



DISTRICT-WISE GROWTH OF POPULATION IN WESTERN HIMALAYAN STATES OF INDIA, 1981-2011



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Abstract: The growth of population is an important demographic characteristic which not only helps in understanding the population change that a society has undergone, but also helps in predicting the future demographic characteristics of an area. Therefore, it is useful to study and analyze the pattern of population growth. The purpose of this study is to examine the decadal variation of population growth in Western Himalayan States of India i.e. Jammu and Kashmir, Himachal Pradesh and Uttarakhand sprawling over an area of 3,31,392 sq km. It constitutes about one-tenth area of India but supports merely 2.44 percent of India's population (Census 2011). The present study is based on secondary data collected at district level for four Census years i.e. 1981, 1991, 2001 and 2011. The simple percentage method and choropleth technique have been used to present the temporal and spatial variations in growth of population. In order to identify the regions of high, low and moderate growth rate the decadal growth rate of population has been calculated for these decades (1981-1991, 1991-2001 and 2001-2011). The study reveals that the study area as a whole experienced declining trend in growth of population. However, there were marked regional variations at the district level. The majority of districts of Jammu and Kashmir have recorded sizable growth of population, whereas, the central and southern parts of the study area which comprise Himachal Pradesh and Uttarakhand have conversely registered low growth rate in population.

Keyword: Growth Of Population, Population In Western Himalayan.

INTRODUCTION:

The term growth of population is generally used to refer to the change in the number of inhabitants of a territory during a specific period of time, irrespective of whether the change is negative or positive. Population growth may be measured both in absolute terms and in percentage form. Population growth is the product of a combined operation of the three population process viz. the fertility, mortality and migration. These three are also called the components of population dynamics because it is these three, which bring about dynamism in population numbers by not letting them remain static (Chandna, R. C. pp. 132-133).

Mountain form one of the most important bio-geographical resource zone of the world. They are remote areas covering 52% of Asia, 36% of North America, 25% of Europe, 22% of South America, 17% of Australia and 3% of Africa making up in total 24% of the earth continental surfaces (Bridges, 1990: 260). In most mountain regions, people have their livelihood on agriculture, pastoralism and use of forest resources timber, fuel wood and fodder (UNEP-WCMC, 2002, p. 17). The Indian Himalayan Region is spread between 21°57' - 37°5' N latitudes and 72°40' - 97°25' E longitudes. It has an area of 5,31,250 km² spread over 12 states and constitutes about 16.16% of India's total geographical area. This great chain of mountains in Indian Territory extends all along the northern border of the country from the eastern border of Pakistan on the west to the frontiers of Myanmar in the east for about 2,500 km with an average width of 240 km. Orographically, the Himalayan mountain system is divided into Greater Himalaya (Himadri), Lesser Himalaya (Himanchal) and the Sub-Himalayan tract (Sivalik). Apart from the longitudinal divisions the Indian Himalaya is also divided into following regional divisions based on population features and vegetation elements: Western Himalaya, Central Himalaya and Eastern Himalaya. (Nandy, S.N. et al., 2000, p.12).

Study Area: Western Himalayan States of India

The Himalayas consist of the youngest and loftiest mountain chains in the world. Geographically as well politically, Western Himalayan region is more important from strategic point of view, because of its contiguity to Pakistan, China, Afghanistan and connecting link between Central Asian countries. Geographically, the Western Himalayas is located between 29° 5' N latitude to 37° 5' N latitude and 72° 40' E longitude to 81° 00' E longitude. The region stretched for 880 km between the Indus river in the west and the Kali river in the East, comprise Jammu and Kashmir, Himachal Pradesh and Uttarakhand. It covers an area of 3,31,392 sq km i.e. approximately One Tenth area of India but supports merely 2.44 percent of India's Population (Census 2011). Fig. 1 shows that the study area shares land frontier with Nepal in South east part, China in North

and North East Part, Afghanistan in North West and Pakistan in west and North West. Besides, southern Part of the study area is bordered by three states i.e. Punjab, Haryana and Uttar Pradesh.

Regional Setting of Study Area

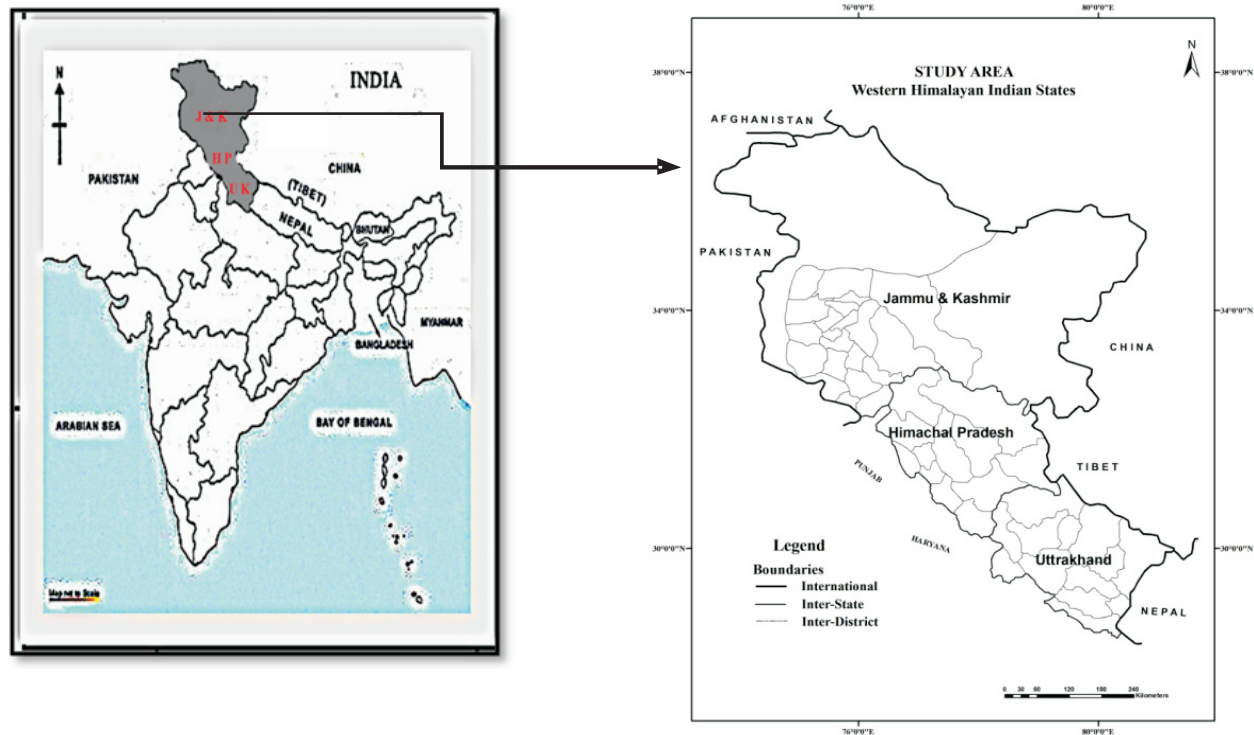


Fig. 1

Aims and Objectives:

The present study has set to achieve following objectives:

1. To examine the growth pattern of population at district level in Western Himalayan States of India.
2. To identify the core areas with growth rate either very high or very low.

Database and Methodology

The present study attempts to investigate the growth of population at district level for three decades i.e. 1981-1991, 1991-2001 and 2001-2011. Thus, the district constitutes the basic unit of present study. The study is based largely on secondary data obtained from Directorate of Census Operations, India. The percentage decadal growth rate and choropleth techniques have been used in the present study to describe and portraint the regional variations in the growth of total population. Notably, the decadal growth rate for 1981-1991 and 1991-2001 was not calculated due to non-conductance of Census in Jammu and Kashmir State in 1991.

The following formula has been used to calculate the percentage decadal growth rate of population:

Computation of growth rate:

$$PGR = \frac{P2 - P1}{P1} \times K$$

Where: PGR percentage growth rate

P2 Figure of the latest year under study

P1 Figure of the Base year under study

K indicate hundred

Results and discussions

Western Himalayan region is one of the least populated parts of India. The analysis of the data shows that there were marked regional variations in the growth rate of population in western Himalayan stats of India. The growth rate of population in various census reports shows a variation in all the districts of Western Himalayan states, from -2.51% in

Lahul & Spiti to 34.66% in Dehradun during 1981-1991, from 2.13% in Garhwal to 31.42% in Chamoli during 1991-2001 and from -5.17% in Lahul & Spiti to 37.48% in Anantnag during 2001-2011.

Growth of population in Western Himalayan Indian states, 1981-1991

Fig 2 shows that there were marked regional variations in growth rate of population at district level. It varied from -2.51% in Lahul & Spiti district of Himachal Pradesh to 34.66% in Dehradun district of Uttar Pradesh Himalayas (Present Uttrakhand). Thus on the basis of the variation stated above three broad categories can be identified:

High Growth Rate (Above 20.51%): There were 10 districts out of total 35 districts which observed high growth rate above 20.51% during 1981-1991. Major concentrations of districts were observed in southern parts of Himachal Pradesh and northern and western parts of Uttar Pradesh Himalayas (Present Uttrakhand). The highest growth rate has been observed in Dehradun (34.66%) followed by Nainital (30.01%), Hardwar (28.44%), Kullu (26.68%) and Solan (26.02%). This high growth rate may be attributed due to urbanization, migration and other historical and social factors.

Moderate growth rate (15.50-20.50%): 7 districts were placed in this category of moderate growth rate. A large pocket of districts were observed in north western parts of Himachal Pradesh. Besides, the Lahul & Spiti and Tehri Garhwal districts also recorded moderate growth rate.

Low growth rate: (Below 15.50%): The low growth rate below 15.50% was registered in Garhwal (9.05%) followed by Almora (9.43%) and Pithoragarh (14.11%). The Lahul & Spiti districts of Himachal Pradesh recorded negative growth i.e. -2.51% during 1981-1991

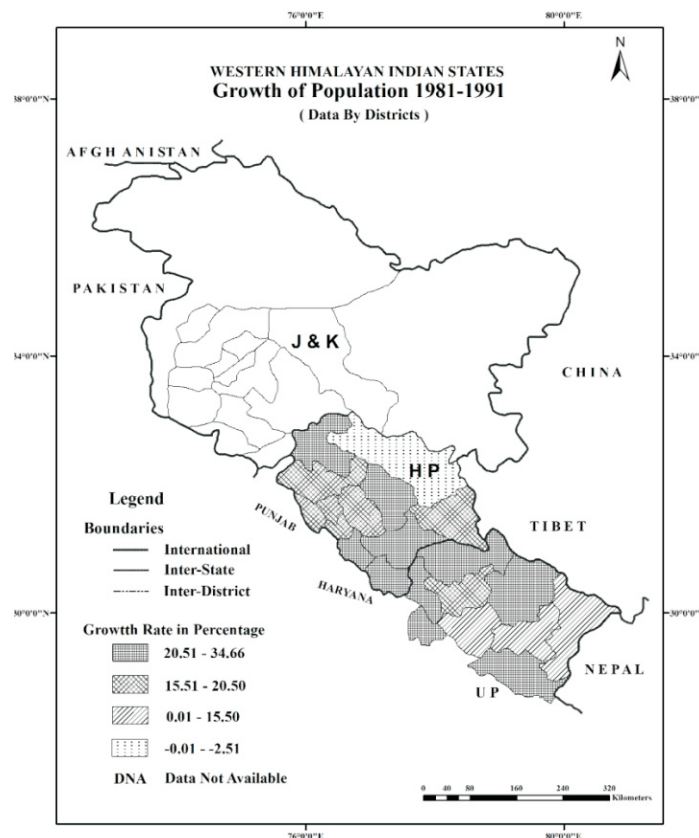


Fig. 2

Growth of population in Western Himalayan Indian states, 1991-2001

The analysis of the data reveals that there were marked regional variations in growth of population at the district level. It varied from 2.13% in Garhwal district to 31.42% in Chamoli district of Uttarakhand. Fig 3 shows the pattern of population growth across different parts of the study area. On the basis of the magnitude of variation as stated above following categories of areas can be identified:

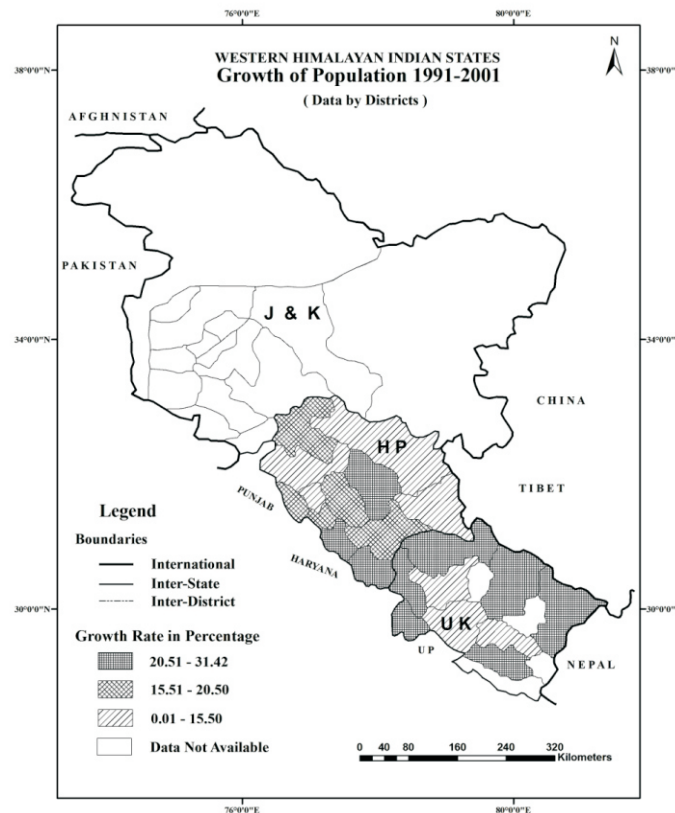


Fig. 3

High growth rate (Above 20.50%): There were 9 districts in the study area, where the decadal growth rate of the population has more than 20.50%. The highest growth rate of population has been recorded in Chamoli (31.42%) followed by Solan (30.94%), Hardwar (28.78%), Dehradun (25.0%), Kullu (26.17%) and Sirmaur (20.78%). This high growth percentage of population is attributed due to Urbanization, better medical facilities and out-migration from surrounding districts. **Moderate growth rate (15.51-20.50%):** 4 districts i.e. Chamba, Mandi, Una, and Shimla observed moderate growth rate during 1991-2001 decade. **Low growth rate (Below 15.50%):** In 7 districts the growth rate has been recorded below 15.50%. These districts covered eastern and western parts of Himachal Pradesh and central parts of Uttarakhand. The lowest growth rate has been observed in Garhwal (2.13%) followed by Tehri Garhwal (4.24%), Lahul and Spiti (6.17%) and Kinnaur (9.91%). These districts experienced relatively low growth rate due to difficulties of terrain, lack of economic opportunities and large scale out-migration. The census data of Jammu and Kashmir was not available because of non-conductance of census in 1991.

Growth of population in Western Himalayan Indian states, 2001-2011

According to 2001-2011 census total population of western Himalayan is 29,522,187 persons which constitute 2.44% population of India's population. The analysis of the data shows that the population of study area during 2001-2011 decade grew at an average rate of 19.47% but there has marked regional variations in growth of population at district level. It varied from 37.48% in Anantnag district of Jammu and Kashmir to -5.10% in Lahul and Spiti district of Himachal Pradesh. Fig 8 shows district-wise growth of population in Western Himalayan Indian states during 2001-2011 decade. On the basis of the magnitude of variation as stated above following categories of areas can be identified:

High growth rate (Above 20.51%): 20 districts, out of total 47 districts recorded high growth rate above 20.51% during recent decade i.e. 2001-2011. Large concentrations of these districts have recorded in Jammu and Kashmir. In addition to it, some minor concentration of districts which have high growth rate also registered in Uttarakhand. The highest growth rate has been observed in Anantnag (37.48%) followed by Ganderbal (36.30%), Kupwara (34.62%), Udham Singh Nagar (33.40%) and Hardwar (33.15%). **Moderate growth rate (15.51-20.50):** Areas belonging to this group, growth rate between 15.51% and 20.50% included 6 districts of the study area. Kathua, Baramula, Kargil, Samba, Una and Sirmaur districts have moderate growth rate during 2001-2011 decade. **Low growth rate (Below 15.50%):** A major concentration of districts which recorded low growth rate has observed in almost entire Himachal Pradesh except Lahul and Spiti and Una districts. Besides these many districts of Uttarakhand also registered low growth rate. The lowest growth rate has been observed in Almora (1.37%), followed by Garhwal (1.51%), Tehri Garhwal (1.92%) and Rudraprayag (4.14). Lahul and

Spiti district of Himachal Pradesh recorded negative growth rate during recent decade.

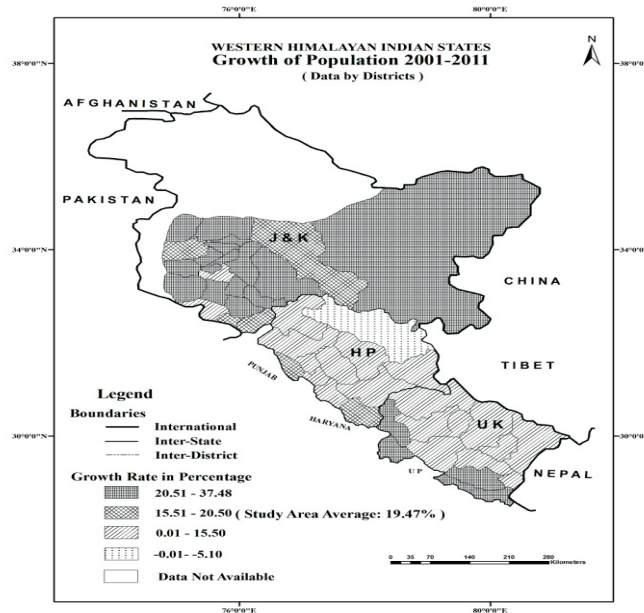


Fig. 4

Conclusion:

The analysis of the district-wise growth rate of population in Western Himalayan States of India during 1981-2011 decades reveals the following facts:

During the decade 1981-2001, there were 10 districts out of total 35 districts which observed high growth rate above 20.51%, 7 districts moderate growth rate (15.50-20.50%) and 4 district recorded growth rate below 15.50%. Whereas, 1991-2001 decade, 9 districts of the study area observed decadal growth rate of the population above 20.50%, 4 district moderate growth rate (15.50-20.50) and 7 districts registered decadal growth rate less than 15.50%. Latest decade i.e. 2001-2011 shows that the population of study area grew at an average rate of 19.47% but there has marked regional variations in growth of population at district level. 20 districts, out of total 47 districts recorded high growth rate above 20.51%, 6 district moderate growth rate (15.150-20.50% and 21 districts observed less growth rate below 15.50%.

It is evident from the study that the majority of the districts of Himachal and Uttarakhand states which registered high growth rate above 20.50% in 1981-1991 decade, now comes under the category of low growth rate (15.50%) during latest census decade i.e. 2001-2011. This transformation may be attributed due to improvement in socio-economic development during the last 30 years. Thus, finally it can be concluded that although there were marked regional variation at district level, but overall the study area experience declined trend in population growth during study periods.

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