

Sex Discrimination and Low Girl Birth are the Emerging issues of Sex Ratio & Child Sex Ratio (CSR) in Andhra Pradesh, Evidence from Census and Civil & Sample Registration Systems

¹Y Jagannadha Puri , ²Dr.R Subba Rao

¹Research scholar, Dept of statistics , Acharya Nagarjuna university, Guntur

²Professor, SRKR Engg college, Bhimavaram

Abstract

Our glorious state of Andhra Pradesh is known worldwide for many virtues – rich heritage, land of great world temples, large no. cultivators, food basket of the country etc. All these virtues, most unfortunately, have now been diminished in their stature as our state has now gained the nefarious term of the “Coastal state”. In spite of showing great rates of overall development in agriculture, manufacturing and service sectors, tourism, land of fishing harbors. The bias toward male child and its reflection in the adverse sex ratio in Andhra is not a recent phenomenon. In fact from the time census figures are available, i.e. 1901, Andhra has had the dubious distinction of being the Indian state with the most unbalanced sex ratio until 1971, and continues to be among the states with a high imbalance in male and female numbers. The historical adverse sex ratio testifies to the persistent unfavorable condition of women in Andhra. Earlier, it was female infanticide that was practiced in Andhra to get rid of unwanted girl child and now the medical techniques that help in sex determination have accelerated the problem and converted into female foeticide. The sex ratio of our state has shown a regular decline during the past century and has shown only a meagre uplift during the last decade. Much research work has been done on this issue of declining sex ratio but I felt the need to probe deeper into the same as I wanted to know more about the reasons of the declining sex ratio in such a prosperous state as ours and, in particular, Visakhapatnam – the city I reside in. Thus I have chosen this topic for research. The present study is an attempt to analyze the determinants and implications of the declining sex ratios in Andhra. A detailed case study has been undertaken of Visakha district. The district is studied on the sub-division level. The present work embodies the results that were acquired from the interviews and focus group discussions held in all the five subdivisions of the Visakha district. The documented evidence on the factors affecting the sex ratio mainly focuses on many aspects such as socio-economic background, women autonomy, son preference, extent of sex selective testing etc. in Andhra state as well as in the district of Visakha. On the basis of the data acquired, conclusions have been drawn as to why the sex ratio of Andhra is at such a low level and the reasons and factors behind it, the most important being the son preference due to attached advantages along with like old age security, to inherit property, to perform last rites etc. People generally don't prefer to have daughter because of increasing crime and violence against women and economical burden attached with them as dowry etc. A little daughter preference which is there in the society is just because girls are regarded as unpaid domestic workers i.e. they take care of the household and children for which they aren't supposed to be paid. Accordingly, intervention policies have been suggested along with recommendations for strengthening of laws against sex selection and about general upliftment in the status of women so that the menace of sex selective

Keywords: Declining Sex Ratio, Status of Indian Women, Women in Andhra, Son Preference, Patriarchal India, Factors affecting Sex Ratio

Introduction:

The noted fact is that more than half of the human population in this world is male. In 2011, males accounted for 50.35 per cent of the world population and rest 49.65 was female. The disparity in sex ratios seen worldwide is a result of several factors namely, economical, educational, social and cultural. The higher class of the society who are economically, educationally and socially belonging to upper level have higher proportion of males at birth than less favorably illiterate families. The Child sex Ratio (CSR) is not constant phenomenon and it varies depending on the socio-economic and cultural factors of the countries, so in countries the proportion is higher and some have lower. In India 51.47 percent are males while 48.52 are females. The sex ratio of India was 943 in 2011 which comprised of 949 in rural India and 929 in urban India. These ratios in our country are much lower than the desired level. As per Census 2011, the total population of India is 1210.8 million with a decadal growth rate of 17.7 per cent. While 31.14 per cent of the population lives in urban areas, the rest lives in rural areas. The Sex Ratio (number of females per 1000 males) in the country has improved from 933 in 2001 to 943 in 2011. In rural areas the sex ratio has increased from 946 to 949. The corresponding increase in urban areas has been of 29 points from 900 to 929. Kerala has recorded the highest sex ratio in respect of total population (1084), rural population (1078) and urban (1091). The lowest sex ratio in rural areas has been recorded in Chandigarh (690). While 28.5% population of India lies between 0-14 age group; only 8.3% are above the age of 60 years.

The Medical Termination of Pregnancy Act:

In India, abortion is not a constitutional right, but is legalized by a statute, the Medical Termination of Pregnancy Act, 1971 (MTP Act). However, this right to abortion is limited, and the MTP Act only guarantees the right when the pregnancy is less than twenty weeks. Further, a doctor's assent is required for every abortion. If the pregnancy is between twelve and twenty weeks, two medical practitioners must give consent to the abortion. The medical practitioner(s) must conclude that "(i) the continuance of the pregnancy would involve a risk to the life of the pregnant woman or of grave injury to her physical or mental health; or (ii) there is a substantial risk that if the child were born, it would suffer from such physical or mental abnormalities to be seriously handicapped." The Act provides two examples of "grave injury" to mental health: pregnancy as the result of rape and pregnancy that "occurs as a result of failure of any device or method used by any married woman or her husband for the purpose of limiting the number of children." Abortion on any grounds other than those specified in the MTP Act

Significance of the study:

The imbalance in juvenile sex ratio attracts social scientists and demographers to know the ground realities about the issue as it has negative implication on future generations. The skewed growth in CSR has reached an emergency proportion which needs urgent action so that to cope up situation as early as possible, but there is not much effort by the authorities to react to the situation as every burning issue remains for seven days. Now this issue has almost been forgotten by the authorities. Interestingly the sex ratios are skewed in the children of educated mother than illiterate ones. It sees that, education has increased the chances of adopting sex selection technologies. From a study it was observed that the states where women have attained higher education are inversely proportional to the birth of a female baby especially when first child is girl especially in the states of Kerala, Andhra Pradesh, Tamilnadu. The study could reveal the actual position of CSR in the districts both rural and urban and could be a reminder to the authorities so that to take necessary steps for improvement in CSR.

Literature and Review:

Seema Jayachandran(2017) results suggest that between one-third and one-half of the change in sex ratio in India since 1981 can be attributed to the decline in fertility rates. Or in other words: If there had been no change in fertility rates over time, there would still be a skew in the sex ratio. But fertility declines have had a significant impact on exacerbating son preference.

Kashyap and Villavicencio (2017) tried to model how the changes in willingness, ability and readiness all affect the change in sex ratio in specific countries. They found that even very low levels, of son preference can have a significant impact on the sex ratio if sex-selection technology diffuses steadily and fertility declines quickly. This means that in contexts where economic development is fast-meaning fertility rates fall quickly and prenatal screening technologies become widely accessible-even very small levels of son preference across a population can have a significant impact on the overall sex ratio.

The relationship between development and sex ratios is complex and non-linear; what's clear is that the issue does not quickly disappear through economic development alone.

Objectives:

1. To elucidate inter district variation of CSR in India & States using Census, CRS & SRS
1. To elucidate inter district variation of CSR in Andhra Pradesh State
2. To identify the causes behind decline in CSR
3. To compare the census data 2011 to identify possible difference in rural and urban areas of the State.
5. To compare the Andhra Pradesh and Major states and India of Sex Ratio of the data.
6. Recent study of sex ratio at Urban Visakhapatnam analyzing data

Hypothesis

There is significant difference in Child Sex Ratio within in the State and India of various levels and also checks the values of Sample data in Visakhapatnam

Methodology

Secondary data available on census of India website was downloaded and possible inferences were made possible with the help of data from district sources. Different sources of Government websites and Sample Registration system, NFHS data were accessed to find the causes behind declining in CSR

Also rank method will be used to find the differences between total CSR, urban CSR and rural CSR among the districts of the state using census data 2011.

And also collected primary data from Visakhapatnam urban and fitted various statistical methods

Discussion:

As per Census 2011, Gender ratio of India is 943 females per 1000 males. In rural area, there are 949 females to 1000 men, while in urban area there are 929 females to 1000 males. Rural India has 21,813,264 more males and urban India has 13,872,275 more males than females. India's Sex Ratio has improved by number 10 from 933 in 2001 to 943 in 2011. In rural and urban India, Sex ratio has improved by number 3 and 29, respectively. In 1901, India had the highest sex ratio of 972.

As of 2020, India has more males than females until 64-69 age group and there are 10 more males per 100 females until 34-69 age group. Above 25-29 ages, ratio of females population keep improving and there are almost double women than men above 100 year.

Among states, Kerala has highest sex ratio of 1084 females to 1000 males and Haryana has the lowest sex ratio of 879 females per 1000 males. Among union territories, Puducherry has highest sex ratio of 1037 and Daman & Diu has lowest sex ratio of 618.

The Child Sex Ratio(CSR) which takes into note of the children who are in the age group 0-6 years of age, if reflects the underlying socio-economic and cultural patterns of the society, especially its attitude towards the girl child has been declining since last decades. The ratio is defined as the number of females per 1000 males in the population in a given area. It is becoming of more concern in recent years as the number of females is declining every year. In India CSR was 927 in 2001 with a ratio of 934 in rural India and 906 in urban India. It declined to 919 in 2011 with a ratio of 923 in rural and 905 in urban India. Conderring to a study, the condition sex ratio for second-order births when the first-born was a girl in the country increased from 110 in 1990 to 120 in 2005(Jha et al.2011).It is commonly understood that such a shortfall is lartely due to an increase in sex-selective abortions. Children represent the future generations of the human race but if there is a discrimination against female child, there will be a decline in their ratio to boys which will lead to an imbalance in future years.

In Andhra Pradesh CSR was the child sex ratio in Andhra Pradesh has come down alarmingly to 939 as per 2011 census, from 961 in 2001, indicating the continuing preference for boys. The child sex ratio is highest in East Godavari district (968) and lowest in Hyderabad district (914).Among "mandals" or blocks, the child sex ratio is the highest in Venkatarapuram (1,047) in Khammam district, followed by Gangavaram (1,043) in East Godavari district; the lowest child sex ratio is found in Nagalanka (780) preceded by Avanigadda (787)

The standard of living, quality education,employment,better medical facilities are always given first preference in every state. But as the economy of the states is growing there are some of the critical things jst like child sex ratio which are increasing. Erin a study is done on Andhra Pradesh state to know the difference between juvenile sex ratios of the districts keeping into concern total sex ratios, rural sex ratios and urban sex ratios.

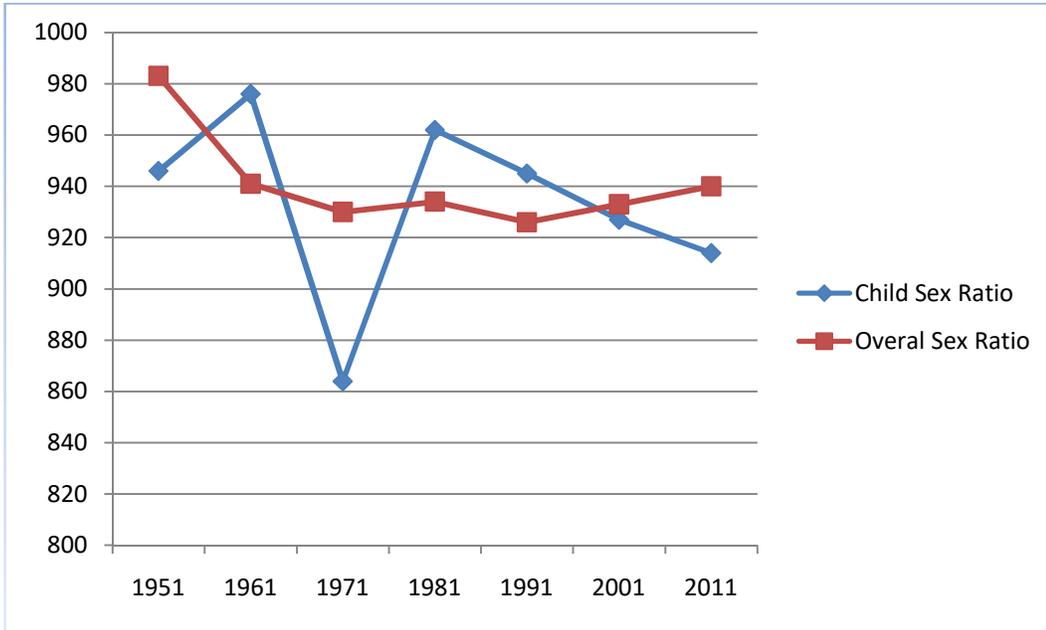
Analysis of Data:

The overall Sex Ratio India are compare than 1951 to 2011 census showing that child sex ratio are declining almost and vice versa sex ratio

Year wise Child Sex Ratio(CSR) overall sex Ratio In India							
Year	1951	1961	1971	1981	1991	2001	2011
Child Sex Ratio	946	976	864	962	945	927	914
Overall Sex Ratio	983	941	930	934	926	933	940

Source: Census Data

The Child sex ratio and overall sex ratio are showing in the following graph shows that declining almost

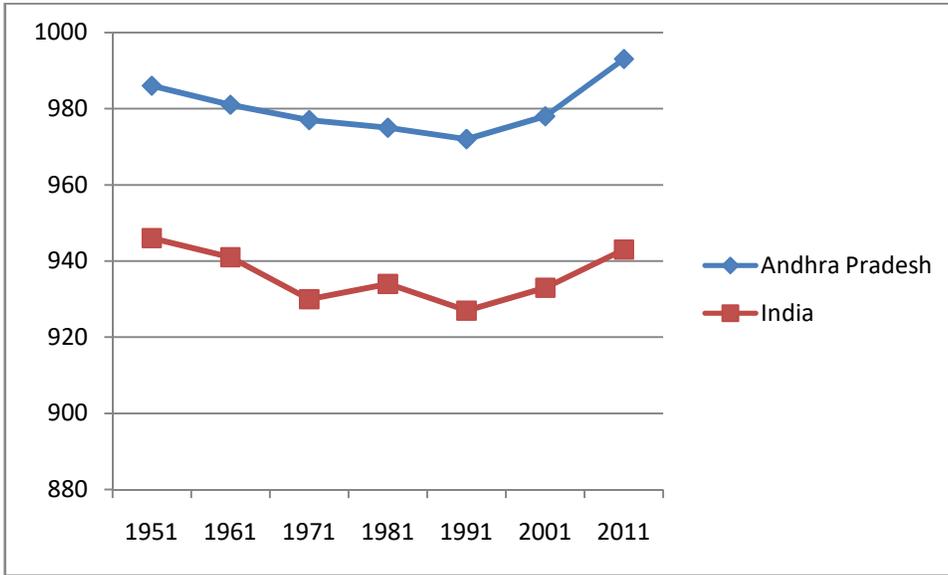


As per census the decade change of sex ratio shown that compare than India combined Andhra Pradesh more better

Decadal of Sex Ratio of after Independence of India Sex Ratio							
State/Year	1951	1961	1971	1981	1991	2001	2011
Andhra Pradesh	986	981	977	975	972	978	993
India	946	941	930	934	927	933	943

Source: Census Data

The below graph shown that India more than combined Andhra Pradesh

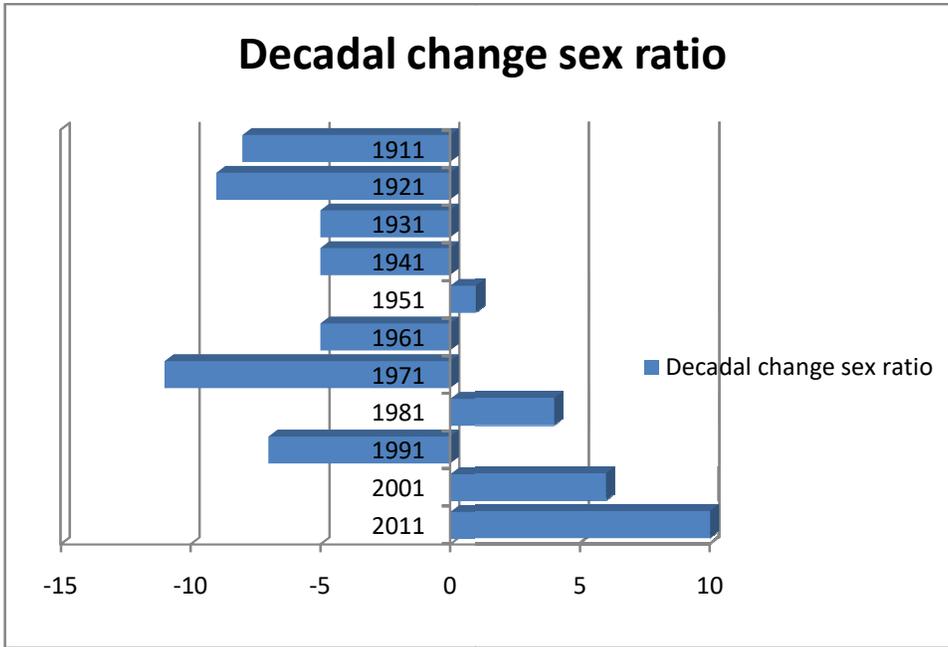


As per Census from 1901 to 2011 of decadal changes only 4 times increasing remaining all time decreasing, compare to 2001 to 2011 the decadal change positive, because of JSSY and other policies and Strictly followed by Sex Selective abortions.

Year	Total	Rural	Urban	Decadal change sex ratio
2011	943	949	929	10
2001	933	946	900	6
1991	927	938	893	-7
1981	934	951	879	4
1971	930	949	858	-11
1961	941	963	845	-5
1951	946	965	860	1
1941	945			-5
1931	950			-5
1921	955			-9
1911	964			-8
1901	972			

Source: Census Data

The above decadal change shown below the graph only positive are 4 and remaining years are negative



According to sample registration system, compare India, Andhra State Sex ratios declining.

According to Sample Registration System survey data released by the government, the sex ratio at birth (SRB) had gone down from 898 girls for every 1,000 boys born to 896 between 2015 and 2017. This translated to 12 million missing girl children within a span of three years, said Alok Vajpeyi of the Population Fund of India (PFI). The calculation is based on the rate of decline of girl children over the two years when compared with against the growth in India’s population.

Sex Ratio various age group in the context of development planning					
State	2012	2013	2014	2015	2016
Andhra Pradesh	985	954	955	971	806
Bihar	NA	924	868	870	837
Kerala	955	942	948	948	954
Madhya Pradesh	912	904	908	904	909
Maharashtra	894	901	911	883	904
Karnataka	971	943	926	893	896
Odiassa	896	886	880	866	858
Tamilnadu	904	853	834	818	840
Uttarapradeh	930	883	881	877	885

Rajasthan	861	859	799	794	806
Telangana	NA	954	961	834	881
West Bengal	926	913	897	919	911
India	908	898	887	881	877

Source: Sample Registration System

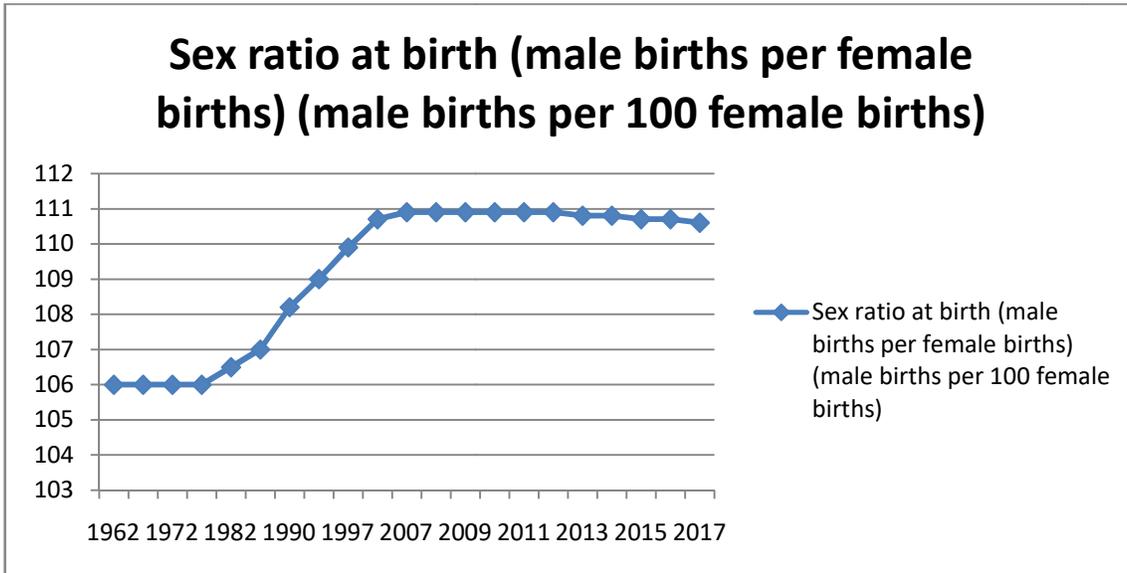
According UN population

India sex ratio 1962 to 2017 the various years wise calculation are shown as below

country	year	Sex ratio at birth (male births per female births) (male births per 100 female births)
IND	1962	106
IND	1967	106
IND	1972	106
IND	1977	106
IND	1982	106.5
IND	1987	107
IND	1990	108.2
IND	1992	109
IND	1997	109.9
IND	2002	110.7
IND	2007	110.9
IND	2008	110.9
IND	2009	110.9
IND	2010	110.9
IND	2011	110.9
IND	2012	110.9
IND	2013	110.8
IND	2014	110.8
IND	2015	110.7
IND	2016	110.7
IND	2017	110.6

Source: UN data

The sex ratio at birth male as per female increasing and then falling slowly



According to the United Nations, Sex ratio is defined as the number of males per 100 females. Sex Ratio of India is 108.176, i.e., 108.176 males per 100 females in 2020. It means that India has 924 females per 1000 males. In absolute terms, India has 48.04% female population compare to 51.96% male population. India has 54,197,555 more male’s population than female’s population. India is at 189th position out of 201 countries in terms of female to male ratio. Among Asian countries, India is at 43th position out of 51.



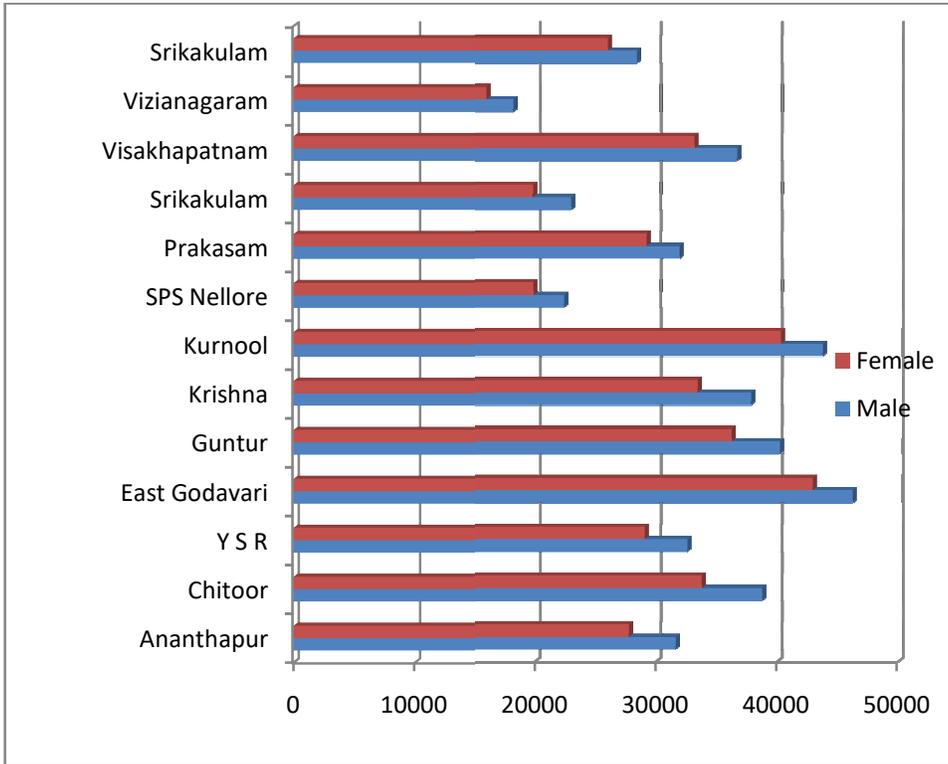
Comparison of Andhra Pradesh State and the Districts:

Births registered in Civil Registration System as on 2017, as shown the civil registration system data shown below showing that Male registration total more than female registration.

Number of Births Registered District wise in Andhra Pradesh										
Sl. No.	State/District	Rural			Urban			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
		1	2	3	4	5	6	7	8	9
	Andhra Pradesh	123704	103991	227695	307369	283101	590470	431073	387092	818165
1	Ananthapur	7806	6472	14278	23738	21193	44931	31544	27665	59209
2	Chittoor	12277	10293	22570	26462	23469	49931	38739	33762	72501
3	Y S R	6873	5264	12137	25653	23733	49386	32526	28997	61523
4	East Godavari	20767	19248	40015	25512	23706	49218	46279	42954	89233
5	Guntur	8539	6896	15435	31637	29320	60957	40176	36216	76392
6	Krishna	8979	7249	16228	28833	26141	54974	37812	33390	71202
7	Kurnool	10234	8640	18874	33525	31671	65196	43759	40311	84070
8	SPS Nellore	2901	2279	5180	19399	17529	36928	22300	19808	42108
9	Prakasam	9410	7937	17347	22490	21242	43732	31900	29179	61079
10	Srikakulam	11426	9253	20679	11505	10479	21984	22931	19732	42663
11	Visakhapatnam	8990	7800	16790	27661	25362	53023	36651	33162	69813
12	Vizianagaram	6697	5421	12118	11408	10512	21920	18105	15933	34038
13	Srikakulam	8805	7239	16044	19546	18744	38290	28351	25983	54334

Source: Civil Registration System

The Registration of Births showing that Kurnool and East Godavari more and also almost all Districts registions male birth more compare female

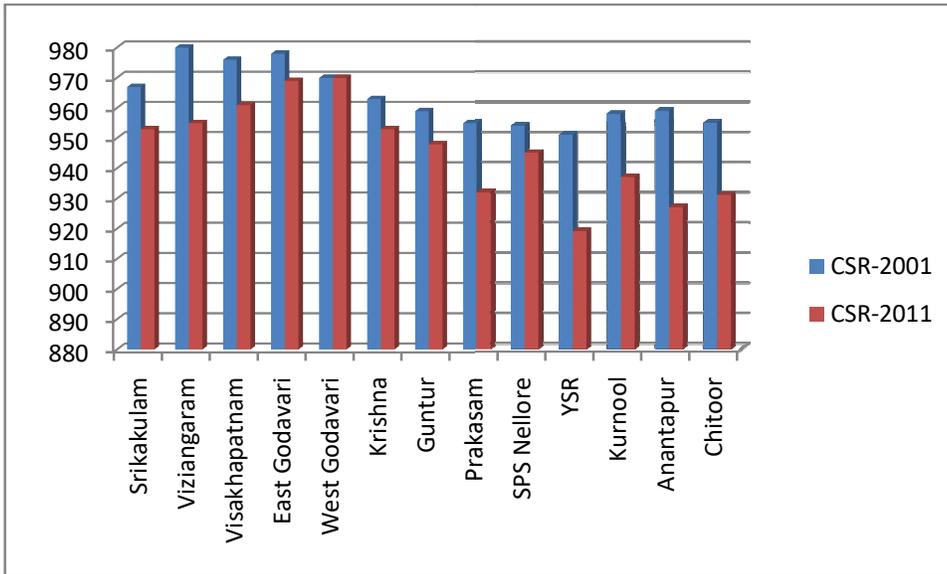


The comparison of District wise Child Sex Ratio srikaklam, viziangaram, Viskakhapatnam districts almost declined compare than 2001 census

State/District	CSR-2001	CSR-2011
Andhra Pradesh	961	943
Srikakulam	967	953
Viziangaram	980	955
Visakhapatnam	976	961
East Godavari	978	969
West Godavari	970	970
Krishna	963	953
Guntur	959	948
Prakasam	955	932
SPS Nellore	954	945
YSR	951	919
Kurnool	958	937
Anantapur	959	927
Chittoor	955	931

Source: Census Data

The comparison of 2001 and 2011 to compare almost all the districts declining compare than 2001



In census 2011 observed that India, Top 3 Districts are showing that more than 1000 In india, where as Andhra Pradesh highest districts showing that 976 highest in west Godavari and bottom showing YSR

District which showing that 919

Child Sex Ratio of top three and bottom Districts in 2011 of India and Andhra Pradesh(Rural&Urban)								
Sl.No.	TOP				BOTTOM			
	India	CS R	Andhra Pradesh	CS R	India	CS R	Andhrapradesh	CS R
1	Lahul& Spiti(Himachal Pradesh)	1013	West Godavari	976	Jhajjar(Haryana)	774	YSR	919
2	Tawang(Arunchal Pradesh)	1005	East Godavari	969	Mahendgarh(Haryana)	778	Anantapur	927
3	Dakshin Dantwada(Chhittsagr h)	1005	Viskhapatna m	961	Rewari(Hararyana)	784	Chittoor	931

As per comparison of 2011 census total combined state Mandals are 640 and that distributed various levels almost all 461 mandals declining the Sex Ratio

Change in CSR(0-6) 2001-2011 Districts	
Total No.of Districts	640
Decline	461
More than 100 points	7
50 to 99 points	31
20 to 49 points	178
1 to 19 points	245
No Change	20
Increase	159
Up to 10 points	74
11 to 20 points	34
21 to 30 points	17
31 to 49 points	19
50+	15

Source:Census Data

As per below table observed that compare than 2001 census shows that in census-2011 greater 1000 are only 3 mandals remaining are in between the 800-900

Range of CSR(0-6 Years)	Census Year	
Year	2001	2011
Total	640	640
>800	18	6
800-849	36	52
850-899	71	135
900-949	224	266
950-999	279	178
1000+	12	3

Source:Census Data

Sex Ratio of Preference study at Visakhapatnam Urban Analyzing data:

Survey conducted through Google and participated Visakhapatnam urban public 102 married include those 58 males and 44 female and share the information

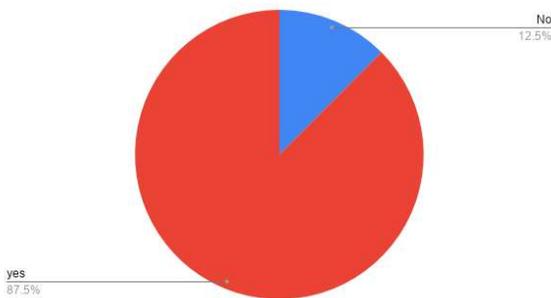
Everybody knows that child sex act almost 80%

Contraception followed strictly and no preference 57% and 28% public first option female child waiting for male child better option in their life

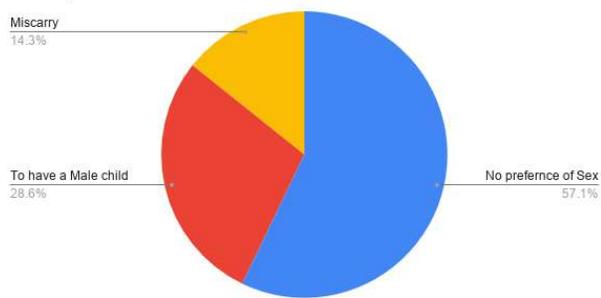
Two gender preference 67% reaming 33% no preference of their life

And also age at marriage shows that increasing minimum 22- 26 years

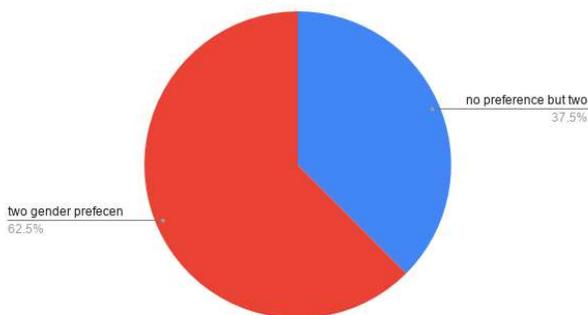
Count of Idea about Sex Preference Act



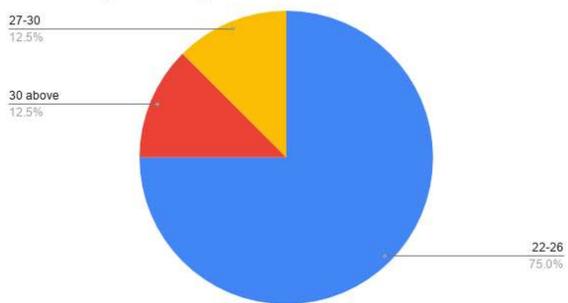
Count of if Yes for above question reason for second conception



Count of Preference of family



Count of Age at Marrige



Role of Government

The government has already been playing an important role through legislation. The need of the hour is the work of the executive part of the government. It should be made honest and corruption free and if need arises it should take help from the judiciary. Further the government should strengthen educational, health, medical and other infrastructural setup with the help of respective ministries, departments and boards.

Role of Media Media:

In it every form, has a great bearing on the social scenario. It can play a very important part in curbing unbalanced sex ratio. In spite of projecting women as commodities and commercial items, media should repeatedly advertise against the practice against of violence and crime against 190 women, female foeticide and unbalanced sex ratios. Healthy discussions, articles, debates etc can generate awareness among a large number of people. We all know that there are many serials broadcasted on various channels most of which are "Saas-Bahu" type. Most of these reflect the correct picture of our society in which, unfortunately, woman is shown as the prime foe of another woman. Such serials should also show that how this mindset can be changed. During my research, I have found that most of the pressure on the respondents to bear sons was from mother-in-laws. Media is a powerful tool that can eradicate this problem by producing such content that can throw light on this self destruction mode of female sex.

Key Findings:

As per the Sample Registration System (SRS) data from the Registrar General of India, the country's **sex ratio at birth** (SRB) declined to **898** in triennium (three year period) ending 2017.

- The **fertility rate reduced** from **2.3** in the year 2016 to **2.2** in the year 2017, close to the replacement level of fertility of 2.1.
- This trend is in line with the population projections by the United Nations, which have been revised downward in recent years. The year in which India will surpass China in population has been extended from 2022 (according to 2015 report) to 2027 (according to the 2019 report).

This trend also indicates that Indians want **less children** now but want them as sons. The Economic Survey 2017-18 underlined the Meta preference towards son in detail.

It is Telangana, Delhi, and Kerala along with Bihar that have shown the sharpest worsening in sex ratio at birth in recent years.

Though use of sex-selection techniques is the biggest cause, social norms that prefer male children is a reason behind poor sex ratio in states like Bihar whereas in urbanized states, the richer households prefer more sons due to flawed social and economic reasons.

Conclusion

The study examined the trends in the child sex ratio and other socio-economic factors – female literacy rate and female labour force participation rate for the major States of India. Using panel data estimation for the past five decennial censuses across fifteen major States of India, the study investigated the determinants of current trends in gender bias in child mortality. The empirical findings show that both female and male literacy rates depicted an inverse relationship with the child sex ratio. The influence of female labour force participation rate was found to be insignificant showing no impact of the economic independence of women in reducing the gender bias in mortality. The disaggregated panel data analysis by urban and rural components indicated that the matter is more severe in urban areas. Though both the regions have shown inverse relationship between child sex ratio and its socio-economic correlates, the intensity of their association was more critical in urban India, suggesting the consequent deficit of girl child more among the educated and economically better-off households in the urban areas. Sen.'s prediction of only gainful work

outsidel improve status of women is invalidated. Paid female worker is found to be insignificant in determining child sex ratio in both rural and urban areas. The results, taken together strongly indicate the presence of deep rooted cultural factors that are not responsive to any improvement of females' autonomy or to the economic and also improving showing that small sample survey in Visakhapatnam also.

References:

1. Abshisek Kumar, Valeria Bordone and Raya Mutarak, Influence of old generations fertility behaviours on daughter desired family size in Bihar, India, Vienna Institute of Demography, Austrian Academy of Sciences.
2. Bottles Jean Dreze child sex Ratio and sex selection Old fallacies in New, Economic & Political weekly EPW September 2012, Vol XLVI no.38
3. Census of India 2011 website
4. M R Singariya Determinants of Declining child sex ratio in Rajasthan Government college Jitran, Journal of Economics and Sustainable Development
5. Sndhay Srivisan. The significance of the Lancet study on skewed sex ratios, Published in Info Change News & Features, January 2006
6. Shahid Perwe, Roger Jeffery, Patricia Jeffry, Declining Child Sex Ratio and sex selection in India, A demography Ephiphany, 2012
7. Perianiyagam Ariokiasamy. Srinivas Goli, explain the skewed child sex ratio in rural India Revisiting the landholding-patriarchy hypothesis published in Economic, vol XLVII no.42
8. Civil Registration system website