



Growth and Distribution of Population in Osmanabad District

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Abstract

The human population always changes continuously. Growth of population implies a change between two given points in period. Growth and distribution of population reflects the history of man's response to the environmental possibilities present in the region. Growth of population in any area is an index of its economic development, social awakening and many other characters. The population growth is the most fundamental demographic process with which all other demographic attributes are directly or indirectly associated. Therefore, an attempt is made here to analyse growth and distribution of population in Osmanabad district. The paper is based on secondary data source. to calculate growth of population simple mathematical formula i.e. growth rate = population of end period minus population of beginning period divided by population of beginning period X 100. To analyse growth of population, the tahsils of Osmanabad district are grouped into three categories on the basis of mean and standard deviation. the study reveals that the high growth rate of urban population only in Osmanabad tahsils mainly because of location of district headquarter in this tahsil, which leads to educational, industrial and administrative development.

Key words: Growth, Population Rural, Urban, Male, Female

Introduction:

The word 'population' can be used in different ways. A biologist may refer to a collection of animals or plants as populations, whereas a geographer uses the same word to indicate the collection of human beings. Indeed, the term is frequently applied to a collection of people, the exact number of peoples. Population Geography may be defined as the analysis and geographic interpretation of spatial variation of the structure and value of demographic phenomena. These phenomena analyze the size and changes of population growth and distribution (Garnier, 1978).

The human population always changes continuously. Growth of population implies a change between two given points in period (reference?). 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). It is determined by three basic factors namely human fertility, human mortality and human mobility.

Growth and distribution of population reflects the history of man's response to the environmental possibilities present in the region. Growth of population in any area is an index of its economic development, social awakening and many other characters (Chandana and Sidhu, 1980). The population growth is the most fundamental demographic process with which all other demographic attributes are directly or indirectly associated. Therefore, geographical study of population growth of a region has vital importance for understanding its dynamics as well as planning at the local and regional levels (Gharge, 2007).

The study of population growth provides an accurate assessment of the dimension of growing demand for food, fibre, shelter, and a variety of social and economic facilities on the one hand and on

the other leads to an objective evaluation of general nutrition level, standard of living, welfare issues and of programmes of development in operation (Jare, 1994). Therefore, an attempt is made here to analyse growth and distribution of population in Osmanabad district.

The Study Region:

The Osmanabad district is located in Southern part of Maharashtra. The absolute location of district is 17° 35' to 18° 40' North Latitudes and 75° 16' to 76° 40' East Longitudes. The district has an area of 7569 Sq KM. East-West extent is 280 KM. and South-North extents only 240 KM. As for as area is concerned, the district ranks 24th in the state of Maharashtra. It is bounded on the South-West by Solapur district, on the North-West Ahmednagar district and South by Bidar and Gulbarga district of Karnataka State. The district consists of eight tahasils namely Osmanabad, Tuljapur, Lohara, Omerga, Kalamb, Bhoom, Paranda and Washi.

It lies on the Deccan plateau with an average height of 600 metre above from sea level. most of the area of district is covered by Balaghat Ranges with patches of low level

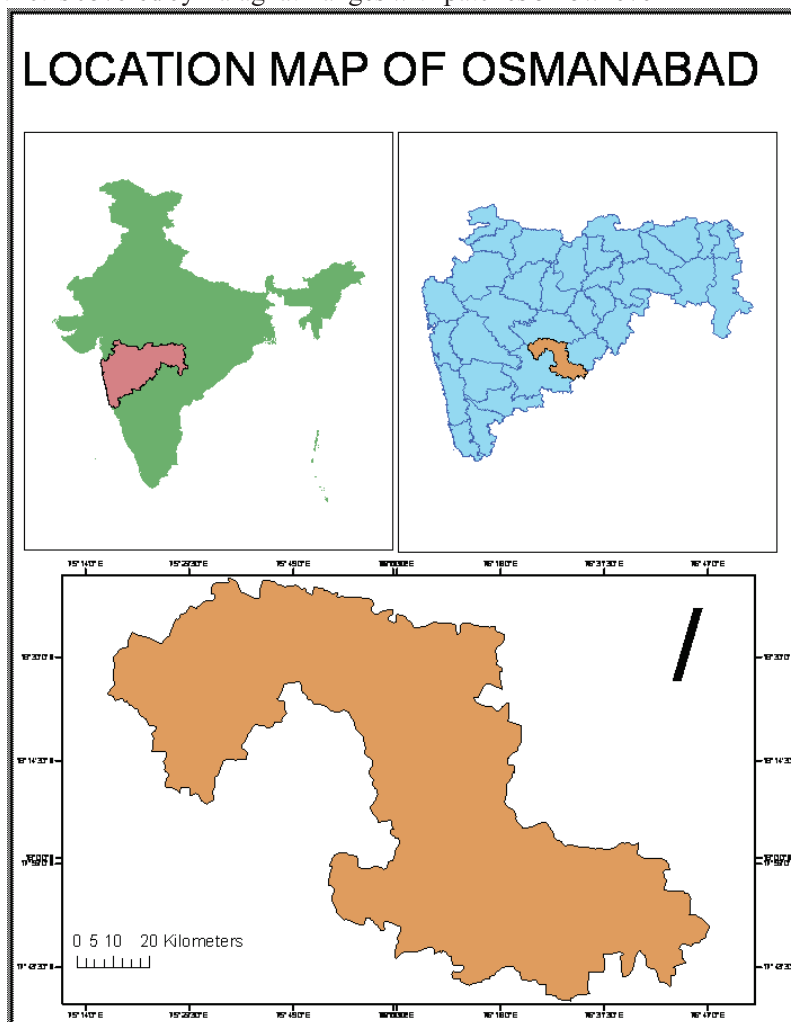


Figure No. 1

plain. Climate of the district is hot and dry, as daily mean maximum temperature ranging in between 30°C to 39°C and minimum temperature ranging in between 18°C to 21° C. Osmanabad District comes under the low rainfall region, with about 623.16 mm average annual rainfall. The soil of the district is essentially derived from the Deccan Trap, can broadly classified into four groups- shallow soil, medium soil, medium deep, and deep soil. The district consists of 8 urban centers and 735 villages. District is inhabited by 16,60,311 population (as per 2011 census) and density of population is 219 per sq. km.

Objectives:

The main objective of present study is to analyse growth and distribution of population in Osmanabad District.

Data collection and Methodology:

In order to meet these objectives the relevant information and data of population is used for the period of 2001 to 2011 are based on the secondary sources. The information and data was collected from census of Osmanabad district 2001 & 2011 and Socio Economic Review and District Statistical Abstracts of Osmanabad District 2001 - 2011.

Collected rough data are processed. To calculate decadal growth of population following formula is employed

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

Where,

r = Growth rate

P_n = is the Population at the end of the period

P₀ = is the Population at the beginning of the period

To analyse growth of population, the tahsils of Osmanabad district are grouped into three categories on the basis of mean and standard deviation. Analysis of the study has been made with help of the statistical techniques and on the these techniques of this results and conclusion are drawn.

Result and Discussion:

Growth of Total population in Osmanabad District in 2001-2011

The table 1 indicates that the district as whole has 11.50 per cent growth of total population during the period of 2001-2011, but spatial distribution of population growth varies from tahsil to tahsil. The high growth rate of total population i.e. above mean+1 standard deviation (>16.18 per cent) is found in Bhum tahsils due to the low literacy rate.

Table :1 Growth of total population in Osmanabad District 2001-2011

Sr. No.	Tahsils	Population		Change
		2001	2011	growth rate in %
1	Bhum	116894	136745	16.98
2	Kalab	188237	217687	15.65
3	Lohara	110163	116712	5.94
4	Osmanabad	359234	405736	12.94
5	Paranda	125136	140148	12.00
6	Tuljapur	250149	278879	11.49
7	Umarga	241339	269519	11.68
8	Washi	95435	92150	-3.44
	District	1486587	1657576	11.50

(Source: compiled by authors on the basis of census report of Osmanabad district 2001 & 2011)

The moderate growth rate of total population i.e. mean to mean + 1 standard deviation (10.40 to 16.18) is found in the tahsils of Kalmb, Osmanabad, Paranda, Umarga and Tuljapur ranging from 10.40 to 16.18 percent. The low growth rate i.e. below mean (< 10.40) is recorded only in Lohara tahsil. The notable thing is that negative change in total population is found in Washi tahsil i.e. -3.44 percent due to the out migration because of frequency of drought and lower development of irrigation facilities.

Growth of Rural Population in Osmanabad District 2001-2011

The table 2 indicates that the district as whole has 9.83 per cent growth rate of rural population during the period of 2001-2011, but tahsil level analysis reveals both positive and negative growth rate of rural population. The high growth rate of rural population i.e. above Mean + 1 standard Deviation (>16.18 per cent) is found again in Bhum tahsils and causes are same as mentioned earlier. The moderate growth rate of rural population i.e. mean to mean

Table 2: Growth of Rural, Urban, Male and Female Population in Osmanabad District 2001-2011

Sr. No.	Tahsils	Rural population			Urban population		
		2001	2011	Growth rate in %	2001	2011	Growth rate in %
1	Bhum	99385	118184	18.92	17509	18561	6.01
2	Kalab	165215	191974	16.20	23022	25713	11.69
3	Lohara	110163	116712	5.94	0	0	
4	Osmanabad	278609	293911	5.49	80625	111825	38.70
5	Paranda	108146	121390	12.25	16990	18758	10.41
6	Tuljapur	202454	226527	11.89	47695	52352	9.76
7	Umarga	193924	215671	11.21	47415	53848	13.57
8	Washi	95435	92150	-3.44	0	0	
	District	1253331	1376519	9.83	233256	281057	20.49
Sr. No.	Tahsils	Rural Male population			Rural Female Population		
		2001	2011	Growth rate in %	2001	2011	Growth rate in %
1	Bhum	51524	62100	20.53	47861	56084	17.18
2	Kalab	85472	100238	17.28	79743	91736	15.04
3	Lohara	56629	60258	6.41	53534	56454	5.45
4	Osmanabad	145081	152976	5.44	133528	140935	5.55
5	Paranda	55940	64023	14.45	52206	57367	9.89
6	Tuljapur	104834	117793	12.36	97620	108734	11.38
7	Umarga	99450	110773	11.39	94474	104898	11.03
8	Washi	49346	48076	-2.57	46088	44074	-4.37
	District	648276	716237	10.48	605054	660282	9.13
Sr. No.	Tahsils	Urban Male Population			Urban Female Population		
		2001	2011	Growth rate in %	2001	2011	Growth rate in %
1	Bhum	9096	9672	6.33	8413	8889	5.658
2	Kalab	12057	13524	12.17	10965	12189	11.163
3	Lohara	0	0		0	0	
4	Osmanabad	41982	57824	37.74	38643	54001	39.743
5	Paranda	8767	9665	10.24	8223	9093	10.580
6	Tuljapur	24788	27096	9.31	22907	25256	10.255
7	Umarga	24402	27517	12.77	23013	26331	14.418
8	Washi	0	0		0	0	
	District	121092	145298	19.99	112164	135759	21.036

(Source: compiled by authors on the basis of census report of Osmanabad district 2001 & 2011)

+1 standard deviation (7.02 to 16.82 percent) is found in the tahsils of Kalmb, Paranda, Tuljapur and Umarga ranging from 7.02 to 16.82 percent. The low growth rate of rural population i.e. below mean (< 7.02) is recorded again only in Lohara tahsil. The notable thing is that negative change in rural population is found in Washi tahsil i.e. -3.44 per cent and causes are same as mentioned in earlier.

Growth of Urban population in Osmanabad District in 2001-2011

The table 2 indicates that the district as whole has 20.49 per cent growth of urban population during the period of 2001-2011, but tahsil level analysis varies from tahsil to tahsil ranging from 6.01 to 38.70 per cent. The high growth rate of urban population i.e. above Mean (>15.02 per cent) is found only in Osmanabad tahsils because of district headquarter lies in this tahsil, which leads to educational, industrial and administrative development. The low growth rate of urban population i.e. below mean is recorded in the tahsils of Kalmb, Umerga, Paranda, Tuljaur and Bhum i.e. <15.02, where as there is no urban population in Washi and Lohar tahsils.

Growth of Rural Male population in Osmanabad District in 2001-2011

The table 2 indicates that the district as whole has 10.48 per cent growth of rural male population during the period of 2001-2011, but tahsil level analysis reveals both positive and negative growth rate of rural population. The high growth rate of rural male population i.e. above Mean + 1 standard Deviation (>18.02 per cent) is found again in Bhum tahsils and causes are same as mentioned earlier. The moderate growth rate of rural male population i.e. mean to mean + 1 standard deviation (7.36 to 18.02 percent) is found in the tahsils of Kalmb, Paranda, Tuljapur and Umarga ranging from 7.36 to 18.02 percent. The low growth rate of rural male population e. below mean (<7.36) is recorded in Lohara and Osmanabad tahsils. It is surprising that negative change in rural male population is found in Washi tahsil i.e. -2.57 per cent and causes are same as mentioned in earlier.

Growth of Rural Female population in Osmanabad District in 2001-2011

The table 2 indicates that the district as whole has 9.13 per cent growth of rural female population during the period of 2001-2011, but tahsil level analysis reveals both positive and negative growth rate of rural population. The high Growth rate of rural female population i.e. above Mean + 1 standard Deviation (>15.62 per cent) is found again in Bhum tahsils and causes are same as mentioned earlier. The moderate growth rate of rural female population i.e. mean to mean +1 standard deviation (6.73 to 15.62 percent) is found in the tahsils of Kalmb, Paranda, Tuljapur and Umarga ranging from 6.73 to 15.62 percent. The low growth rate of rural female population e. below mean (< 6.73) is recorded again in Lohara and Osmanabad tahsil. The negative change in rural female population is found in Washi tahsil i.e. -4.36 per cent mainly due to the negligence of female and sex determination give to dowry method. in the society

Growth of Urban Male population in Osmanabad District in 2001-2011

The table 2 indicates that the district as whole has 19.98 per cent growth of urban male population during the period of 2001-2011, but tahsil level analysis varies from tahsil to tahsil. The high growth rate of urban male population i.e. above Mean + 1 standard Deviation (>26.24 per cent) is found in Osmanabad tahsils. Because Osmanabad is big urban center in the district where job opportunity is higher than other tahsils. The moderate growth rate of urban male population i.e. mean to mean + 1 standard deviation (11.48 to 26.24 percent) is found in the tahsils of Umarga and Kalamb ranging from 11.48 to 26.24 percent. The low growth rate of urban male population e. below mean (< 11.48) is recorded Paranda, Umarga and Bhum tahsil.

Growth of Urban Female population in Osmanabad District in 2001-2011

The table 2 indicates that the district as whole has 21.03 per cent growth of urban female population during the period of 2001-2011, varies from tahsil to tahsil. The high growth rate of urban female population i.e. above Mean + 1 standard Deviation (>27.59 per cent) is found in Osmanabad tahsils and causes are same as mentioned earlier. The moderate growth rate of urban female population i.e. mean to

mean +1 standard deviation (12.29 to 27.59 percent) is found in Umarga tahsil ranging from 14.41 percent. The low growth rate of urban female population e. below mean (< 12.29) is recorded in Kalab, Paranda, Tuljapur and Bhum tahsils, where as there is no urban female population in Washi and Lohar tahsils.

Conclusions:

The forgoing analysis reveals that there is high influence of geographical factors on growth and distribution population in Osmanabad district. The high growth rate of total population and rural population and rural male population in Bhum tahsils is a result of low literacy rate. The high growth rate of urban population only in Osmanabad tahsils mainly because of location of district headquarter in this tahsil, which leads to educational, industrial and administrative development. The growth rate of rural male population is higher than the rural female population and negative change in rural female population in Washi tahsil is mainly due to the negligence of female child and sex determination due to the dowry method. The high growth rate of urban male and female population in Osmanabad tahsils is a result of big urban center located in this tahsil where job opportunity of high than other tahsils.

The study also reveals that the growth of urban population is higher than the rural population because of rural to urban migration for in search of job therefore creation of job in rural area is important reduce the urbanization and urban and environmental problems.

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