Spatio – Temporal Growth Of Population In Western Vidarbha: A Geographical Analysis

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Abstract:
Population growth refers to decadal or annual change in numbers of people in a particular region. It may be positive or negative growth. Growth of population is depends upon three factors i.e. Fertility, mortality and migration status. Such type of study is a part and parcel of demography and population geography. Population geography relates growth with geographical factors such as climate, soils, and vegetation types, social, cultural and economic factors.

Key words: Growth, Migration, Fertility and mortality.

1.1 Introduction:
Population growth is the fundamental process with which all other demographic attributes are directly or indirectly associated. Population growth determines density, distribution pattern and composition of population (Ghosh, 1985). Population growth refers to the growth of the human population in a particular area during a specific period of time. A trend in birth rate, death rate and migration patterns reflects overall growth of population in any region. Change in those aspects decides the stage of demographic transition. Rapid population growth is treated as the hard core factor accountable for deteriorating resource situation, environmental degradation and overall poor living conditions (Singh, 1922).

The problem of increasing of population pressure on physical resources is of paramount importance birth rate is tending to decline but the net rate of increase is higher than ever for the simple reason that the knowledge and practice of death control have been expanding more rapidly than the knowledge and practice of birth control (Jamali F.Z.). The stage of population explosion is experienced by developing countries like India. All attempts to improve social and economic conditions are thrown out of the gear by increase in the total population of such countries. This tremendous increase in population has created certain severe problem such as unemployment, poverty, nitrite, crimes expansion of slums and blight areas in the countries which is explosive stage of population.

1.2 Trends in Population Growth (1901-2011):
Western Vidarbha has recorded 11 percent growth of population during the decade 1901-11 which was higher than state of Maharashtra (10.14) and than India (5.7). Between the decades of 1911-21, there has been decline in population of the study area, state and India. Decline in population for the study region was 0.59 percent, at state level decline in population was -2.09 percent which was higher than the study area. Population decline at each level is an impact of high mortality rates caused by famine and epidemics of plague, malaria and Influences. After 1921, the effect of famine and epidemics almost brought under control and therefore population of the study region gets increase with 11.91 percent, 11.34 percent in rural area and 37.11 percent in urban in 1931. During the decade of 1931-41 the growth rate of population was 4.73 percent, 2.45 percent in rural and -1.37 percent in urban areas similarly which was lower than Maharashtra state (11.99) and India (14.2). In the next decade, 1941-51 population of the study area increased to 4.97 percent.

Table No. 1.1 Temporal Growth of Population (1901-2011)

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<tbody>
<tr>
<td>W. Vidarbha</td>
<td>11.0</td>
<td>0.59</td>
<td>11.91</td>
<td>4.73</td>
<td>4.97</td>
<td>21.03</td>
<td>25.08</td>
<td>21.03</td>
<td>20.81</td>
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<td>-2.41</td>
<td>11.34</td>
<td>2.45</td>
<td>0.47</td>
<td>22.47</td>
<td>23.20</td>
<td>18.93</td>
<td>16.43</td>
<td>16.41</td>
<td>22.77</td>
</tr>
<tr>
<td>Urban</td>
<td>-11.83</td>
<td>22.65</td>
<td>37.11</td>
<td>-1.37</td>
<td>22.02</td>
<td>20.10</td>
<td>29.02</td>
<td>36.12</td>
<td>25.72</td>
<td>18.18</td>
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</tr>
<tr>
<td>Maharashtra</td>
<td>10.14</td>
<td>-2.09</td>
<td>14.91</td>
<td>11.99</td>
<td>19.27</td>
<td>23.6</td>
<td>27.45</td>
<td>24.54</td>
<td>25.59</td>
<td>22.73</td>
<td>15.99</td>
</tr>
<tr>
<td>India</td>
<td>5.7</td>
<td>-0.03</td>
<td>11.00</td>
<td>14.2</td>
<td>13.3</td>
<td>21.5</td>
<td>24.8</td>
<td>24.99</td>
<td>23.79</td>
<td>21.68</td>
<td>17.64</td>
</tr>
</tbody>
</table>

Source: Based on Census Data 2001, 2011
Graph no 1.1 Western Vidarbha: Temporal Growth of Population (1901-2011)

In next two decades 1951-61 and 1961-71 growth rates of the population was highly increased by 21.03 and 25.08 percent respectively for the study region. In 1971, growth rate of population at state level was 27.45 percent comparing to state and India, growth rate of population for the study region was 21.03 percent which was lower than last decade 1961-71. This decline in growth rate is combine impact of differences between vital rates and migration figures. Lastly between the decades 1981-91 population growth rate was decreased to 20.81 percent for the study region. Between the decade 1991-2001 highest population growth was recorded for the study region as a whole with 31.4 percent which was almost higher than state of Maharashtra (22.73%) and India (21.68%). Urban population growth rate for the study region was higher with 25.72 percent than rural areas with 16.41 percent for the study region. It is an impact of rural-urban migrations, high standard of living, available health facilities in urban parts which is results in low mortality rates at each level. Between the decade, 2001-11, population growth rate for the study region was 30.28 percent. It is notable that, in the study area urban population growth rate is declining comparing to rural population growth rate. Urban population growth rate was 18.18 percent whereas rural population growth rate was 22.77 percent.

1.3 Spatial variations in Growth of Population (1981-2011)

As per the discussion of population growth of the study area, it is not possible to decide sub regions, therefore to study population growth at micro level; district level is taken into consideration. It is easy to understand how the local factors on the growth of Population with the help of spatial analysis. To examine the population growth at district level the period 1981 to 2011 is taken into consideration.

Table No 1.2 shows decadal population growth rates of the study area since 1981 to 2011 census. According to 1981-1991 data, decadal change in population was 25.02 percent in Buldhana district whereas 21.72 percent in Washim and in Akola district 20.87 percent. Growth rate of population is not uniform through the study area. It varies from district to district. Highest population growth rate was registered between the decades 2001-2011 with 17.34 percent. 2001-2011 at district level highest population growth was found in Washim (17.34) and Buldhana district (15.84). It is mainly due to Industrialization nonagricultural activities and consequent urbanization. Lowest type of population growth was found in Amravati (10.78) between the decades 2001-2011. At district level there is rural - urban different in growth rate of population in the study area. With the analysis of rural-urban population data during the period of 1981-2011, it is clearly seen that urban population growth is always higher than rural population growth rates it is mainly due to 1. Sizeable rural-urban migration 2. High infant and child mortality at rural parts and due to no availability of health care centers 3. Rural pregnant women relieved in the urban hospitals therefore birth registration of a baby performed in an urban part consequently it helps to high growth rates of population at urban parts. According to 2011 census, urban population growth rate was 20.30 percent whereas rural population of the study area declined to 15.09 percent at each district of the study area there is negative growth of population but urban parts registered positive growth.

Table no. 1.2 Western Vidarbha : Spatial Growth of population (1981-2011)

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Akola</td>
<td>20.87</td>
<td>20.58</td>
<td>11.26</td>
</tr>
<tr>
<td>Amravati</td>
<td>18.19</td>
<td>18.50</td>
<td>10.78</td>
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<tr>
<td>Yavatmal</td>
<td>19.55</td>
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<td>Buldhana</td>
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<td>15.84</td>
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<tr>
<td>Washim</td>
<td>21.72</td>
<td>18.31</td>
<td>17.34</td>
</tr>
</tbody>
</table>

Source: computed by Author
Between the decades 1991-2001, highest population growth rate was registered in Akola district with 20.58 percent whereas lowest population growth rate was found in Washim district with 18.31 percent. (Graph.no.1.2)

1.4 Conclusions:
Population growth of the study region is closely associated with geographical factors. Sea level height, nature of topography, resources such as soil and water as well as social structure, commercial and industrial development are the factors controlling on the growth of the study region. Rural-urban migration also significant factor to confine the nature of the population growth. Developed health facilities are related to mortality rates. Overall mortality rates of the study region are rapidly declined, But this phenomenon affects adversely on birth rates. Birth rates are stable but death rates declined largely therefore rapid growth of population is witnessed.

1.5 References: