TRENDS AND PATTERNS OF HUMAN SEX RATIO OF SOUTH 24 PARGANAS DISTRICT, WEST BENGAL, INDIA

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Abstract

This article foregrounds the trends and patterns of sex ratio of human population for three consecutive Censuses (1991, 2001 and 2011) finding traditional trend of masculinity. Fortunately, slight progress of the attitude of 'gender indifference' the district's sex ratio has been showing increasing trends for both rural and urban areas after the independence in India. Increasing trend of urban sex ratio is steeper than rural counterpart and both have tried to diminish their residential gap. Most of the rural areas contribute higher sex ratio than urban parts that patterns have become somewhat changed in 2011 Census in the study. The analysis of inter-Censual Change provides that twenty three blocks have shown increasing record from 1991 to 2001 which becomes twenty seven from 2001 to 2011 out of twenty nine blocks in total of the district. Such contemporary demographic transformation would suggest feeling indifferent about sex as well as female education and work participation that have made substantial change in sex ratio. Notably, the total sex ratio increases steeply whereas the child sex ratio decreases gently. Though down ward trends of rural child sex ratio and upward trend of urban child sex ratio manifest the prevailing differential gender preferences for both areas.

Key Words: Sex Ratio, patriarchal, discrimination, change, awareness

1. Introduction:

The population sex ratio is a powerful index of societal status and welfare of women. The numerical measurement of sex composition of a population is often expressed in terms of sex ratio (Chandna, 2005). Computation of sex ratio varies from country to country. In India the number of females is calculated per thousand males. This is always influenced by sex ratio at birth, differential mortality by age and sex and patterns of migration (Coale, 1991). In 2020, India's sex ratio has been estimated at 107.9 male(s) for every 100 female populations (Central Intelligence Agency, 2020). In patriarchal social system, the ever increasing proportion of male emerges to be the major concern at present and the future prospect in the field of demographic health. Such biological advantage of higher male birth over females has a relation to the human evolution (Fisher, 1930).

In the last century, the first three decades witnessed a declining nature of Sex Ratio but fortunately the last seven decades have shown a remarkable increase in trend which is a good sign for demographic health. The population pyramids are never symmetrical due to an imbalance proportion of the male and the female. There is a common feature that boys outnumber girls at the time of birth (Sen Amartya, 1990), though low sex ratio is found in all types of sex ratio. Visaria's pioneering research on 'sex ratios of the population of India' suggested that the sex differentials in mortality are responsible for such low sex ratio (Visaria, 1971). The incidence of female mortality is caused by the Socio-cultural discrimination against female children (Miller, 1981). The socio-economic factor of our patriarchal social system may be responsible for this and also the couple's marital stability is protected by the presence of at least one boy (Bose and South 2003). In India, more females die than males due to the negligence of females and they suffer neglect in their infancy, childhood and old age (Gosal, G.S., 1961). The traditional elevated masculinity influenced poorer nutrition and inferior health care to the girl child that has been described as 'the greatest single demographic change in the second half of the

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century' (Caldwell, 1982). Prabhat Jha and colleagues has claimed that 10 million female feticides have been committed in India (Jha et al., 2006) that is very shameful incidence towards female. Selective abortion of female fetuses and monitoring of foetal health became easier due to the availability of foetal ultrasound (Baridia, 2004). Prenatal sex selective technology (ultrasound) became available in the mid-1980s and since then the sex ratio imbalances have been seen in some Asian countries (Gu, B, 1995), Though, the combined effect of sex selective technology and small family culture cause higher sex ratio (Klasen, 1994). In the late 1990s, sex selective abortions of female fetuses were estimated to be 100,000 annually in India. According to Government of India's record, the manufacturing of ultrasound machines have been increased 33 times between 1988 and 2003 (Murthy, 2006). The enforcement of government regulation would always be unsuccessful without the changing of social landscape for fostering son preference (Arnold, 2004). There is an important point to note that the frequent births in reproductive age not only results in high maternal mortality rate but also reduces the life expectancy of the females in general (Chandna, 2005). The sex ratio is associated with the socioeconomic development, the standard of living, the status granted to women, the type of economy and the degree of participation in work by females. Migration is an important factor which influences the sex ratio because migration occurs due to the economic reason and the rural to urban migration is mainly male dominated which influences the higher male sex ratio in urban areas.

2. Study Area

South 24 Parganas district, the largest and 2nd most populated district in West Bengal is located in the southernmost part of the deltaic plains of Bengal. The district is situated between 21º 29' 00'' North to 22º 33' 45'' North latitude and 88 º 03' 45'' East to 89º 04' 50'' East longitude. On the 1st of March, 1986, the southern part of erstwhile 24 Parganas was carved out separately to form a new district named South 24 Parganas. The largest district in West Bengal resembles an irregular triangle in shape. It has artificial land frontier as well as natural water boundaries. Kolkata and North 24-Parganas lies to its north and north east and Bay of Bengal to its south. The study area is constituted by twenty nine blocks, bounded by an International boundary with Bangladesh to the east. On the west, the river Hooghly has demarcated the boundary proceeding from north to south separates it from the district of Howrah and East Midnapore. The sensitive border district commands a vital strategic area not only for West Bengal but also for the entire country.

3. Objectives

1. To observe the trends of sex ratio over the century.
2. To quantify the patterns of sex ratio by block level in three consecutive Censuses (1991, 2001 and 2011) and inter-censual changes too.
3. To examine the trends and patterns of rural and urban sex ratio of the district.
4. To analyze the trends of juvenile (0-6 year age) sex ratio of the study area.

4. Data Sources and Methodology:

To investigate the different trends over time and spatial patterns of sex ratio, secondary sources of data has been obtained from District Census Hand Book of 24 Parganas: 1951, 1961, 1971 and 1981; District Census Hand Book of South 24 Parganas: 1991, 2001, and 2011: Primary Census Abstract and many other relevant published reports and documents. The data so obtained have been analyzed through some simple but meaningful statistical techniques including decadal growth and annual exponential growth rate have been used to show the trends, patterns and variation of sex ratio in consecutive decades in blocks as well as in the district. Some cartographic techniques have been used to show the

patterns and changes of sex ratio and few maps have been prepared with the help of Arc info GIS software.

5.   Results and Discussion

5.1.   Trends of Sex Ratio among South 24 Parganas, West Bengal and India (1901-2011)

John Graunt and his colleagues recorded at first about the phenomenon of 'slight excess male birth' in 1710 and their finding was confirmed by a number of population studies and John Arbuthnott was the first person who demonstrated that the excess of male birth is statistically significant (Campbell, 2001). An interesting pattern of relationship between nature and human population establish that boys outnumber girls at the time of birth, but after birth nature seems to favor for women because women tend to live longer than man in spite of receiving same intra household health care and nutritional conveniences that reflects differential sex ratio (Sen 1992; 2003; Waldron 1983; Sheila Ryan Johansson 1991; George Alter, et al 2004; Teitelbaum, 1970).

Table 1 Sex Ratio of South 24-Parganas, West Bengal and India, 1901-2011			
Year	South 24 Pgs.	WB	India
1901	927	945	972
1911	894	925	964
1921	871	905	955
1931	866	890	950
1941	846	852	945
1951	861	865	946
1961	921	878	941
1971	917	891	930
1981	927	911	934
1991	929	917	927
2001	937	934	933
2011	956	950	940

Figure: 1 Trend of sex ratio of south 24-Parganas, West Bengal and india (1901-2011)
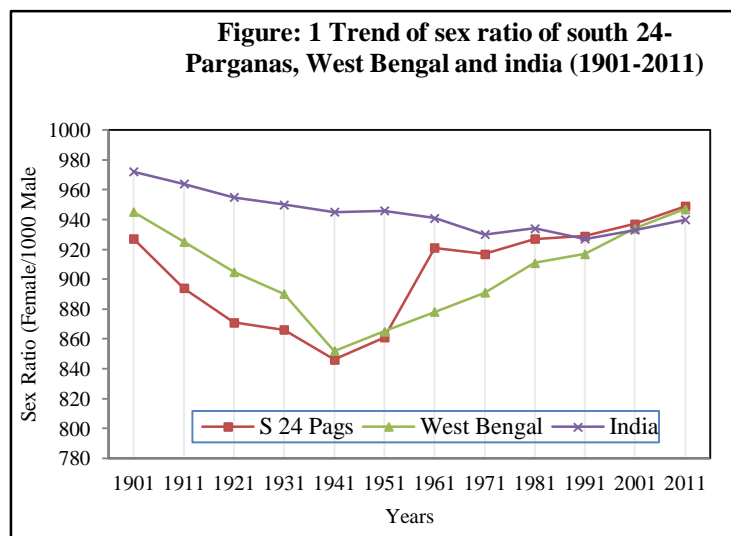
Source: District Census Hand Book: 1951, 1961, 1971, 1981, 1991, 2001 and 2011, South 24 Parganas; Primary Census Abstract, computed by the author.

Generally, Men have the plausibility to engage with more risk behavior and violence than that of women which may be an important cause for the premature male mortality and results female majority in old age (Waldron, 1993). Like other developing countries, India too shows a common sex ratio with high masculinity. In 2011, the district of South 24-Parganas showed the sex ratio to be 956 which is comparatively higher than the state of West Bengal average (950) and national average (940). Both the district and the state have experienced a propensity of decreasing sex ratio till 1941 (Figure 1) that is very unfavorable status in the socio economic attitude. Fortunately India's Sex Ratio had not ever been fall below 927(1991) in the last century. In spite of having continuous diminishing trend till independence, the district's status was better to some extent than national and state average and accelerating trend has been experienced after independence. Such rise in sex ratio is the consequent of improved medical facilities that increases female life expectancy and decreases the probability of dying during pregnancy and post pregnancy period of women. Furthermore, accelerating propensity of out migration of male workers and decreasing attitude of discrimination among sex in case of birth have promoted the district towards the demographic modernization.

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5.2.   The pattern of Sex Ratio of South 24 Parganas, 1991:

The tradition of Son preference is most prevalent in an arc of countries from East Asia through South Asia to the Middle East and North Africa (Arnold, 1987)). As the district has always been recorded to have a masculine sex ratio, the traditional Indian society prefer especially son child due to their higher wage-earning capacity specially in agrarian economies (Basu, 1989), their role of carrying on the family line, recipients of inheritance (Coale, 1996, Arnold, 1998) and they provide social security of parents in their old age (Das Gupta et al. 2003, Coale, 1996, Arnold, 1998).

On the other hand, Dowry system makes the girls as a burden to parents and also girls become members of husband's family after marriage (Leone, 2003). Such socio-economic factors influence to perform some practices like sex determination, sex selective abortion, neglect and abandonment of female that are responsible for the numerical reduction of female, though somewhat improvement have been found due to some under lying causes like improved female education and employment opportunities and rising overall incomes (Klasen, 2002). The high sex ratio has consistently been found in the north-east and the south western part of the district. The

Map 1 Sex ratio, 1991

mostly urbanized north western parts of the district present a lowest proportion of females per thousand males (Map 1). Particularly, the very back-ward and fully rural Canning-II block occupies the highest sex ratio with 961, followed by Bhangar-I (952) and Patharpratima (951).

Table: 2 Block wise distribution of sex ratio of South 24 Parganas, 1991, 2001 and 2011

Sl. No.	Blocks	1991	2001	2011	Sl. No.	Blocks	1991	2001	2011
1	Thakurpukur-Maheshtala	885	914	959	16	Gosaba	941	956	959
2	Bishnupur-I	928	934	957	17	Mograhat-I	932	937	951
3	Bishnupur-II	934	945	957	18	Mograhat-II	931	939	946
4	Budge Budge-I	844	883	953	19	Mandirbazar	936	935	944
5	Budge Budge-II	896	927	949	20	Kulpi	940	945	956
6	Sonarpur	914	937	966	21	Falta	928	941	955
7	Jaynagar-I	931	933	951	22	Diamond Harbour-I	931	932	963
8	Jaynagar-II	941	932	957	23	Diamond Harbour-II	942	950	953
9	Kultali	943	931	948	24	Mathurapur-I	937	939	949
10	Baruipur	924	937	961	25	Mathurapur-II	918	924	940
11	Bhangar-I	952	954	951	26	Kakdwip	948	949	956
12	Bhangar-II	944	928	940	27	Namkhana	947	952	959
13	Canning-I	949	955	964	28	Sagar	946	943	937
14	Canning-II	961	952	966	29	Patharpratima	951	953	959
15	Basanti	950	952	966	***South 24 Parganas***		***929***	***937***	***956***

Source: District Census Hand Book: 1991, 2001 and 2011, South 24 Parganas; Primary Census Abstract, computed by the author.

Due to unfavorable economic development, a number of males are forced to out-migrate for seeking job outside. Such paucity of number of males may be caused due to higher number of females in enumeration. Most of the southern agrarian blocks, located nearer to Sundarbans area, have the higher sex ratio with 940 to 950 females per thousand males (Table 4). The eight blocks have a medium sex ratio with 930 to 940 females per thousand males. The only three north western blocks like Bishnupur-I (928), Falta (928) and Baruipur (924) occupy a low sex ratio with 920 to 930 females per thousand males (Table 4). Bishnupur-I and Falta are well connected with Kolkata area where a lot of migrated males are inhabited for jobs in Kolkata. The very low sex ratio (below 920) is found in north and northwest parts of the district where maximum urbanisation has taken place; Sonarpur (914), Budge

Map 2 Sex ratio, 2001

Budge-II, Thakurpukur-Maheshtala (885) are among them and the lowest sex ratio has been found by Budge Budge-I (844) in 1991 (Table 2).

5.3.   The Patterns of Sex Ratio, 2001:

In 2001, the major distribution pattern of sex ratio is more or less same throughout the district. Most of the southern rural blocks of the district show a higher sex ratio. A very high sex ratio (above 950) is seen in seven blocks where Gosaba occupies the 1st position (956) followed by Canning-I (955), Bhangar-I (954), Patharpratima (953), Canning-II (952), Basanti (952) and Namkhana (952) (Map 2). The lowest sex ratio with below 920 is seen in the two most urbanized north western blocks of Thakurpukur-Maheshtala (914) and Budge Budge-I (883), because of prevalence of male migrant workers.

Table: 3 Distribution of Blocks according to their range of sex ratio: 1991, 2001 and 2011			
Range of Sex Ratio	Name of Blocks		
	1991	2001	2011
Very High Sex Ratio (951 and Above)	Canning-II, Bhangar-I, Patharpratima	Gosaba, Canning-I, Bhangar-I, Patharpratima, Canning-II, Basanti, Namkhana	Sonarpur, Canning – II, Basanti, Canning – I, Diamond Harbour – I, Baruipur, Thakurpukur Maheshtala, Patharpratima, Gosaba, Namkhana, Bishnupur – II, Bishnupur – I, Jaynagar – II, Kakdwip, Kulpi, Falta, Budge Budge – I, Diamond Harbour – II, Bhangar – I, Mograhat – I, Jaynagar – I
High Sex Ratio (941-950)	Basanti, Canning-I, Kakdwip, Namkhana, Sagar, Bhangar-II, Kultali, Diamond Harbour-II, Jaynagar-II, Gosaba	Diamond Harbour-II, Kakdwip, Bishnupur-II. Kulpi, Sagar, Falta	Mathurapur-I, Budge Budge-II, Kultali, Mograhat-II, Mandirbazar
Medium Sex Ratio (931-940)	Kulpi, Mathurapur-I, Mandirbazar, Bishnupur-II, Mograhat-I, Jaynagar-I, Mograhat-II, Diamond Harbour-I	Mograhat-II, Mathurapur-I, Sonarpur, Baruipur, Mograhat-I, Mandirbazar, Bishnupur-I, Jaynagar-I, Jaynagar-II, Diamond Harbour-I, Kultali	Mathurapur-II, Bhangar-II, Sagar
Low Sex Ratio (921-930)	Bishnupur-I, Falta, Baruipur	Bhangar-II, Budge Budge-II, Mathurapur-II	N.A
Very Low Sex Ratio (920 and Below)	Mathurapur-II, Sonarpur, Budge Budge-II, Thakurpukur-Maheshtala, Budge Budge-I	Thakurpukur-Maheshtala and Budge Budge-I	N.A

Source: District Census Hand Book: 1991, 2001 and 2011, South 24 Parganas; Primary Census Abstract, computed by the author.

5.4.   Pattern of Sex Ratio, 2011:

A very contrasting feature is seen in the spatial pattern of Sex Ratio in 2011. Due to the compulsory inclusion of female in administrative sectors, they are getting more privilege in important decision making processes. As women have more gender-egalitarian attitudes than men (Kitterød, 2020), the attitude of gender discrimination tends to be reduced. The sex ratio in urban area has also become higher which somewhat shows a reverse trend of earlier Censuses. The very rapidly grown urbanized Sonarpur block and relatively under developed Canning-II and deltaic Basanti blocks have shown the highest sex ratio. These three blocks experienced the identical sex ratio with 966 and followed by Canning-I (964), Diamond Harbour-I (963) and Baruipur (961). With the rapid socio-economic change, women's empowerment and women's work participation in almost all sectors of economy, a higher sex ratio in both rural and urban area has been found.

Map 3 Sex ratio, 2011

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5.5. Changing pattern of Sex Ratio of South 24 Parganas, 1991-2001

Among the 29 blocks of the district, six blocks have recorded a decreasing change in their sex ratio in 2001 with respect to 1991 Census. The maximum decline (-16) has been identified in Bhangar-II followed by Kultali (-12), Canning-II (-9), Jaynagar-II (-9) and Sagar (-3). Here, the 23 blocks have recorded to have an increasing trend of sex ratio in this decade. Budge Budge-I show the maximum increase (39) followed by Budge Budge-II (31), Thakurpukur-Maheshtala (29), Sonarpur (23), Gosaba (15) and Baruipur (13) (Figure 3).
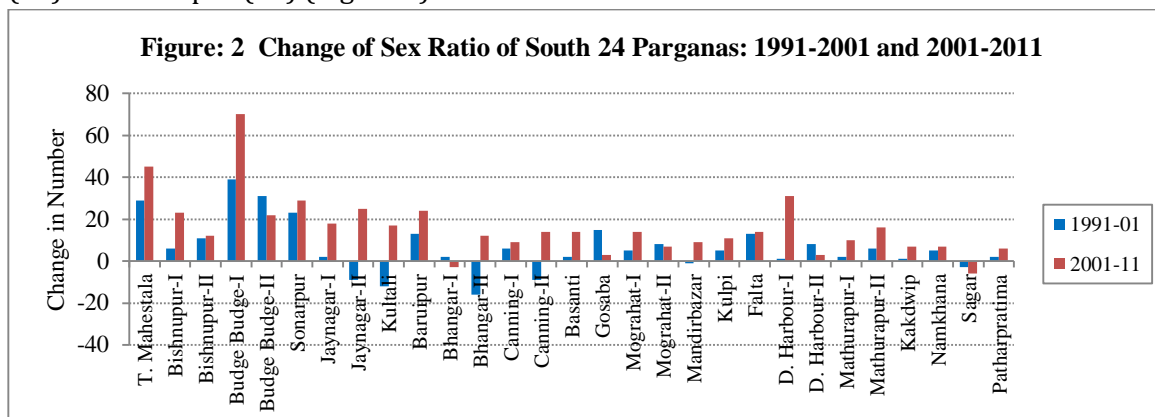
Figure: 2 Change of Sex Ratio of South 24 Parganas: 1991-2001 and 2001-2011

Source: District Census Hand Book: 1991, 2001 and 2011, South 24 Parganas; Primary Census Abstract, computed by the author.

With the changing social awareness as well as government's effort, more and more care for female child has been increased dramatically. The participation of females in all sectors such as education, economic and political fields has encouraged thousands of parents about the importance of girl child. The attitude of gender discrimination has greatly reduced. The dropout rates in schools for female are lower than the male in the district. Such factors have collectively influenced the increasing sex ratio of the district.

5.6. Changing pattern of Sex Ratio of South 24 Parganas, 2001-2011

This decade has become an evident for the tremendous positive change of sex ratio in the district which had never been happened before. Only the extreme north eastern block (Bhangar-I) and the extreme south western island block (Sagar) show a decreasing tendency of sex ratio and rest of the 27 blocks have recorded better positive change of sex ratio where Budge Budge-I presents the 1st position by adding 70 (Table 2) from 2001 and followed by Thakurpukur-Maheshtala (45), Diamond Harbour-I (31), Sonarpur (29), Jaynagar-II (25), Baruipur (24), Bishnupur-I (23) and Budge Budge-II (22). Due to the influence of globalization and modernization, the importance of women due to social awareness has increased considerably. The deltaic Gosaba has occupied the highest sex ratio in 2001 (956), it increases only 3 in 2011 from 2001 Census. Some of the low increasing blocks are Patharpratima (6), Namkhana (7), Kakdwip (7) and Mograhat-II (7). The economic and cultural transformation through the process of urbanisation played an important role for increasing sex ratio in some northern blocks like Budge Budge-I, Thakurpukur-Maheshtala and Sonarpur. The Aila, a severe cyclonic storm occurred in 26th May, 2009 in southern parts of the district that led out-migration of a number of families from Aila affected blocks to the middle and northern part of the district.

### 5.7. Trends and Patterns of rural and urban sex ratio of South 24 Parganas 1991-2011

Both the rural and urban sex ratio have experienced accelerating trend during the last three consecutive Censuses (Table 2 and Figure 2). The trend of urban sex ratio has received remarkable attention with having steeper growth than that of the trend of total and rural. Such increasing trend of female population per 1000 male population may be caused by the contemporary assigned importance to female population in all sections of society for the educational development and diminishing attitude

of gender discrimination. The higher rural sex ratio has been recorded in the some under developed eastern blocks like Canning-II (961), followed by Bhangar-I (952), Patharpratima (951), Basanti etc. in 1991 and such picture has been shifted towards south east where Gosaba (956) contributed the highest position in 2001. Interestingly, the most urbanized Thakurpukur Maheshtala experienced the highest rural sex ratio in 2011 and the lowest position is shown by deltaic south western Sagar block (937). Some partly urbanized blocks like Sonarpur, Baruipur, Jaynagar-II (Table 5) located in the middle part of the district has contributed more urban sex ratio in 1991 and more urbanized northern blocks like Budge Budge-II (832), Thakurpukur-Maheshtala (872), Bishnupur-I (880) and Bishnupur-II (889) have recorded as very low urban sex ratio. The spatial pattern of urban sex ratio in 2001 is nearly identical with the preceding Census. Especially, the newly formed urban areas have witnessed higher urban sex ratio compared to the older urban areas observed in 2001 and 2011. In 2011, the newly urban areas of Canning-II block presents maximum urban sex ratio (981) followed by Baruipur (976), Canning-I (973), Diamond Harbour-I (973) etc. It may finally be noted that the pattern of both rural and urban sex ratio has very sporadically distributed throughout the district and has remained favorable to females which is a welcome feature as far as the demographic pattern is concerned.

Table: 4 Total, Rural and Urban sex ratio of South 24 Parganas 1991, 2001 and 2011

Sex Ratio	1991	2001	2011
Total sex ratio	930	937	956
Rural sex ratio	938	942	954
Urban sex ratio	877	913	961

Source: District Census Hand Book: 1991, 2001, and 2011, South 24 Parganas; Primary Census Abstract, computed by the author.

Figure: 3 Trend of rural and urban sex ratio of South 24 Parganas 1991-2011
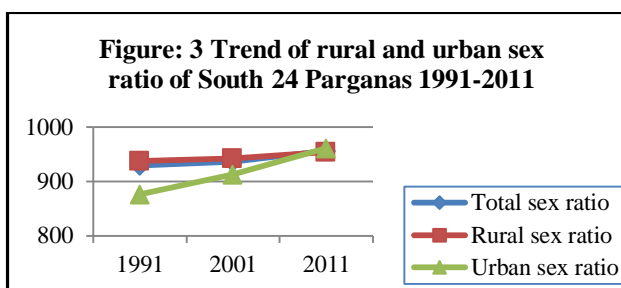
Source: District Census Hand Book: 1991, 2001, and 2011, South 24 Parganas; Primary Census Abstract, computed by the author.

Table: 5 Spatial Pattern of Rural and Urban Sex Ratio by Block Level, 1991, 2001 and 2011

Year	1991		2001		2011		Year	1991		2001		2011	
Blocks	Rural	Urban	Rural	Urban	Rural	Urban	Blocks	Rural	Urban	Rural	Urban	Rural	Urban
Thakurpukur-Maheshtala	932	872	942	907	973	956	Gosaba	941	---	956	---	959	---
Bishnupur-I	932	880	935	934	955	972	Mograhat-I	932	---	937	---	954	941
Bishnupur-II	936	889	944	953	951	969	Mograhat-II	931	---	938	954	943	954
Budge Budge-I	932	804	934	868	966	951	Mandirbazar	936	---	935	---	944	943
Budge Budge-II	934	832	938	857	957	931	Kulpi	940	---	945	---	955	967
Sonarpur	904	926	945	933	959	969	Falta	928	---	941	---	954	960
Jaynagar-I	931	---	933	907	947	961	Diamond Harbour-I	932	928	930	938	958	973
Jaynagar-II	942	930	931	939	957	961	Diamond Harbour-II	942	---	950	---	953	957
Kultali	943	---	931		948	---	Mathurapur-I	937	---	939	---	952	931
Baruipur	926	910	935	951	954	976	Mathurapur-II	918	---	924	---	940	---
Bhangar-I	952	---	954	957	949	971	Kakdwip	948	---	949	---	956	---
Bhangar-II	944	---	928	---	940	---	Namkhana	947	---	952	---	959	---
Canning-I	950	945	955	---	958	973	Sagar	946	---	943	---	937	---
Canning-II	961	---	952	---	965	981	Patharpratima	951	---	953	---	959	---
Basanti	950	---	952	---	967	922	**South 24-Parganas**	**938**	**877**	**942**	**913**	**954**	**961**

Source: District Census Hand Book: 1991, 2001 and 2011, South 24 Parganas; Primary Census Abstract, computed by the author

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5.8.   Juvenile Sex Ratio of South 24 Parganas (0-6 year age):

Gender discrimination is one of the significant social issues that manifests male majority among the young population. Progress of life expectancy due to health awareness, medical facilities and various government plans are very remarkable advantages for women. This (0-6 year age group) is a most sensitive age cohort in respect of gender discriminatory practices (Chakraborty, 2006). Notably, the total sex ratio has steeply increased whereas the child sex ratio has decreased gently (Table 6 and Figure 4) and a reverse trend of decreasing rural child sex ratio and increasing urban child sex ratio are being observed in consecutive three Censuses (Figure 5). Due to the effect of demographic modernization, the attitude of weakening of son preference widespread everywhere in the society especially in urban area where number of female children tends to increase gradually. Such dramatic improvement of the survival of the girl child has accelerated the child sex ratio and consequently the gap between total and child sex ratio as well as rural and urban child sex ratio is being reduced.

Table: 6 Comparison of trend between total and child sex ratio of South 24 Parganas 1991-2011

Sex Ratio	1991	2001	2011
Total sex ratio	930	937	956
Child sex ratio	973	964	963
Rural Child Sex Ratio	975	965	964
Urban Child Sex Ratio	951	955	957

Source: District Census Hand Book, 1991, 2001, and 2011, South 24 Parganas; Primary Census Abstract, computed by the author.

Figure: 4 Comparison of trend between total sex ratio and child sex ratio of South 24 Parganas 1991-2011

Figure: 5 Trend of rural and urban child sex ratio of South 24 Parganas, 1991-2011
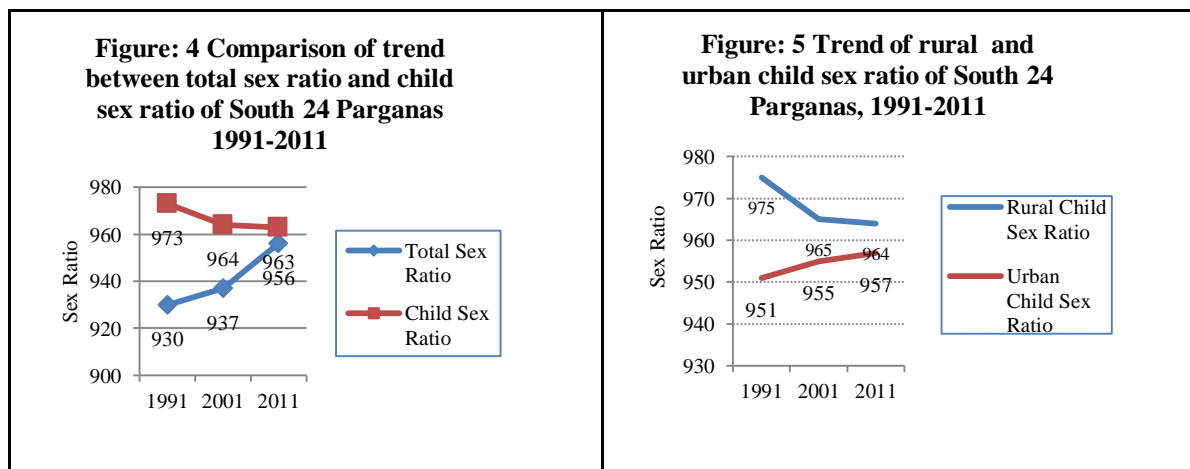
Source: District Census Hand Book: 1991, 2001, and 2011, South 24 Parganas; Primary Census Abstract, computed by the author

The total child sex ratio has been recorded as 963 in 2011 where Gosaba (981) has occupied the maximum ratio followed by Jaynagar-II (978), Kultali (977), Budge Budge-I (976), Kakdwip (976) etc. The minimum child sex ratio is found in Diamond Harbour-II (937).

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Table: 7 Child sex ratio of South 24 Parganas, 2011

Blocks	Sex ratio	Blocks	Sex ratio
Thakurpukur- Maheshtala	965	Gosaba	981
Bishnupur - I	955	Mograhat - I	970
Bishnupur - II	970	Mograhat - II	956
Budge Budge - I	976	Mandirbazar	949
Budge Budge - II	957	Kulpi	971
Sonarpur	953	Falta	964
Jaynagar - I	954	Diamond Harbour - I	974
Jaynagar - II	978	Diamond Harbour - II	937
Kultali	977	Mathurapur - I	975
Baruipur	953	Mathurapur - II	949
Bhangar - I	967	Kakdwip	976
Bhangar - II	962	Namkhana	959
Canning - I	943	Sagar	964
Canning - II	961	Patharpratima	965
Basanti	970	***South 24 Parganas***	***963***

Source: District Census Hand Book: 1991, 2001, and 2011, South 24 Parganas; Primary Census Abstract, computed by the author.

6. Findings

- The gradual decreasing trend of the district's sex ratio has been showing accelerating trend after the independence in India.
- The growing rural urban sex ratio has come close to each other by reducing their residential gap.
- Most of the agricultural based southern rural blocks contribute higher sex ratio than urban parts.
- The total sex ratio has been steeply increased but the child sex ratio has been decreased gently.
- Masculine sex ratio has also been observed in the study of child sex ratio.
- High positive change of sex ratio has been observed in 27 of district's 29 blocks during 2001-2011.
- The gradual shrinking of gender discrimination is very clear from the increasing trends of sex ratio in most of the study area.

7. Suggestions

- It should be a moral obligation to each responsible citizen to change the attitude of gender discrimination in social, cultural, economic and political sector and they should have helpful for implementing government rules in associated sectors.
- The traditional attitude of son preference of parents should be changed by realizing equal regard and affection towards girl child.
- Government should be strict to those people who are responsible for child marriage and proper guidance should be given to poorly literate rural parents for banning such customs.
- Government should be organized 'parents awareness camp' for making understand the importance of female for all levels of society for reducing infant girl child mortality.

8. Conclusion:

The differential sex ratio between boy and girl children as well as rural and urban is indicative for demographic changes which reflect the socio-economic status of women in particular. Girl children are

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discriminated more in rural areas than in urban by influencing some biological, social and economic factors. Dyson (1987) studied the 1971 post enumeration check showed Indian females suffered a marginally greater percentage of under count than their male counter parts and consequently, the male dominated sex ratio has long been a traditional common picture of the district. The rising trend of sex ratio is the consequent of improved medical facilities that increases female life expectancy and decreases the probability of dying during pregnancy and post pregnancy period of women. Higher masculinity presents the stronger prevalence of traditional son preference which promotes the practice of sex selective abortion, neglect and abandonment of female. A comprehensive reverse relationship has been found between urbanisation and sex ratio of the population. More urbanized north western part of the study area has witnessed lower sex ratio whereas the southern agrarian rural parts contribute higher sex ratio. Male worker out migration from rural to urban sector may be responsible for such reverse pattern of gender imbalances in consecutive Censuses. With the demographic modernization and compulsory inclusion of females in important decision making processes have reduced the gender discrimination to some extent in the recent decades. Presently, the government's efforts as well as changing social awareness have encouraged thousands of parents to feel the value of female child that has weakened the attitude of son preference. Finally, the gap between total sex ratio with child sex ratio and child sex ratio of rural and urban area are being reduced very rapidly which focuses a dramatic improvement of demographic structure of the district.

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