

## A Geographical Study Of Sex Ratio Of Kanpur Nagar District Of Uttar Pradesh

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### Abstract

Population geography encompasses the exploration of population dynamics, encompassing factors such as dispersion, concentration, religious and linguistic makeup, gender ratio, age demographic, migration trends, quality of life, and economic framework. It delves into the adaptive capabilities of humans in diverse environments across the globe. This paper focuses on examining the sex ratio in Kanpur Nagar district, of Uttar Pradesh.

The investigation relies on secondary data sources, including district census handbooks, gazetteers, statistical departments, examinations of socio-economic conditions and statistical summaries of the area, wherein the gathered data undergoes analysis and is subsequently conveyed through tables and visual representations. According to the 2011 census, Kanpur Nagar's the overall populace amounted to 45,81,268 with 24,59,806 males and 21,21,462 females, resulting in an overall gender proportion indicating 862 females for every 1000 males.

**Keywords:** sex ratio, sex composition, rural sex ratio, urban sex ratio.

### Introduction

There are many characteristics of population but the sex composition is the major one which shapes the marriage dynamics and influences the population growth rate. Sex ratio or composition also influences the migration and the occupation structure. And hence the roles in which two sexes are is of contrasting and of complementary in nature.

Sex ratio is one of the topic of major importance for the study by the population geographers. Sex ratio is characterized as the proportion of females to males within the population. Sex ratio can be termed as an index which gives a clear picture of an area's socio economic condition and thus it is very useful in the regional analysis of the area. Both the employment pattern and the social need are influenced and affected by the sex ratio. Broadly speaking, sex ratio is the count of females per thousand males. And hence both in the time and space the sex composition have variations or changes. The major three factors which bring the variations or changes in the sex ratio are the difference in the mortality rate in the two sexes, selectiveness in migration between the two sexes and sex ratio at the birth.

### **Objectives:-**

- Investigating, analyzing, and scrutinizing the temporal shifts in the sex ratio within the Kanpur Nagar district.
- To investigate unique variations in the sex ratio within the Kanpur Nagar district of Uttar Pradesh.
- To examine the rural-urban disparities in sex ratio within the Kanpur Nagar district.

**Database And Methodology-** . The research presented in this paper relies entirely on secondary data sources. Information has been gathered from various outlets, encompassing government and private publications, as well as published books. Primary sources of secondary data include district census handbooks, the census of India, district gazetteers, and the district statistical department, along with socio-economic surveys. Collected

data is meticulously processed and subsequently presented through both graphical and tabular formats. The sex ratio is computed by dividing the total number of females by the total number of males and multiplying the result by a thousand. Thus, the calculation of the sex ratio is determined by the formula mentioned below.

$$\text{Sex ratio} = \frac{\text{Total number of females}}{\text{Total number of males}} \times 1000$$

**The Study Area-** Kanpur Nagar is situated between the latitudinal parallels of 25°26' and 26°58' north, and longitudinally between 79°31' and 80°34' east. Its northern boundaries are shared with Kannauj and Hardoi, the eastern border with Unnao, the southern limits with Fatehpur and Hamirpur, and the western boundary with Kanpur Dehat. The sacred Ganga river serves as a natural boundary to the east, separating it from the Unnao district, while the Pandu river acts as a dividing line to the west and south, separating Kanpur Nagar from Kanpur Dehat and Fatehpur, respectively. Occupying the middle Ganga plain-west, this district spans an expanse of 1,065 square kilometers.

Administratively, Kanpur Nagar is divided into four tehsils: Kanpur Sadar, Bilhaur, Ghatampur, and the newly established Narwal, established by a government notification on June 22, 2015, by the governor of Uttar Pradesh, Shri Ram Naik. To ensure the effective execution and supervision of developmental initiatives, the district is subdivided into ten blocks dedicated to development: Kakwan, Bilhaur, Shivrajpur, Chaubepur, Kalyanpur, Vidhunu, Sarsol, Patara, Bhitargoan, and Ghatampur. The district encompasses a total land area of 3155.0 square kilometers. As per the 2011 census, Kanpur Nagar district ranks 6th in population within the state, totaling 45,81,268 individuals. Out of this population, 24,59,806 are males, and 21,21,462 are females. In terms of sex ratio, Kanpur Nagar district is ranked 68th, with a ratio of 862, falling beneath the state's average of 912 females per thousand males.

**Temporal Changes In Sex Ratio-** Temporal changes of the current given study describes about the changes in the sex ratio over the period of time. Based on the 2011 census, the Kanpur Nagar district's total population reached 45,81,268, comprising 24,59,806 males and 21,21,462 females. Consequently, the district exhibits an overall sex ratio of 862, indicating a noticeable disparity with fewer females compared to males. This persistent imbalance in the sex ratio underscores an unfavorable condition for females in the region.

Table no.1 represents the temporal changes in the sex ratio of Kanpur Nagar district of Uttar Pradesh from 1901 to 2011. At the commencement of the twentieth century, the sex ratio stood at 868 females per thousand males. There after we can see that there is continuous decline until 1951 after independence except 1931 with increase with eight points, the main causes or reasons behind this decline or downfall was the high mortality of the females because of the large epidemics likes cholera, influenza, plague which occurred from the period 1911 to 1931, but they also showed their adverse effect till 1951, due to poor health system of the district.

Than after one decade that is 1961, there was increase in the sex ratio of the Kanpur Nagar district with eighteen points. In 1981, the district's sex ratio reached 825 females per thousand males, marking the most substantial growth rate in the past century. In 2001 and 2011 which were the last two decades the sex ratio was 858 and 862 respectively which shows continuous growth because of social awareness among the people.

**TABLE NO.1: TEMPORAL CHANGE OF SEX RATIO 1901-2011**

CENSUS YEAR	SEX-RATIO	INCREASE/ DECREASE
1901	868	

1911	832	-36
1921	802	-30
1931	810	+8
1941	777	-33
1951	770	-7
1961	788	+18
1971	797	+9
1981	825	+28
1991	832	+7
2001	855	+23
2011	862	+7

Source: District census handbook: Kanpur Nagar, 2011

#### Temporal Change of Sex-Ratio in Kanpur Nagar District: 1901-2011

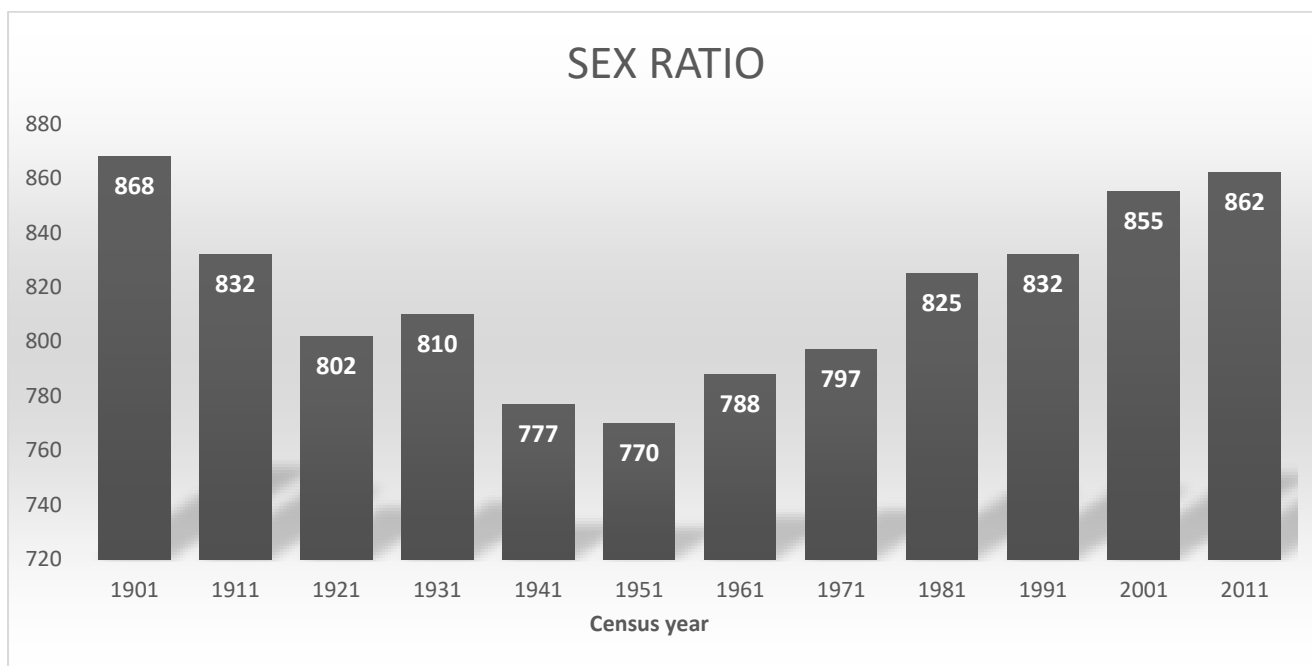


Fig. 01

#### SPATIAL PATTERN OF SEX RATIO

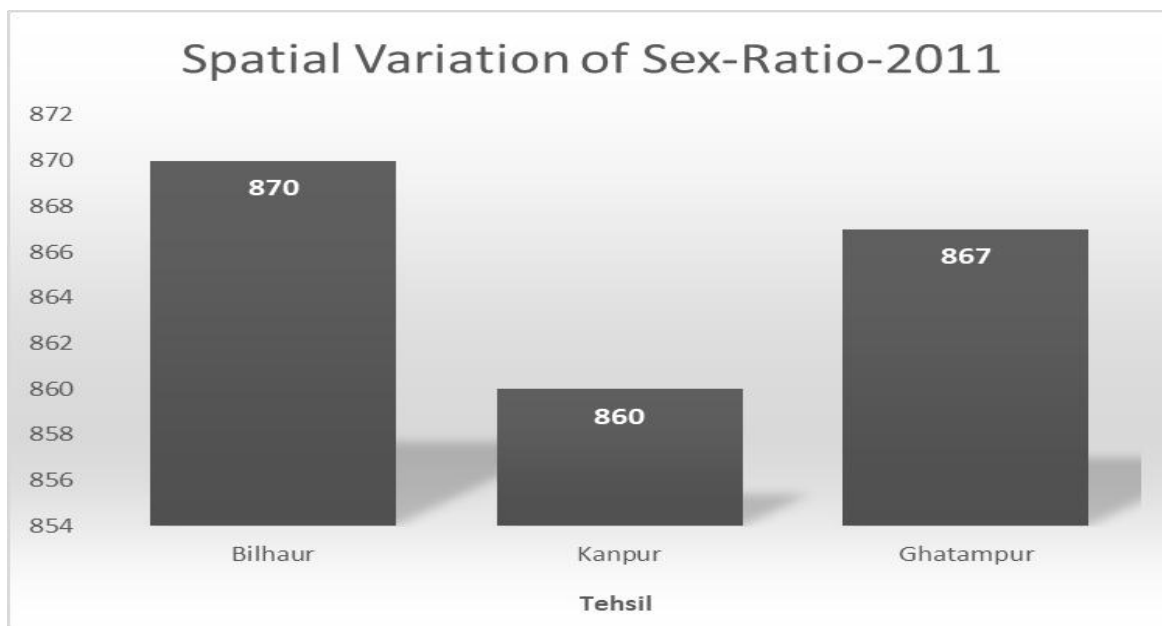
According to the data of the census figure 2011, the sex ratio of Kanpur Nagar district was about 862 females per thousand males. In the table no.2 the tehsil wise changes or the variations in the total sex ratio is given and the fourth tehsil which is the Narwal is not found in the table because it was made by government issued notification on June 22, 2015 by governor Shri Ram Naik. It can be observed from the table that the highest sex ratio is found in Bilhaur tehsil which is 870 females per thousand of the males followed by Ghatampur

tehsil which has sex ratio of about 867 and the lowest sex ratio in the Kanpur tehsil which is 860 which is below the district level average sex ratio.

**TABLE NO.2: SPATIAL VARIATION OF SEX RATIO: 2011**

Serial No.	Name of the Tehsil	Sex-Ratio
1.	Bilhaur	870
2.	Kanpur	860
3.	Ghatampur	867
4. District	Kanpur Nagar	862

Source: District census handbook: Kanpur Nagar, 2011



**Fig. 02**

### RURAL URBAN SEX RATIO – 2011

Table no.3 shows about the evolving dynamics of sex ratio in rural and urban settings. In the Kanpur Nagar district we can see that in 2011, there is a big difference between the rural and the urban sex ratio which is about 870 for the rural and 859 for the urban respectively. When focusing on urban regions, the Ghatampur tehsil boasts the highest urban sex ratio, reaching 904, followed by Bilhaur tehsil which is 897 and the lowest in Kanpur tehsil which is 857. The Ghatampur tehsil and Bilhaur tehsil the sex ratio in urban areas surpasses that of the Kanpur Nagar district itself, except the Kanpur tehsil which has lower than the district.

Now if we consider the case of the rural areas, we can see that the Kanpur tehsil has the highest rural sex ratio which is the 877 which is even more than the Kanpur Nagar district average which is 870, followed by Bilhaur tehsil which has sex ratio of 868 and the lowest rural sex ratio is found in Ghatampur tehsil which is 865, five points lower than the district average.

**TABLE NO. 03: RURAL-URBAN SEX RATIO 2011**

Serial No.	Name of Tehsil	Rural Sex ratio	Urban Sex Ratio
1.	Bilhaur	868	897
2.	Kanpur	877	857
3.	Ghatampur	865	904
4.District	Kanpur Nagar	870	859

**Source: District census handbook: Kanpur Nagar, 2011**

### Conclusion-

- The aforementioned investigation deduces that the sex ratio within the Kanpur Nagar district did not exhibit the one of the stable in nature whereas it has been continuously decreasing and increasing but at last it has reduced from 1901 to 2011 as shown in the (fig no.1). At the beginning or starting of the century, it was about 868 females per thousands of males but in the year 2011, it was about 862 females per thousands of males.
- In the census year 2011, the distribution of the region's sex ratio displayed a diverse spatial pattern. The highest sex ratio was found in the Bilhaur tehsil which is about 870 females per thousand males because of good employment opportunities and capable and better educational opportunities as well which is found in the tehsil itself and Kanpur tehsil is the one with the lowest sex ratio which is 860 females per thousand of males.
- In all over the district rural urban sex ratio was also different. In the Kanpur Nagar district, the sex ratio in rural areas is approximately 870, while in urban areas, it is around 859. Notably, the highest urban sex ratio was observed in Ghatampur tehsil, while the lowest was recorded in the Kanpur tehsil. And in the case of rural sex ratio the highest was found in Kanpur tehsil because of high rural area found in the tehsil and the lowest is found in the Ghatampur tehsil.

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