

Spatial Pattern of Growth Rate of Rural Population in Kolhapur District

Dr. Navnath K. Bansode,

Assistant professor in Geography,
Bhogawati Mahavidyalaya, Kurukuli, Dist. Kolhapur.

Abstract:

Population has gained importance in the economic, social and cultural development of the country. One of the most important issues in the world is population growth. All the scientists of the world are seriously thinking about this question because population is a volatile factor. Today, the world generally adds 150 people every minute while in India 48 children are added every minute. Developing countries are facing difficulties because developing countries have high population growth rate while developed countries have low population growth as countries try to maintain their development. Population growth is not always positive but sometimes population growth is negative. Population growth is the change in population over a period of time. This change in population can be expressed in two ways 1. Change in total population 2. Change in population per hundred. This population growth in Kolhapur district is more or less. As the population of Kolhapur district is more in rural areas, I have studied the population growth in rural areas. The study of growth rate is important from the view point of future planning. Therefore attempt is made here to analyze spatial pattern of growth rate of rural population in Kolhapur district. The paper is based on secondary data source. To analyze of decadal variation in the absolute growth of rural population within the study area, the tahsils of Kolhapur district are divided into high, medium, low with the help of Mean and Standard deviation.

Key words: Growth Rate, Development, Mean, Standard Deviation,.

Introduction:

Growth of population means any change in population in number, further it refers to the growth of the human population in a particular area during a specific period of time. The net change in population between two points in time is expressed in percentage and is described as the growth rate of population. Population growth is also measured in terms of absolute increase (Patil and Gatade, 2006). It may be negative or positive and it is resultant feature of the natural increase and net immigration or emigration over a certain period of time in a particular region (Sharma, 1978). Any change in population numbers is called growth. If this change is in the negative direction, then population decreases, when population increases the change is positive. This indicates that a growth does not necessarily always mean only an increase (Ray, 1979). Growth rate of population is controlled by the birth rate, death rate and migration of the population. These factors are controlled by the various physical, social, cultural and economic components, which are varies from region to region (Ranade, 1990). Hence, here an attempt is made to analyze growth rate of rural population.

Study Region:

Kolhapur district is the most developed district of Southern-western part of Maharashtra. The absolute location of district is 15° 43' to 17° 17' North Latitude and 73° 40' and 74° 42' East Longitude.



It is surrounded by Sangli district to its North and East, Belgaum district of Karnataka to its South and Sindhudurg district to the West. The Sahyadri ranges to the west and Warana River to the North forms the natural boundaries. The geographical area of districts 7685 square kilometres, for the administrative purpose the district is divided into 12 Tehsils (Fig 1). The population of the study region is 38, 76, 001 persons, according to 2011 census. The maximum and minimum temperature ranges in between 38°C and 14°C with annual average precipitation 115 cm.

Objectives:

The main objectives of this paper are as following.

- 1) To study spatial pattern of rural population in Kolhapur district
- 2) To analyze change in rural population in Kolhapur district during 1961-71 to 2001-11.

Data collection and Methodology:

The present research paper is entirely based on the secondary data. Hence, the related data has been collected from the Kolhapur District Census Handbook, 1961 to 2011. Collected rough data are processed.

To calculate decadal growth of rural population following formula is employed

$$r = \frac{P_n - P_0}{P_0} \times 100$$

Where,

r = Growth rate

P_n= is the rural Population at the end of the period

P₀= is the rural Population at the beginning of the period

To analyze spatial pattern of rural population in Kolhapur district are grouped into five categories on the basis of mean and standard deviation.

Result and Discussion:

1. Pattern of Growth Rate of Rural Population during 1961-1971:-

The table 1 indicates that the district as a whole as 24.76 percent growth rate of rural population from 1961 to 71 that of state is 22.23 percent indicate that the growth rate of rural population of Kolhapur district is higher than the state but spatial distribution varies from tahsil to tahsil.

The figure 3.3 A reveals that the high growth rate of rural population i.e. above 30.04 percent is found in Panhala, Hatkanangle and Karvir tahsils due to development of agricultural practices through Warana, Panchaganga River and its tributaries. The moderate growth rate of rural population is recorded in Shirol, Radhanagari and Ajra tahsils ranging from 23.30 to 30.04 percent. The low growth rate of rural population is registered in Shahuwadi, Bhudhargad, Chandgad, Gadhinglaj and kagal tahsils ranging from 16.56 to 23.30 percent because of undulating topography, poor irrigation and health facility. The very low growth rate of growth rate of rural population i.e. below 8.51 percent is observed in Bavda tahsil due to unfavorable physiography of Western Ghats, lower economic development and out-migration.

Table 1 Growth Rate of Rural Population in the Kolhapur District, 1961-2011(in %)

S r. N o	Name of Tahsils	Decades					Change in Growth rate in between 1961 -71 and 2001 - 2011
		1961-71	1971-81	1981-91	1991-2001	2001-2011	
1	Shahuwadi	19.35	15.92	14.74	11.75	5.23	-14.12
2	Panhala	30.27	15.21	21.17	15.22	7.10	-23.17
3	Hatkanangle	30.59	14.31	28.93	10.38	14.83	-15.76
4	Shirol	29.09	23.01	23.50	16.33	8.60	-20.49
5	Karvir	32.56	24.40	25.67	11.93	6.69	-25.87
6	Bavda	8.51	-63.62	19.14	17.08	9.98	1.47
7	Radhanagari	24.52	20.68	12.01	11.28	6.17	-18.35

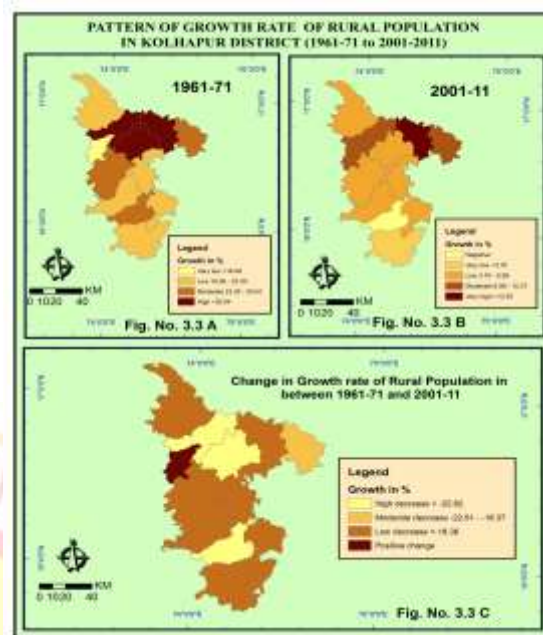
8	Kagal	22.5 7	14.5 0	17.1 5	16.39	6.88	- 15.6 9
9	Bhudarga d	19.8 2	14.6 6	18.0 3	13.61	3.77	- 16.0 5
1 0	Ajra	23.5 2	11.9 1	12.6 2	0.15	-3.35	- 26.8 7
1 1	Gadhinglaj	19.1 8	12.0 4	12.1 5	8.95	4.01	- 15.1 7
1 2	Chandgad	19.6 7	19.1 8	19.7 9	13.17	3.56	- 16.1 1
	District	24.7 6	14.1 4	20.0 2	12.27	7	- 17.7 6
	Maharash tra	22.2 3	17.5 5	18.6 4	15.26	10.34	- 11.8 9

Source: Compiled by Researcher on the basis of District Census Handbook of Kolhapur District, 1961 to 2011.

2. Pattern of Growth Rate of Rural Population During, 2001-2011

The district as a whole has 7.00 percent growth rate of rural population during 2001-2011 that of state is 10.34 percent which indicates that the growth rate of rural population of Kolhapur district is lower than the state average but spatial distribution varies from tahsil to tahsil (table 1).

The figure 3.3 B indicates that the very high growth rate of rural population i.e. above 13.55 percent is found in Hatkanangale tahsil due to fertile soil, good irrigation and in-migration. The moderate growth rate of rural population i.e. ranging from 6.98 to 10.27 percent is observed in Panhala, Bavda and Shirol tahsils. The low growth rate of rural population is recorded in Shahuwadi, Karvir, Radhanagari, Kagal, Gadhinglaj and Bhudhargad tahsils ranging from 3.70 to 6.98 percent. The very low growth rate of rural population i.e. above 3.56 percent is found in Chandgad tahsil due to the lack of irrigation, health facility and out-migration. The negative change in rural population is found only in Ajra (-3.35 percent) tahsil and causes are same discussed pervious.



3. Change in Growth Rate of Rural Population from 1961-71 to 2001- 2011

The table 1 designates that the district as a whole has -17.76 per cent decrease in growth rate of rural population from 1961 to 2011 that of state is -11.89 per cent, it means that the decrease in growth rate of rural population of Kolhapur district is higher than the state but spatial distribution varies from tahsil to tahsil (figure 3.3 C). The high decrease in growth rate of rural population is found in Panhala, Karvir and Ajra tahsils i.e. above -22.62 percent during the period of investigation due to fertile soil, well irrigated area which resulted into development agro-based industries. The moderate decrease in growth rate of rural population is recorded in only Shirol tahsil ranging from -22.62 to -18.37 percent. The low decrease in growth rate of rural population i.e. below -18.37 percent is found in Kagal, Shahuwadi, Bhudargad, Chandgad, Hatkanangale, Radhanagari and Gadhinglaj tahsils due to low literacy because of adverse physical condition. Again Bavda (1.47) tahsil shows that positive growth rate of rural population due to lack of social awareness.

Conclusions:

The spatial patterns of rural population change at tahsil level in the study area are the manifestation of spatial dimensions of socio-economic conditions. The high decrease in growth rate of rural population is found in Panhala, Karvir and Ajra tahsils due to fertile soil, well irrigated area

which resulted into development agro-based industries. The low decrease in growth rate of rural population in Kagal, Shahuwadi, Bhudargad, Chandgad, Hatkanangale, Radhanagari and Gadhinglaj tahsils due to low literacy because of adverse physical condition.

References:

1. Patil, Sardar A. and Gatade, D. G. (2006): The study spatio temporal changes in population growth in Kolhapur district, Maharashtra Bhogolshastra Sanshodhan Patrika, Vol. XX, No. 2, Pp- 29-37.
2. Sharma P.R. (1978): Spatio-Temporal Patterns of Population Growth and Distribution-A Regional Analysis, The Deccan Geographer Vol.XVI, Pp.33.
3. Ray Phanibhusan (1979): Methods of Describing Growth of Population, Geographical Review of India, Vol.41 No.2,p.258
4. Ranade Prabha Shastri (1990): Population Dynamics in India, Ashish Publishing House, New Delhi, p.80.

