POPULATION GROWTH IN SOLAPUR DISTRICT OF MAHARASHTRA A GEOGRAPHICAL ANALYSIS

AWATE S.J.[1] AND TODKARI G.U.[2] [*]

[1]Head, Department of Geography, Walchand College Solapur, Dist- Solapur MS
[*2]Department of Geography, Shri. Sant Damaji Mahavidyalaya, Mangalwedha, MS, India
*Corresponding author. E-mail: govind.todkari@gmail.com

Abstract- Population of a country or other area is the total number of people who live in it. Populations change as a result of migration and a process called natural increase. Natural increase is the difference between births and deaths. Most countries have more births than deaths, and so their population increases, unless a net loss results from migration. The present paper intends the ascertain of the population growth of Solapur District of Maharashtra for the period of 1901 to 2011. Population   growth is basic parameter in population science. The population of Solapur District has been increased tremendously since independence. Among them urban and rural population growth has been varied according to time and space.   So in the present research paper, the major objective is to understand the population growth in Solapur District. Such type of study represents real situation of population in Solapur District and helps to planners, population scientists and research scholars.
Keywords: Population growth rate, decadal, spatial pattern, Urban population, rural population

Introduction

Population of a country or other area is the total number of people who live in it. Populations change as a result of migration and a process called natural increase. Natural increase is the difference between births and deaths. Most countries have more births than deaths, and so their population increases, unless a net loss results from migration. The rapid increasing of population is a major problem in the socio-economic development of the region. The population is increasing at a very faster rate than the food grain production and its availability per head per annum. The large population size in area are directly affects resource available there e.g. reducing land-man ratio, shortage of food, water scarisity, shortage in electricity supply etc. From this point of view, the present study of population growth in Solapur District has been undertaken.

Objectives

The major object of this paper is to assess the population growth, rural and urban population growth, spatial variation in population in Solapur District of Maharashtra.

Database and Methodology

Present study mostly relies on the secondary data collected through   District statistical Department of Solapur, District socio-economic abstract of Solapur District and censes handbook of Solapur District. For the present investigation, District is selected as in general and tahsils in particular. The collected data are analyzed by statistical and cartographic techniques. The actual growth rate of specific decade is obtained by dividing the difference between the populations of two decades. In order to assess the population growth, the following formula has been adopted.

$$Pr = \frac{Pn - Po}{Po} \times 100$$

Where ' Pr' means the population Growth rate, 'Pn' is the Population of next year, 'Po' is the Population of base year and 100 is for percentage value.

Study Area

The present study deals with the geographical perspectives of the population growth in Solapur district. The Solapur district is bounded by 17º05′ North latitudes to 18º 32′ North latitudes and 74º 42′ East of 76º 15′ East longitudes. The total geographical area of Solapur district is 14895² K.m. divided into eleven tahsils. The Population is 32.4 lakhs in   eleven tahsils of District.(Censes 2001). It is bounded from the North by Osmanabad district and Ahmednagar district, on the North-East by Satara district and at the South & East it has common boundary of Karanataka state. The rivers like Bhima, Sina, Man, Nira Bhogawati and many other smaller tributaries drain in the district. The soil of the district is origion from volcanic DeccanTrap. It varies from light brown to black in colour and lesser in quality. Climate of the district is generally semi-arid type expect

during the monsoon season. The average annual rainfall is 584 mm. It varies from East to West between range of 200 to 600 millimeters. Temperature is high in summer season. Agriculture is main occupation of the people in the district where jowar, bajara, tur, gram, mug, groundnut, sugarcane are the main crops. Agriculturally Solapur District is considered as the bowl of jowar.

GROWTH OF POPULATION

The growth of population may be approached just by taking into consideration the next growth of population over the basic year. The growth rate assumes special significance, when viewed in temporal perspective. The growth of population has been taken in to consideration for the last ten decades that is for 1901-2001. The growth rate of population has a great significance for the geographer to understand of perspectives on population. The table reveals that the trends of general rural and urban population growth rate vary from rural to urban areas during the span of 100 years (1901-2001). The trend of general population growth rate and rural population growth rate by and large are lower than the urban growth rate, except, during 1951-1971 periods. But there are remarkable ups and downs in the urban population growth rate during the span of hundred years (1901-2001). According to Demographic transition theory , Solapur District is on third stage i.e. Late Transition Stage.

Pre-Transition Equilibrium stage (Period of 1901-1941)

The birth rate and death rate are high before the industrialization, so population constant is known as Pre-Transition Equilibrium stage. The period of 1901 to 1941 was on this stage in Solapur District. In this period average population growth rate was 8. 92 percent. But the urban population growth rate was 20.62percent and rural population growth rate is 5.60 percent.There was severe toll of life due to influenza epidemic (1918) and other severe diseases. During the 1911-1921 decade there were 93,766 deaths (out of 96,961 births) due to plague, cholera, fevers, bowel complaints and other causes. Same case was recorded in 1931-1941 decade, where 89,008 deaths (out of 115520 births) occurred. The heavy toll of life was experienced in the rural areas as compared to the urban areas.

Early Transition Stage(Period of 1951-1991)

Early transition stage means the high growing of population due to high birthrate and low death rate. In this period, the general population enhanced by 21.62 percent. In this, net increase of population for urban areas was 21.05 percent and 22.03 percent increase was for rural population. The population grew in this period due to gradual decline in births and sudden decline in the deaths. Rapid decline in mortality rate was a major cause for the population increase. The mortality rate rapidly declined due to more availability of medical facilities, increasing literacy and getting basic need of

population, an improvement in the industrialization and agriculture activities through out the district.

Late Transition Stage(Period of 1991-2001)

The increase in percentage was of the order of 19.14 percent for total population, and 13.99 percent for rural and 29.99 percent for urban areas of the district. The birth rate was 22.61 percent in 1991, while it declined to 20.68 in 2001. The death rates during the same period were recorded to 5.08 percent and 5.35 percent respectively. From this, it can be concluded that the growth rate of population though, declined, so this period is known as late transition stage.

SPATIAL PATTERN OF POPULATION GROWTH

An understanding of the dynamics of population will be neither complete nor clear unless making a reference of the differentials in the growth rates of spatial pattern of district. Solapur district had 93.50 percent of growth rate of population growth during 1961-2001. Thus, spatial pattern of growth rate of population varies enormously within the district. The entire region is classified into three sub-region of population growth. These are (i) High population growth region (ii) Medium population growth region and (iii) Low population growth region. This classification of sub-regions of population growth is based on the district average growth rate.

i) High Population Growth Rate : Within the district, the Barshi, Akkalkot and Karmala tahsils have recorded the growth of population above the average for the region. Tahsils, which have recorded higher growth rate of population, are infact are of the order of 183.99, 152.85 and 122.27 percent.

ii) Medium Population Growth Rate : The Madha, Mangalwedha South Solapur and Mohol tahsils of the study region fall in this category. Madha had 114.99 percent population growth, Mangalwedha 108.62 percent, South Solapur 114.48 percent while Mohol tahsil had 95.08 percent growth of population during 1961-2001. Mangalwedha and South Solapur tahsils are located in extreme south of the Solapur district on the border between Maharashtra and Karnataka states. While Mohol tahsil is located in the western side of Solapur city in the central part of the study region.

Conclusion

The present study concludes that population in the study region has experienced consistent acceleration in growth, since 1921, the increase in rural and urban population reveals differing trends, while during 1921-1951 the rural population was increasing at practically uniform moderate rates of about 16 to 19 percent. During 1961-1991 decades, population increased tremendously because birth rate remain constant but death rate declined fatly, so the rural and urban growth of is high due to the impact made by family planning programs and increase in literacy rate. After 1991, the birth also declined slowly, therefore the population growth rate

declined in small scale. The Barshi taluka recorded highest growth rate, while Pandharpur taluka recorded lowest growth rate during 1961-2001. Within the district the Barshi, Akkalkot and Karmala talukas have recorded the growth of population above the average for the region. The Madha, Mangalwedha, South Solapur and Mohol talukas of the study region fall in medium population growth rate category. Sangola, North Solapur, Malshiras and Pandharpur talukas belong to low population growth rate category.

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Table 1- Solapur District: Decadal Growth Rate of Population

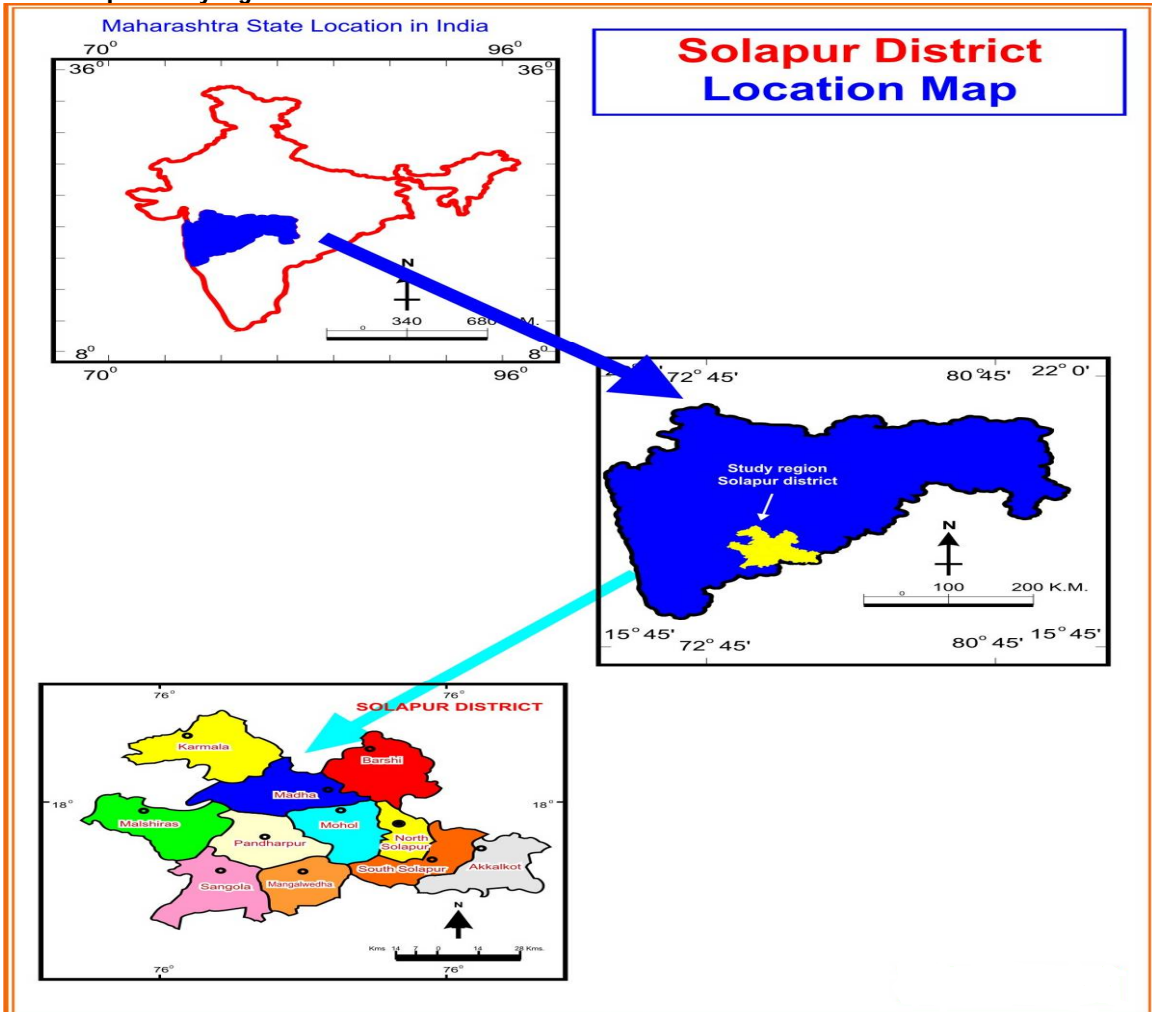| Sr. No.	Decade	Rural population	Urban population	Total general
1	1901-1911	+13.44	-12.12	+8.16
2	1911-1921	-14.31	+41.64	-4.91
3	1921-1931	+16.26	+21.71	+17.63
4	1931-1941	+9.02	+31.44	+14.83
5	1941-1951	+19.24	+30.50	+22.57
6	1951-1961	+29.70	+10.56	+23.66
7	1961-1971	+22.19	+18.60	+21.17
8	1971-1981	+12.61	+24.48	+15.88
9	1981-1991	+26.41	+21.11	+24.84
10	1991-2001	+19.14	+29.99	+19.14

Source : Socio-economic abstract of Solapur district.

Table 2- Solapur District: Tahsilwise population growth rate during 1961-2001
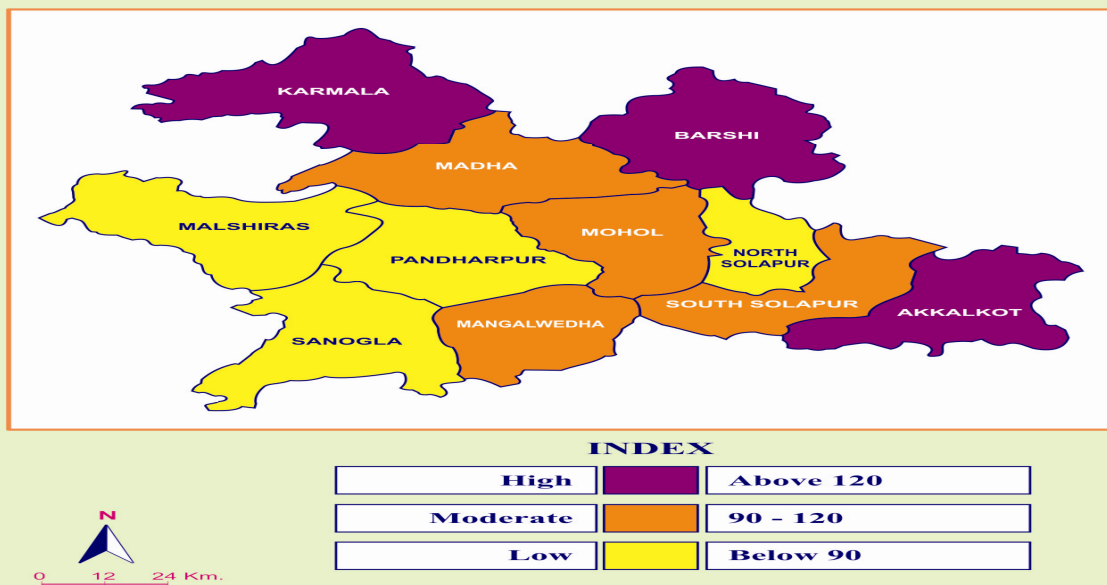
Sr. No	Population growth region	No. of Tahsils	Name of Tahsils
1	High population growth region (above 120 percent)	3	Barshi, Akkalkot, Karmala
2	Medium population growth region (90 -120 percent)	4	Madha, South Solapur, Mangalwedha, mohol
3	Low population growth region (below 90 percent)	4	Sangola, North Solapur, Malshirash, Pandharpur

Source: complied by author

Location Map of study region

Figure – 2