalence and correlates of sex-selective abortions and missing girls in Nepal: evidence from the 2011 Population Census and 2016 Demographic and Health Survey. https://bmjopen.bmj.com/content/11/3/e042542**.**

Goodkind, Daniel. (1999). Goodkind, Daniel (1999). "Should Prenatal Sex Selection be Restricted? Ethical Questions and Their Implications for Research and Policy". *Population Studies*. **53** (1): 49–. doi:10.1080/00324720308069. JSTOR 2584811

United Nations Fund for Population Activities (UNFPA). (2022). Preventing Son Preference and Undervaluing of Girls in Eastern Europe and Central Asia. https://eeca.unfpa.org/en/publications/preventing-son-preference-and-undervaluing-girls-eastern-europe-and-central-asia.

United Nations Fund for Population Activities (UNFPA). (2020). Legal landscape: Gender-biased Sex Selection in Nepal Policy Brief, December 2020. https://nepal.unfpa.org/sites/default/files/pub-pdf/gbss_policy_brief-english.pdf

United Nations Fund for Population Activities (UNFPA). (2022). Seeing the Unseen: The case for action in the neglected crisis of unintended pregnancy. . https://eeca.unfpa.org/sites/default/files/pub-pdf/en_swp22_report_0_2.pdf

Constitution of Nepal (2015). Safe Motherhood and Reproductive Health Rights Act (2018).

Article 38(3).

Gahatraj, R. & Chaudhary, A. (2022). Gender bias forcing women into sex-

selective abortions .https://kathmandupost.com/province-no-5/2022/01/13/gender-bias-forcing-women-into-sex-selective-abortions

United Nations Fund for Population Activities (UNFPA). (2014). Mechanisms behind the Skewed Sex Ratio at Birth in Azerbaijan: Qualitative and Quantitative Analyses.

https://azerbaijan.unfpa.org

Puri, M. (2021). Selective abortions and missing girls in Nepal. https://bmjopen.bmj.com ›

United Nations (UN). (2021). List of Countries by Sex ratio. www.un.org .

United Nations Fund for Population Activities (UNFPA). (2017) Population situation analysis of Nepal. www.nepal.unfpa.org.

British Medical Journal. (BMJ). (2019). Determinants of imbalanced sex ratio at birth in Nepal: evidence from secondary analysis of a large hospital-based study and nationally-representative survey data. doi: 10.1136/bmjopen-2018-023021

British Medical Journal. (BMJ). (2021). _Prevalence and correlates of sex-selective abortions and missing girls in Nepal: evidence from the 2011 Population Census and 2016 Demographic and Health Survey BMJ Open. https://bmjopen.bmj.com.

Sen, A. (1990). More than 100 million women are missing, New York Review of Books.

Piyush. (2023). Indian Sex Ratio 2023 State-wise, Women and Men 2022. Study IQ IAS https://www.studyiq.com

UNFPA & CREHPA (2020). Legal Landscape of Gender-biased Sex Selection in Nepal. UNFPA Nepal. https://nepal.unfpa.org.

Center for Research on Environment Health and Population Activities (CREHPA). (2021). Study reveals significant concerns over growing scale. University of Bath https://www.bath.ac.uk.

Central Bureau of Statistics (CBS). (2022). National Population and Housing Census 2021. Results https://censusnepal.cbs.gov.np.

Shrestha, A. (2022). Key highlights from the Census Report 2021. Nepal Economic Forum https://nepaleconomicforum.org › key-highlights.