GROWTH OF POPULATION IN SATARA DISTRICT OF MAHARASHTRA

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Abstract- In this paper the present study reveals the tahsil wise growth of population in Satara district during 1991-2011. The growth of population of Satara district from 2451372 in 1991 to 2808994 during 2011. It has studied on the basis of India reports, Socio-economic Statistical Abstract and Census Handbook. It occupies area of 10,490 sq.km. 15 towns and 1739 villages. Satara is the 'Historical City' is currently emerging as the largest educational center of certain cool stations, goods and services. The highest population in Satara district is Karad, Satara and Phaltan tahsils. The secondary data have been collected and computed by recent research techniques and the results have been brought through tables and maps. The total population of the district in rural area is observed 87.11 per cent whereas in urban area it is 12.88 during 1991 and 85.82 per cent rural area, 14.17 per cent urban area in 2001 respectively. It is reported that district is in the growth of urbanization and consequently the rural area of district. The highest growth rate of Mahableshwar tahsil is 35.86 per cent in 1991-2001 and 22.50 per cent followed by Satara tahsil. The lowest rate comes from the Khandala tahsil, Jaoli tahsil and Man tahsil i.e. 7.01 per cent, 7.02 per cent and 8.19 per cent respectively. The results have been discussed with the help of population growth rate refers to the change in population growth rate over a unit time period, often expressed as a percentage of the number of individuals in the population, at the beginning of that period.
Keywords- Growth, Population, Change, Period, Percentage.

Introduction

India is the most populous countries in the world. Our country covers only 2.4 per cent of the land area of the world, whereas it is the home of more than 16.87 per cent of the world's population. About three-fourths of our total population is living in rural areas, indicating we are basically depending on agriculture and other activities. This is due to large scale migration of people from villages to towns and cities in search of opportunities of employment and better amenities of life. Cities and towns have registered a much higher growth-rate than that of the village. This is due to large scale migration of people from villages to towns cities in search of opportunities of employment and better amenities of life. The population of Maharashtra is constantly changing. To determine changes in population, the Government of Maharashtra State of the Census gathers data on counts of people, that distribution and their characteristics. Population size and its distribution of geographical units are among the most important elements in the study of population. These elements are closely associated with the potential for population growth and decline, the economic situation, the age profile and other population characteristics. Information on population size and distribution is vital if programs relating to agriculture, health, education, transportation, housing, urban renewal, law enforcement and waste disposal are to be administered equitable.

Changes of growth rate in the size of area's population are primarily the result of three processes (1) people are born, causing an increasing in population (2) people die causing a loss in numbers and (3) people migrate, resulting in a decrease or increase in population, depending on the direction of their movement. When more births than deaths occur in a given area, the phenomenon is referred to as natural increase, while natural decrease occurs when there are more deaths than births. Further, a gain from mi-

gration occurs when more people move into an area than move out during a given period. Thus, changes in the size of an area's population involve two components, natural increase or decrease and net migration.

The growth of population in the Satara district continues to increase of Satara, Karad, Phaltan, Mahabaleshwar tahsils of the growth rate during the last decade. The population of Satara district as per 2001 Census stood at 2808994. The decadal growth of population in his district has come down from 14.59 per cent during 2001. Population can well be studied through the district of an area. The existing district inequalities of population are because disparities of industries, natural resources, geographical factors and economic activities.

Study Area

The Satara district is situated in west part in Maharashtra state. This district consists eleven tahsils covering 1739 villages. The total area extent is of 10,484 sq. km. extending from 17^0 5' to 18^0 11' north latitudes and 73^0 33' to 74^0 54' east longitudes. This district is confined by Pune district to north, Solapur district to east, Sangli district to south and Ratanagiri district and Raigarh districts to west (Fig.1). Satara district has typical landscapes due to variations in relief, climate and vegetation. The variation of relief ranges from the pinnacles and high plateau of the main Sahyadrians range having heights over 1200 meters above mean sea level to the subdued basin of Nira river with an average height of about 600 meters above mean sea level. The climate ranges from the rainiest in the Mahabaleshwar region which has an average annual rainfall of over 6000 mm to the driest in Man, Phaltan, Khandala and Khatav tahsils where the average annual rainfall is about 500 mm. Satara is predominately a rural district of the 23 inhabited places in the district, 1739 are villages and 15 towns including the city of Satara. The distribution of the total district of population in the urban and rural areas is 3, 98000 and 24, 11000 respectively. It will try to growth of population in Satara district.

Objectives

The objectives of this paper are to analyze the tahsilwise changes in growth rate of population in Satara district during 1991-2001

Data Base and Methodology

Present paper is based on the tahsil wise census data of1991 to 2001 census of district reports. The data have been analyzed for total growth of population change in percentage. Calculate the most common way to express population growth is as a ratio. The change in population over a unit time period is expressed as a percentage of the population at the beginning of the time period. The positive growth rate indicates that the population is increasing, while a negative growth ratio indicates the population decreasing. A growth rate of zero indicates that there were the same number of people at the two times-net differences between births, deaths and migration zero. The secondary data have been collected and computed by recent research techniques and the results have been brought through tables and maps. Population growth rate (PGR) has been calculated during a period of time. PGR ordinarily refers to the change in population over a unit time period, often expressed as a percentage of the number of individuals in

the population at the beginning of that period. The changes in population growth rate are measured with the following formula.
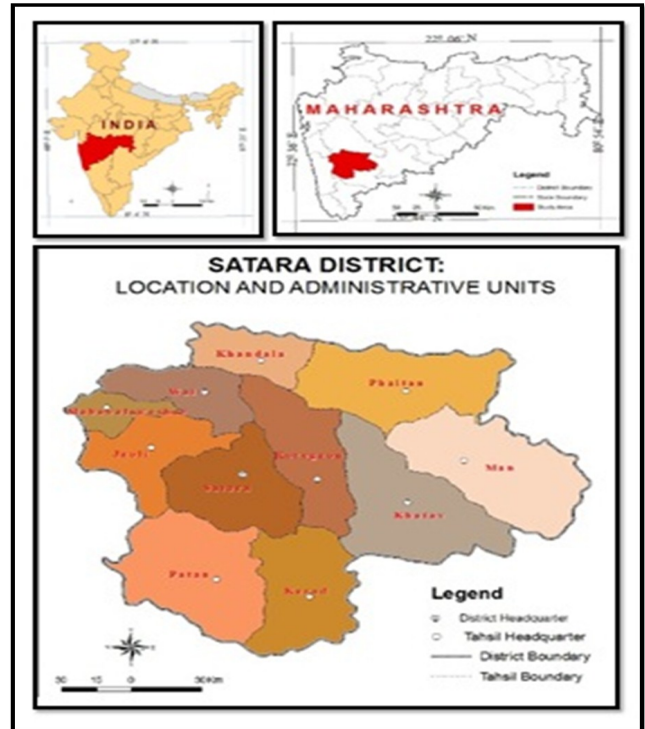

Fig. 1

Formula

$$PGR = \frac{P_2 - P_1}{P_1} \times 100$$

Where,

PGR is the population growth rate.
P_2 is the population of X district in the later decade.
P_1 is the population of the same tahsil of X initial decade.

Spatio -Temporal Variation in Population Growth in Satara District

Table No.1 and Fig. 2 below shows that the growth of population, temporal as well as spatial, is far from being even. This phenomenon was more prominent in the decade 1911 and 1921 recorded negative population growth rate of -1.69 per cent and -5.85 per cent respectively. As a result of which the year 1921 is called the "Demographic Divide" in Maharashtra. The high mortality during this period was the product of large scale abnormal deaths due to epidemics of influenza, plague, small pox, cholera, etc. Food shortage caused by severe droughts in 1911, 1913, 1915, 1918 and 1920 claimed own toll. In addition, hundreds of Satara district soldiers (Military Apshinge, Nagthane and overall Satara District) lost their lives during the World War I (1914-1918). During 1931 growth rate registered in Satara district 13.81 per cent. The development helped in controlling epidemics. After 1951 registered growth rate 16.17 per cent this period gradually increasing population growth. Death rate declined much faster than the growth rates. The improvement of health facilities, living conditions o the

people enormously. The highest growth rate recorded of 21.50 per cent in 1961 which continued in 1991 growth rate recorded 20.24 per cent followed by decline growth rate during the 14.59 per cent in 2001. During 1991 this period birth rate declined rapidly. Declined trend of death rate, decreasing birth rate are continued but at a slower rate recorded 6.94 per cent.

Table 1- Satara District: Decadal Variation Growth of Population (1901-2011)

Sr.No	Year	Change of Decadal Growth Rate in %
1	1901	-
2	1911	-1.69
3	1921	-5.85
4	1931	13.81
5	1941	13.21
6	1951	16.17
7	1961	21.50
8	1971	20.79
9	1981	18.02
10	1991	20.24
11	2001	14.59
12	2011	6.94

Source: Complied By Researcher

Fig. 2-

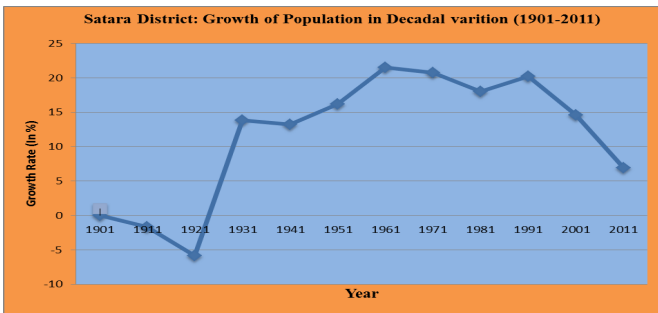## Satara District: Population Growth Rate and Distribution of Population

Population distribution is the geographical arrangement of the population within the physical space of the State boundaries. The major factors that determine the pattern of population distribution are: (1) geographical factors, such as climate, terrain, soils, and natural resources; (2) economic, social, and political factors, such as the type of economic activity and the form of social organization; and (3) demographic factors, such as the different growth rates that exist between areas as a result of differences in births, deaths and migration rates.

The above Table No.2 and Fig.3 shows that the growth in population during 1991-2001 both in rural and urban areas along with male and females of Satara district and different tahsils and Fig. No. 3 shows the maps growth of population of different of tahsils within this period. It is clear that urban population is increasing at a slowly all tahisls but increasing at a faster rate in Satara, Mahabaleshwar, Karad and Phaltan tahsils of the district compared to rural population. Rural population of Satara, Jaoli and Khandala tahsils found to decrease 3.13, 5.60 and 6.80 per cent respectively. Total population of the district in urban area is observed to increase 20.55 per cent in 2001. In Satara district the percentage of high because the pressure of large municipalities center Satara

nearly half of the total population of the Satara, Karad, and Phaltan cities. Satara city being the most important urban center in the district, all development is concentrated here.

Table 2 -Satara District: Population Growth Rate (1901-2001)

Sr.No	Tahsil	Total	Rural	Urban
1	Mahabaleshwar	35.86	22.02	23.11
2	Wai	13.01	12.02	18.34
3	Khandala	7.01	6.80	8.89
4	Phaltan	14.69	14.73	14.50
5	Man	8.19	7.59	13.68
6	Khatav	12.77	11.43	26.67
7	Koregaon	12.50	30.58	62.23
8	Satara	22.50	3.13	78.19
9	Jaoli	7.02	5.60	16.95
10	Patan	8.68	52.82	13.94
11	Karad	18.15	19.89	5.78

Source- Directorate of Economics and Statistics, Government of Maharashtra
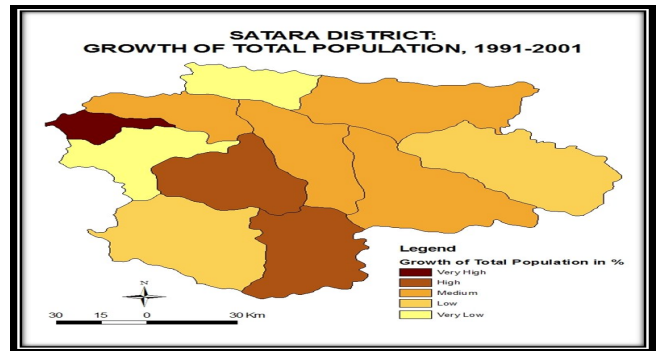*Complied By Researcher.*

Fig. 3-

Population in urban area of Satara tahsil have increased by 78.19 per cent whereas, rural area of these tahsil has shown increases of 3.13 per cent respectively Fig. 4. Population in urban areas of other tahsils viz. Koregaon, Khatav, Mahabaleshwar, Wai and Jaoli tahsils has shown increases as 62.23, 26.67, 23.11, 18.34 and 16.95 per cent respectively. This is relatively less compared to increase in population of their rural areas 30.58, 11.43, 22.02, 12.02 and 5.60 per cent respectively. These tahsils Patan and Koregaon tahsils completely rural population with an increase of 52.82 and 30.58 per cent during the current decadal. Lonand, Karad, Koregaon and Satara tahsils have shown urban population to be increased as they are connected to railways and sugar industry is localized here. Lonand is the biggest onion market in Khandala tahsil. Satara city is headquarters of the district, market, relgion, educational, MIDC, etc. center and health facilities here available. It is an important education office of Rayat Shikshan Sansths.

Phaltan, Khandala, Dahiwadi (Man), Jaoli (Medha), Patan, Khatav (Vaduj), Wai tahsils are headquarters of urban centers. This indicate that the village people interested to increased educational, employment and health facilities have migrated to tahsils and people have migrated to district headquarter. This shows the migration within the district is taking place at a faster rate and village people have generated the tendency to come and settle in the

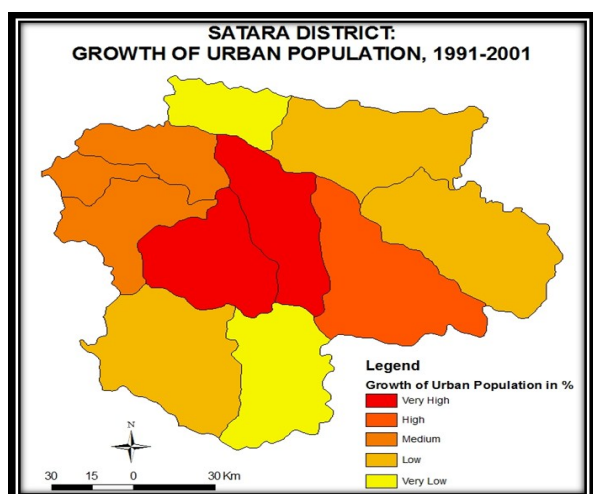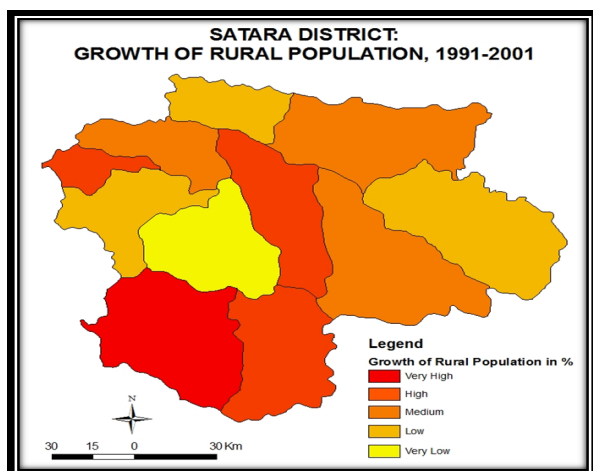tahsil headquarter which are generally urban centers.

Fig. 4-

The national population policy issued in 2000 control the population growth rate and to improve the quality of life. The attainment of compulsory and free school education p to age 14 years, and the reduction of drop-out rates to under 20 per cent at primary and secondary school levels for boys and girls. The achievement of universal child immunization against all vaccine preventable diseases. The promotion of delayed marriage for women to 18 years (legal age at marriage for women) and preferable to over 20. Moving in the direction of this target is clearly desirable. Their attainment increased financial resources and improvements of several social sector programs. Considering the significance of population control. World population Day is celebrated on 11th July each year. Hence, the Satara District is successes the decline growth rate of during 1991-2001 as compared to the decadal growth rate registered during last decade.

Conclusion

The population of Satara district is constantly changing. These population changes represent peoples' adjustment to economic development, opportunities of employment, development of educational facilities, immigration and outmigration sources, agricultural development, sugarcane industries concentrated in Karad,

Satara and Koregaon tahsils, advanced technology, social environment and the exercise of residential preferences when more people move into an area than move out during study period. Thus changes of in the size of an area's population involve natural increase or decrease and net migration. It is clear the changes in population growth rate will be increasingly affecting our society. The population of Satara District, like the population of the Maharashtra, will continue to change as long as people vary their fertility, mortality and migration behaviors.

The population of Satara district is to reach 3003922 in 2011. We face to challenge of anticipating these demographic changes and encouraging social institutions of education, family, economic, political, health and recreation at all organizational levels to plan in ways that will maximize the well-being and satisfaction of the population.

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