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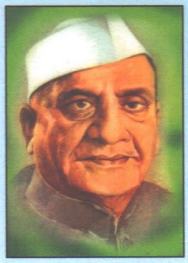

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# Development of Smart City : Impact and Transformation due to Urbanization

Convenor
**Dr.Kalpana Deshmukh**

## MAHARASHTRA BHUGOLSHSTRA PARISHAD'S

*35th Annual International Conference*

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from an initial analysis commissioned by NMC in 2015-2016 and forms the basis for future project requirements.

**CONCLUSION:**

Solutions involve finding sustainable ways for the urban area to reduce both its dependence on pollutants and the amount of pollutants it produces, and to properly recycle or dispose of pollutants before they contaminate soil, water, or air.

The result obtained in present study revealed that certain human activities such as immersion of idols of God and Goddess (in large ratio) during festival season, washing activities, recreational activities, surface runoff from resulting rainfall, (poor) sewage have contributed considerable pollution in various lakes within Nagpur city areaand Balaghat, Bhandara, Gondia, Chhindwara etc. Water quality from studied lakes is unsafe for consumption of human use and therefore need serious attention.

**Sources and References**


- KudnarNanabhau S. (2017):"Morphometric Analysis of the Wainganga River Basin Using Traditional & GIS Techniques" Pp 10-30.
- Paranjpye Vijay (2011): Wainganga Planning for Water Resource Development. Pp. 25 -33.
- Paranjpye Vijay (2013): A Master Plan for Integrated Development and Management of Water Resources of Wainganga Sub- Basin. Pp.10- 37.
- Singh R.L. (1971): India, A Regional Geography. NGSI, Varanasi, Researcher Publication. 6. Pp. 20-45.
- Singh Vimla, DubeyAlok (2012): Land Use Mapping Using Remote Sensing & GIS Techniques in Naina - Gorma Basin, Part of Rewa District, M.P., India International Journal of Emerging Technology and Advanced Engineering, Volume 2, Issue 11. Pp. 155.
- TexakArun Kumar, Murumkar A. R., Arya D. S. (2014): Long term spatial and temporal rainfall trends and homogeneity analysis in Wainganga basin, Central India, Water and Climate Extremes, volume 4. Pp. 50-61.
- The Census of India, provisionaldata, 2011.
- Nagpur city information, Wikipedia.


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# IMPACT OF BAN ON SEX DETERMINATION TEST ON SEX RATIO IN NAGPUR DISTRICT OF MAHARASHTRA

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**Abstract**

Sex Ratio means the number of females per thousand Males, this was very high (991)in the Cencus return of 1910 and in the early twentieth century when there was no restriction what so ever of any sort from the government nor any awareness among the general population regarding birth control measures and the policy adopted by most of the people was "More The Merrier" and more hands to work and earn without realizing that the women folk were not a production house meant for doing house hold chores and producing babies In a patriarchial society Neglect of girl child since birth and subsequently also was the main reason for higher Female mortality rate in the predominantly male dominated Society in our country.

With the introduction of contraceptives and birth control measures / techniques the number of children per household started decreasing however the sex ratio was still going down at alarming speed which was a cause for concern for the government machinery to step in and enforce the laws of sex determination test and female foeticide which was rampant due to the advancement in technology like Ultrasonography

The impact of ban on sex determination test on sex ratio in Nagpur District of Maharashtra is quite significant as the trend in decreasing sex ratio has reversed . The sex ratio for the decadal period 1991 - 2001 has gone up from 922 to 934 an increase of 1.3% and for the period 2001 - 2011 the sex ratio increase from 934 - 948 showing an increase of 1.50% which ofcourse is a positive change for the better for the future generations.

The population explosion world wide is surely a cause for concern to one and all associated with this is the universal problem of Sex ratio.The study of population excluding the sex ratio is something like a body without a Soul. The form, Tempo and lifestyle in any country or region is generally influenced by the sex ratio of that particular place.The Sex ratio is determined by the number of females per thousand males,

There is a need to make a detailed spatial analysis of changes in the sex composition of India`s population particularly during the past three decades and especially in the present situation where India is in the offing for the top spot by defeating China as far as the population is concerned.

A spatio-temporal analysis of the sex ratio of Nagpur district of Vidarbha region in the state of Maharashtra for the decadal period 2001 - 2011 has been carried out with special emphasis on the Urban - Rural Sex ratio in the study region,

**Key words** :- Sex Ratio, Spatio, Temporal, Rural Sex ratio, Urban sex ratio

**Objectives:-** The main objectives of the present paper are as follows :-

(a) The trends of sexratio of Maharashtra and Nagpur district are explained separately.

(b) To analyse the spatio - Temporal pattern of sex ratio in the study region.

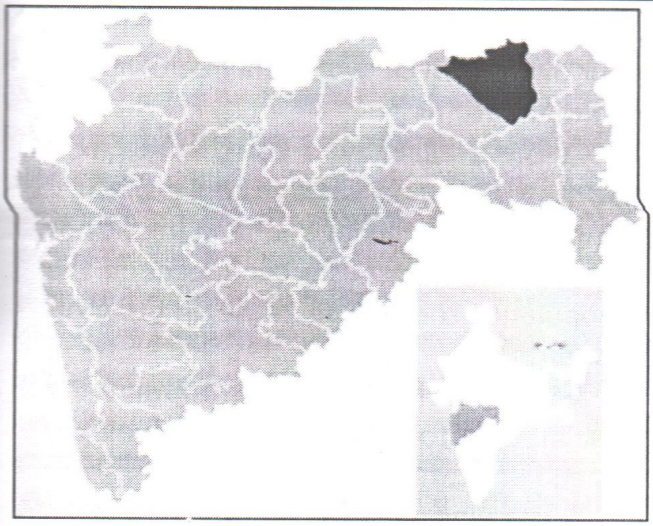
(c) To highlight the rural - urban sex ratio 2001 - 2011 in the study region.

(d) To find out the factors affecting the sex ratio in the study region.

**Study Area :-**

Nagpur is a city and winter capital of the state of Maharashtra, the largest city in central India and third largest city in Maharashtra after Mumbai and Pune. With a population of 46,53,171 (2011). Nagpur Metropolitan City is 13th largest urban conglomeration in India. It has also been ranked as the cleanest city and the second greenest city of India. Nagpur is also a major commercial and political centre of Vidarbha region of Maharashtra and is also famous throughout the country as Orange City .

The Nagpur district lies between latitude 200 35`- 210 44`North and Longitude 780 15` - 790 40` East ,on the North lies the southern part of Madhya Pradesh, in the north-west and west are the districts Amravati and Wardha, the Southern portion of the district is surrounded by Channdrapur district of Maharashtra and in the East lies the Bhandara District. Nagpur district comprises of 14 tehsils,it stretches over an area of 9892 sq.km. Area under urban sector is 364.66sq.km.While the area under rural sector is 9527.34 sq.km. In terms of area district Nagpur Constitutes 3.21% of the area of Maharashtra state The population of the district according to 2011census was 46,53,171.



**Methodology & Database:-**

This study is purely based on secondary data obtained from socio economic review of Nagpur district (2001 &2011),Maharashtra state Cencus records 2001 & 2011, district level statistical data,

The data analysis has been carried out on a decadal basis 2001 - 2011, and processed using various cartographic techniques.

Sex Ratio = Pf/Pm x 1000

Where Pf= total female population

Pm = total male population

**Discussion :-**

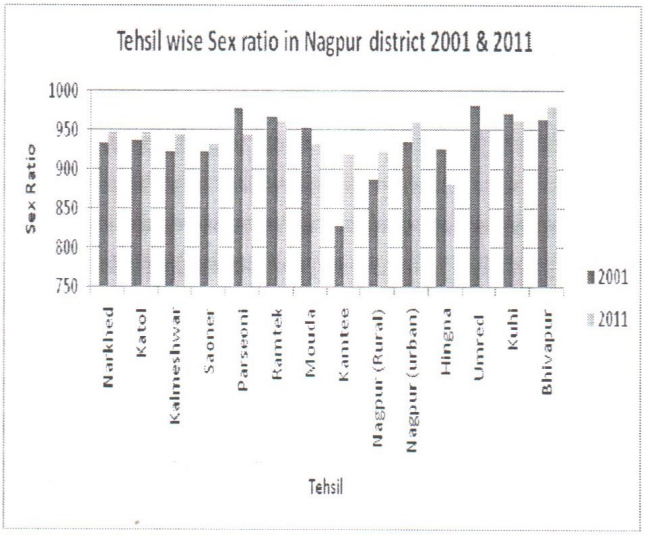
TEHSIL WISE URBAN - RURAL SEX RATIO IN NAGPUR DISTRICT 2001 & 2011

| | | 2001 | | | 2011 | | |
|---|---|---|---|---|---|---|---|
| S NO | Tehsil | Total | Urban | Rural | Total | Urban | Rural |
| 1 | Narkhed | 934 | 947 | 931 | 948 | 965 | 944 |
| 2 | Katol | 938 | 939 | 938 | 948 | 957 | 945 |
| 3 | Kalmeshwar | 923 | 931 | 921 | 945 | 944 | 946 |
| 4 | Saoner | 923 | 928 | 921 | 932 | 934 | 930 |
| 5 | Parseoni | 979 | 920 | 947 | 944 | 944 | 944 |
| 6 | Ramtek | 967 | 961 | 970 | 962 | 974 | 960 |
| 7 | Mouda | 954 | 0 | 955 | 933 | 932 | 933 |
| 8 | Kamtee | 829 | 916 | 926 | 920 | 918 | 922 |
| 9 | Nagpur (Rural) | 887 | 881 | 890 | 923 | 915 | 931 |
| 10 | Nagpur (urban) | 936 | 936 | 0 | 961 | 961 | 0 |
| 11 | Hingna | 926 | 809 | 900 | 883 | 882 | 917 |
| 12 | Umred | 982 | 948 | 929 | 950 | 965 | 941 |
| 13 | Kuhi | 971 | 0 | 972 | 962 | 0 | 962 |
| 14 | Bhivapur | 964 | 0 | 964 | 980 | 0 | 980 |
| | Total | 934 | 931 | 935 | 948 | 951 | 942 |

Source - socio economic review of Nagpur district (2001 &2011)

On detailed analysis of the average sex ratio in the study area it has been observed that the average sex ratio in 2001was 934, and it increased by 1.50% to 948 in the year 2011. The maximum sex ratio in 2001 was 982 of Umred tehsil and the minimum was 829 in Kamptee tehsil, whereas the maximum sex ratio was 980 in Bhivapur tehsil and the minimum was883 in Hingna tehsil in the year2011.

The average Urban sex ratio in the study area was 931 in 2001 and it increased by 2.15% to 951 in 2011, The maximum sex ratio in2001 was 948 of Umredtehsil and minimum was 809 of Hingna tehsil, in 2011 the maximum sex ratio was 974 of Ramtek tehsil and the lowest sex ratio was 882 of Hingna tehsil.



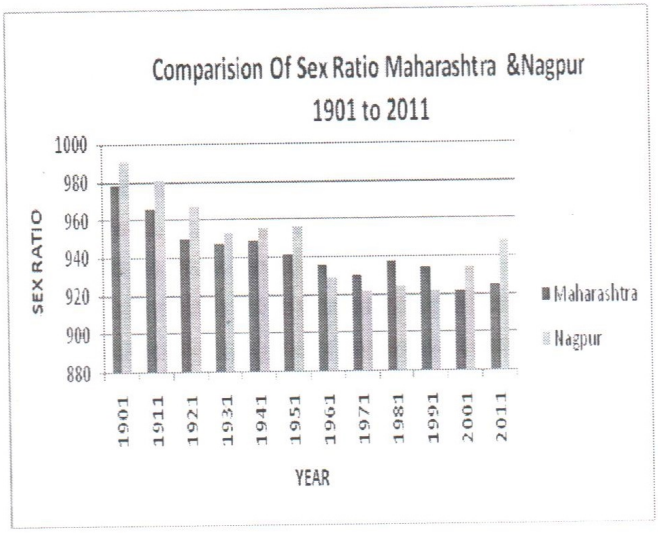

**COMPARATIVE SEX RATIO FOR STATE & DISTRICT 1901 -2011**

| S No | Year | Maharashtra | Nagpur |
|---|---|---|---|
| 1 | 1901 | 978 | 991 |
| 2 | 1911 | 966 | 981 |
| 3 | 1921 | 950 | 967 |
| 4 | 1931 | 947 | 953 |
| 5 | 1941 | 949 | 955 |
| 6 | 1951 | 941 | 956 |
| 7 | 1961 | 936 | 929 |
| 8 | 1971 | 930 | 922 |
| 9 | 1981 | 937 | 924 |
| 10 | 1991 | 934 | 922 |
| 11 | 2001 | 922 | 934 |
| 12 | 2011 | 925 | 948 |

Source - socio economic review of Nagpur district, Census of India

The comparative study of the sex ratio in the study area with the Maharashtra State

we observe that the sex ratio in 1901was highest at 991 for Nagpur and 978 for Maharashtra , since then there has been a steep decline over the century when the sex ratio was the lowest at 922 in 2001 for Maharashtra state and now again a trend reversal is being seen with the sex ratio increasing by 0.33% to 925 in 2011 for the state of Maharashtra and from 934 in 2001 to 948 in 2011 for the study region showing an increase of 1.50%.




**Conclusion :-**

The average sex ratio of Nagpur district in 2001was 934, and it increased by 1.50% to 948 in the year 2011

(a) The impact of Ban on Sex determination tests have shown positive signs and more so in the Urban areas where these facilities were readily available and were forced to shut down their shops due to strict vigil and stringent measures by the government. Combined with the awareness amongst the general population.

(b) The Urban Sex ratio in 2001 was 931 which increased to 951 in 2011 showing an increase of 2.15%

(c) The Rural sex ratio in 2001 was 935 and increased to 942 in 2011 an increase of 0.75% only

(d) There has been a steep decline in the sex ratio of Nagpur district as well as the Maharashtra state from 1901 to 2001, followed by a trend reversal from 2001 onwards which is +0.33% for Maharashtra State and +1.50% for Nagpur district which surely is a healthy sign

**Recommendations :-**

1 The availability of basic health facilities at the PHC (primary health centres) and ensuring the availability of staff and medicines as well at the PHC instills a confidence in the local population thereby decrease in the mortality at birth.

2 Stringent measures / punishment for non qualified doctors (Quacks) by the judiciary is the need of the hour

3 The govt policy on complete ban on sex determination tests by doctors / hospitals is showing the desired results by means of increase in the sex ratio,in the past decade which is prominently visible in the Urban areas whereas the negligible rise in the sex ratio in the Rural areas is still a cause for concern however the tempo should be maintained and strict vigilance and reporting is required at the grassroot level

**References :-**

1 Mahendra K Premi - India`s Changing Population Profile (2010)

2 socio economic review of Nagpur district, Census of India (2001, 2011)

3 Dr R C Chandana Population Geography

4 Dr B P Panda Population Geography

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