

A changing trend of population Distribution in Pune District: A Geographical Analysis.

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Abstract:

Population distribution is a dynamic process, which is ever changing. Its cause and effect vary in the spatiotemporal frame. The economic characteristics of an area directly influence the population pattern through the resource and economic stability of the region. Study of relationship between man and environment helps to analyze the density and distribution of population. With intensive utilization of the natural resources, a region tends to increase in population and density of the region.

Changing population density is often ignored in studies of population growth and population (Gaillard 1998) transfer in the Pune district. The population density of Pune district growing from 65 in 1901 to 603 in 2011. Fertility, mortality and migration this three key factors occurs population change in any area (Chesnaïs 1998). Study area Pune district high population ratio because of industrialization and urbanization (Shiliang Su, 2012). The distributional pattern of population is infact eloquent expression of the synthesis of all geographic phenomena operating in an area (Chandna, 1969). The analysis of population distribution and density holds immense significance for population geographers, as its successful understanding holds the key to the analysis of entire demographic character of an area. The present paper shows that relationship between patterns of population growth and in the Pune district.

Introduction: Population Geography is more concerned with "Spatial Variation in the nature of places and this is where it distinguishes itself from Demography. Distribution and density of population are analytically very important for population geography. The concept of distribution and density of population, though not identical, are so intimately related to each other that there is a genuine reason to discuss them simultaneously. "The field of Population distribution may be defined as the study of nation or community's population in terms of area, sub-divisions, such as regions, states socio-economic areas, urban and rural residence and census tracts. This includes the study of population residing in the smaller areas unit, as well as the study of total number of inhabitants" (Bogue, 1959) Population distribution we mean geographical and spatial study of distribution of population of a territory and the way in which the people are distributed over it. When, however, changes take place in the existing pattern of population distribution, it is called population re-distribution Population density is related to the number of people and the space occupied by them.

The term density of population was used by Henry in 1837, while preparing railway maps. This is ratio between population and area. This is used as an indicator to measure of concentration of population. While calculating density total population taken as numerator while total area is taken as denominator. Pune district having second largest population in Maharashtra. Pune district population constituted 8.38 per cent of total Maharashtra population in 2011. Population density is the average number of people per square kilometer (Bhende A.A 2010). It is way of measuring population in district and shows where an area is sparsely or densely populated. Density of population helps us an understanding nature of distribution of population. It is useful in several other ways. It also becomes easier to know possibilities for development for a region. It indicates nature of balance between population of the region and its natural resources (Ashish 1973). The concept of density of population is the most rarely and is useful tool in the analysis of the diversity of man's distribution in space (Clarke, 1972) The distribution of Population is more locational, while the density in more proportional (Chandna, 1996). The former refers to the spatial pattern in which the population finds its location such as linear, dispersed, nucleated, agglomerated, etc; and the later is concerned with the ratio between the size of population and the area. Both are the fundamental issues and their disparities are of prime concern to population geographers. As population geographer's main task is to explain spatial variations in population distribution. Therefore here attempt is made to analyze population density in Pune district.

Objectives

The main objective of present study is as following

1. To analyze the pattern of population density and changes there in during 1971 and 2011 in Pune district.
2. To find out population concentration in the study region

Methodology

The paper is totally based on secondary data sources. The data regarding area and population of tahsils of Pune district are collected from the 'Censuses' of Pune district, 1981 and 2001. (A Census has been defined as "the total process of collecting, compiling and publishing of demographic data pertaining at a particular time, to all persons in a defined territory" (Shrivastava). The density of population is calculated by using simple formula i.e. density of population = total population total area in square kilometer. We have used tahsil boundaries, for population distribution. To determine population concentration we have taken into consideration proportion of area and population to district total. The analysis and interpretation of data has been done from the geographical point of view. The data has been processed in tabulation, percentage, index value done with help of computer software. The processes data has been put in the table forms, certain statistical methods.

1) Changing Trend of Population 1971-1981

The overall finding from the data 1971-1981 shows that the Pune city is known as education hub, oxford of the east have recorded highest population density. Pune is historical background and population from the surrounding area settles in the Pune city so population density is more. The change in the density of population of Pune city is 2068 person per sq km it is highest after the Mumbai. The tahsil like Purandar (10), Velhe (10) population density changes during the span of ten years is very less comparatively with the other tahsil of Pune district. Maval (33) and Daund (33) shows during 1971-1981.

2) Changing Trend of Population 1981-1991.

In the 1981-1991 Pune city shows increasing trend in the population density. Daund tahsil is the number two in the list of increasing trend of the density, Maval is also leading in the population density, it velhe is only tahsil in the pune district shows negative change it is 8. Junnar tahsil shows increasing trend in the population density it is 45. The Haveli tahsil is the urban fringe area of the Pune city shows changes in the density of population. Daund tahsil have maximum density of population compare to the 1971-1981.

Table No. 1
Population Density Tahsil wise (1971-2011)

Sr. No.	Tahsil Name	Area Sq Km	1971	1981	1991	2001	2011
1	Junnar	1385	150	178	223	267	288
2	Ambegaon	1043	133	154	178	205	226
3	Shirur	1557	96	117	156	199	248
4	Khed	1400	140	166	210	245	322
5	Maval	1131	133	166	221	269	334
6	Mulshi	1039	88	105	119	122	165
7	Haveli	1337	277	490	909	1027	1822
8	Pune City	184	5434	7502	12417	14643	27488
9	Daund	1290	113	146	205	264	295
10	Purandar	1103	136	146	173	202	214
11	Velhe	497	81	91	99	112	109
12	Bhor	892	127	145	181	192	209
13	Baramati	1422	164	186	225	269	304
14	Indapur	1468	132	155	194	237	261
Total	Pune District	15642	203	266	354	462	603

Source: (Pune district Census Handbook)

3) Changing Trend of Population 1991-2001

The Pune city shows decline the trend of density due to the merge of the villages. Some of the tahsil shows negative ratio of density comparatively 1981- 1991. The tahsil like Junnar (44), Maval (48), Mulshi (3), Haveli (118), Purandar (29) Bhor (11) these tahsil shows the changing trends in the density. In the 1981 -1991 these tahsil have maximum density but in the 1991-2001 the density was decreased. Only Indapur, Baramati, shows increasing trend in the density.

4) Changing Trend of Population 2001-2011.

The pune city again retain the maximum density of population, the main reason behind the increase in the globalization, IT industry and Educational facility. The pune city have maximum density of population it is 12845 after the Mumbai in Maharashtra. The velhe tahsil shows negative change in the density it is (-3) Purandar (12) Bhor (17). Haveli tahsil recorded highest density it is 795. Haveli tahsil is the urban fringe area of the pune city so from 1971 to 2011 the population density continuously increasing.

Table No.2
Changing Trend of Population Density (197-2011)

Sr. No.	Tahsil Name	1971-1981	1981-1991	1991-2001	2001-2011
1	Junnar	28	45	44	21
2	Ambegaon	21	24	27	21
3	Shirur	21	39	43	49
4	Khed	26	44	35	77
5	Maval	33	55	48	65
6	Mulshi	17	14	3	43
7	Haveli	213	419	118	795
8	Pune City	2068	4915	2226	12845
9	Daund	33	59	59	31
10	Purandar	10	27	29	12
11	Velhe	10	8	13	-3
12	Bhor	18	36	11	17
13	Baramati	22	39	44	35
14	Indapur	23	39	43	24
Total	Pune District	63	88	108	141

Conclusion: These population density changes represent people's opportunities of employment, educational facilities, industrial development, economic development, social environment health and recreation, political, social institutes of education and the exercise of residential preferences.

The density of population in the Pune district shows changing trend. The pune city and the Haveli tahsil shows increasing trend from the 1971 to 2011. The Pune city is historical background and known as the oxford of the East, so people from across India are migrating towards Pune. The tahsils nearby to Pune city shows increasing trend changes in the density from 1971 to 2011. The tahsils like Khed, Maval and Shirur density increases rapidly.

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