

Population Characteristics in Ahmednagar District of Maharashtra State, India

Mr. Gawali Santosh Bapurao

Asst. Professor, Department of Geography UG and PG, JTSSPM-Shri Shiv Chhatrapati College, Junnar, Dist- Pune, Affiliated Savitribai Phule Pune University Pune

ABSTRACT

The study of population characteristics is very important in one sense because it is on these characteristics that it is useful for future government to decide its population policy and planning. Therefore, this study helps in planning the facilities, food supply, educational facilities, dispensaries, transport, drinking water, electricity, various aspects of public health in terms of what changes may be made in future planning or what new policies should be formulated. Various factors such as geographical, socio-economic and political influence affect the factors that make up the characteristics of the population. This research paper is based on the secondary data material. The data is taken from the 2011 Ahmednagar District Census. It studies the population characteristics of Ahmednagar district. It mainly studies population distribution, literacy, working population and marginal population. Socio-economic, geographical, as well as political factors influence the change of population characteristics. At the same time, some factors affect the fact that there were human activities in Ahmednagar district. This study has been conducted in 14 tehsils of Ahmednagar district. In these tehsils, the population characteristics are not uniform and the reasons for this have been sought. A brief study of the population characteristics has been done by tehsil wise.

Keywords: Population Characteristics, Population distribution, Sex ratio, Literacy, Population density, sex ratio.

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*Author's Correspondence

Mr. Gawali Santosh Bapurao

 Asst. Professor, Department of Geography UG and PG, JTSSPM-Shri Shiv Chhatrapati College, Junnar, Dist- Pune, Affiliated Savitribai Phule Pune University Pune

 [gawalisantosh9\[at\]gmail.com](mailto:gawalisantosh9[at]gmail.com)

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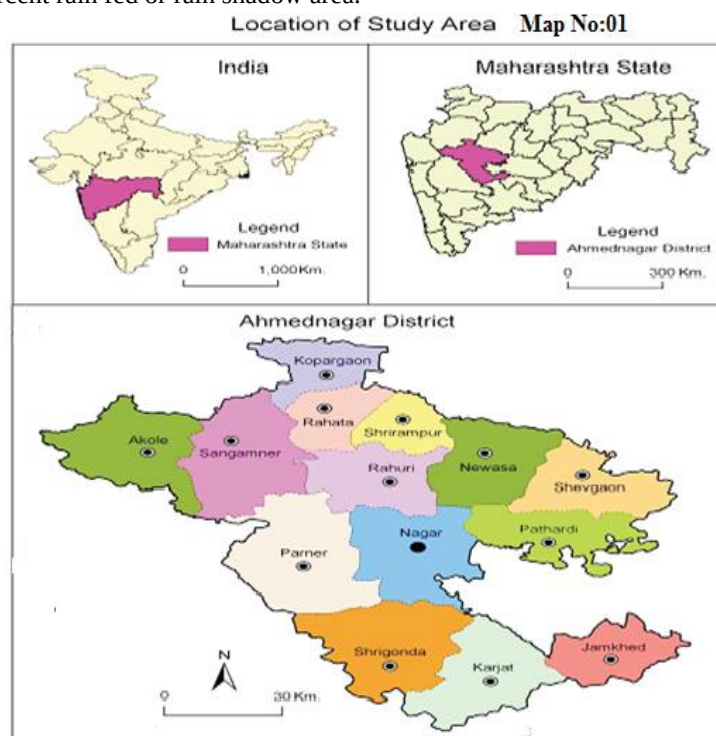
1. Introduction

The population distribution, population growth, population density, sex ratio and literacy etc. these factors are mainly studied. These factors are known as human research, the economic development of any region depends on these factors [3, 4, 5, 6]. Population is also a curse or a boon for any geographical region depending on the characteristics of the population and the quality of the population. The economic development of any geographical region depends on the socio-political development of all these factors. The higher the population quality in a region, the higher its socio-economic development^[10, 11]. The quality of the population depends mainly on the literacy factor. In areas where literacy is high, socio-economic development is high and employment generation is high thus population characterized is human resources^[12, 14, 15]. While human resource has some positive and some negative factors, literacy population density is the main factor, while SC and ST population is the negative factor. Positive factors contribute to the economic development of any geographical region and human research gives a boost to regional planning or allows for proper planning. The socio-economic, political, and geographical etc. factors affecting on human resources elements. Many factors affect population distribution and population density, mainly natural socio-economic factors, fertile land, topography, water availability, climate and rainfall, road density, economic development, industrialization, agricultural development. Birth rate and mortality rate are the two most important factors affecting population growth and the third factor is migration. Migration is one of the most important factors affecting on sex ratio, as well as economic development and social factors also educational facilities on literacy affect social factors. Human resources is importance factors for agricultural economic development^[2, 17]. The study of population characteristics is an important part as it helps the government to make various strategic plans on the basis of population characteristics, mainly to plan for various components such as water, electricity, transport, market, food and medicine, educational facilities, etc., It is important to study

the population factors to decide on a different strategy for such different factors. Therefore, geographical analytical studies have been done keeping in view the important objective of studying population characteristics in this research paper.

2. Study area:

The present study Ahmednagar district has been selected as a study area. It extends between $18^{\circ} 20'$ and $19^{\circ} 59'$ north latitudes and $73^{\circ} 40'$ to $75^{\circ} 43'$ east longitudes (Map.1) located in part in the upper Godavari basin. The district is very dense in shape and length of 200 km. a width of 210 km. The average annual rainfalls is 578.8 mm. ($22.79''$) and mean daily maximum temperatures is 39°C and mean daily minimum temperature is 11.7°C . In study region 71.10 percent area under cultivation area out of them 32.40 percent is irrigated and 67.60 percent rain fed or rain shadow area.



3. Aims and objective:

The main objective of this research paper is to study the demographic characteristics of Ahmednagar district. Also in this research paper all the factors like population distribution, sex ratio, literacy, total working population and marginal population etc. of Ahmednagar district have been studied. This study has been done according to 2011 census date. The characteristics of this population have been studied from a geographical view.

4. Methodology:

The study method is important for any research. Since this research is the secondary data information material and depends, the study method of this research is different. The additional data in this research are taken from Ahmednagar District Census 2011. Some of the elements of the first population characteristics have been considered. In short, the GIS method has been used to convert the numerical data of population characteristics into a qualitative, mainly using GIS software to create maps. The bar graph method is also used in cartography technique, and Population Distribution, Literacy, Population Density, etc. Various maps of these different population constitutional factors have been created. Also, to some extent formula has been used to calculate population density, population growth as well as literacy has been extracted in percentage. This research paper has been done in 14 tehsils of Ahmednagar district. The demographic characteristics has been studied according to the 14 tehsils.

5. Result and discussion:

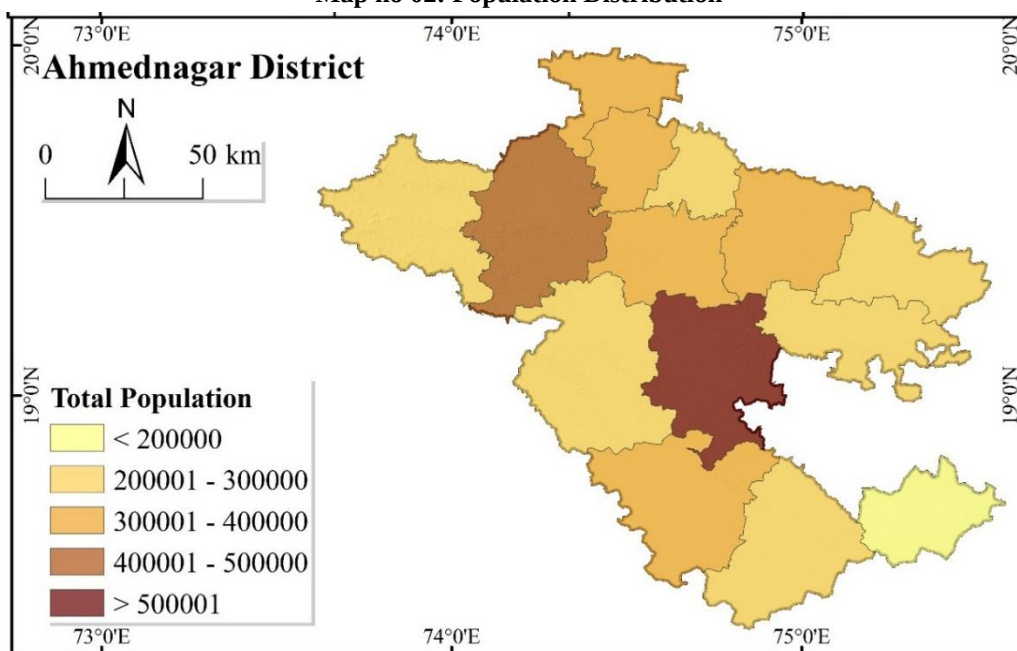
The factors that are the characteristics of the population are affected by various factors such as geo-socio-economic and political. One of the important purposes of studying these features is to study the effect of geographical, socio-economic status on

population characteristics in this study area. In short, it is an important purpose to study these population characteristics from a geographical point of view. The studying of population characteristics in Ahmednagar district, five main characteristics are taken into consideration, namely population distribution, population growth, population density, literacy and sex ratio. The characteristic of this population has been studied according to 14 tehsils of Ahmednagar district. The populations characteristics are of all these as follows.

1) Population distribution:

The most important reason for the unequal distribution of population in Ahmednagar district is that you can see that these Ahmednagar districts and topography or geographical economic factors have greatly affected them. The population growth rate also affects the population distribution, which consists mainly of two factors, birth rate and mortality rate. You see more population in geographical regions where fertile soil, water availability, favorable climate, and diverse reactions have developed and where employment is high, as well as in geographical regions where birth rates are high those region more population living or high population. Population distribution is mainly affected by four factors including geographical, regional, cultural and some other factors, such as the location of a region, climate, condition, surface and altitude. These factors affect the population as well as water supply. Type of soils or quality, vegetation, resource etc. these factors affects. In the culture factors are level development, economic growth and condition, transport, trade, political conduction as well as other factors affecting the environment, religious factors as well as social structure and social tradition. Map number 02 shows the population distribution in Ahmednagar district and table number 01 shows the index value and the number of tehsils. Five index value have been created to show the population distribution. According to the index value, Jamkhed tehsil has the lowest population distribution with a population of less than 200000. There are six tehsils between two lakh and three lakh, mainly Akole, Karjat, Shirampur, Shevgaon, Pathardi, Parner. There are five tehsils with a population of three lakh to four lakh, mainly Kopargaon, Rahuri, Nevasa, Shrigonda. Also see the highest population in Shirampur and Nagar tehsils. In Shirampur tehsil population between four lakhs to five lakhs and in Nagar tehsil you see more than five lakhs. The most important reason is that Nagar tehsil is the center of the district and here Due to industrialization, employment has been created thus population is high. Also Jamkhed Karjat, Shrigonda, Akole has low population due to water scarcity and drought in these areas and Akole tehsil is the highest topographical area with high rainfall and high vegetation due to low population.

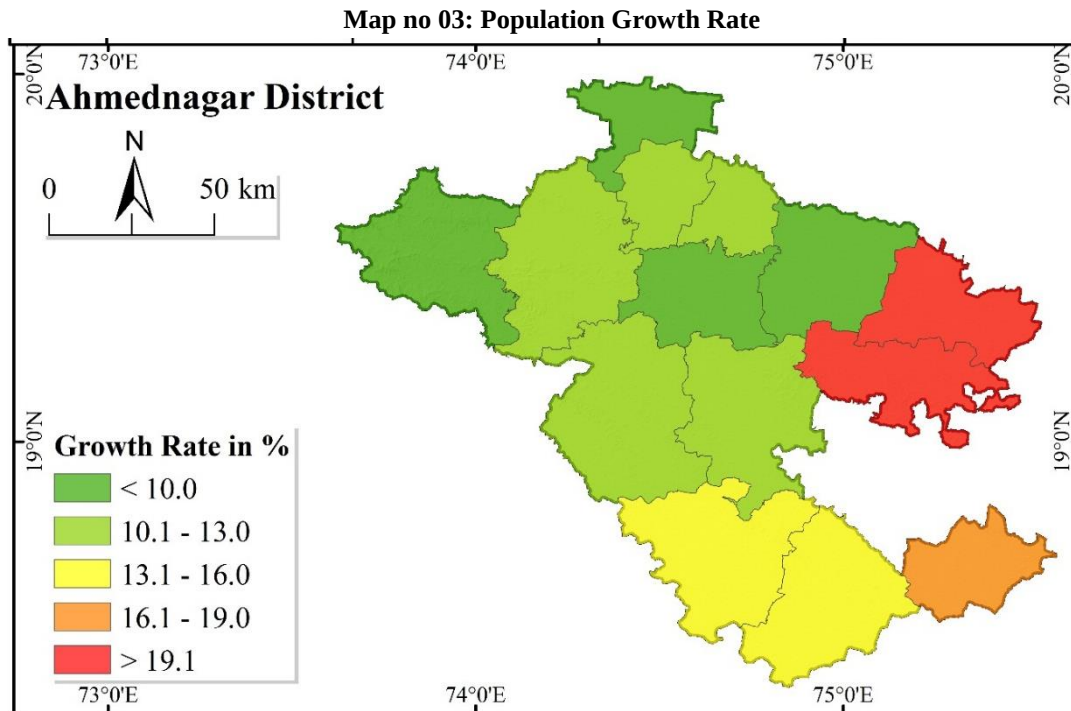
Map no 02: Population Distribution



2) Population Growth Rate:

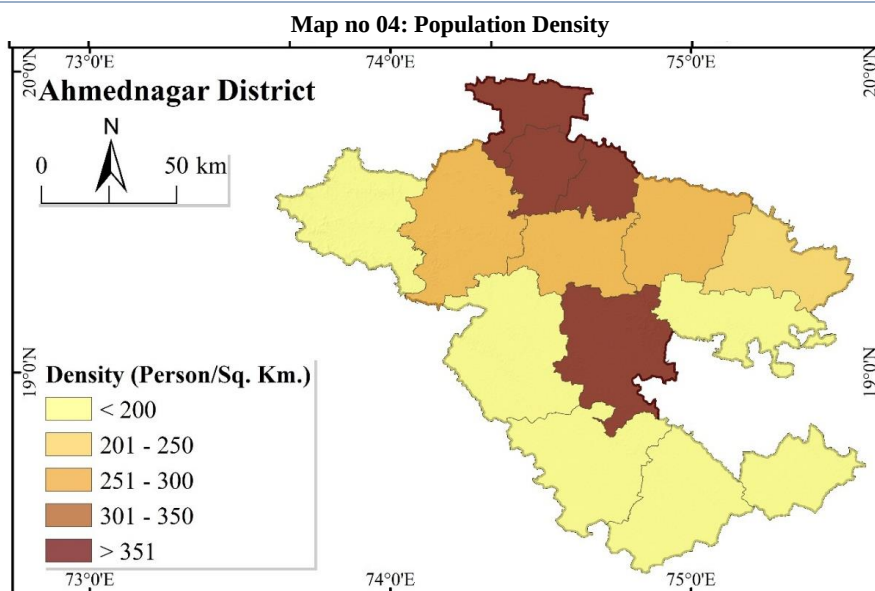
Birth rate and mortality rate are two important factors affection on population growth and migration is also a supporting factor. Population growth is determined by fertility rates (the number of children per adult) fatality rates. Birth rates and mortality rates are, in turn, determined by a combination of factors. The often-economic growth and economic development have led to a decline in population growth, but there are no hard and fast rules and other factors, such as availability of family planning, social expectations and government intervention can play an important role. At the same time, there are some supporting factors on

population growth, mainly the cost of education, economic growth, stability of society, social norms, government policies, Health care standard, and culture attitudes to family size, female labour market participation and Availability of family planning. Considering all these factors, literacy has a huge population growth rate and its effects, as well as government policy. Map No. 3 shows the population growth in Ahmednagar district. The population growth is also shown in percentage. The lowest population growth is in Akole, Kopargaon, Nevasa, and Rahuri tehsil where the population growth is less than 10% and the highest population growth is seen in Pathardi and Shevgaon tehsils this rate is greater than 19 percentage. Pathardi and Shevgaon tehsils have high population growth which means that the above factors affect them.



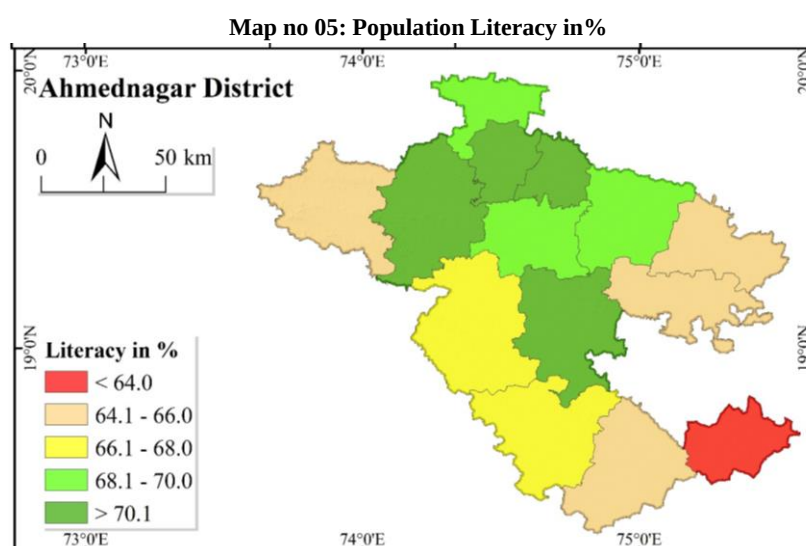
3) Population Density:

Population density is mainly the ratio of land availability and population living in an area. In short, natural resource is the ratio of land to population. Population density depends on how many people live in or per square kilometer. Population density and economic development are closely linked ^[8]. In short, the high population density in a geographical region means that human development is considered. In contrast, low population density in a geographical region means that there is no economic development or lack of various components in that geographical region mainly due to low transport development or low transport connectivity, then lack of agricultural development and lack of water, poor soil, lack of services, distance from markets etc. In short, population density is the ratio of land to population in a geographical area. This means that the relationship between land and population in particular living area. The higher the population density, the greater the land and population relation. Map No. 4 shows the distribution of population density in Ahmednagar district. It is clear from the map that Ahmednagar district is affected by geographical, socio-economic factors. The lowest population density is mainly in Akole, Jamkhed, Parner, Pathardi, Shrigonda and Karjat tehsils where the population density is less than two hundred per square kilometers. The geographical, socio-economic factors in this tehsil have affected the population density, as Akole tehsil has a large hilly terrain and high vegetation cover due to low population density as well as severe water shortage in the rest of the tehsil. Due to the lack of economic and agricultural development, the population density is low. On the other hand, Kopargaon, Nagar, Rahata and Shrirampur tehsil has a high population density of more than 350 per square Km. The most important reason is that Nagar tehsil is the center of the district as a result, the population density is high. Also in Kopargaon, Rahata, Shrirampur tehsil the population density is high due to proper water supply of fertile land and water supply from Godavari and Pravara River. Tehsils which have low population density means low transport connectivity, lack of water. Geographical conditions are not suitable for population density. As well as Topography affects and various geographical factors, affecting on population density thus density is low in some tehsils.



4) Population Literacy:

Population literacy is the ability of such people to read and write, the human literacy is a vital resource is considered to be the most important factor. Literacy is considered to be a positive factor for human resources development so the economic and social development of a geographical region or country depends on it. In short, literacy is an important factor in measuring human resources development. Socio-economic factors, education amenities mainly affect human literacy. Map number five shows that the literacy rate in Ahmednagar district is uneven. You can see that it is mainly in the percentage of literacy, five index groups of literacy have been formed. Table number one shows the distribution of index value and tehsil. From map number three it is clear that the lowest literacy rate is seen in Jamkhed tehsil. This is because of the lack of educational facilities in the area and the geographical location or condition. The highest literacy rate is in Sangamner, Shrirampur, Nagar and Rahata tehsil. The most important reason is that educational facilities have been more available in these tehsils. There is also a need for educational development in the tehsil of Nevasa, Parner, Kopergaon and Rahuri, which have a literacy rate of more than 60 per cent and less than 70 per cent of the total population. Also Akole, Karjat, Pathardi, Shevgaon, Shrigonda, Nevasa and Parner tehsils have lower literacy rate than other tehsils which means there may be lack of educational facilities in these areas or social status may be different from other tehsils. In short, there is a lot of scope for human resource development in the tehsil of Sangamner, Shrirampur, Nagar and Rahata or development should be encouraged. On the contrary, Jamkhed, Akole, Karjat, Pathardi, Shevgaon, Shrigonda, Nevasa, Parner, there is a shortage of human resource development in these all tehsils as well as it is important to encourage people to develop social stability.



5) Sex Ratio:

Sex ration is one parameters in calculated Human resources development [7, 23].The sex ratio shows how many women are behind a thousand men. In short, this method shows the ratio between men to women. Sex ratio is a factor in human development or it affects a factor on human resources progressive. The sex ratio is influenced by birth rate, mortality rate and migration, and indirectly by the socio-economic status of the area. Map 6 shows the distribution of sex ratio in Ahmednagar district and it was clear that the distribution of sex ratio in Ahmednagar district is unequal. The map shows that in Karjat and Jamkhed tehsils of Ahmednagar district, the rate of sex ratio is less than 920.This means that due to the low birth rate of girls and the high birth rate of boys in these areas, there should be less sex here and the geographical and economic conditions here should have had an impact. In short, the social status of the area is also noticeable. In Ahmednagar district, the tehsil with the highest proportion of sex ratio is mainly Akole,Shriampur,Parnerand Shevgaon tehsil but Akole tehsil has the highest proportion of sex ratio. Because Akole tehsil is a tribal area and many people from this area go to Thane, Mumbai and Nashik for employment, there should be more sex ratio and higher birth rate of girls. Also considering other tehsil in Ahmednagar district, although the sex ratio is less here, the average population of Ahmednagar district in general is less.

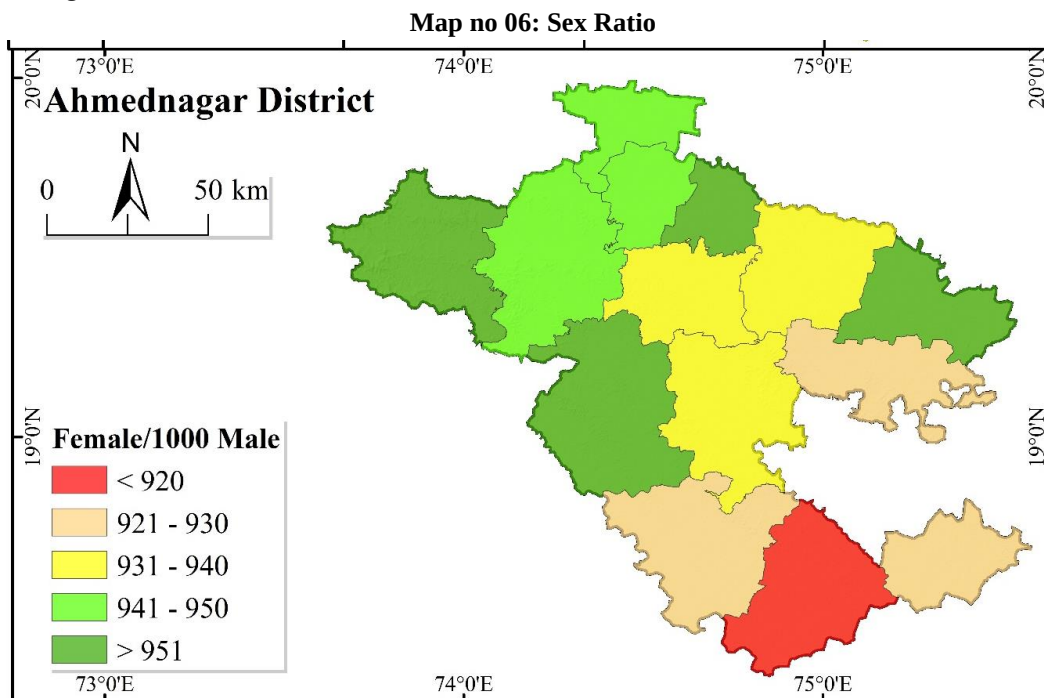


Table no 01: Result Table

Population Characteristics	Index Value	Number of Tehsils	Name of the Tehsils
Population distribution	<200000	01	Jamkhed
	200001-300000	06	Akola, Shrirampur, Karjat, Shevgaon, Parner, Pathardi,
	300001-400000	05	Rahta, Rahuri, Kopargaon, Shrigonda, Nevasa,
	400001-500000	01	Sangamner
	>500001	01	Nagar
Population Literacy in %	<64	01	Jamkhed
	64.1-66	05	Akola, Karjat, Pathardi, Shevgaon, Shrigonda
	66.1-68	02	Nevasa, Parner
	68.1-70	02	Kopargaon, Rahuri
	>70.1	04	Sangamner, Shrirampur, Nagar, Rahata.
Sex Ratio	<920	02	Karjat , Jamkhed
	921-930	02	Pathardi, Shrigonda
	931-940	04	Nagar, Rahta, Nevasa, Rahuri
	941-950	02	Sangamner, Kopargaon
	>951	04	Akola, Shrirampur, Parner, Shevgaon,

Population Growth Rate in %	<10.0	04	Akole, Kopargaon, Nevasa, Rahuri
	10.1-13.0	05	Nagar, Parner, Sangamner, Rahata, Shrirampur
	13.1-16.0	02	Shrigonda, Karjat
	16.1-19.0	01	Jamkhed
	>19.1	02	Pathardi, Shevgaon
Population Density in Per Sq. Km.	<200	06	Akole, Jamkhed, Parner, Pathardi, Shrigonda, Karjat
	201-250	01	Shevgaon
	251-300	03	Nevasa, Sangamner, Rahuri
	301-350	00	Nil
	>350	04	Kopargaon, Nagar, Rahata, Shrirampur

Sources: Calculated by Researcher

6. Conclusion:

The geographical, socio-economic and political factors affecting the demographic characteristics of Ahmednagar district as population distribution is affected by the geographical situation here, mainly in Jamkhed tehsil and AkoleKarjatShevgaonParnerPathardi tehsil. However, in Nagar and Sangamner tehsils, the distribution of population is higher because of the economic development in the area or the geographical location of the area which is better in terms of population. The Jamkhed tehsil of Ahmednagar district has the lowest literacy rate followed by Akole,Karjat,Pathardi,Shevgaonand Shrigonda tehsil has less than 70% population literacy and SangamnerShrirampurNevasa tehsil has more than 70% literacy rate.Also, considering the population growth, the highest population growth is in Pathardi and Shevgaon tehsil as well as in Jamkhed tehsil and the lowest population growth is in Akole,Kopargaon,NevasaandRahuri tehsil.Considering the population density in Ahmednagar district, Akole,Jamkhed,Parner,Pathardi,Shrigondaand Karjat tehsil has a population density of less than 200 per sq km.At the same time, considering the sex ratio, see the highest sex ratio in Akole, Shrirampur, Parner and Shevgaon tehsils and the lowest sex ratio in Jamkhed tehsil. In short, it is clear that the population characteristics of Ahmednagar district are not found in the same form as each tehsil has different geographical conditions, socio-economic factors affect differently or the situation is different in each tehsils.

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