## "A Study of Tribal Population Density in Nashik District, Maharashtra"

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# **Abstract**

Density, the number of persons per square kilometer, is one of the important indices of population concentration. As the tribal population in India is mostly concentrated in hilly and forest areas, the study of its density has remained one of the interesting topics for researchers. With this background, an attempt has been made in this paper to understand the density of tribal population in Nashik district of Maharashtra. A secondary data is obtained from the district census handbook while the discussions with individuals are also considered as a source of primary information. It is found that, the density of tribal population is high in western tahsils, while it is low in the central and eastern part of the district.

### **KEYWARDS:** Tribal, Population, Density

#### Introduction

For humans, population density is the number of people per unit of area, usually quoted per square kilometer or square mile (which may include or exclude, for example, areas of water or glaciers). Commonly this may be calculated for a county, city, country and for the entire world.

The world's population is around 7,000,000,000 and Earth's total area (including land and water) is 510,000,000 km² [1] Therefore, the worldwide human population density is around 13.7 per km². If only the Earth's land area of 150,000,000 km² is taken into account, then human population density increases to 47 per km². This includes all continental and island land area, including Antarctica. If Antarctica is also excluded, then population density rises to over 50 people per km². [2] However, over half of the Earth's land mass consists of areas inhospitable to human habitation, such as deserts and high mountains, and population tends to cluster around seaports and fresh-water sources. Thus, this number by itself does not give any helpful measurement of human population density.

Several of the most densely populated territories in the world are city-states, microstates, and dependencies. [3] These territories have a relatively small area and a high urbanization level, with an economically specialized city population drawing also on rural resources outside the area, illustrating the difference between high population density and overpopulation.

Cities with high population densities are, by some, considered to be overpopulated, though this will depend on factors like quality of housing and infrastructure and access to resources.[4] Most of the most densely populated cities are in Southeast Asia, though Cairo and Lagos in Africa also fall into this category.[5]. With this background an attempt has been made in this paper to study the density of tribal population in Nashik district.

### **Importance of the Study**

- Population density is studied to control its growth within the suitable capacity
- High population density may lead to environmental pollution and other ecological issues
- The study of population density helps in providing space in a given area and it also provide the needs of people to prevent over dependency.

### **Study Area**

Nashik district is an administrative divisional headquarter of Maharashtra, situated in North western part of the state (Fig. 1). It is well surrounded with the mountains of Sahyadris. The district

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is lying between 19<sup>0</sup>35' N to 20<sup>0</sup>52' N latitudes and 73<sup>0</sup>16' E to 74<sup>0</sup>56' E longitudes with an area of 15,582 km<sup>2</sup>. It has a population of 23, 69,221 with 20 towns and 1,628 inhabited and 4 uninhabited villages as per the census of 1971. In 2011, Nashik had population of 6,107,187 of which male and female were 3,157,186 and 2,950,001 respectively. In 2001 census, Nashik had a population of 4,993,796 of which males were 2,590,912 and remaining 2,402,884 were females. The population of this district is constituted 5.43 percent of total population of the state. However, Maximum 12% of an area is occupied by Malegaon tahsil and the smallest area 3.63% occupied by Peint Tahsil. The second smallest tahsil is Deola which occupied 3.81% area; rest 12 Talukas occupied 5 to 9 % of the district.

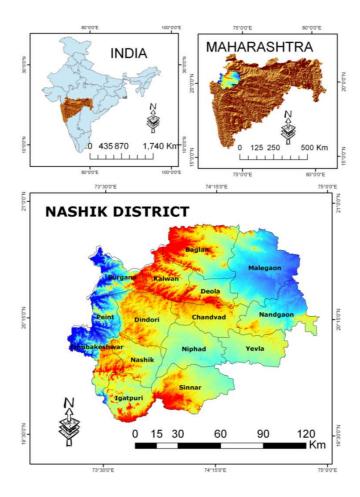


Fig. 1: Location of Study Area

### **Objectives:**

- To study the density of tribal population.
- To study the volume of change in tribal population density (1991 to 2011).

#### **Data Sources and Methodology:**

The present study is based on both primary and secondary data. The primary information is obtained through personal discussions with the tribals during field visits while, the secondary data is obtained through the District Census Handbook, Census of India.

Population density= Total population / Total Geographical Area.

### **Density of Tribal Population in Nashik District:**

Density is the proportion of population to the geographical area. This proportion can be conveyed in three ways, viz. arithmetic, agricultural and physiological density. Arithmetic density is

the total population divided by total area. Table-1 exhibits the tribal population density in Nashik district for 1991 and 2011. It is observed that the density of tribal population in study region was 60 persons per square kilometer in 1991. The highest density was recorded in Peint tahsil (217) followed by Nashik (145), Surgana (124) and Kalwan (120) tahsil lying on the west part in the study area due to mountainous area, dense forest cover, less urbanization and less industrialization, poor transport and remote area. This has attributed to hilly, forest and remote area except Nashik tahsil. The tribals in-migration is in search jobs in Nashik city. The moderate density between 50 to 100 persons per square kilometer was identified in Igatpuri (96), Dindori (81), Baglan (63) and Niphad (55) tahsils. The less tribal population density in the study region was found in Yevla (14), Sinnar (19), Nandgaon (20), Chandvad (27) and Malegaon (30) tahsils. These tahsils are located in eastern part of the study area. The density of tribal population decreases from west to east due to increasing non-tribal population in the study area (Fig. 2).

Table-1: Arithmetic Density of Tribal Population in Nashik District

THE POLICE DOINGS	Years		Volume of Change	
Tahsils	1991	2011	1991 to 2011	
Nashik	145	226	81	
Peint	217	206	-11	
Dindori	81	131	50	
Surgana	124	201	77	
Kalwan	120	167	47	
Baglan	63	101	38	
Malegaon	30	53	23	
Chandvad	27	49	22	
Nandgaon	20	40	20	
Yevla	14	27	13	
Niphad	55	91	36	
Sinnar	19	34	15	
Igatpuri	96	121	25	
Trimbakeshwar	N.A.	154	N.A.	
Deola	N.A.	53	N.A.	
District Total	60	101	41	

**Source:** District Census Handbook, Nashik District for 1991 and 2011.

**Note:** N.A.= Data is not available.

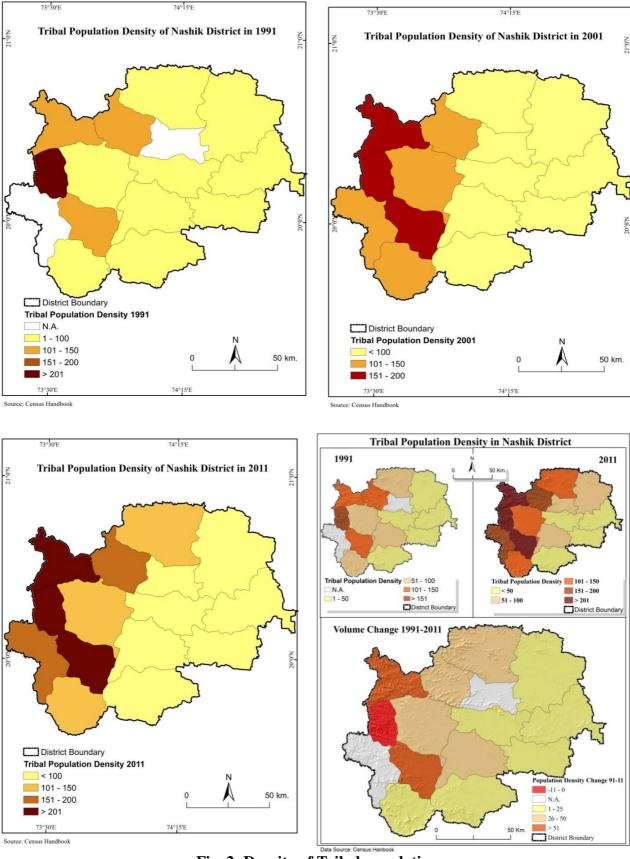


Fig. 2: Density of Tribal population

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### **Findings and Conclusion:**

It is observed that the density of tribal population in Nashik district was 101 persons per square kilometer in 2011. The highest density was recorded in Nashik tahsil (226) followed by Peint (217), Surgana (201), Kalvan (167), Trimbakeshwar (154), Dindori (131), Igatpuri (121), Baglan (101) and Niphad (91) tahsils. These tahsils lie in west part in study region. This has attributed to hilly, forest and remote area except in Nashik tahsil. The tribals in-migration is in search of jobs in Nashik city. The lowest tribal population density was found in Yevla (27), Sinnar (34) and Nandgaon (40), Chandvad (49), Deola (53) and Malegaon (53) tahsils. These tahsils are located east part in study region. The decline trend is observed in 1991 and it decreases from west to east in study region.

The change in density of tribal population during 1991 to 2011 is positive except in Peint tahsil (i.e. -11). The growth of total population density for 1991 to 2011 was 161 persons per square kilometer. The density of tribal population has slightly increased during the study period (41) and west lying tahsils have recorded positive growth of the density of tribal population. The highest volume of growth of tribal density was observed in Nashik tahsil (226). This is because of the immigration of tribal's due to the larger industrial development, district headquarter, educational center etc. The growth of tribal density is observed high in Surgana (77), Kalvan (47), Dindori (50), Baglan (38) and Niphad (36) tahsils. The lowest growth of tribal density was observed in Peint (-11), Yeola (13), Sinnar (15), Nandgaon (20), Chandvad (22), Malegaon (23) and Igatpuri (25) tahsils. These tahsils belong to drought prone area and has dominance of agricultural and industrial activities. During 1991 to 2011 only one tahsil Peint is observed (-11) as negative trend of arithmetic density of tribal population.

#### **References:**

- 1. World. CIA World Handbook
- 2. Matt Rosenberg Population Density. Geography.about.com. March 2, 2011. Retrieved on December 10, 2011.
- 3. Department of Economic and Social Affairs Population Division (2009). "World Population Prospects, Table A.1" (PDF). 2008 revision. United Nations. Retrieved March 12, 2009.
- 4. Human Population. Global Issues. Retrieved on December 10, 2011.
- 5. The largest cities in the world by land area, population and density. Citymayors.com. Retrieved on December 10, 2011.

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