



## A GEOGRAPHICAL ANALYSIS OF LITERACY AND SEX-RATIO OF TRIBAL POPULATION IN AHMEDNAGAR DISTRICT

Navnath Laxman Wayal

Department of Geography, Modern College of Arts, Science and Commerce, Shivajinagar,  
Pune 411005. wayalnavnath7@gmail.com

### Abstract

Literacy and sex ratio both are important parameters for the study of demographic, socio-cultural and economic status of any region. Literacy is a sensitive indicator of the cultural advancement of an area. It develops the personality and rationality of individuals, qualifies them to fulfill certain economic, political and cultural functions and, thereby, plays an active part in the socio-economic transformation of society. The sex composition is also an important demographic component of human development. It is the basic biological attributes of any demographic group. It can be expressed either in the form of a proportion of a particular sex in the population or as a ratio between the population of two sexes. The sex ratio represents the most radially recognizable components of the population. It is in advance and rising objective consequence with a growing emphasis on the regional planning and regional approach to the population policy. Information about the pattern of sex ratio helps to enlighten the employment and consumption pattern, social requirement of the peoples and perhaps the psychological characteristics of a society. Besides, the ratio can reflect the social, economic, biological and migration characteristics of the population. According to a census of India, the general literacy rate in Maharashtra state and Ahmednagar District was 82.34 and 79.05 percent respectively in 2011. About 50.15 percent of the tribal population of Ahmednagar district recorded as literate in 2001, which have experienced an upward trend up to 56.18 percent in 2011. While the sex ratio of the tribal population is declining from 977 (2001) to 971 (2011) in the district. There is a wide variation in the spatial pattern of literacy and sex ratio in the district. In the present study, literacy and sex ratio are taken under consideration and further relation between literacy and sex ratio has to find out by applying Spearman's Rank Correlation method.

**Keywords:** Literacy, Sex ratio, Demographic study, Scheduled Tribe.



[Scholarly Research Journal's](http://www.srjis.com) is licensed Based on a work at [www.srjis.com](http://www.srjis.com)

### 1. Introduction:

The census of India has recorded 550 tribes in the country (2011). The tribal population represents one of the most economically impoverished and marginalized groups in India. With a population of more than 10.4 crores, India has the single largest tribal population in the world. This constitutes 8.6 percent of the total population of the country (Census of India, 2011). Education is one of the primary agents of transformation towards socio-economic development. Education is in fact, an input not only for the economic development of tribes but also for the inner strength of the tribal communities which helps

them in meeting the new challenges of life (Sahu, 2014). It is an activity or process which may either improve the immediate living condition or increase the potential for future living. Education is an important avenue for upgrading the socio-economic conditions of the scheduled tribes. Currently, the tribes lag behind not only the general population but also the scheduled cast population in literacy and education. This disparity is even more marked among scheduled tribe women, who have the lowest literacy rates in the country (Maharatna, 2005). The male-female gap in literacy and educational attainment among the scheduled tribes is significant. Despite the sincere and concerted efforts by the government for the overall development of the scheduled tribes, they are still far behind in almost all the standard parameters of development. They are not able to participate in the process of development, as they are not aware of most of the programmes and policies made for their upliftment. This is mainly due to the high incidence of illiteracy and a very low level of education among the tribal people. The sex composition is also an important demographic component of human development, which are usually expressed in the terms of sex ratio i.e. number of female per thousand males. According to the United Nation Population Division, all over the world male population is more than the female population. Sex ratio also an important indicator of inequality between males and females in society. An understanding of the sex ratio of a population in the spatial context is of fundamental importance for a proper consideration of the various demographic characteristics of any region (Musmade, 2018). It is the mirror of the socio-economic condition of an area, (Gill, 1981). The sex ratio is an index of the socio-economic condition of an area and an important device for the regional analysis. Many scholars from different disciplines like Bimal (2002), Lakshmana (2006), Singh (2007), Zodade (2008), Roy (2008), Arute (2009), Nayak (2010), used this mirror for observing the socio-economic status of different regions of rural India. In India, the sex ratio in a tribal population (990 females for 1000 males) is higher than the national average (940) in 2011. In Ahmednagar District, tribal sex ratio is 972 females for 1000 males and it is also higher than general sex ratio of Maharashtra state and Ahmednagar District, 929 and 939 respectively. Though higher sex ratio among the tribal population in district, level of socio-economic development is observed less in tribal concentrated areas. In this context present study attempt to identify the relationship between literacy rate and sex ratio among the tribal population and its collective impact on the socio-economic development of the tribal population in Ahmednagar District.

## 2. Study Area:

Ahmednagar District is an agriculturally pre-dominant district in Maharashtra state. The district is situated partly in the upper Godavari basin and partly in the Bhima basin. It lies between 18°2' to 19°9' N latitudes and 73°9' to 75°5' E longitudes with the total geographical area of 17410.91km<sup>2</sup> (Narke and Kore, 2012). Ahmednagar District is the largest district by area in the state of Maharashtra. The district is consisting of 14 revenue tahsils namely Akole, Sangamner, Kopergaon, Rahata, Shrirampur, Nevasa, Shevgaon, Pathardi, Nagar, Rahuri, Parner, Shrigonda, Karjat, and Jamkhed.

According to the district census of 2011 has total villages 1584 and the total population of this district is 4543159. In this district, 33 tribes having some population and they were scattered all over the district. Among them, the major tribes were Koli Mahadeo, Bhil and Thakur. These major tribes constitute 96.32% of the scheduled tribe population of the district. Ahmednagar District has 378230 scheduled tribe populations, amongst 2342825 male and 2200334 female population.

## 3. Objective:

- 1) To study the spatial pattern of literacy and sex-ratio of tribal population in Ahmednagar District.
- 2) To find out the correlation between literacy and sex ratio in the study area.

## 4. Database and methodology:

The present study is based on the secondary data which is collected from the district census handbook of Ahmednagar district of 1991, 2001 and 2011. The variable like literacy and sex ratio are taken under consideration.

Further, the collected data is processed to analyze the literacy rate and sex ratio in Ahmednagar District. Then, the correlation between two variables Viz. literacy and sex ratio is analysed by using Spearman's rank correlation method. The formula for computing Spearman's rank correlation is as follows:

$$r = 1 - \frac{6 \sum d^2}{N^3 - N}$$

where 'N' is the total number of observation, 'd' is the difference in rank of the two variables in its observation.

## 5. Literacy of tribal population in Ahmednagar District:

According to the 2011 census, the proportion of literacy among the tribal population has gone up to 58.18 percent. It is observed that, as compared to the general literacy rate of

district, literacy among the tribal population is very low. There are many critical issues and problems in the field of tribal education such as language or medium of education is the main constraints of tribal children which prevents them access to education. Tribal settlements located in hilly and rugged areas, which creates physical barriers and hindrances for children of the tribal village to attend the school in a neighbouring village. Tribes are economically backward so that they do not desire to spare their children or their labor power and allow them to attend schools. Tribal peoples not aware of education. The attitude of parents like as education does not yield any immediate economic return, the tribal parents prefer their children to engage their children in remunerative employment which supplements the family income. Also, the lack of educational facilities in tribal areas. There is a wide variation in the spatial pattern of literacy among the tribal population in the district. Similarly, there are sharp differences between the literacy rates of males and females. In 2011, following tahsils have a higher percentage of literacy in tribal population i.e. Akole (66.74%), Sangamner (63.59%), Rahata (58.54%), Nevasa (58.85%), Pathardi (61.66%) and Nagar (60.44%). While Shrigonda has the lowest percentage of tribal literacy (48.43%) along with Kopargaon (56.35%), Shrirampur (57.27%), Shevgaon (57.27%), Rahuri (57.65%), Parner (56.75%), Karjat (52.86%) and Jamkhed (58.08%) (Table No.1).

Ahmednagar District has remarkable progress in the spread of literacy. Total 188163 tribal population are found literate in Ahmednagar District as per the 2011 census report. Ahmednagar District had 68.19 % male literacy and 47.91% female literacy while the total literacy rate had 58.18% among tribal population. In 1991 and 2001, the total literacy rate of tribal population were 29.38% and 50.15% respectively. Last two-decade growth rate showing an increasing trend. Since economic development cannot be achieved without literacy. So, serious attention is to be paid to educate the younger generation of tribal population. The socially backward and economically, deprived people deserve special attention for eradicating illiteracy from the tradition-bound social group of the district.

**Table 1: Literacy and sex ratio of scheduled tribe population in Ahmednagar District.**

Sr. No.	Tahsil	Sex-Ratio			Literacy % (2011)*		
		1991	2001	2011	Total	Male	Female
1	Akole	1017	985	987	66.74	77.34	56.08
2	Sangamner	949	955	965	63.59	73.72	53.14
3	Kopargaon	975	950	980	56.35	67.09	45.45
4	Rahata	--	987	979	58.54	68.35	48.58
5	Shrirampur	968	984	1004	57.27	68.68	45.91
6	Nevasa	954	966	988	58.85	69.17	48.34

7	Shevgaon	972	980	969	57.37	68.65	45.82
8	Pathardi	971	1010	972	61.66	71.27	51.85
9	Nagar	913	976	951	60.44	68.88	51.47
10	Rahuri	972	980	986	57.65	68.38	46.90
11	Parner	979	977	993	56.75	66.34	47.14
12	Shrigonda	919	975	929	48.43	57.13	39.02
13	Karjat	955	978	960	52.86	60.90	44.36
14	Jamkhed	986	974	935	58.08	68.70	46.66

*Source: Census of India, Census Handbook from 2011*

*Socio-Economic Abstract, Ahmednagar District - 2017*

*\*0-6 age group has been excluded*

## **6. Literacy of male and female:**

A person who can both read and write with understanding in any language is known as literate. Achievements in the sphere of literacy are the most important in the context of developing areas for the people it provides a lot of skills to get out of ignorance and backwardness. A literate person makes a more productive labor in the factory, a more progressive farmer keen to use innovations and technology in farm operations, an enlightened trader and enterprising individual adjustability and sociability. The progress in literacy and economic development is generally interrelated.

In Ahmednagar District, literacy among tribal male population has observed 68.19% in 2011. In 1991 and 2001, male literacy rate were 42.64% and 45.58% respectively (Table No.1). It is showing an increasing trend in the last two decades. Due to increasing educational awareness along with economic progress and government policies related to inclusive education among the tribe. In 2011, the male literacy rate increased everywhere district in Akole, Sangamner, Rahata, Shirampur, Nevasa, Shevgaon, Pathardi, Nagar, Rahuri and Jamkhed tahsil. Were having a male literacy rate above 68 percent. In this district male literacy among the tribal population has witnessed remarkable progress in the spread.

After independence women's literacy is raised considerably but it is still lower than the males. In 2011, Karjat (56.08%) have highest female literacy rate among tribal population along with Sangamner, Rahata, Nevasa, Pathardi and Nagar tahsils have higher female literacy than district average percent literacy among tribal females (47.91%). In 1991 and 2001, the female literacy rate were 15.66% and 16.32% respectively (Table No.1). It is showing an increasing trend in the last two decades. Before 2001, the literacy rate was increasing very slowly. Tribal peoples were not aware of women's education. But after 2001, rapid growth observed in the trend of female literacy.

### **7. The sex ratio of tribal population in Ahmednagar District:**

Sex ratio is important parameters for studying the demographics, socio-cultural and economic status of an area. According to the 2011 census, the tribal sex ratio of Ahmednagar district is 971 females for 1000 males. Shrirampur tahsil has the highest sex ratio with 1004 and it is followed by Akole (987), Kopargaon (980), Rahata (979), Nevasa (988), Pathardi (972), Rahuri (986) and Parner (993) tahsil respectively. Sangamner (965), Shevgaon (969), Nagar (951), Shrigonda (929), Karjat (960) and Jamkhed (935) these tahsil have less than 971 sex ratio. Shrigonda (929) has the lowest sex ratio in the district. In 1991 and 2001, the sex ratio of the tribal population was 964 and 977 respectively in the district. As compare to last decade sex ratio showing a decreasing trend. This may be due to an increase in female mortality and a decline in the out-migration of males.

### **8. Correlation between literacy rate and sex ratio:**

Correlation simply means a relationship between two variables viz. independent variable and dependent variable. In the present study, Spearman's Rank Correlation method is used for finding the correlation between literacy and sex ratio of tribal population in Ahmednagar District. It has been observed that there is a slight positive correlation ( $r = 0.09$ ) between literacy and sex ratio. The result indicates that the districts which have remarkable progress show sex ratio among the tribal population in this district.

### **9. Conclusion:**

Literacy and sex ratio both are considered as an important indicator for the development of any particular region. Education is the key to tribal development. In the case of Ahmednagar District, the total literacy rate of the tribal population is 58.81 percent and the sex ratio 971females/000 males in 2011. Those in this district tend to a show high sex ratio whereas the literacy rate in this district relatively high. Although the sex ratio is higher in the tribal population, still there is a need to increase it at the ideal level through increased education and literacy among the tribal population in Ahmednagar District.

### **References:**

- Basu S (1994): "Health Problems and Health Care of The Tribal Population of India" Tribal economy health and wasteland development, Edited by Neeta Mahanti New Delhi.
- Census of India (2011) District Census Handbook of Ahmednagar 2011.
- Chandana R.(2001): "Geography of Population" Kalyani Publication, pp333.
- Gare G. (2012): "Tribes in Maharashtra" Continental Publication pp.18.
- Govt. of Maharashtra (2011) Statically Abstract of Ahmednagar District.
- Copyright © 2017, Scholarly Research Journal for Interdisciplinary Studies

- Maharatna A. (2005): "Demographics Perspectives on India's Tribes" Oxford University Press.*
- Mane D. (2015): Proceeding of National Conference on Resource Management & Sustainable Development in India. pp.109-111.*
- Musmade A. (2018): Maharashtra Bhugolshastra Sanshodhan Patrika (IIFS) vol. 35 Jan-Jun 2018. pp 77-82*
- Narke S. Y. and Kore N. S. (2012): Trend of literacy pattern in Ahmednagar District (Maharashtra), Ultra Scientist, Vol. 24 (1B), pp. 203-209.*
- Sahu K. 2014: IOSR Journal of Economics and Finance (IOSR-JEF) Volume 3, Issue 2. Ver. II (Mar-Apr. 2014), pp 48-52.*
- Sule B. & Barkhede A. (2012): "Correlation Between Literacy and Ratio in Solapur district of Maharashtra; A Geographical Analysis.*