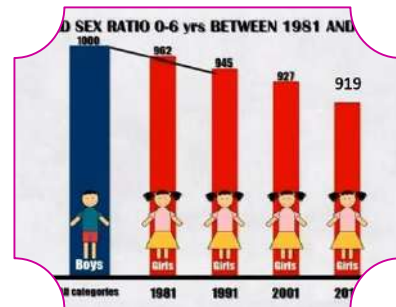




CHILD POPULATION AND CHILD SEX RATIO AGE GROUP (0-6 YEARS) IN BANGALORE METROPOLITAN REGION OF KARNATAKA

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ABSTRACT

Sex ratio is an important social indicator to measure the extent of prevailing equity between males and females in a society. In a developing country like India, Child Population and child sex ratio is a growing concern. The problem of Sex ratio is commonly felt cross India and Karnataka state as well. Sex and age are also very important because they are the “visible indisputable and convenient indicators of social status” (R. Tomlinson). Child sex ratio has been defined as the number of females in age group 0-6 years per 1000 males in the same age group in the population. The present study is related to child population and child sex ratio age group (0-6 years) in Bangalore Metropolitan Region of Karnataka. The data is mainly based in Secondary data which were collected from Census of India (2011). The study area consists of 3 districts namely- Bangalore Urban District, Bangalore Rural District and Ramanagara District which consist of 13 taluks. It shows the decadal growth rate and the variation of child sex ratio in the two decades.

KEYWORDS: Sex ratio, population structure, social indicator.

1. INTRODUCTION:

The study about demography, structure and characteristics of population is an important aspect of the study of population and socio-economic growth of a region. It is necessary to seek explanations for any change which may have occurred. For instance, that the population of Children below the age of six years has decreased in a certain population. The study about child sex ratio also shows the dependency ratio in the region. Sex and age are also very important because they are the “visible indisputable and convenient indicators of social status” (R. Tomlinson). For the study of sex structure of any population, the following two measures are generally adopted (a) the percentage of males in the population and (b) the sex ratio of these two measures, the latter is more frequently used in the study of population.

Present study is related to change in child population (0-6 years) and sex ratio in Bangalore Metropolitan Region in between 1991-2011. In the period of time, study is also aiming at finding out and measuring change in child population and sex ratio Child sex ratio has been defined as the number of females in age group 0-6 years per 1000 males in the same age group in the population

2. STUDY AREA:

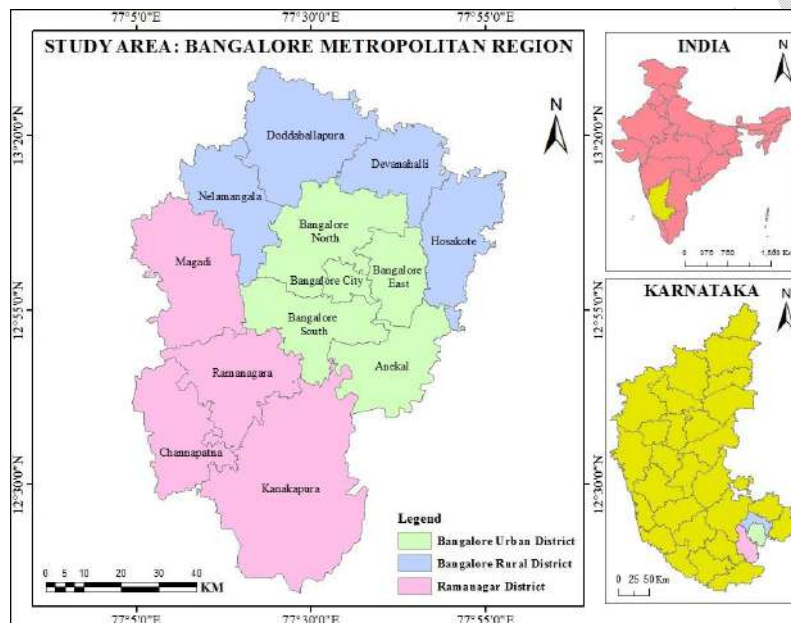
The Bangalore Metropolitan Region (BMR) is constituted by three districts namely Bangalore Urban, Bangalore Rural and Ramanagara. It is one of a handful of urban agglomerations in the World to be situated

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above the 3000 feet above Mean Sea Level. Bangalore Urban district comprises four taluks Nelamangala, Doddballapura, Devanahalli, and Hoskote. The District is ranked as one of the top Five Technology Clusters in the world. Bangalore rural district is located in the south eastern part of State of Karnataka. Ramanagara district is located approximately 50 km southwest of Bangalore has four taluks viz. Ramanagaram, Channapattana, Kanakapura and Magadi. The three districts in the Bangalore Metropolitan Region are further divided into thirteen Taluks of which Bangalore East is newly formed. The Bangalore Metropolitan region has vast areas under reserved forests especially in the South and the South -West. Also, the topography of the region has strong valley formations. The sphere of influence of Bangalore Metropolitan region shows that, within a radius of 25 km from the center of the city, the area falls in the Bangalore Metropolitan Area, if radius of 50 km from the center of the city, the area falls in Tamil Nadu State. It has constraints for further increasing the jurisdiction towards South –East direction.



Map-1

3. OBJECTIVES:

The main objective of this study is

1. To assess the spatio-temporal change in the child population and child sex ratio
2. To study about the variation in Child sex ratio in different taluks of the region.
3. To suggest some remedial measures to improve the child sex ratio

4. PURPOSE OF THE STUDY:

Sex ratio is the most enabling tool for the development of a society and a country. From age old days, the practicing of son-based society and preference of son, female feticide and infanticide resulted a skewed sex ratio. The steadily declining child sex ratio in India has reached emergency proportion and immediate actions need to be taken to alleviate this crisis, warned a latest UN Study. Bangalore Metropolitan region consisting of 13 taluks resulted a asymmetric child population and child sex ratio. Being one of the most developed regions in the nation a study is conducted to know about the present condition of child sex ratio in different taluks of the region. The variation among the child sex ratio in the region is result of higher immigration.

5. RESEARCH METHOD:

The study is completely based on Secondary data collected from Census of India for the year 2001 and 2011. With the help of tables, maps and others cartographic techniques the positive and negative change in child population and sex ratio have been deciphered with respect to Bangalore Metropolitan Region.

$$\text{Child Sex Ratio} = \frac{\text{Number of female children (0-6 age group)}}{\text{Number of male children (0-6 age group)}} \times 1000$$

6. RESULTS AND DISCUSSION (FINDINGS)

6.1 Child Population:

The table 1 and Figure 1 below show the total population in different taluks of Bangalore Metropolitan region including the child population and their percentage in the respective taluks. It can be seen that out of all the taluks Bangalore City (8443675) has the highest population compared to other taluks whereas the child population is also highest among other taluks i.e. (916441) followed by Anekal (517575), Bangalore North(Bangalore North) and Kanakapura. Whereas Anekal (58938), Bangalore North (40487), Kanakapura (34319) also have the highest child population as of total population among other taluks. The lowest child population is seen to be in Bangalore East (13041) followed by Magadi (19330). The highest percentage of child population is seen to be in Bangalore East followed by Bangalore South, Bangalore North, Anekal whereas the least percentage of child population is seen to be in Magadi, Channapatna and Kanakapura.

The table 2 and Figure 2 below show the child population in Bangalore Metropolitan region for the year 2011. The highest male child population between two year (0-6 years) is seen in Bangalore city (471842) followed by Anekal (29969) and Kanakapura (17545) while the least. The total male child population of the region is 651525 i.e. 51.4% of the male child population out of total child population where as 616213 is total female child population of age group between (0-6) years which means 48.6% of female child population out of total child population. The child population in rural area is 255527 i.e. 20.2% of child population in rural area compared total child population whereas in Urban area the total child population is 1012213 i.e. 79.8% of child population in urban area compared to total child population. Bangalore City has highest child population compared to other taluks while Bangalore east has least child population.

Table-1: Child Population in Bangalore Metropolitan Region - 2011

Taluks	Total Population	Person Child	Percent
Anekal	517575	58938	11.4
Bangalore North	352420	40487	11.5
Bangalore South	205274	23930	11.7
Bangalore East	102607	13041	12.7
Bangalore City	8443675	916441	10.9
Devanahalli	209622	23010	11.0
Doddaballapura	299594	30672	10.2
Hosakote	270818	31028	11.5
Nelamangala	210889	22352	10.6
Channapatna	261304	25383	9.7
Kanakapura	350877	34319	9.8
Magadi	203841	19330	9.5
Ramanagara	266614	28809	10.8
Total	11695110	1267740	10.8

Source: Census of India 2011

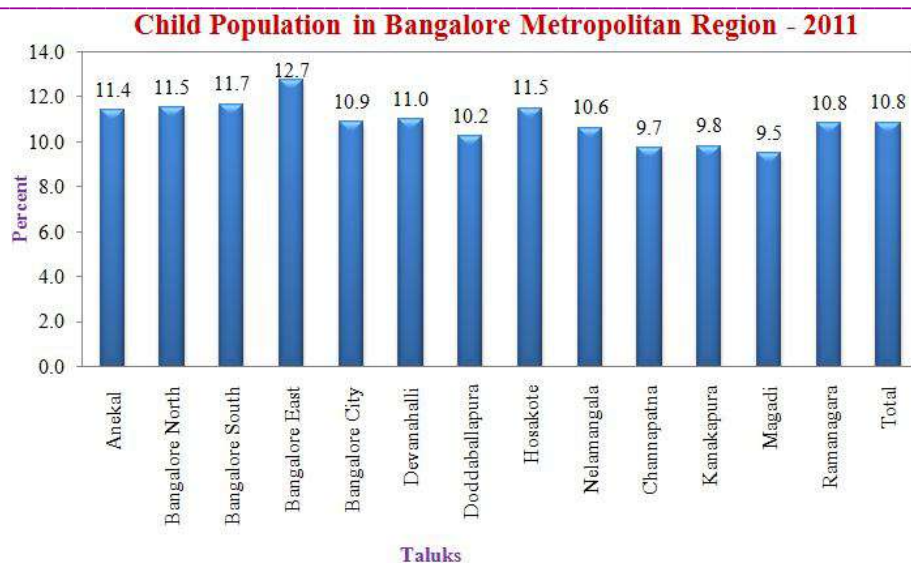


Figure-1

Table-2: Child Population in Bangalore Metropolitan Region - 2011

Taluks	Male	%	Female	%	Rural	%	Urban	%
Anekal	29969	50.8	28969	49.2	39851	67.6	19087	32.4
Bangalore North	20837	51.5	19650	48.5	31008	76.6	9479	23.4
Bangalore South	12409	51.9	11521	48.1	18057	75.5	5873	24.5
Bangalore East	6599	50.6	6442	49.4	11877	91.1	1164	8.9
Bangalore City	471842	51.5	444599	48.5	0	0.0	916441	100.0
Devanahalli	11680	50.8	11330	49.2	15827	68.8	7183	31.2
Doddaballapura	15670	51.1	15002	48.9	20210	65.9	10462	34.1
Hosakote	16072	51.8	14956	48.2	24203	78.0	6825	22.0
Nelamangala	11486	51.4	10866	48.6	17165	76.8	5187	23.2
Channapatna	12968	51.1	12415	48.9	17345	68.3	8038	31.7
Kanakapura	17545	51.1	16774	48.9	28578	83.3	5741	16.7
Magadi	9773	50.6	9557	49.4	15384	79.6	3946	20.4
Ramanagara	14677	50.9	14132	49.1	16022	55.6	12787	44.4
Total	651527	51.4	616213	48.6	255527	20.2	1012213	79.8

Source: Census of India 2011

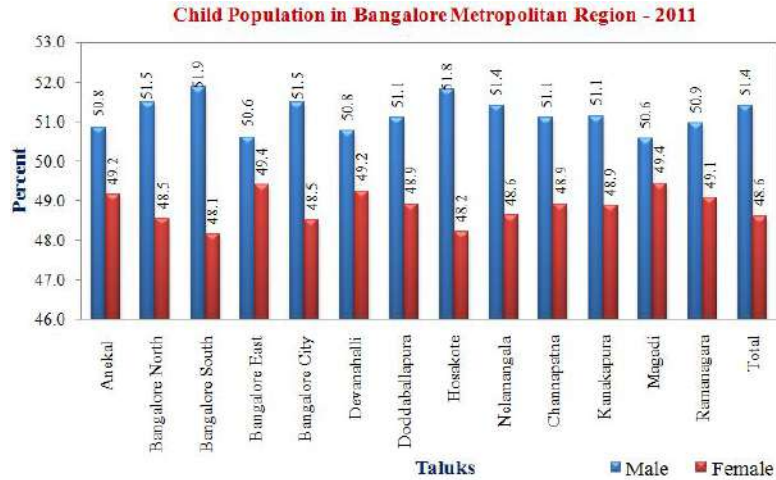


Figure-2

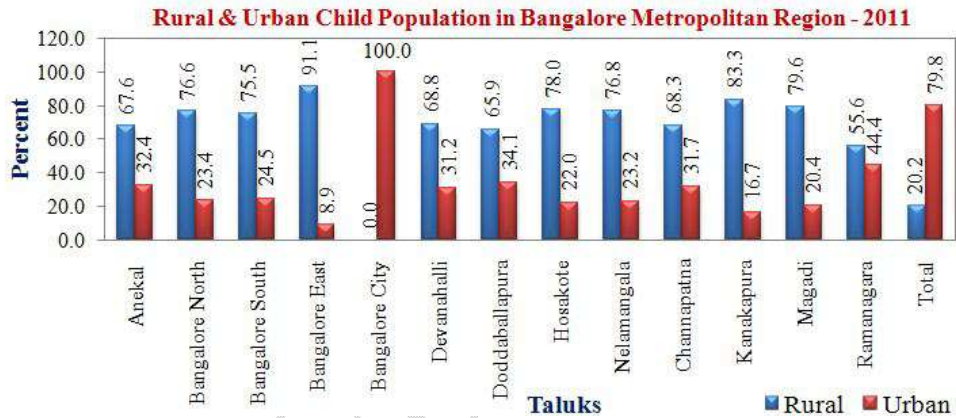


Figure-3

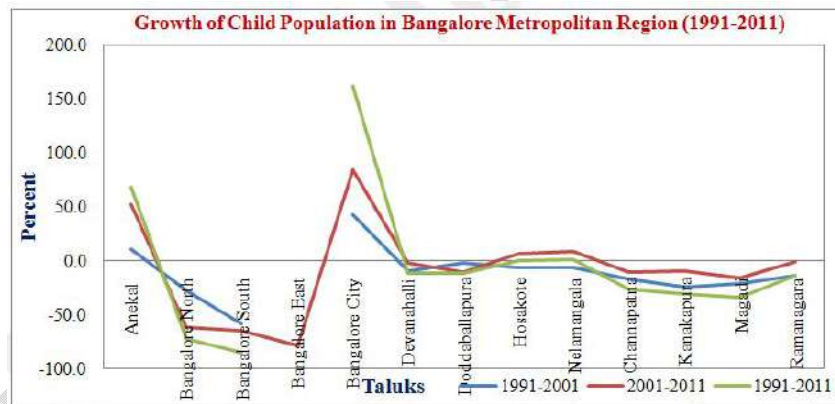
6.2 Growth of Child Population

The table 3 below shows the increase of child population in the two decades i.e. between 1991-2011. The total child population in the region was 954600 which increased to 998158 and then to 1267740. The decadal growth rate in between 1991-2011 is 32.8%. The decadal growth rate in between 1991-2001 is 4.6% which increased to 27% in between 2001-2011. Bangalore city has the highest decadal growth rate whereas Bangalore South seen to have lowest growth rate.

Table-3: Growth of Child Population in Bangalore Metropolitan Region (1991-2011)

Taluks	1991	2001	2011	Decadal Growth Rate 1991-2001	Decadal Growth Rate 2001-2011	Decadal Growth Rate 1991-2011
Anekal	35124	38653	58938	10.0	52.5	67.8
Bangalore North	147998	107318	40487	-27.5	-62.3	-72.6
Bangalore South	160582	67458	23930	-58.0	-64.5	-85.1
Bangalore East	----	61575	13041	----	-78.8	----
Bangalore City	349919	497536	916441	42.2	84.2	161.9
Devanahalli	26011	23440	23010	-9.9	-1.8	-11.5
Doddaballapura	34719	34152	30672	-1.6	-10.2	-11.7
Hosakote	31117	29047	31028	-6.7	6.8	-0.3
Nelamangala	22140	20662	22352	-6.7	8.2	1.0
Channapatna	34477	28481	25383	-17.4	-10.9	-26.4
Kanakapura	49606	37741	34319	-23.9	-9.1	-30.8
Magadi	29399	23059	19330	-21.6	-16.2	-34.2
Ramanagara	33508	29036	28809	-13.3	-0.8	-14.0
Total	954600	998158	1267740	4.6	27.0	32.8

Source: Census of India 1901 and 2011

**Figure-4**

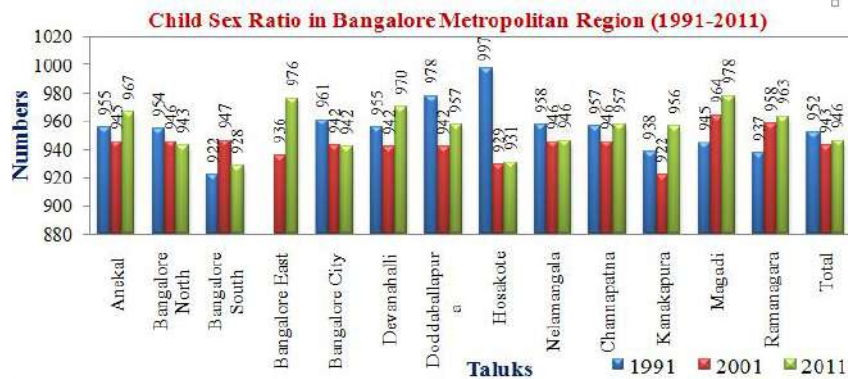
6.3 Child Sex Ratio:

The table 4 below shows the variation of child sex ratio between 1991-2011. The overall child sex ratio in 1991 in Bangalore Metropolitan Region is 952 females per 1000 male child within age group of (0-6 years) which declined to 943 in 2001 and again increased to 946 in 2011. The highest child sex ratio in 2011 is seen to be in Magadi taluk i.e. 978 female child per 1000 male child whereas the lowest child sex ratio is seen to be in Bangalore South (928 female per 1000 male).

Table-4: Total Child Sex Ratio in Bangalore Metropolitan Region (1991-2011)

Taluks	1991	2001	2011	Variation 1991-2001	Variation 2001-2011	Variation 1991-2011
Anekal	955	945	967	-10.4	21.6	11.3
Bangalore North	954	946	943	-8.9	-2.5	-11.4
Bangalore South	922	947	928	24.5	-18.1	6.5
Bangalore East		936	976		40.2	
Bangalore City	961	942	942	-18.3	-0.1	-18.3
Devanahalli	955	942	970	-13.7	28.4	14.6
Doddaballapura	978	942	957	-35.4	15.3	-20.1
Hosakote	997	929	931	-68.1	1.3	-66.8
Nelamangala	958	946	946	-12.0	0.4	-11.5
Channapatna	957	946	957	-10.9	11.7	0.8
Kanakapura	938	922	956	-15.8	33.7	17.9
Magadi	945	964	978	19.7	13.6	33.3
Ramanagara	937	958	963	20.7	4.8	25.5
Total	952	943	946	-9.2	3.2	-6.0

Source: Census of India 1901 and 2011

**Figure-5**

The variation between 1991-2001 is seen to be negative i.e. -9.2% whereas the percentage increased to 3.2% in between 2001-2011. The overall variation between 1991-2011 is seen to have a negative decline. Hoskote taluk has the highest variation in between the two decade. There is declining of child sex ratio in the taluk. The child sex ratio in 1991 was 997 which declined to 931 in 2011. Whereas Magadi shows a positive growth. The Child Sex ratio in the taluk was 945 in 1991 which increased to 978 in 2011.

6.4 Variation in Child Sex Ratio

The taluks below show the changes in Child Sex Ratio in the year 1991, 2001 and 2011. The variation is shown as H-High, M-Medium and L-Low.

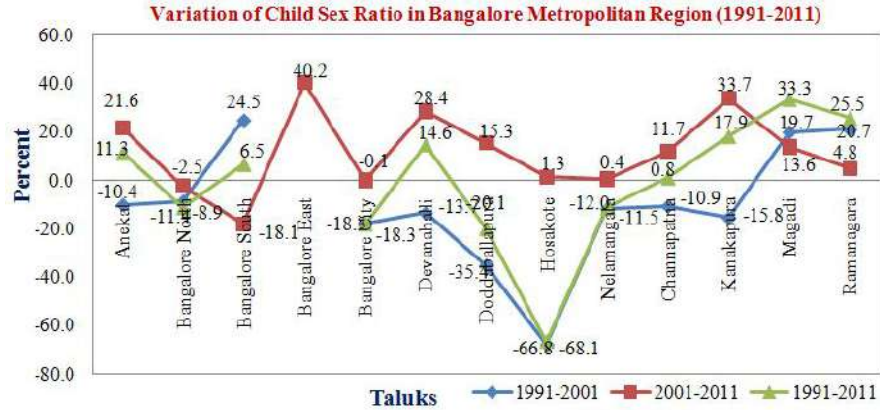
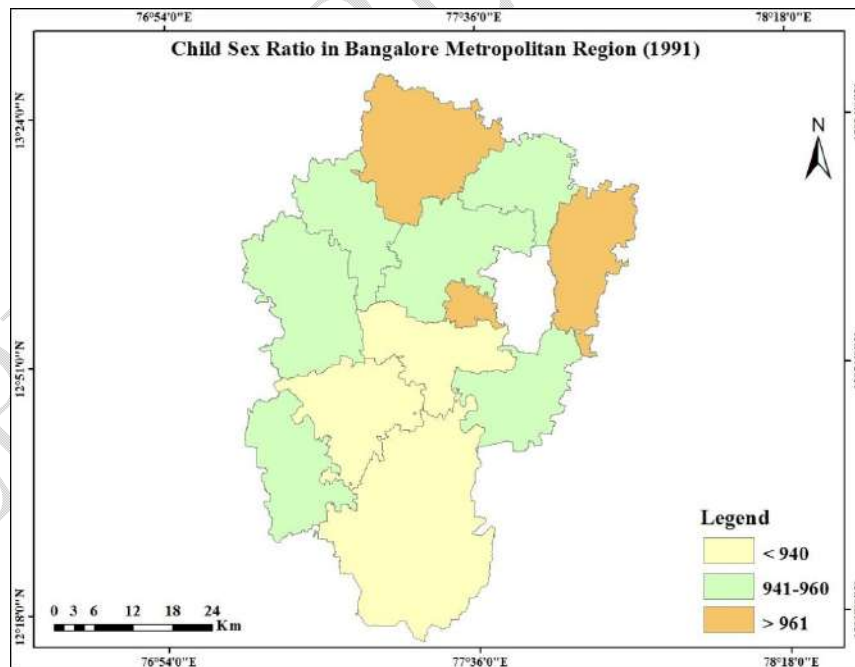


Figure-6

Bangalore North, Nelamangala and Channapatna seem to have no much variation in between the two decades. Anekal, Bangalore East, Devanahalli, Kanakapura, Magadi and Ramanagara shows a positive growth in Child sex ratio in between 1991-2011 whereas Bangalore South, Bangalore City, Doddaballapura, Hosakote Taluks shows a negative growth in Child Sex ratio.

6.4.1 Child Sex ratio in Bangalore Metropolitan Region 1991:

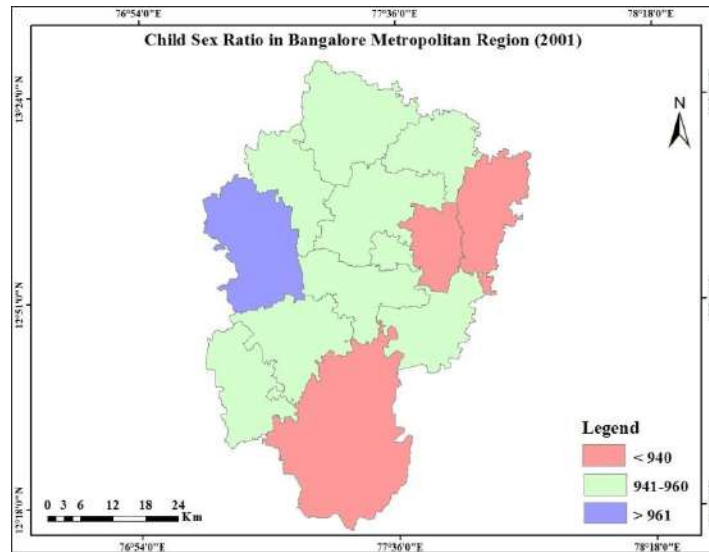
The Map 2 below shows year wise variation in Child Sex ratio. In the year 1991 Doddaballapura, Hoskote and Bangalore City have the had the highest child sex ratio which is above 961 whereas Devanahalli, Bangalore North, Nelamangala, Magadi, Channapatna, and Anekal have child sex ratio between 941-960 which is of average whereas Bangalore South, Ramnagara and Kanakapura have child sex ratio below 940.



Map-2

6.4.2 Child Sex ratio in Bangalore Metropolitan Region 2001:

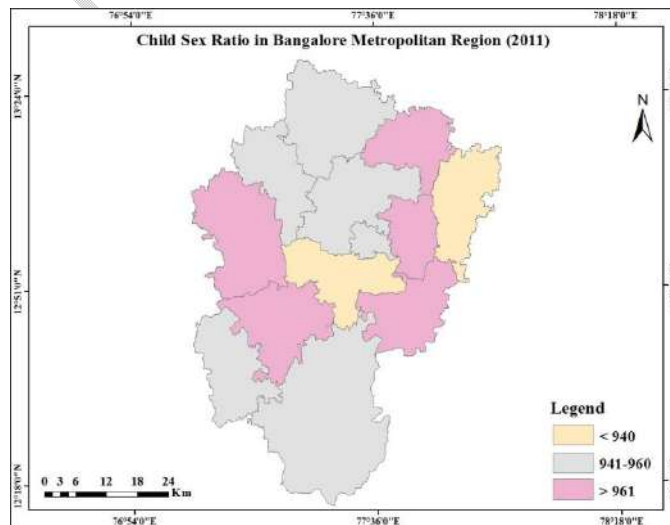
The Map 3 Shows that Hoskote, Ramanagara and Bangalore East shows least change in Child sex ratio in the year 2001 whereas Doddaballapura, Nelamangala, Devanahalli, Bangalore North, Bangalore city, Bangalore South, Anekal, Ramnagara and Channapatna shows medium Variation in Child sex ratio i.e. (941-960) whereas Magadi shows the highest variation in Child sex ration in the year 2001 which is 964 female child per 1000 male child from 945 female child per 1000 male child.



Map-3

6.4.3 Child Sex ratio in Bangalore Metropolitan Region 2011:

The Map 4 below illustrates that Hoskote and Bangalore South shows the least growth in Child sex ratio in the year 2011. It shows a negative decline in the child sex ratio i.e. least then 940 female children per 1000 male child whereas Doddaballapura, Nelamangala, Bangalore North, Bangalore city, Channapatna and Kanakapura shows medium change in child sex ratio i.e.941-960. Devanahalli, Bangalore East, Anekal, Magadi and Ramanagara shows the highest change in Child sex ratio i.e. above 961 female child per 1000 male child.



Map-4

7. CONCLUSION:

The present study points out the notable spatio temporal variation of child sex ratio in Bangalore Metropolitan Region. But in due course of time the region notices a sharp fluctuation of child sex ratio in the two decades. Being the IT hub and Silicon Valley of India, the variation is due to Migration from last few decades. Education is also the main important cause of variation in Child Sex ratio in all the taluks of the region.

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