

CHAPTER-VI

TEMPORAL VARIATION OF SEX STRUCTURE

6.1 INTRODUCTION

Temporal analysis of sex ratio plays a vital role in the way to study the sex structure of the North Bengal region as it reveals the picture of sex ratio since early period of the last century till today. With the positive and negative changes in the overall sex ratio of the region as a whole, as well as, in all districts individually; one can easily acquire some idea about the changing status of women in the society and can identify the socio-demographic factors worked behind this change. Identification of these factors will help the policy makers in the way to make suitable socio-economic policies through which, if properly implemented, may lead the region to achieve sustainable development in all fields of social, economic as well as cultural sectors.

Though the sex ratio of India is not satisfactory since 1901 and which has declined from 972 in 1901 to 933 in 2001, yet the number of females per thousand males is low in all years in the state of West Bengal throughout the last century (Table 6.1). This deficiency of females is more prominent in the northern six districts of the state and the North Bengal's average sex ratio is much lower than that of the nation's average throughout the 20th century. The proportion of women in the Indian population and in the state's population, 933 women per 1000 men and 934 women per 1000 men respectively, is strikingly below the world average of about 990 women per 1000 men. This sex ratio has steadily declined from 972 in 1901 to 933 in 2001 in India and from 945 in 1901 to 934 in 1991 in West Bengal. There is adequate evidence to show that the low sex ratio mainly arises out of higher female over male mortality and the sex differentials in mortality are in turn a result of discrimination against women which operates through their unequal access to life sustaining inputs, like, food, nutrition and health care.

Since 1901, the sex ratio in the country's total population declined continuously till 1941, which became 945 in 1941 from 972 in 1901. During 1941-'51, the sex ratio increased slightly by only one point and after 1951, it again decreased by 16 points till the census year 1971. The decade 1971-'81, experience a 4 points increase in sex ratio to achieve 934 females for every 1000 males in 1981. But unfortunately, this increasing trend did not continue and the general sex ratio of India fell to 927 during 1991 and again took some upward move with having 933 females per thousand males during 2001. Therefore, in the whole country, the general trend of sex ratio is declining during the last

century with two exceptions during 1941-'51 and during 1971-'81 with only one and four points increase respectively (Table 6.1).

A decline has been witnessed in the proportion of women over the years in the population of many countries the world over. This is mainly in the societies with a strong cultural tradition of son preference. Strong male preference is common in India along with other Asian societies like Japan, China, and South Korea etc. Main reasons behind this strong emphasis on the need for a male offspring are basically the patrilineal property transfers, religious and ritualistic practices and other patriarchal social structures etc. This forms the basis for a family, which aspires to have at least one or more boys. The lower status ascribed to women due to societal beliefs and practices that view them burdens, costs and dangers to family honour and dignity, further intensifies son preference. This is why, among younger cohorts, the sex ratios are most strikingly imbalanced and have been declining over the years in almost all regions of India.

6.2 SEX RATIO AMONG TOTAL POPULATION

Like the whole country, West Bengal shows a declining trend in overall sex ratio since 1901 to 1941 where it decreased from 945 females per 1000 males in 1901 to 852 in 1941. After 1941, the sex ratio patterns of the state shows an inclining trend up to the year 2001, which became 934 females per 1000 males in 2001. Therefore, though up to 1941, sex ratio of the state shows a steady falling than that of the country, yet after the year 1941, till 2001, unlike the country's irregular pattern, the state experiences a steadily increasing trend. Most important feature in the sex ratio of the state during the decade 1991-2001 is that, during this period for the first time, the state's sex ratio exceeds that of the country's average. Thus, 1941 is the year, which marked as the divide between decreasing and increasing sex ratio pattern of the state. But with this increasing trend of sex ratio also, the state could not achieve the same number of females for every 1000 males like that in the beginning of this century (it was 945 during 1901 and now it is recorded 934 in 2001).

Unlike the state, the sex ratio pattern of the North Bengal was much more irregular in the last century. It started with 909 females for every 1000 males in the beginning of this century (1901), which was much lower than that of the state's average of 945 as well as the country's average of 972 females per 1000 males. The sex ratio pattern in North Bengal's general population shows a

declining trend since 1901 to 1951 with exception of 7 points increase during 1911-'21. During these 50 years, sex ratio decreased from 909 females per 1000 males in 1901 to 881 in 1951. The year 1951 marks the divide line in the sex ratio pattern of the study region. Because, after 1951, the region continuously increase its sex ratio till 2001 and became 944 females per 1000 males at the beginning of 21st century, which is more than that of the state's average. Therefore, started with a sex ratio much below than the state and the country, North Bengal has come at the beginning of new century with a sex ratio more than that of the state and the nation's average. This mainly because, the downs in sex ratio during the 90 years period in North Bengal was less severe than the other two. During the first five decades of the 20th century, the loss of sex ratio was 28 points, whereas during the last five decades, the gain was 63 points

Table 6.1: - Sex Ratio for Total Population, 1901-2001

Sex Ratio (number of females per 1000 males) in											
Nation/ State/ Region	Census Year										
	1901	1911	1921	1931	1941	1951	1961	1971	1981	1991	2001
India	972	964	955	950	945	946	941	930	934	927	933
West Bengal	945	925	905	890	852	865	878	891	911	917	934
North Bengal	909	904	911	903	900	881	898	914	927	930	944

Source: - Calculated from PCA, 1901-2001

The district wise variation of sex ratio during the last century shows more or less irregular trend in all the districts of North Bengal. In the Darjiling district, the 20th century started with 876 females per thousand males, which was less than the region's average at that time. Between 1901 and 1951, there was a little change in overall sex ratio of the district, which was a decrease of 13 points. After 1951, the sex ratio experienced continuous increase upto the beginning of the 21st century and became 943 females per thousand males in the census year 2001. At the end of 20th century, the district records sex ratio of 914 females per 1000 males, which was the lowest sex ratio among all the six districts of the region. But during the decade 1991-2001, number of

females for every thousand males has increased by 29 points, which is the maximum increase among all the districts in the said decade. Therefore in the district of Darjiling, the trend of general sex ratio shows irregularity before 1951 and records a continuous increase after 1951.

Table 6.2: - District wise Sex Ratio for Total Population, 1901-2001

Sex Ratio (number of females per 1000 males) in							
Census Year	Darjiling	Jalpaiguri	Koch Bihar	West Dinajpur	Maldah	Uttar Dinajpur	Dakshin Dinajpur
1901	876	843	881	918	1007		
1911	871	829	873	920	1004		
1921	898	856	877	929	991		
1931	881	830	886	923	989		
1941	884	836	879	910	983		
1951	863	825	855	884	966		
1961	864	854	890	906	965		
1971	882	887	916	921	948		
1981	888	910	935	937	949		
1991	914	927	935	930	938	921	944
2001	937	942	949		948	938	951

Source: - Calculated from PCA, 1901-2001

On the other hand, in Jalpaiguri district, about 943 females were recorded per 1000 males during the beginning of 20th century. This district records an irregular pattern of sex ratio before the year 1951 as the decades experienced ups and downs in the sex ratio pattern on overall population of this district. Before independence, three decades of the 20th century, i.e., 1901-1911, 1921-1931 and 1941-1951, recorded downward trend in the

sex ratio, while the remaining two decades of 20th century before independence recorded an increase in the sex ratio pattern (Table.6.1). With this irregular pattern, the general sex ratio declined to 825 females per 1000 males during 1951 from that of 843 in 1901. 1951 marked the demographic divide in the sex ratio pattern of this district, as since 1951, the district recorded a continuous increase in its overall sex ratio pattern upto 2001 which became about 941 females per 1000 males in the year 2001.

Koch Bihar started its journey with 881 females per every thousand males at the beginning of this century, which declined by 8 points in the decade 1901-1911. Between 1911 and 1931, the sex ratio for total population in Koch Bihar increased by 13 points to 886 females per 1000 males. But again the overall sex ratio attained a decrease during the 20 years period since 1931 to 1951. Between the decades from 1951 to 2001, the sex ratio pattern took a continuous increasing trend and become 949 females per 1000 males in the beginning of the present century. Therefore, in the Koch Bihar district, the change in the number of females per thousand males was not regular in all decades till the middle of the last century, but in the 50 years period after independence, the sex ratio shows a steady increase and recorded 68 points more at the end of the 20th century than that of the beginning. In other words, the change in sex ratio before 1951 was irregular, while after 1951, it records a continuous increase (Table 6.1).

In case of the southern three districts of the study region, the general sex ratio pattern is quite different than that of the northern three districts. During 1901, unlike northern three districts, the sex ratio was more in Uttar and Dakshin Dinajpur separately till 1981, therefore, upto this year, both the district in combined is taken for analysis as the West Dinajpur district. In West Dinajpur, before 1951, the sex ratio pattern was less irregular than that of the northern three districts. Between 1901 and 1921, sex ratio increased from 918 females per 1000 males in 1901 to 929 in 1921. This is a reversal trend in temporal variation of sex ratio among all districts of the region. Between 1921 and 1951, the sex ratio recorded a continuous decrease by 45 points and become 884 females per 1000 males in 1951. After 1951, the sex ratio has increased till 2001 with an exception in 1981-1991, when it increased by 7 points. Therefore, the sex ratio pattern of total population in the district records totally irregular trend.

Figure 6.1: - Temporal Variation of Sex Ratio, 1901-2001

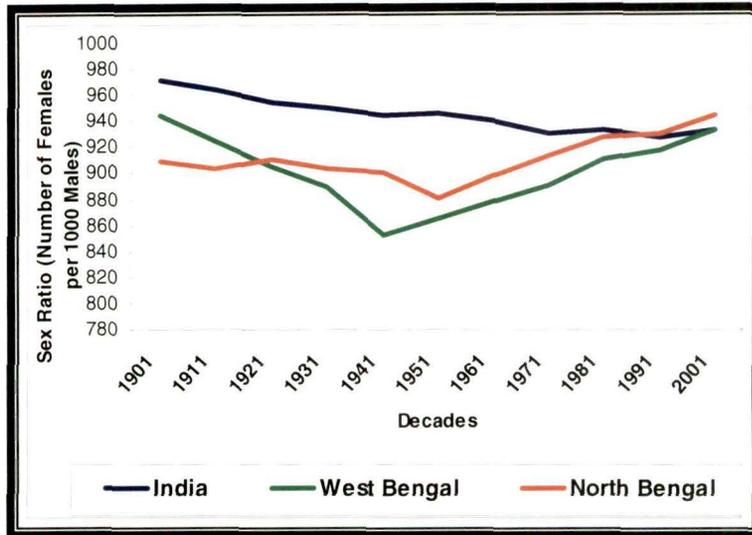
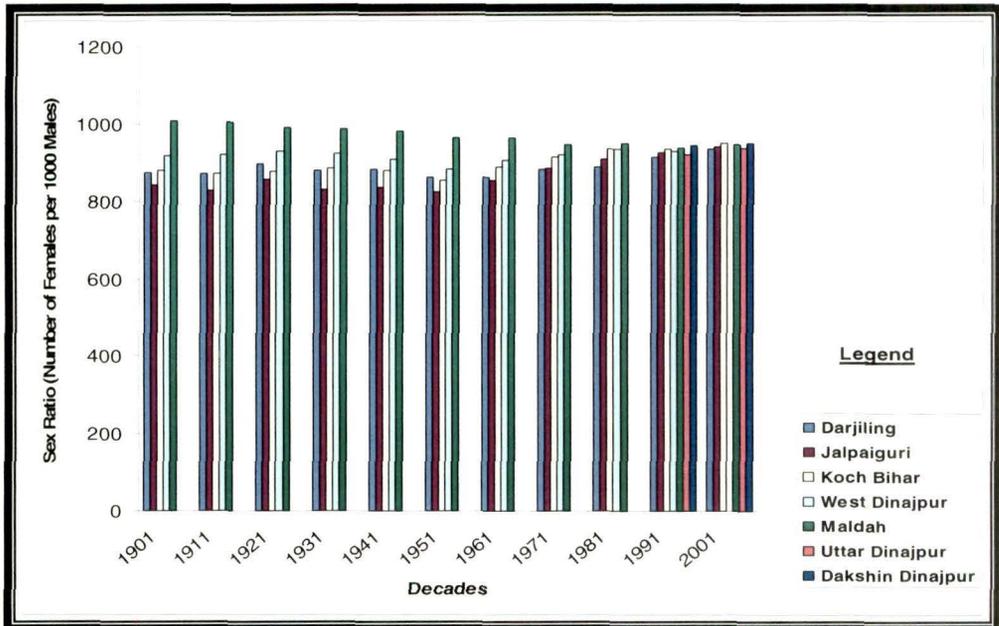


Figure 6.2: - Temporal Variation of Sex Ratio by Districts, 1901-2001



The southernmost district, Maldah shows a total different picture in the sex ratio pattern of general population since 1901. Unlike all other districts, it started its journey in the beginning of the 20th century with excess females than males, where there were 1007 females recorded per 1000 males in the year 1901. This high sex ratio started falling since 1901 and continued till 1971. Thus, the number of womenfolk against every thousand men in this district deteriorated since the beginning of the last century and this

trend continued for 70 years, which is till 1961, when there recorded about 948 females per 1000 males. After 1961, the sex ratio increased by 1 points in the next decade, which was followed by again a fall of 11 points in the next decade and at the end of the last century, the sex ratio in Maldah became 938 females per 1000 males. During the decade of 1991-2001, the sex ratio shows an increase by 10 points and become similar to that was in the year 1971. Therefore, in this district, the sex ratio pattern shows a continuous decrease till 1971 and after that, it records an irregular trend (Table 6.1).

The above discussion reveals that, all the three northern districts of the North Bengal, started their journey for the 20th century with the sex ratio below the region's average; while, the southern districts with their sex ratio of above average. At the end of the century, all the districts except Maldah, achieved sex ratio more than that of the sex ratio of their own at the beginning of this century, while in Maldah, the number of females per thousand males is less than that was at the starting.

6.3 SEX RATIO AMONG LITERATES, 1961-2001

From the beginning of the planned era, education along with health and social welfare were accepted as crucial services for women's development. Allocations through the Five Year Plans and special programmes for women's education together with efforts to reduce gender inequalities in school enrolment and dropouts have been undertaken by the state. The challenge posed in trying to increase retention rates of girls in schools surpasses the efforts required to enroll them. Unless girls continue their education up to higher levels of schooling, the potential benefits of education will remain limited.

In the whole state, as well as the whole region, literacy rate is very low and above all, female literacy is abnormally low. This fact will clearly understood from the distribution of sex ratio among total literates. The Table 6.3 shows that during 1961, only 372 females were literate for every thousand literate males in the whole state of West Bengal, which is only 285 in case of Whole North Bengal region. With the passage of time, the literate's sex ratio for both the areas increases and achieved 721 and 676 females per 1000 males respectively. During the whole time span, in all census years, sex ratio for literates in the whole state is far more than that of the study region.

Table 6.3: - Variation of Sex Ratio among Total Literates, 1961-2001

Sex Ratio (Number of Females per 1000 Males)					
among total literates in					
	1961	1971	1981	1991	2001
West Bengal	372	466	544	623	721
North Bengal	285	391	470	544	676
Darjiling	333	491	545	644	734
Jalpaiguri	316	417	494	544	672
Koch Bihar	262	352	453	538	699
West Dinajpur	253	367	444	514	
Uttar Dinajpur				459	581
Dakshin Dinajpur				584	711
Maldah	262	348	429	509	662

Source: - Calculated from PCA, 1961-2001

However, during the year 1961, among all districts of North Bengal, Darjiling records maximum sex ratio for total literates of about 333 females per 1000 males, which recorded a continuous increase through all the 40 year period and have increased by 158 points between 1961 and 1971 and have attained sex ratio of 491 females per 1000 males. During the decade 1971-1981, the district attained only 54 points increase and has registered 545 female literates per 1000 male literates. During the last two decades till recent, the increase in the number of educated females per thousand males was 99 and 90 points respectively.

Figure 6.3: - Temporal Variation of Sex Ratio among Literates, 1961-2001

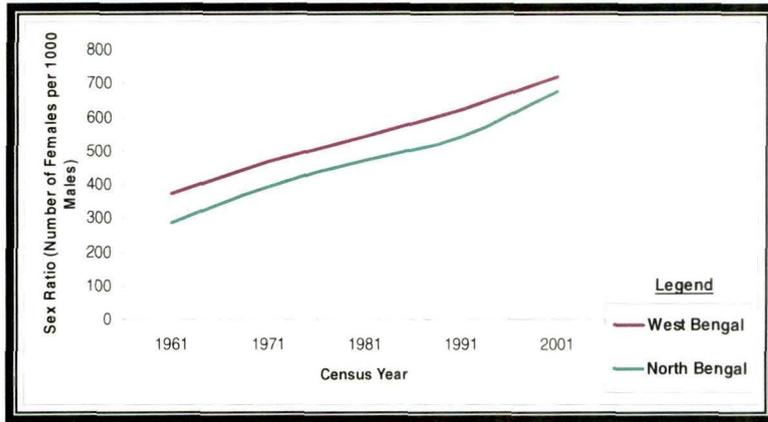


Figure 6.4: - Temporal Variation of Sex Ratio by Districts among Literates, 1961-2001

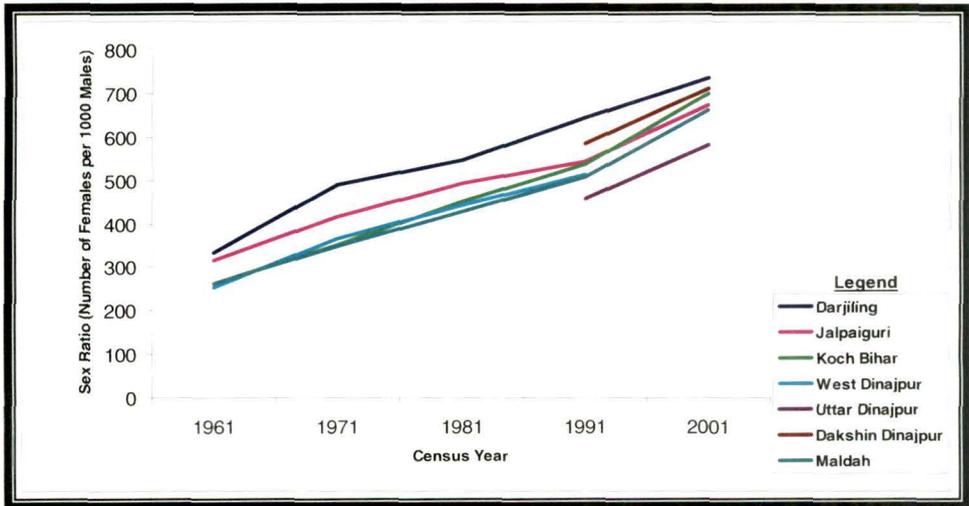
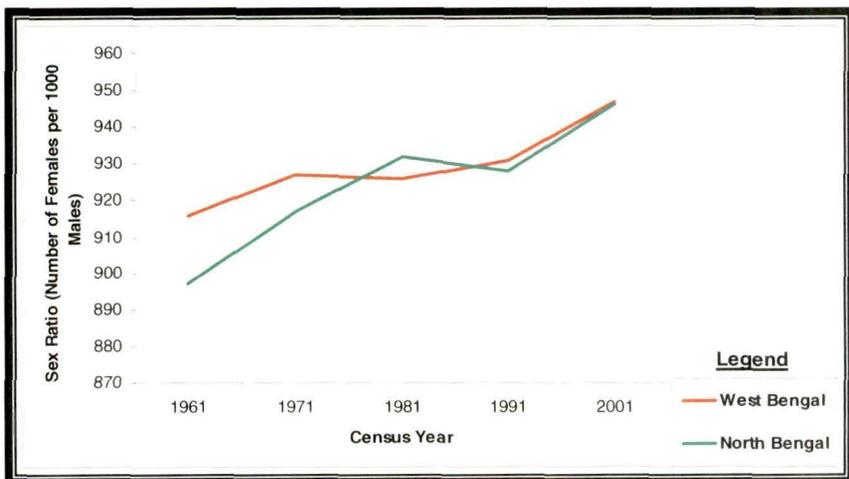


Figure 6.5: - Temporal Variation of Sex Ratio among Scheduled Caste Population, 1961-2001



Thus, through increase in the sex ratio among total literates, Darjiling district passes 40 years since 333 in 1961 to 734 females per 1000 males in 2001 with maximum increase in the number of female literates per 1000 male literates during 1961-'71. There were only 316 females per 1000 males in total educated people of Jalpaiguri during the year 1961 and with an increase of 101 points; it recorded the sex ratio of 417 females per 1000 males during 1971. In the decade 1971-'81, there was an addition of 77 female literates per thousand male literates while in the next decade, the addition was only 50 points and this is the minimum addition in the whole 40 years of time. Contrary to this, the maximum addition of female literates is in the decade of 1991-2001, where about 128 females were added for every 1000 male literates and the district attained 672 females per 1000 males in case of total literates of the district. About 262 females were recorded per 1000 male literates in Koch Bihar during the year 1961. With the addition of 90 educated females per thousand males, the sex ratio for literates become 352 during 1971 and due to addition of 101 educated females, it again increased to 453 females per 1000 males during 1981 in Koch Bihar. However, in the decade 1981-'91, only 85 educated females were added while in the next decade, i.e., in 1991-2001, about 161 female literates were added per every 1000 male literates and the sex ratio became 699 females per 1000 males among literates. During the year 1961, the then West Dinajpur district records 253 female literates per 1000 male literates, which increased to 367 during 1971 and 444 in 1981. In 1991, the sex ratio became 514 with the increase of 114, 77 and 70 educated females per 1000 males respectively. During 1991-2001, due to addition of 122 and 127 educated females per thousand males, Uttar and Dakshin Dinajpur recorded sex ratio of 581 and 711 respectively. The southernmost district, namely Maldah records 262 female literates per 1000 males in 1961. During the year 1971, it became 348 due to the addition of 86 educated females per 1000 males, while due to the addition of 81 and 80 females per 1000 males, the sex ratio among educated people become 429 and 509 females per 1000 males in 1981 and 1991 respectively in the Maldah district. During 1991-2001, due to the increase of 153 points, the sex ratio among literates became 662 females per 1000 males in 2001 (Table 6.4).

The above discussion reveals that, maximum sex ratio was recorded in Darjiling with 333 females per 1000 males during 1961 followed by Jalpaiguri district, while the minimum sex ratio for total literates was recorded in the then West Dinajpur district with 253 females per 1000 males. Darjiling district continued its leading role among all

districts of North Bengal during 1971 followed by Jalpaiguri and minimum sex ratio was recorded in Maldah district with lagging by 143 points than that of the former. However, during the year 1981 and 1991, maximum and minimum sex ratio among literates were still recorded in Darjiling and Maldah respectively. During the year 2001, though Darjiling continued its position with 734 females per 1000 males, but Uttar Dinajpur occupied minimum position with only 581 female literates per thousand male literates.

The emphasis laid on education, especially for women, is visible in the policy documents of the governments such as the various Five Year Plans (since the Sixth Plan, 1981-'85, in particular), The National Policy on education (NPE) and so on. Many programmes targeting different segments of the population have been instituted to promote literacy among women, young and old. These efforts have been only partially successful on account of the lower value ascribed to women's education in our society. All districts of North Bengal have registered improvement in female literacy rates. This is an outcome of various educational programmes such as Mahila Samakhya, District Primary Education Programme (DPEP), Adult Literacy Mission and Non-formal Education Ventures. Independence had created an unquenching thrust for knowledge, resulting in an abnormal rise in the social demand for education. Public policy towards equality in education led to the expansion of education horizontally. The rise in the individual earnings created further growth in demand for education. There has been a very significant improvement in education with respect to interregional inequalities, and inequalities by gender, caste, religion etc., during the post-independence period. The expansion of education since independence period has made a significant contribution to economic growth. The effect of education on agricultural development was also found to be quite high.

Despite the expansion of the system, the progress achieved has not been satisfactory, both in terms of quality and quantity. India inherited an irrelevant education system from the British rule. That is, the Indian education system faced a crisis even before attaining maturity, and the crisis became an integral part of the system. While this reflects the deep roots the colonial policies had taken in the system, this also reflects on the state policies of the independent India. After all, education has been under the control of the Indian ruler not just after 1947, but also since 1921. At the beginning of the twenty-first century, the Indian education system still faces the problems that many developed

countries had solved in the nineteenth and the early twentieth centuries. The unfinished tasks in education seem gigantic.

6.4 SEX RATIO AMONG SCHEDULED CASTE POPULATION, 1961 –2001

In North Bengal region, about 897 females have recorded per 1000 males among scheduled caste population of 1961, which were 916 females per 1000 males in case of whole state. During 1971, the figure for North Bengal region has increased to 917 females per 1000 males and in 1981, it became 932 females per 1000 males and in 1991, the sex ratio is 928 females per 1000 males among scheduled caste population. In case of Darjiling, throughout the forty years span, sex ratio among scheduled caste population shows a fluctuating trend. During 1961, the sex ratio was 905 females per 1000 males, which decreased in 1971 to 888 females per 1000 males. After the year 1971 till 2001, the sex ratio increased from 904 females per 1000 males in 1981 to 949 females per 1000 males in 2001. Therefore, the sex ratio among scheduled caste population in Darjiling district was lowest in the year 1971 and maximum in the year 2001. In case of Jalpaiguri district, the sex ratio among scheduled caste population was recorded as 871 females per 1000 males in 1961, which was the minimum among all districts of North Bengal in that year. It increased to 903 females per 1000 males in 1971. During 1981 and 1991, the sex ratio remained more or less same of 921 females per 1000 males and it again increased by 21 points and attained 942 females per 1000 males during 2001, which is maximum in the district in terms of sex ratio among scheduled caste population. About 901 females have recorded per 1000 males in the year 1961 in Koch Bihar district, which has increased to 920 females per 1000 males during 1971 and to 937 females per 1000 males during the year 1981. During the decade 1981-'91, the sex ratio among scheduled caste population has decreased slightly and as a result, it was recorded as 936 females per 1000 males in 1991. Again in 2001, the sex ratio increased by 16 points and recorded as 952 females per 1000 males. About 884 females were there per 1000 males among scheduled caste population of the West Dinajpur district. It increased to 914 females per 1000 males in the year 1971 and 935 females per 1000 males in 1981. But, during the decade 1981-'91, the sex ratio among scheduled caste population of the West Dinajpur district decreased by 7 points and recorded 928 females per 1000 males in the year 1991.

During the year 2001, the sex ratio among scheduled caste population of Uttar Dinajpur and Dakshin Dinajpur recorded 940 and 948 females per 1000 males respectively. According to the (Appendix 6.1), the sex ratio among scheduled caste population in Maldah district during 1961 was 978 females per 1000 males. It declined by 17 points and has attained 961 females per 1000 males during 1971, which again declined by 12 points and the sex ratio has become 949 females per 1000 males. This declining trend continues till the next census and the sex ratio recorded was 932 females per 1000 males in 1991. After the year 1991, the number of females per 1000 males in scheduled caste community in Maldah district has increased slightly and the recorded sex ratio in 2001 was 946 females per 1000 males. Therefore, in Maldah, minimum sex ratio was recorded during the year 1991, while the maximum was recorded in 1961. Therefore the Appendix 6.1 shows that, the minimum sex ratio is recorded in Jalpaiguri and maximum of 978 females per 1000 males in Maldah during 1961. During the next census year i.e., 1971, the sex ratio was maximum in Maldah and minimum in Darjiling. After the next decade i.e., 1971-81, the sex ratio was recorded as maximum in Maldah and minimum in Darjiling. During 1981-'91, Darjiling continued minimum sex ratio district of the region by during 1991, maximum sex ratio was recorded in Koch Bihar. During 2001, the sex ratio was maximum in Koch Bihar and minimum in Uttar Dinajpur district.

6.5 SEX RATIO AMONG SCHEDULED TRIBE POPULATION, 1961 – 2001

The tribes are the autochthonous people of the land who are believed to be the earliest settlers in the Indian Peninsula. They are generally called 'adivashis', which are original inhabitants. The ancient and medieval literatures mention a large number of tribes living in India. Before the introduction of the caste system during the Brahminic age, people were divided into various tribes. A tribe was a homogeneous and self-contained unit without any hierarchical discrimination.

Figure 6.6: - District wise Variation of Sex Ratio among Scheduled Caste Population, 1961-2001

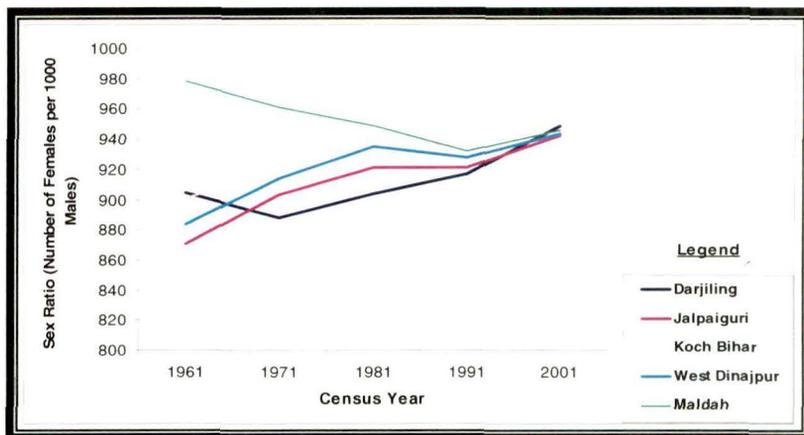


Figure 6.7: - Temporal Variation of Sex Ratio among Scheduled Tribe Population, 1961-2001

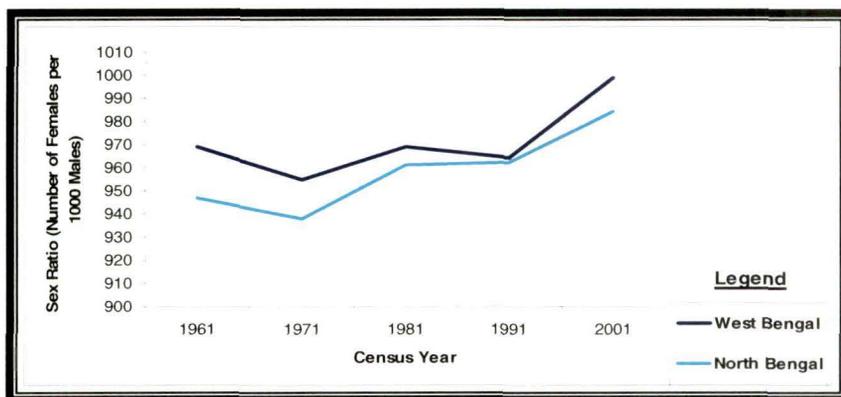
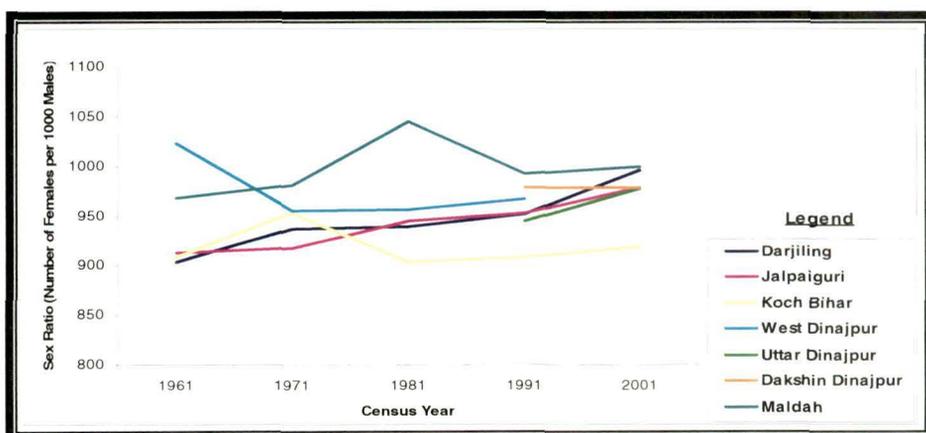


Figure 6.8: - District Level Variation of Sex Ratio among Scheduled Tribe Population, 1961-2001



In the whole of 1961-2001 period, the sex ratio among tribal population was lower in the North Bengal region than that of the state's average. In the former, the sex ratio has recorded as 984 females per 1000 males in the 1991-2001 period, while it was 999 for the whole state. In Darjiling and Jalpaiguri, the tribal population has attained a continuous increase in case of sex ratio from the year 1961 to the 2001 census. Remaining other districts registered fluctuations in sex ratio in the same period. In case of Koch Bihar, the sex ratio for tribal population was increased from 908 in 1961 to 954 females per 1000 males in 1971. In the next decade, it decreased to 903 females per 1000 males, which recorded a continuous increase in the next two decades and become 919 females per 1000 males in the year 2001.

About 1023 females per 1000 males were recorded in 1961 in the West Dinajpur district. It decreased to 967 females per 1000 males in 1991. In the decade, 1991-2001, the tribal sex ratio was recorded 978 and 979 females per 1000 males in Uttar and Dakshin Dinajpur respectively. In Maldah district, the tribal sex ratio was recorded an increase from 969 in 1961 to 1045 females per 1000 males in 1981. But in the next decade, it decreased to 993 females per 1000 males, which again increased to 1000 in the next decade of 1991-2001 (Appendix 6.2)

6.6 AGE WISE SEX RATIO, 1971-2001

Juvenile Population: -

As India is a developing country, thus the general pattern of its age-sex pyramid is characterized by a wide and broad base, which is narrowing towards the top of the pyramid. But, the most striking feature in the distribution of juvenile sex ratio in the study region that, in the North Bengal as a whole, the juvenile sex ratio follows a decreasing trend since 1971 till 2001. During the year, 1971, there were more girls than boys in the age 0-14 and the sex ratio was recorded as 1034 females per 1000 males. During 1981, the sex ratio decreased to 972 and in 1991 it recorded 960 females per 1000 males in 2001. During 2001, it further decreased and became 954 females per 1000 males. Therefore, in the period of 1971-2001, there was 80 points decrease in juvenile sex ratio of the North Bengal region. In case of Darjiling district, the juvenile sex ratio was only 955 females per 1000 males during the year 1971, which increased slightly (by

only 5 points) in the year 1991 but again decreased to 953. In the Jalpaiguri district, there were about 1131 females per 1000 males in the age of 0-14 during 1971. During the decade 1971-1981, the juvenile sex ratio in this district were recorded a fall of 167 points and became 964 females per 1000 males in 1981. With a decrease of 3 points in 1991 and a slight increase of 2 points it became 963 in the next decade of 2001. Like Jalpaiguri, Koch Bihar also shows a declining trend in the juvenile sex ratio since 1971 till 1991. During the year 1971, the juvenile sex ratio in the Koch Bihar was recorded 1102 females per 1000 males, which decreased to 986 in the year 1981 and again decreased to 960 females per 1000 males in the year 1991 and remained same in 2001. In case of West Dinajpur district, the juvenile sex ratio was recorded 982 females per 1000 males in the year 1971, which increased to 988 in the year 1981 but it decreased by 20 points and recorded 968 females per 1000 males in the juvenile age group. In the next decade, two new districts, namely, Uttar and Dakshin Dinajpur recorded decrease in the juvenile sex ratio. In the

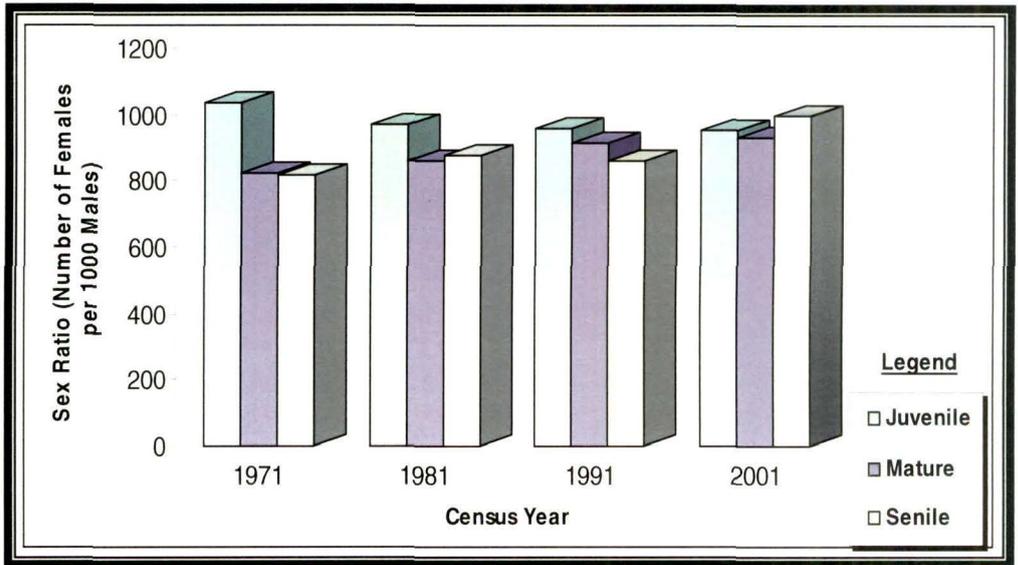
Maldah district, the sex ratio for juvenile population was recorded as 981 females per 1000 males in 1971, which decreased to 956 in 1981 and 951 in 1991 and as a result of further decrease, it became 949 females per 1000 males during the year 2001.

Therefore, except Maldah, all other districts of North Bengal region recorded a fluctuating trend but more prone to decrease since the year 1971 to the 2001 (Appendix 6.3)

Mature Population: -

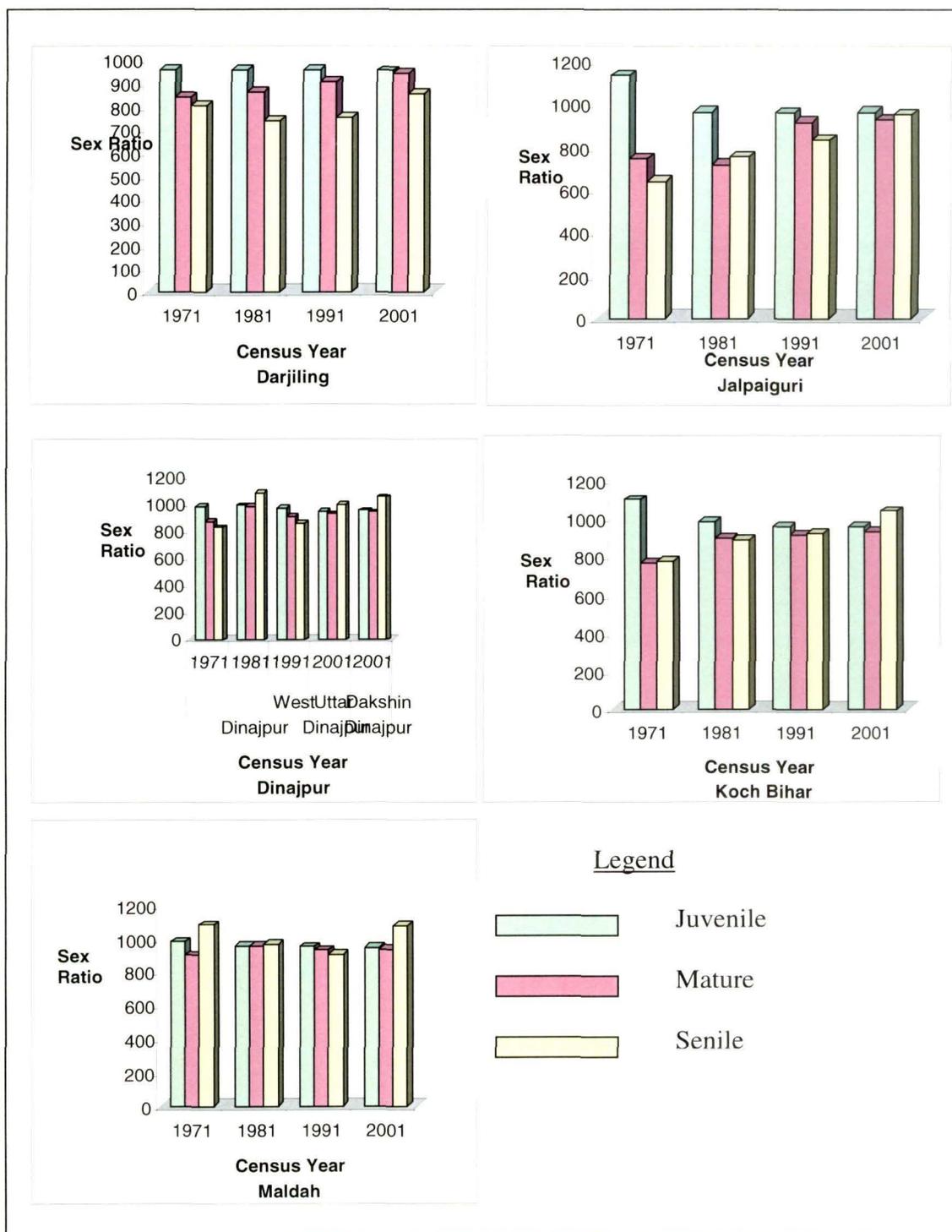
Unlike the juvenile sex ratio, the whole North Bengal region records more or less an increasing trend in its all districts in terms of sex ratio among mature age. During 1971, the whole region was recorded 823 females per 1000 males, which increased to 917 in the year 1991 and 933 in 2001. Therefore there was an addition of 110 females per every 1000 males in the whole North Bengal during the 30 years period between 1971 and 1991.

Figure 6.9: - Sex Ratio among Three Age Groups in North Bengal, 1971-2001



However, in the Darjiling district, the increasing trend of the region continued and it increased from 837 females per 1000 males in 1971 to 861 in the next decade. Again the sex ratio increased to 903 in 1991 and again increased to 941 females per 1000 males in the next decade. In case of Jalpaiguri district, 744 females per 1000 males were recorded in the year 1971, which decreased to 718 in the next decade, which again increased due to the addition of 198 points and became 916 females per 1000 males and ultimately became 929 in 2001. In the Koch Bihar, there was an increasing trend of sex ratio among mature population between 1971 and 2001. There were about 772 females per 1000 males in the age of 15-59 during the year 1971. After 10 years, the sex ratio was recorded 901 females per 1000 males and in the next two decade, it increased to 932 females per 1000 males during 2001. In West Dinajpur district, the sex ratio was recorded 876 in the year 1971, which increased to 987 females per 1000 males during 1981. But, after 10 years, it recorded sex ratio for Middle Ages of about 911 females per 1000 males. During the decade 1991-2001, newly formed districts record sex ratio for working population of 929 and 941 females per 1000 males in Uttar and Dakshin Dinajpur respectively. Incase of Maldah district, there were about 903 females per 1000 males during the year 1971, which increased to about 954 in the year 1981. But in the year 1991, the sex ratio among mature population of Maldah district recorded a decreased sex ratio of 933 females per 1000 males. In the next decade, with an increase of 2 points the district achieved sex ratio for mature age group of 935 females per 1000 males (Appendix 6.3).

Figure 6.10: - District wise Sex ratio for three age groups in North Bengal, 1971-2001



Senile Population: -

The sex ratio among senile age group in whole North Bengal was recorded as 819 females per 1000 males in 1971. It increased to 880 females per 1000 males in 1981. It again decreased to 864 females per 1000 males in 1991 but with an increase of about 134 points during the decade 1991-2001, it became 998 in 2001. During 1971, the sex ratio among senile population was recorded as 804 females per 1000 males in Darjiling district, which decreased to 737 females per 1000 males in 1981 and increased to 855 females per 1000 males in 2001. In case of Jalpaiguri district, the sex ratio among senile population was 640 females per 1000 males in 1971. With the increase of 117 points, it became 757 during 1981 and due to the addition of 74 females per thousand males, the sex ratio in 1991 was 831 females per 1000 males. In the next decade, it increased again to 954 females per 1000 males. That is in this district, in the 1971-2001 period, the senile sex ratio was increased by 314 points. Like Jalpaiguri, in Koch Bihar also, the sex ratio has increased from 777 females per 1000 males in 1971 to 1041 females per 1000 males in 2001 and in other words there was an increase of 264 points during the period of 1971-2001. Thus, these two districts record continuous increase in senile sex ratio since 1971 to 2001. The increase is 314 points in case of the former and 264 points in case of the later. The most interesting feature in the distribution of sex ratio among senile population in West Dinajpur is that in spite of the low sex ratio of 828 females per 1000 males in 1971, it increased to 1083 females per 1000 males in the year 1981, i.e., about 255 points increase in just 10 years. But during the decade 1981-'91, due to the decline of sex ratio by 219 points, the senile sex ratio in 1991 has become 864 females per 1000 males, which became 994 and 1084 females per 1000 males in Uttar and Dakshin Dinajpur respectively in the decade 1991-2001. In case of Maldah district, the number of females was more than that of the males among senile population during the year 1971 and the sex ratio was 1084 female per 1000 males. During 1981, the senile sex ratio has decreased to 965 females per 1000 males and it further decreased to 906 females per 1000 males in 1991. Therefore, the sex ratio among senile population of Maldah district decreased by 178 points between 1971 and 1991. Not only that, among all districts of North Bengal, the senile sex ratio of Maldah records a continuous decrease from the year 1971 to 1991 through 1981. But, in the decade, 1991-2001, it increased to 1079 females per 1000 males in the year 2001 (Appendix 6.3).

6.7 SEX RATIO AMONG TOTAL (MAIN+MARGINAL) WORKERS, 1961-2001

Though only about 39 percent of total population of North Bengal is recorded as total workers in 2001, constituting about 53 percent of male population and 24 percent of female population as male and female workers respectively, yet the sex ratio among the total workers during 2001 in whole region is maximum among all decades since 1961. In other words, about 437 females are recorded per every thousand males as workers in the year 2001, which is the highest sex ratio since 1961 among total workers of the region. The Appendix 6.4 shows that in the region, the sex ratio among workers was about 208 females per 1000 males during 1961, which decreased by 93 points and during the next decade, it became 115 females per 1000 male workers. Since this year, till 2001, the sex ratio recorded an increasing trend and in the decade 1991-2001, with the increase of 177 females per 1000 males, the sex ratio became 437 females per 1000 males for total working population. However, during the year 1961, Darjiling recorded highest sex ratio of 487 followed by Jalpaiguri with 299 females per 1000 males for total workers. In Darjiling district, during the next census year of 1971, the worker's sex ratio declined by 98 points and recorded 389, which again declined in the next decade to 381 females per 1000 males. But after 1981, the sex ratio increased by only 32 points and recorded 413 females per 1000 males among total workers during 2001. Thus in the Darjiling district, though the sex ratio of total workers has increased since 1981, but between the time span of 1961-2001, the sex ratio was maximum in 1961 with 487 females per 1000 males. As mentioned earlier, in 1961, Jalpaiguri follows Darjiling with 299 female workers per 1000 male workers; but in this district, sex ratio decreased to 179 during 1971. After 1971, female participation as workers per every 1000 males took an increasing trend till 2001 and recorded 424 female workers per 1000 male workers. The appendix 6.4 shows that, during 1961, Koch Bihar recorded lowest worker's sex ratio of only 58 females per 1000 males, which declined to 30 females per 1000 males during 1971. In the next decade, 1971-'81, it increased to 75 females per 1000 males, which again increased to 161 in 1991 and 384 females per 1000 males in 2001. During 1961, the then West Dinajpur district record 104 female workers per 1000 male workers which decreased to only 50 in 1971. But after 1971, the district takes an increasing trend till 1991, when the district recorded 223 females per 1000 males among total workers. However, after 1991, two new districts formed from this West Dinajpur, of which, Uttar Dinajpur recorded 431 while the Dakshin Dinajpur recorded about 430 females per 1000 males in 2001.

The southernmost district, Maldah, recorded 207 females per 1000 males for total workers in 1961. During 1971, it decreased to 65, which again increased to 179 females per 1000 males in 1981. This increasing trend continued till recent times with 510 females per 1000 males in 2001(Appendix 6.4).

Figure 6.11: - Temporal Variation of Sex Ratio among Total Workers, 1961-2001

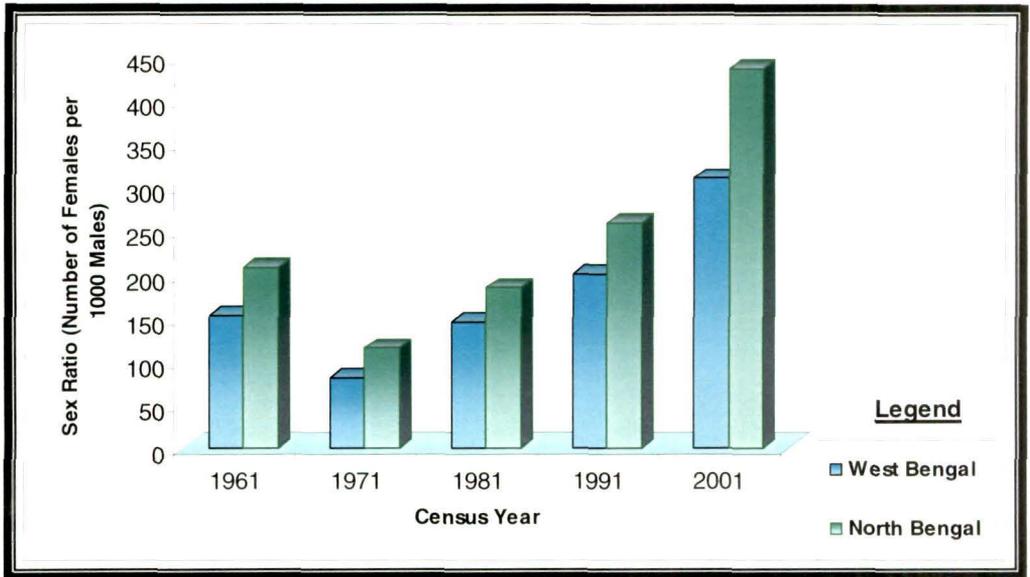
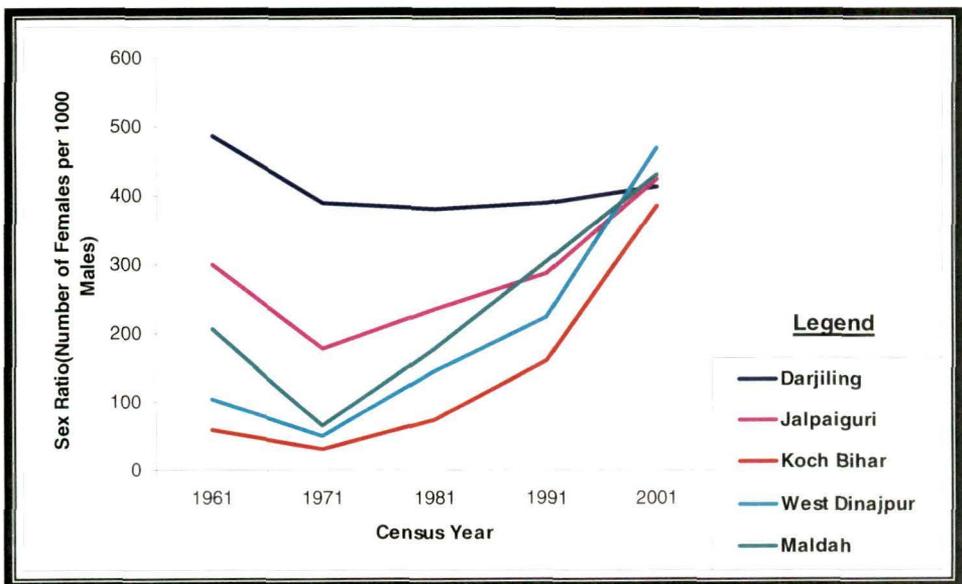


Figure 6.12: - District wise Variation of Sex Ratio among Total Workers, 1961-2001



Therefore, the above discussion reveals that, during 1971, all districts of North Bengal region recorded the lowest sex ratio among total workers except Darjiling, where the lowest was recorded during 1981. However, in 1971, among all districts, lowest sex ratio was recorded by Koch Bihar district with only 30 female workers per 1000 male workers and maximum sex ratio by Darjiling with 389 females per 1000 males. During 1981, Darjiling and Koch Bihar continue their position with Jalpaiguri as the second highest. Thus, since 1961 to 1981, Darjiling district recorded highest sex ratio and Jalpaiguri with second highest sex ratio among total workers. But in 1991, second highest sex ratio was recorded by Maldah with 305 females per 1000 males following the highest and lowest sex ratio in Darjiling and Koch Bihar respectively. But in 2001, maximum sex ratio was recorded by Maldah, where about 510 female workers are there against every 1000 male workers followed by Uttar Dinajpur with 431 and Dakshin Dinajpur with 430 females per 1000 males. Contrary to this, the minimum sex ratio was recorded in Koch Bihar district, where there are 384 females per 1000 males among total work force. During 2001, only Maldah records workers sex ratio more than that of the region's average of 437 females per 1000 males.

Sex ratio among total population has increased in 2001(934 females per 1000 males) than that in 1991(917 females per 1000 males) in West Bengal as well as in North Bengal (which was 930 females per 1000 males in 1991 and become 944 in 2001). Definitely, this increasing trend in sex ratio is a good sign in social structure of the region. Keep pace with the whole state & the study region, all of six districts also showing the same trend in sex ratio among the total population. If we consider the economic condition, i.e., employment condition of females, the most encouraging factor is that in all of six districts of North Bengal shows increasing trends incase of sex ratio among total workers and as a result, in this region, the sex ratio among workers has increase from 260 females per 1000 males in 1991 to 437 in 2001.

The district-wise analysis reveals that, during 1991, Darjiling district recorded maximum sex ratio among total workers (390 females per 1000 males) in North Bengal, which was followed by Maldah district with 305 females per 1000 males. The third position was occupied by Jalpaiguri district with 286 females for every 1000 males in working class. Remaining three districts having more or less same sex ratio as all lying below the sex ratio of 200 females per 1000 males. Uttar Dinajpur recorded minimum number of

female workers for every 1000 male workers in North Bengal, where only 154 females are there. But during, 2001, the picture has changed. Though the sex ratio among total workers has increased in 2001 in all districts, yet the increase is not even. Maximum increase in number of female workers for every 1000 male workers has been achieved by the Uttar Dinajpur district (increase of 273 points) whereas least increase is recorded in Darjiling district (an increase of 16 points). During 2001, Dakshin Dinajpur has recorded sex ratio among total workers of 510 females per 1000 males, which was the maximum in the whole region of North Bengal. Uttar Dinajpur and Maldah have recorded as the 2nd and 3rd highest in 2001 in case of sex ratio among total workers with 431 and 430 females per 1000 males respectively. Followed by these three southern districts, Jalpaiguri and Darjiling occupied the 4th and 5th position respectively. The lowest sex ratio among workers has recorded in Koch Behar with 384 female workers for every 1000 male workers (Appendix 6.4).

6.8 SEX RATIO AMONG MAIN AND MARGINAL WORKERS

The sex ratio among main workers in all districts of North Bengal shows an increasing trend between 1981-1991 and 1991-2001 except in Darjiling district. Only this district has achieved sex ratio in 2001 among main workers less than that in 1991 and this is less of 54 females for every 1000 male main workers. Though this district shows a decreasing trend in sex ratio, yet it have the maximum sex ratio among main workers among all districts of North Bengal region with a sex ratio of more than 300 females per 1000 males in both of two decades. Followed by Darjiling, the second position in sex ratio was occupied by Jalpaiguri district (with a sex ratio of 225 females per 1000 males) in 1991 but during 2001, this place is occupied by Maldah district with sex ratio of 277. Next in position in descending order was occupied by Maldah in 1991 and Jalpaiguri in 2001. That means, due to 130 per cent increase in main workers sex ratio between 1991 and 2001 in Maldah district, it improve its position, whereas with 111 per cent increase in that case, Jalpaiguri district deteriorate in its position. Remaining three districts, recorded more or less similar sex ratio ranging between 110 and 191 females per 1000 males in 1991 and between 173 and 219 females per 1000 males in 2001 where, Koch Behar has recorded maximum number of females per every 1000 males among main workers in both the year (Appendix 6.5)

Figure 6.13: - Temporal Variation of Sex Ratio among Total Main Workers, 1961-2001

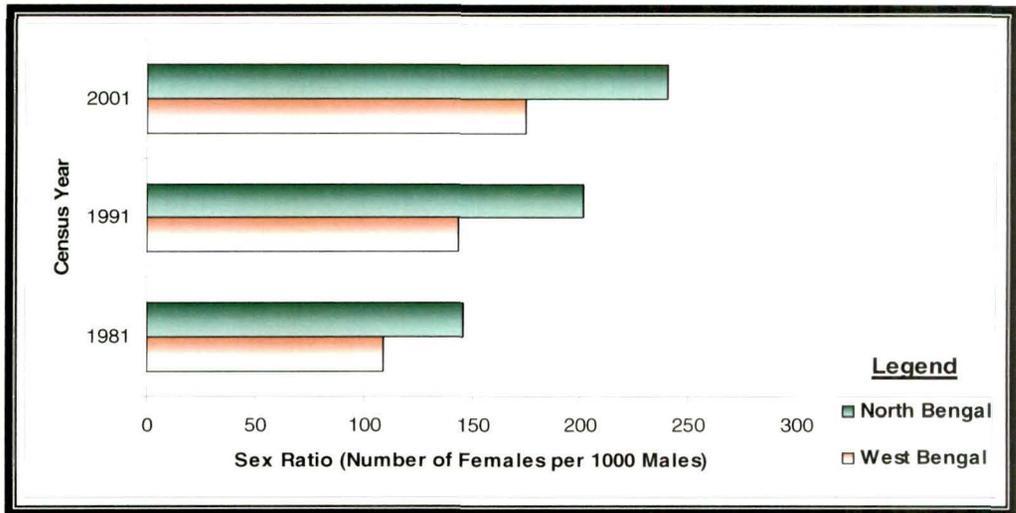
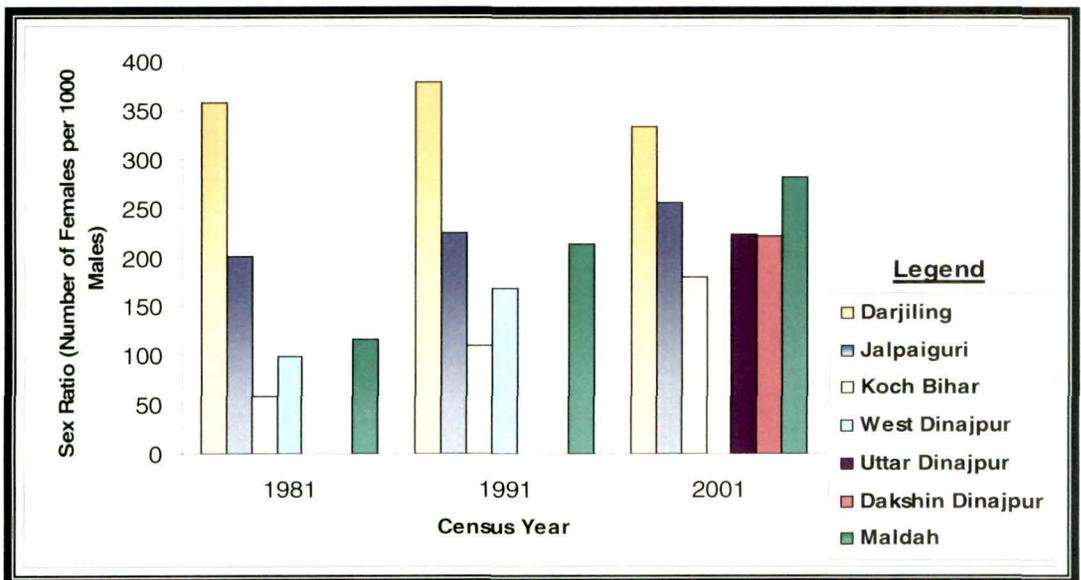


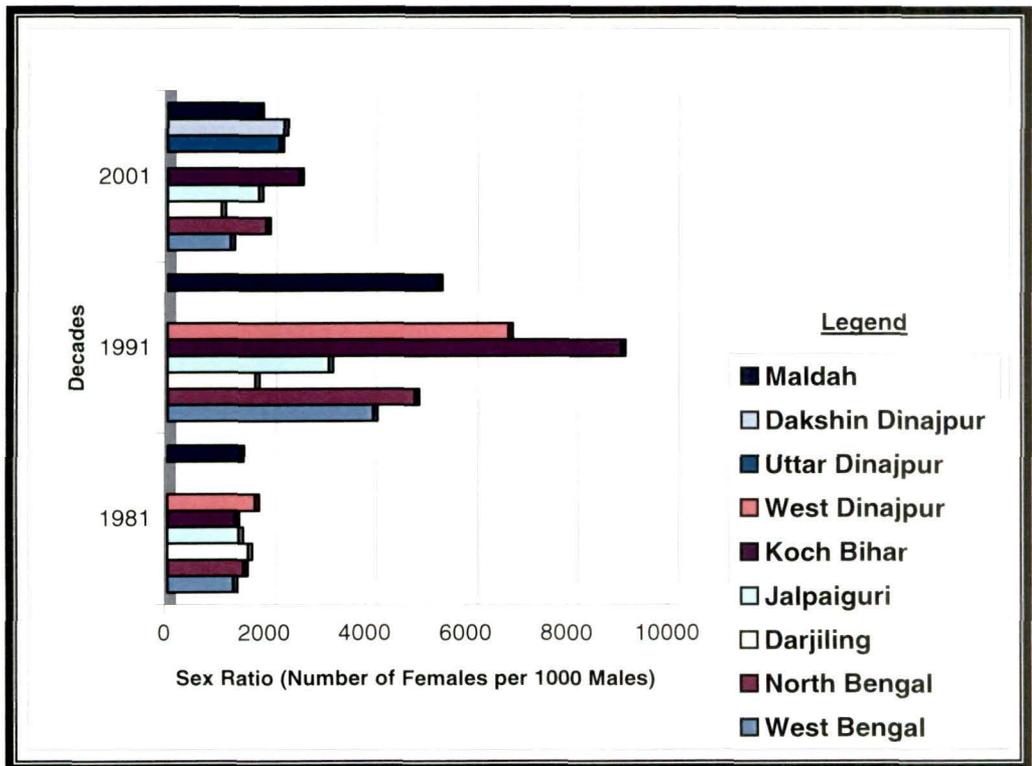
Figure 6.14: - District wise Variation of Sex Ratio among Total Main Workers, 1961-2001



Like North Bengal's average and like the whole state, the sex ratio among marginal workers decreased from 1991 to 2001 in all of six districts. Among six districts of North Bengal, Koch Behar achieved a decrease of 6334 female marginal workers for every 1000 male marginal workers, which is maximum decrease among all districts. On the other hand, less decrease in sex ratio is achieved by Darjiling district, which is 663 females per 1000 males. During 2001, maximum sex ratio among marginal workers

recorded in Koch Behar district (which is 2671 females per 1000 males), which is followed by Dakshin Dinajpur district of sex ratio 2352 and Uttar Dinajpur (2237 females per 1000 males). Remaining three districts having sex ratio among marginal workers below 2000. Lowest sex ratio is recorded in Darjiling district, where sex ratio among main workers is maximum in 2001.

Figure 6.15: - Temporal Variation of Sex Ratio among Total Marginal Workers, 1961-2001



If we classify the sex ratio of all districts of North Bengal into two classes based on the region's average, then it will be clear that, female work participation rate is maximum in Maldah district for total workers. In case of main workers, sex ratio in Darjiling, Maldah and Jalpaiguri is higher than the region's average. But in case of marginal workers, Maldah, Darjiling and Jalpaiguri recorded sex ratio less than the region's average.

6.9 BLOCK LEVEL COMPARISON, 1991 and 2001

Like the whole country and whole state, all blocks of North Bengal region had an imbalanced sex ratio from the beginning of the last century. Even if this could have been explained by the sex ratio at birth and other factors such as mortality differentials among male and female children at different ages, what is not explicable is the continuing decline in the sex ratios over a period of time.

According to some social scientists, either more males are conceived or females have higher mortality than males during the embryonic and foetal stages of the child's growth. This is based on certain evidences that indicate a possibility of there being far more males than females by the second month of foetal development.

The reduction of male mortality at younger ages due to the improvements in health services and the existence of a gender bias in availing healthcare facilities may account for some of the imbalance. Researchers have linked son preference to gender bias against girls in healthcare, nutrition, food allocation and so on to explain the declining sex ratio. The desired family size and gender composition of children under the prevalent regime of male preference work towards the elimination of girls in the foetal stages through intervention of advanced scientific technologies, infanticide, neglect and discrimination.

The decline in sex ratio is not same everywhere in the study region. Although not conclusive, historical prevalence of matriliney, women's control over property and resources mainly among tribal and hilly societies, greater economic participation and a more significant role in decision-making are some of the likely factors that may explain the better demographic balance and the improvements in sex ratios in some areas of North Bengal.

6.9.1 Sex Ratio among Total Population-

In all the districts of North Bengal, the sex ratio for the total population has increased from that in the year 1991 to that in the year 2001. But the rate of increase is not same in all districts. With an increase of 23 females per 1000 males Darjiling is in the leading position. On the contrary, Dakshin Dinajpur recorded the lowest rate of increase total sex ratio by adding only 8 females per 1000 males in the whole district's population.

Remaining four districts varies between 10 to 16 females per 1000 males in terms of increase in total sex ratio between the census year 1991 and 2001.

From the Table 5.1, it is clear that there is wide variation in sex ratio among the different districts of North Bengal. According to 1991 Census, Maldah holds the second position with 938 females per 1000 males followed by Koch Bihar with 935 females per 1000 males. Remaining three districts were below the region's average sex ratio of 930 females per 1000 males. These three districts are Jalpaiguri with 927, Uttar Dinajpur with 921 and lastly Darjiling with 914 females for every 1000 males as per 1991 Census. This order has changed slightly in 2001 Census year. During 2001, Dakshin Dinajpur still stands on the first position with an improvement in sex ratio to 951 females per 1000 males in 2001. Koch Bihar came up to second position (with a sex ratio of 949 females per 1000 males in 2001) from third position in 1991. But in case of Maldah district, the picture is reverse, i.e., its position declined from second position in 1991 to third position in 2001 having a sex ratio of 948 females per 1000 males in 2001. Darjiling district shows a sign of improvement in case of sex ratio with an increase of 23 points in sex ratio than that of 1991. On the other hand, Jalpaiguri and Uttar Dinajpur are occupying 4th and 5th position respectively in 2001.

In Darjiling District, among all of 12 Community Development (C.D.) Blocks, Jorebunglow-Sukhiapokri records highest sex ratio in both the census year, while Matigara records the minimum sex ratio during both the years. During 1991, maximum sex ratio was recorded 989 females per 1000 males in the district, which increased to 1022 females per 1000 males during 2001. That is, in the first census of this new century, there are more females than males in the hilly block Jorebunglow-Sukhiapokri. On the other hand, due to high rate of urbanization, Matigara records very low sex ratio in both the year, which is much below than 900 females per 1000 males. This is mainly due to high rate of rural-urban migration, especially male migration in search of better employment. However, except two, all other blocks of Darjiling district record total sex ratio more in the year 2001 than that of in the year 1991. But only in Daarjeeling-Pulbazar and Kalimpong-I, the sex ratio decreased from that in 1991 to that in 2001.

In case of Jalpaiguri district, highest sex ratio is recorded in Matiali block in both the year. It was 955 females per 1000 males during 1991, which has increased to 981 during

2001. On the other hand, the lowest sex ratio is recorded by Rajganj block with 900 females per 1000 males during 1991. During 2001, Rajganj maintained its position having the minimum total sex ratio in the whole district with 916 females per 1000 males. Dhupguri is the only block, where the sex ratio in 1991 was much more than that of the year 2001. Except this block, in all other 12 blocks of Jalpaiguri record total sex ratio more in 2001 than that in 1991. Main reason behind the minimum sex ratio in Rajganj block is the existence of some portion of Siliguri Municipality Corporation in this block and hence due to the rural to urban sex-selective migration in search of better employment.

Some different picture regarding the highest and lowest sex ratio recording blocks can be observed in Koch Bihar district during year 1991 and 2001. Sitai is the block where the total sex ratio was maximum in the whole district during 1991 having 951 females per 1000 males. But in the year 2001, maximum sex ratio is recorded by two blocks namely, Tufanfanj –II and Dinhata-II with about 965 females per 1000 males while Sitai records third highest sex ratio with about 955 females per 1000 males. However, during 1991, Mekliganj recorded Minimum sex ratio with having 930 females per 1000 males. In all the blocks of this district, the sex ratio is less in 1991 than that in 2001.

In Uttar Dinajpur district, the maximum total sex ratio is recorded in Itahar in both the year. About 946 females were recorded per 1000 males during 1991, which increased to 960 females per 1000 males in this block. On the other hand, Raiganj records the minimum sex ratio during 1991 as well as during 2001. During 1991, there were about 917 females per 1000 males, which became about 922 females per 1000 males during the year 2001. In all the blocks of Uttar Dinajpur district, the sex ratio increased from that in 1991 to that in 2001.

The maximum sex ratio recording block in Dakshin Dinajpur district is the Harirampur during both the year 1991 and 2001. During 1991, the block recorded about 966 females per 1000 males, which during 2001, it decreased to 964 females per 1000 males. During 2001, along with Harirampur, Kushmundi also records maximum total sex ratio of 964. In this district, two blocks namely, Gangarampur and Harirampur record sex ratio in 1991 more than that in the year 2001.

In Maldah, maximum sex ratio was recorded in Habibpur with 965 females per 1000 males during 1991 and 976 females per 1000 males during 2001. On the other hand, Old Maldah recorded lowest sex ratio during 1991 having about 916 females per 1000 males but during 2001, Ratua-I records the lowest sex ratio of 934 females per 1000 males. In the whole Maldah district, Kaliachak-I records less sex ratio in 2001 than that in 1991.

Therefore, from the above discussion, it is clear that in whole North Bengal, the block wise maximum sex ratio among total population is recorded in Jorebunglore-Sukhaiapokri, where during 1991, about 989 females, were recorded per 1000 males while during 2001, about 1022 females are there per 1000 males. On the contrary, the lowest sex ratio in whole North Bengal region was recorded in Matigara block in both the year 1991 and 2001. Jorebunglore- Sukhaiapokri is the only block in whole region, where, the total number of females is more than that of males in the census year, 2001.

6.9.2 Sex Ratio among Child (0-6 ages) Population -

Except Maldah district, in whole North Bengal region, all other districts record child sex ratio in 1991 more than that of the 2001. This gap is maximum in case of Dakshin Dinajpur district, where the child sex ratio in 1991 is 16 points more than that of the 2001. However, about 976 females per 1000 males were recorded in Darjiling district as child sex ratio during 1991, which became about 962 during 2001. There were three blocks in this district, where the child sex ratio were more than 1000 in the year 1991 and these were kalimpong-I (1023), Jorebuglow-Sukhiapokri (1010) and Mirik (1000) with the first one as highest child sex ratio recording block in the district. But in case of 2001, there is only one block, where the child sex ratio is more than 1000 and this is Gorugathan where about 1045 females are recorded against every 1000 males. On the other hand, in both the years, the minimum sex ratio among children has recorded in Rangli-Rangliot block with 951 and 919 females per 1000 males during the year 1991 and 2001 respectively.

About 973 females were recorded in Jalpaiguri district per 1000 males during 1991, which became 969 during 2001. During 1991, three blocks of this district recorded child sex ratio more than 1000 and these are Madarihat (1019), Kalchini (1016) and Matiali (1001) but in the year 2001, no block records child sex ratio more than 1000. Though Madarihat records child sex ratio as maximum in 1991, but in 2001, the maximum

recording block is Kalchini with 1019 and 989 females per 1000 males respectively. While Alipurduar-II recorded lowest child sex ratio during 1991 with 941 females per 1000 males, but the lowest sex ratio is recorded in Jalpaiguri block with 959 females per 1000 males during 2001.

In Koch Bihar district, the child sex ratio was recorded 967 females per 1000 males during 1991, which decreased to 964 during 2001. There were two blocks in this district where the child sex ratio were recorded more than 1000 during 1991 and these are Cooch Behar-II and Sitai with 1654 and 1052 females per 1000 males respectively. On the other hand, during 2001, no block recorded child sex ratio more than 1000 and the maximum sex ratio is recorded in Mathabhanga-II with 979 females per 1000 males. It is interesting to note that the Mathabhanga-II block was the lowest child sex ratio recording block during 1991 with about 946 females per 1000 males. On the other hand, minimum sex ratio among children is recorded in Dinhata-I in 2001 with about 948 females per 1000 males.

About 970 females are recorded per 1000 males in the Uttar Dinajpur district during 1991. It decreased by 5 points during 2001. No block in this district records child sex ratio more than 1000 in any of the year between 1991 and 2001. However maximum sex ratio among children were recorded in Goalpokhar-II during 1991 and Goalpokhar-I in 2001 with 980 and 973 females per 1000 males respectively. On the other hand, the minimum sex ratio is recorded in Kaliaganj during 1991 and in Chopra during 2001 with 958 and 936 females per 1000 males respectively.

As mentioned earlier that the gap of child sex ratio between 1991 and 2001 is maximum in case of Dakshin Dinajpur district which decreased from 982 in 1991 to 966 females per 1000 males in 2001. Gangarampur is the block in this district, where the child sex ratio is more than 1000 in 1991. But in 2001, maximum sex ratio among children is recorded as 975 females per 1000 males in Bansihari block. On the contrary, Hilli recorded the lowest sex ratio among children during 1991 while Kushmundi records lowest sex ratio among children during the year 2001. In the former, the sex ratio was recorded 956 and in the latter 953 females per 1000 males.

Maldah is the district, where the child sex ratio is attaining an increasing trend between 1991 and 2001. It increases from 960 females per 1000 males in 1991 to 964 in 2001.

Maximum child sex ratio is recorded in Bamongola with 993 females per 1000 males during 1991 while in 2001, maximum child sex ratio is recorded in Habibpur with 989 females per 1000 males. The minimum child sex ratio is recorded in Harishchandrapur-I block in both the year with about 928 and 934 females per 1000 males during 1991 and 2001 respectively.

However, from the above discussion, it is clear that, during 1991, about 9 blocks record child sex ratio of more than 1000 females per 1000 males while during 2001, only one records child sex ratio more than 1000 in whole North Bengal region. In 1991, the block wise maximum is recorded in Cooch Behar-II while in 2001; it is Gorubathan in the whole region. In case of the lowest child sex ratio, the 1991 shows it is in Harishchandrapur-I and the 2001 data shows, it is in Rangli-Rangliot block.

6.9.3 Sex Ratio among Total Literates -

The sex ratio among literates has recorded an increasing trend in all of six districts of North Bengal between 1991 and 2001. The gap of literates' sex ratio between these two years is maximum in Koch Bihar, followed by Maldah with minimum of only 22 points in Uttar Dinajpur. This means the rate of growth in literates' sex ratio between 1991 and 2001 is highest in Koch Bihar with 161 points. Only in Uttar Dinajpur and Darjiling district, this rate of growth is less than 100 points while in other four districts it is more than 100 points.

However, in Darjiling district as a whole, the literates' sex ratio has increased from about 644 females per 1000 males in 1991 to 734 in 2001. This means, this district has attained a 90 points increase in terms of literates' sex ratio between 1991 and 2001. The maximum sex ratio among literates is recorded in Kalimpong-I block in both the census years. During 1991, it was about 702 females per 1000 males while after 10 years, it became 802 females per 1000 males. On the other hand, the minimum sex ratio is recorded in Phansidewa- Kharibari block in 1991 with 420 females per 1000 males. During 2001, newly formed Phansidewa block records the minimum literates sex ratio of 572 females per 1000 males.

About 544 females were recorded per 1000 males in Jalpaiguri district during 1991, which increased to 672 females per 1000 males after 10 years. Thus in other words, this

district attained a 128 points increase in terms of literates' sex ratio between 1991 and 2001. Out of total 13 blocks, Alipurduar-I records the highest literates' sex ratio in both the years with 581 females per 1000 males during 1991 and 754 females per 1000 males during 2001. Besides Alipurduar-I, during 2001, two blocks namely Jalpaiguri and Alipurduar-II also record literates' sex ratio more than 700 females per 1000 males. On the other hand, Nagrakata records the lowest sex ratio among literates in both the census years. It was about 430 females per 1000 males in 1991 and 586 females per 1000 males in 2001.

As stated earlier that the rate of increase in literates' sex ratio between 1991 and 2001 is recorded by the Koch Bihar district with an increase of about 161 points. However, during 1991, the highest sex ratio among literates' is recorded in Cooch Behar-II block with about 574 females per 1000 males while during 2001, the highest sex ratio is recorded in the Cooch-Bihar-I block with 747 females per 1000 males. On the other hand, the lowest literates' sex ratio is recorded in Mathabhanaga-I during 1991 and in Mekhiganj in 2001 with 402 and 622 females per 1000 males respectively.

Contrary to the maximum increase in literates' sex ratio in Koch Bihar district, in Uttar Dinajpur district, the rate of increase is the minimum among all districts of North Bengal. With only 459 and 581 females per 1000 males, this district (Uttar Dinajpur) records the lowest literates' sex ratio among all districts in North Bengal during both the years of 1991 and 2001. The maximum sex ratio is recorded within the Uttar Dinajpur district is by Hemtabad block during 1991 and by Raiganj block during 2001 with 454 and 669 females per 1000 males respectively. But, the minimum sex ratio is recorded in Goalpokhar-I block in both the year 1991 and 2001. It was only 241 females per 1000 males in the former and after 10 years it became 432 females per 1000 males.

During 1991, the literates' sex ratio was recorded 600 females per 1000 males in Dakshin Dinajpur district which increased to 711 females per 1000 males during 2001, that is, the district has attained an increase of about 111 points in terms of sex ratio among literates between 1991 and 2001. Two blocks namely, Kumarganj and Hilli has recorded maximum literates' sex ratio of about 570 female per 1000 males during 1991 while after 10 years, Hilli has recorded the maximum sex ratio of 695 females per 1000 males. On the contrary, the lowest sex ratio is recorded in Kushmundi during 1991, while

during 2001, Harirampur records the minimum literates' sex ratio of about 648 females per 1000 males.

In Maldah district, the literates' sex ratio was recorded 509 females per 1000 males in 1991, which increased to 662 females per 1000 males during 2001. The block wise distribution of literates' sex ratio in this district reveals the fact that, maximum sex ratio in 1991 was recorded in Chanchal-I with about 565 females per 1000 males while during 2001, English Bazar records the highest sex ratio of about 779 females per 1000 males. In case of lowest sex ratio among literates, its recorded in Manikchak block during both the year with 385 females per 1000 males in 1991 and about 539 females per 1000 males in 2001.

From the above discussion, it is clear that, in the whole North Bengal region, the block wise maximum sex ratio among literates is recorded in Kalimpong-I during both the census years while the minimum literates sex ratio is recorded in Goalpokhar-I during both the year.

6.9.4 Sex Ratio among Scheduled Caste and Scheduled Tribe Population-

In all districts of North Bengal and in both Scheduled Caste and Scheduled Tribe Population, the sex ratio has increased from that of 1991 to 2001.

In Darjiling district, Jorebunglow-Sukhiapokri records the highest sex ratio among Scheduled Caste Population with more than 1000 females per 1000 males in both the years, while Kalimpong-I with 1022 females per 1000 males record highest sex ratio among Scheduled Tribe Population in 1991 and Jorebugnlow-Sukhiapohri with 1082 females per 1000 males record the highest sex ratio in 2001. In case of lowest sex ratio, during 1991 Mirik records the lowest sex ratio between Scheduled Caste and Scheduled Tribe population with 751 and 791 females per 1000 males respectively. During 2001, Phansidewa block records the lowest scheduled caste sex ratio with 923 females per 1000 males while Kalimpong-II records the lowest scheduled tribe sex ratio of 946 females per 1000 males.

In both the cases of scheduled caste and scheduled tribe population, Jalpaiguri records an increasing trend in sex ratio between 1991 and 2001. Madarihat records maximum scheduled caste sex ratio during 1991 with about 954 females per 1000 males while

Kalchini block records maximum sex ratio in 2001 with 984 females per 1000 males. Two blocks namely Falakata and Maynaguri record the minimum scheduled caste sex ratio of 913 females per 1000 males during 1991 while in 2001, the lowest sex ratio among scheduled caste population is recorded in Dhupguri with about 934 females per 1000 males. On the other hand, among scheduled tribe population, highest sex ratio is recorded in Kalchini block in both the year with 984 and 1001 females per 1000 males in 1991 and 2001 respectively while, Maynaguri records the lowest sex ratio with 877 and 925 females per 1000 males respectively.

In Koch Bihar district, the scheduled caste sex ratio has increased from 936 females per 1000 males in 1991 to about 952 in 2001. The block wise maximum is recorded in Sitai with 956 females per 1000 males in 1991 and in Tufanganj-II during 2001 with about 976 females per 1000 males, with only 917 and 938 females per 1000 males during 1991 and 2001 respectively, Haldibari records the lowest scheduled caste sex ratio within the district. In case of scheduled tribe population, the sex ratio for the whole district is about 908 and 919 females per 1000 males during 1991 and 2001 respectively. Sitalkuchi block records the maximum sex ratio in 1991 while Tufanganj-I records maximum in 2001. Sitai and Sitalkuchi record the lowest scheduled tribe sex ratio with 600 and 195 females per 1000 males in 1991 & 2001 respectively.

With about 942 females per 1000 males and 961 females per 1000 males in 1991 and 2001 respectively, Itahar block records the highest sex ratio among scheduled caste population among all blocks in Uttar Dinajpur district. In terms of lowest sex ratio, Karandighi in 1991 and Chopra in 2001 record the minimum scheduled caste sex ratio with 919 and 897 females per 1000 males respectively. In case of scheduled tribe population, the maximum sex ratio is recorded in Islampur with 993 females per 1000 males in 1991 and in Goalpokhar-I with 1021 females per 1000 males during 2001. But in case of minimum scheduled tribe sex ratio, Goalpokhar-I and Islampur record in 1991 and 2001 with 914 and 934 females per 1000 males respectively.

In Dakshin Dinajpur district, the block wise distribution of scheduled caste sex ratio reveals that the maximum is recorded in Bansihari with 951 females per 1000 males during 1991 and in Hilli during 2001 with 965 females per 1000 males. On the contrary, the minimum scheduled caste population is recorded in Tapan with 930 females per 1000

males during 1991 and in Gangarampur with 940 females per 1000 males in 2001. In case of sex ratio among scheduled tribe population, the maximum is recorded in Hilli with 991 females per 1000 males and minimum is recorded in Balurghat with 965 females per 1000 males during 1991. During 2001, two blocks namely Kushmundi and Harirampur with 996 females per 1000 males record the maximum sex ratio among scheduled tribe population while minimum sex ratio is recorded in Balurghat with 969 females per 1000 males.

In case of Maldah district as a whole, about 932 females per 1000 males were recorded among scheduled caste population during 1991, which increased to 946 females per 1000 males in 2001. The block wise maximum is recorded in Chanchal-I during 1991 with 951 females per 1000 males and in Chanchal –II during 2001 with 996 females per 1000 males. But the minimum scheduled caste sex ratio was recorded in 1991 in Manikchak and in 2001 in Kaliachak-I with 909 and 922 females per 1000 males respectively. The Maldah district records about 993 females per 1000 males as sex ratio among scheduled tribe population in 1991, which increased to 1000 in 2001. The block wise maximum scheduled tribe sex ratio has recorded in Chanchal-I with 1035 females per 1000 males and in Habibpur with 1028 females per 1000 males during 1991 and 2001 respectively. In case of minimum sex ratio, Kaliachak-II records the lowest scheduled tribe sex ratio in both the years of with 500 and 300 females per 1000 males during 1991 and 2001 respectively.

In the whole North Bengal region, Jorebunglow-Sukhiapokri block records maximum sex ratio among scheduled caste population in both the year while Sitalkuchi and Tufanganj –I record highest scheduled tribe population in 1991 and 2001 respectively.

6.9.5 Sex Ratio among Total Main workers-

There were about 379 females per 1000 males in Darjiling district during 1991, which declined to 333 females per 1000 males in 2001 in case of main workers of the district. The block wise distribution of sex ratio among main workers shows that, during 1991 and 2001 maximum sex ratio is recorded in Jorebunglow-Sukhiapokri with 807 females per 1000 males and 733 females per 1000 males respectively. In case of minimum sex ratio, Kharibari-Phansidewa block records the lowest sex ratio among main workers in 1991 with only 282 females per 1000 males while in 2001, the lowest sex ratio is

recorded in Matigara block with 181 females per 1000 males. It should be mentioned that, only Mirik records main workers sex ratio is 1991 less than that of 2001. But in other blocks the sex ratio in 1991 is more than that in 2001.

In Jalpaiguri district, the sex ratio among main workers has increased from 1991 to that in 2001. It increased from 225 to 256 females per 1000 males. In both the years, block wise maximum sex ratio among main workers is recorded in Nagrakata, which increased from 509 in 1991 to 537 females per 1000 males in 2001. On the other hand, the block namely, Maynaguri records the lowest sex ratio in both the years. It was 67 females per 1000 males in 1991, which increased to 147 females per 1000 males during 2001. Only Kalchini block records the main worker's sex ratio in 1991 more than that in 2001 while in remaining all blocks, the sex ratio in 1991 is less than that in the year 2001.

There were only 110 female main workers per 1000 male main workers in Koch Bihar district during 1991, which increased to 179 females per 1000 males in 2001. Therefore, in both the years, the sex ratio among main workers is very low in all the blocks. During 1991, in five blocks namely, Haldibari, Mekliganj, Mathabhauga-1, Tufanganj –II and Dinhat –II; the main worker's sex ratio was less than 100. This means, less than 100 females were engaged as main workers against every 1000 males. During 1991 the maximum sex ratio was recorded in Mathabhanga –II block where only 148 females were recorded per 1000 males in main work force, while the minimum sex ratio was recorded in Mathabhanga –I block with only 46 females per 1000 males during 1991. But during 2001 Mathabhanga –I recorded the maximum sex ratio among main workers with about 237 females per 1000 males. On the other hand, the minimum sex ratio is recorded by Haldibari block where about 112 females were recorded per 1000 male main workers during the year 2001.

In case of Uttar Dinajpur district, in the year 1991, maximum sex ratio among main workers were recorded in Raiganj with about 239 females per 1000 males while during 2001, the maximum sex ratio is recorded in Goalpokhar-I block with about 296 females per 1000 males. On the other hand, the minimum sex ratio is recorded in 1991 and 2001 by Islampur and Goalpokhar-II blocks respectively and their respective sex ratios are recorded as 58 and 134 females per 1000 males. Only in Raiganj block, the sex ratio

among main workers has attained a decreasing trend between 1991 and 2001 while all other block, has recorded increasing trend between these two years.

In case of Dakshin Dinajpur district, the maximum sex ratio among main workers is recorded by one block, namely Hilli during both the years. This block records about 284 and 399 females per 1000 males during 1991 and 2001 respectively. But in case of minimum sex ratio among main workers, Kushmundi with 133 females per 1000 males and Bansihari with 163 females per 1000 males record the lowest sex ratio during 1991 and 2001 respectively.

About 213 female main workers were recorded in whole Maldah district, which has increased to 282 females per 1000 males during 2001. Among all the 15 blocks of this district, the main worker's sex ratio is maximum in Habibpur during 1991 and Kaliachak-I during 2001 with about 377 and 722 female main workers per 1000 male main workers respectively. On the other hand, during 1991, Ratua-II records the lowest sex ratio among main workers with 78 females per 1000 males and Harishchandrapur-I in 2001 with about 109 female main workers per 1000 male main workers. During 1991, there were two blocks in the whole district namely Chanchal-I and Ratua-II where the female participation as main workers is very low of less than 100 females per 1000 males.

From the above discussion, it is clear that, during 1991 and 2001, the maximum sex ratio among main workers is recorded in one block and it is the Jorebunglow-Sukhiapokri where it is more than 800 and more the 700 females per 1000 males respectively in case of main worker's sex ratio.

6.9.6 Sex Ratio among Marginal Workers -

In whole North Bengal, about 1739 females were engaged as marginal workers per 1000 males during 1991, which increased to 1952 females per 1000 males during the year 2001. This means in majority of blocks of whole region, female participation in work force as marginal workers is very high.

In Darjiling district, maximum female participation is recorded in Kalimpong-I block, where about 5737 females were recorded per 1000 males in terms of sex ratio among marginal workers in 1991 while after 10 years, newly formed Kharibari block records the

maximum sex ratio among marginal workers with about 1656 females per 1000 males. On the other hand, minimum sex ratio among marginal workers were recorded in Mirik with 1349 females per 1000 males in 1991 which is in case of newly formed Naxalbari in 2001 with 762 females per 1000 males. Therefore, in all blocks of Darjiling district, the sex ratio among marginal workers has attained a decreasing trend from 1991 to the year 2001.

Same picture is observed in case of Jalpaiguri district. This district has recorded about 3206 females per 1000 males during 1991, which has declined to about 1809 females per 1000 males in terms of sex ratio among marginal workers. During 1991, the block wise maximum sex ratio is recorded in Rajganj block where the sex ratio is recorded as 5857 females per 1000 males which during 2001, maximum sex ratio among marginal workers is recorded in Maynaguri with about 2598 females per 1000 males. On the other hand, Nagrakata and Kalchini are two blocks where the marginal worker's sex ratio is minimum among all blocks of the Jalpaiguri district during 1991 and 2001 respectively and their respective sex ratios are 1643 and 1185 females per 1000 males. Like Darjiling district, in all blocks of Jalpaiguri district also, the decreasing trend of sex ratio among marginal workers is maintained from 191 to 2001.

In Koch Bihar district, about 9005 females were engaged as marginal workers per 1000 male marginal workers during 1991, which has declined to about 2615 females per 1000 males in 2001. The block wise distribution of sex ratio among marginal workers has revealed that, the maximum sex ratio is recorded in Mathabhanga-I with about 27278 females per 1000 males during 1991 and during 2001, it is in another block namely Sitai, where the sex ratio is maximum among all blocks of the district and it is recorded as about 3494 females per 1000 males. On the other hand, the minimum sex ratio is recorded in Dinhat-II during 1991 and in Haldibari during 2001 with about 3957 and 774 females per 1000 males as marginal workers. Therefore, in this district also, all blocks record sex ratio among marginal workers in 1991 much more than that is recorded in 2001.

In case of Uttar Dinajpur district, the highest sex ratio for marginal workers is recorded in Goalpokhar-II block during 1991 and in Itahar block during 2001. These figures are about 11693 and 3072 females per 1000 males respectively. However, the lowest sex

ratio is recorded in Islampur and Chopra with 3185 and 1435 female marginal workers per 1000 male marginal workers during the census year 1991 and 2001 respectively. Therefore, in this district also, all blocks record a declining trend in terms of female participation as marginal workers per 1000 male participation.

The same declining trend is also maintained by all blocks of the Dakshin Dinajpur district. Gangarampur, in this district, records the highest marginal worker's sex ratio during 1991 with about 10144 females per 1000 males while during 2001, Kushmundi records the maximum sex ratio of about 2977 females per 1000 males. In case of lowest sex ratio for the marginal workers, Balurghat with 2678 females per 1000 males in 1991 and Kumarganj with about 1267 females per 1000 males in 2001 record the minimum sex ratio for marginal workers.

About 5364 female marginal workers have recorded per 1000 male marginal workers in Maldah districts a whole during 1991, which has increased to about 1806 females per 1000 males during the year 2001. The block wise distribution of sex ratio for marginal workers reveals that, Habibpur records the highest sex ratio during 1991 with 13276 females per 1000 males while during 2001, maximum sex ratio is recorded in Harishchandrapur-II with about 2390 females per 1000 males. On the other hand, Chanchal-I and English Bazar record the lowest sex ratio during 1991 and 2001 with about 2972 and 1149 females per 1000 males respectively.

Therefore, from the above discussion, it is clear that, in all blocks of the whole North Bengal region, the female participation as marginal workers is decreasing from 1991 to that in the year 2001. And only except five blocks of Darjiling district namely, Darjeeling-Pulbazar, Kurseong, Matigara, Naxalbari, and Jorebunglow-Sukhiapokri, all blocks of the whole region experienced more female worker than males as marginal workers during the year 2001. While during 1991, in all blocks of North Bengal the female participation is much more than that of male participation as marginal workers. However, the maximum sex ratio in whole region is recorded in Mathabhanga-I during 1991 and in Sitai during 2001. These are about 27278 and 3494 females per 1000 males. Therefore, the female participation as marginal workers has declined with very high rate between these 10 years.

6.10 CONCLUSION

To study the sex structure of any region, temporal analysis of sex ratio plays an important role in order to identify the changes- both increase or decrease of sex ratio through time. North Bengal region reveals the picture of fluctuating change in sex ratio since early period of the last century till the census year 1951. After 1951 the whole region attained a continuous increase in the sex ratio till today. The positive and negative changes in the overall sex ratio of the region reflect the changing status of women in the society and within the family. From this change in sex ratio since 1951, the socio-economic and demographic development of the whole study region can easily be identified. Improvement in medical facilities, improvement in literacy status and economic status of women along with some other socio-economic-cultural factors are mainly responsible for this slight increase in sex ratio of the whole North Bengal.

From the above discussion, it may be said that, North Bengal region as a whole and each and every individual district have been passed through fluctuating trend in sex ratio for each and every parameters of social and economic development.