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## **SPATIO TEMPORAL ANALYSIS OF POPULATION CHARACTERISTICS IN INDIAN DISTRICT**

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# Spatio Temporal Analysis of Population Characteristics in Indian District

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**Abstract – People thickness is the most key fragment measure with which any leftover section credits are clearly or indirectly related (Ghosh 1985). Thickness of people helps us in understanding nature of people scattering. Examination of thickness of people is huge from the view point of people strain on the resources and related issues. While introducing new moving association, it is indispensable for now thickness of people of a space (Sawant, Athavale 1994). Newline Sex extent is fundamental section characteristics of the geographic examination of a space, since it is huge segment of scene, and it moreover impacts on the other fragment parts. It altogether affects the fragment development of a space (Trewartha, 1953). The concordance between the sexual orientations is a huge piece of people structure. It impacts pace of birth, destruction rate, intimate status, work supply and business. Newline The examination of capability is basic for destroying poverty and mental separation for creating quiet and pleasing overall relations and for permitting the free play of fragment measures.**

**Keywords – Population, Demography, Literacy**

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## INTRODUCTION

The subject geology incorporates wide extent of data subsequently Geography is secluded into two essential branches for instance Actual Geography and Human Geography. Human geography is related to man and his activities on the earth surface have included a huge spot in the control for apparently until the end of time. Coincidentally, with a more important complement on genuine points of view, human segments were throughout missing from the concern of geographers for quite a while, in any occasion till the latter half of the nineteenth century. Towards the completion of the nineteenth century, in any case, the foundation for what came to be known as „human geography“ was by then laid. It was Friedrich Ratzel, who set up the new sub-discipline, i.e., human geography for which he wrote the term „anthropogeographie“.

The contemplations of Vidal de la Blache on human geography were in this way clarified and advanced by his understudies Brunhes. When all is said in done, people remained an excused field in the overall arrangement of human geology all through an enormous piece of the fundamental bit of a century prior. After the Second World War, Kobo made an undertaking to get affirmation of social geography of people as an alternate control in 1947. In the year 1951, Pierre George, a French geographer, curiously, presented a total treatment of current real factors of people in geology. Regardless, the ascent and affirmation of people geography as another sub-part of

human geology is by and large credited to the powerful attestation of Trewartha during the 1950s.

Trewartha (1953) later pointed out, their emphasis was a particularly lot on the social scene, for instance the aftereffect of human activities on the earth (Hassan, 2008). People Geography is one of the bleeding edge portions of Geography. Regardless of the way that geographers have for quite a while been excited about people as an element of their general enquiries into neighborhood examinations with a consideration on spatial dissemination. Glenn T. Trewartha (1953), an unmistakable climatologist is credited to have proposed the chance of an alternate field with a huge focus on POPULATION. "In 1953, Glenn Trewartha of the University of Wisconsin passed on the Presidential area at the Association of American Geographers (AAG) yearly assembling in Cleveland, Ohio. The title of his area was "A Case for Population Geography," and in it he fought that the examination of people, since a long time prior disregarded by the control, justified a more perceptible circumstance in Geography's plan" (Trewartha, 1953).

## OBJECTIVES:

1. To consider the actual setting of study district as a base of populace qualities.
2. To look at development of populace regarding reality. .

3. To look at effect of watered territory on thickness of populace in District and to gauge pace of progress in thickness according to inundated region.

## REVIEW OF LITERATURE

For the current assessment, the composition of different sorts has been insinuated. The work of the geographer is central in consolidating the disclosures of various orders and in presenting broad picture of an issue that may then provide for the coordinators for rectifying. It is amazingly basic to have a compact review of the earlier assessments in that specific region.

### Population Growth

Various geographers have been made an investigation of populace development some of them are as under.

**Buddy S. K. (1972):** has considered populace development of million or more urban areas of India. The primary target of this examination is to break down patterns in populace development of India. The examination depends on optional information. He reasons that there is positive development of populace in India.

**Mishra R. N. (1973):** considered development of populace in lower Ganga. He broke down spatial contrast in populace in upper and lower Ganga bowl. For this investigation he utilized essential and optional information. In this examination he inferred that the lower Ganga bowl, the variety of populace was firmly connected with the conveying limit of land, type and ripeness of soil, water system offices, nature of yields, methods for exchange and business, low passing rate and high rates of birth.

**Chandna R. C. (1974):** contemplated Growth of Rural Population in Rohtak and Gurgaon District. He talked about the development of provincial populace in Rohtak and Gurgaon areas by utilizing town astute information and analyzed the effect of nearness of Delhi in regard to this. He inferred that the most elevated development rate is knowledgeable about the towns situated on the streets emanating from Delhi.

**Beam Phanibhusan (1979):** has considered strategies for portraying development of populace. The fundamental goal of his investigation is to break down local pattern in development of populace. He considered the local pattern of development of populace concerning centrograms. He investigated the changeability in development of populace, which is measured by Geddes inconstancy file or by coefficient of variety. He inferred that there are a few strategies for examining populace development.

**Chandna R. C. (1979):** has examined Growth of Population in Haryana. The primary target of this investigation is to examine patterns of populace

change in Haryana. The investigation is completely founded on optional information. In this investigation, he gave a detail spatial example of development and talked about connection in the middle of development and thickness. He presumed that there is fast populace development after autonomy.

### Appropriation and Concentration of Population

**Trewartha G. T. also, Zelinsky Wilbur (1955):** Studied Population dissemination and change in Korea. The primary target of his examination is to dissect spatial example of Population circulation in the investigation area. The examination depends on optional information. In this paper they give a detail examination of dispersion example of the country populace and metropolitan populace in Korea. They presumed that regular increment and movement are the two components of the areal example of populace dispersion because of regular citizen and military losses in North Korea during the new struggle have additionally enlarged the segment differential between the two Korean republics.

**Brush J. E. (1968):** contemplated spatial examples of populace in Indian urban communities. The principle objective of this investigation is to break down spatial examples of Indian intra metropolitan populace dissemination and its adjustment of chose urban areas. The investigation depends on essential and optional information. He expressed that the Indian urban communities have an example of critical development portrayed by rising private focus in the downtown area without ward extension and fringe populace increment.

**Krishnan G. (1971):** considered Distribution and Density of Population in Upper Bari Doab, Punjab. The primary goal of this examination is to investigate dissemination and thickness of populace. The examination depends on auxiliary information. The paper gives a detail clarification of the great thickness, which is identified with serious agribusiness advancement.

**Kumar K. (1973):** contemplated Pattern of Population in Mandakini Valley. The primary target of this investigation is to break down spatial example of thickness. He clarified the example of circulation of populace in Mandakini valley wherein he inferred that the mid segment of valley is thickly populated and the thickness of populace diminishes towards the source region with expansion in height.

**Shastri P. S. (1974):** Studied Potential, Model and the Spatial Distribution of Population in Vidarbha. The principle objective of his examination is to consider the distributional examples of populace around there. He utilized the likely model to look at the dissemination of populace in Vidarbha. He reasoned that there is contrast among expected and noticed size of provincial populace.

**Siddiqui F. A. (1978):** Studied Agricultural Density and its Changing Pattern in the Uttar Pradesh. The fundamental goal of this examination is to break down agrarian thickness and changes there in Uttar Pradesh. The examination depends on optional information. In this examination he said that example of farming thickness was mostly dictated by physiographic and financial conditions.

**Gill M. S. (1980):** Studied dissemination and thickness of provincial populace in Hissar locale of Haryana. The principle objective of this examination is to investigate populace conveyance as indicated by provincial settlement, cast and locale. The investigation depends on auxiliary information. He gave four sorts of populace designs for example high, moderate, low and un-occupied spaces of populace.

**Sharma H. N. also, Panda G. K. (1980):** contemplated spatial examples of populace thickness around there. The fundamental goal of this examination is to investigate distributional example of thickness. The examination depends on essential and auxiliary information. He clarified examples of populace thickness in three gatherings like high, moderate and low thickness.

**Roy P. (1982):** considered patterns in populace rearrangement in west Bengal. The principle objective of this investigation is to follow out patterns in populace rearrangement. The investigation depends on optional information. She broke down convergence of populace and focus list of populace.

**De N. K. what's more, Bera A. K. (1984):** considered spatial parts of populace dispersion in Bankura area. The principle objective of this examination is to dissect spatial circulation of populace. The examination depends on optional information. They inferred that eastern piece of region has high convergence of populace than western part because of modern and farming turn of events.

## LITERACY

A number of geographers and social scientists have made their valuable contribution in the field of literacy.

**Gopal K. and Shyam M. (1973):** studied spatial perspective on progress of female literacy in India. The main objective of this study is to assess present status of female literacy. The study is entirely based on secondary data source. They analyzed spatial pattern of female literacy in India in temporal prospect and concluded that areal variations in female literacy are related to male literacy, age-at-marriage, and degree of urbanization.

**Gopal K. and Chandna R. C. (1974):** have studied patterns of literacy in Haryana. The main objective of this study is to analyze spatial pattern of literacy. The

study is based on secondary data. In this study they analyzed the spatial pattern of rural urban sex ratio.

**Gosal G. S. (1979):** studied spatial perspective of literacy in India. The main objective of this study is to analyze gender disparity in literacy. The study is based on secondary data. In this study he explained male-female and rural-urban differential in literacy and concluded that average national literacy is related with (i) coastal or nearcoastal location, (ii) progressively developing economy, (iii) tradition of emigration and out-migration, (iv) early start of education, (V) relatively high degree of urbanization etc.

**Ramotra K. C. (2000):** studied literacy and educational attainment in Ralegansiddhi. In this study he examined the caste-wise literacy, educational attainment and male-female disparity based on primary data. David Sopher's disparity index has been used. He stated that literacy rate has increased and malefemale disparities have declined in the study area. He concluded that literacy and levels of educational acquisition have increased tremendously with the change in other social and economic conditions of the people in Ralegansiddhi for which the credit goes to Shri. Anna Hazare, an architect of this unique „model village“.

## METHODOLOGY

In the current examination, tahsil has been considered as an essential unit of examination. The investigation of spatio-transient changes in populace qualities incorporates development rate, circulation, thickness, sex proportion, proficiency rate, rate of birth, demise rate, movement and HR advancement in the examination locale.

In the main period of exploration, the information gathered from various sources are handled and investigated; guides and charts are additionally utilized for successful examination of the important factual data relating populace qualities and pointers of human asset improvement of the region concerned. Following different quantitative methods have been utilized to examine the information.

**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<sub>n</sub> = is the Population at the end of the period

Po= is the Population at the beginning of the period

**Population densities are calculated with the help of following formulas**

1. Crude Density or Arithmetic =  $\text{Total Population} \div \text{Total Area}$
2. Rural Density =  $\text{Total Rural Population} \div \text{Total Rural Area}$
3. Urban Density =  $\text{Total Urban Population} \div \text{Total Urban Area}$
4. Agricultural Density =  $\text{Total Agricultural Population} \div \text{Total Cultivated Area}$
5. Physiological Density =  $\text{Total Population} \div \text{Total Cultivated Area}$

**Sex ratio is calculated in terms of number of females per thousand males. It is calculated as under:**

1. General Sex Ratio =  $\text{Total female population} \div \text{Total male population} \times 1000$
2. Rural Sex Ratio =  $\text{Total rural female population} \div \text{Total rural male population} \times 1000$
3. Urban Sex Ratio =  $\text{Total urban females population} \div \text{Total urban male population} \times 1000$

**To calculate the literacy rate following formula is used**

1. General Literacy Rate =  $\text{Total Literate population above 7 year} \div \text{Total population} \times 100$
2. Rural Literacy Rate =  $\text{Total Rural literate population above 7 year} \div \text{Total Rural population} \times 100$
3. Urban Literacy Rate =  $\text{Total Urban literate population above 7 year} \div \text{Total Urban population} \times 100$
4. Male Literacy Rate =  $\text{Total Male Literate population above 7 year} \div \text{Total Male population} \times 100$
5. Female Literacy Rate =  $\text{Total female Literate population above 7 year} \div \text{Total female population} \times 100$

## CONCLUSION

The examination of people attempts to perceive, request, depict and take apart the issues of people characteristics. It is in like manner stressed over

examination of nearby assortment being developed and scattering of people, people structure, pace of birth, passing rate, migration and human resource improvement. In the current assessment, an undertaking has been made to consider the spatio-transitory assortment and changes in people ascribes in Indian region during the hour of 1961 to 2011.

The genuine scene of the area is separate by incline scopes, Plateau and fields, which have cozy relationship with people dissemination. The Western limit is obvious by the water partition of Western Ghats, with a stature running from 1006 to 609 meter from mean sea level. This slanting topography presents the low thickness of people. The region incorporates two level area for instance Kolhapur level and Gadhinglaj level. Both these level areas are positive for human habitant and independently populated. The Central Eastern piece of the Kolhapur region is covered by plain region. The streams in this plain area have developed the flood fields with thick layer of alluvium soil, which is retentive in moistness and ready. This plain domain is for the most part extraordinary for people obsessions.

The Panchganga, Dudhganga, Vedganga channels the lion's offer central piece of the space. The North Eastern lined part is drained by Krishna stream. The North eastern piece of the assessment domain goes under the Warna bowl, while the Southern part is drained by Hirnaykeshi and Ghatprabha. This stream bowls has comparably particularly high centralization of people when stood out from various zones. Climate chooses the spatial dispersal of people around there. The breaking point Western part gets heavy precipitation and hence, this area has incredibly low gathering of people. The central bits of the district have great precipitation and hereafter the force of people center is high. Considering temperature the Western piece of the space is cooler than the Eastern parts, which negatively impacts on people center. The domain being scrutinized has medium to significant dull alluvial soils in the Central and North Eastern stream plain zone, thinking incredibly high people. Laterite, Raddish-Brown soils of the Western part with which act ominously on people happened into sparsely populated.

While inspecting the general population improvement of Kolhapur region, unmistakably the general population was lessened in the principle numerous long stretches of 20th century. After 1921 enlistment the quantity of occupants in Kolhapur region started extending. As such, the year 1921 is doled out as "The Great Divide" as in it is the pivotal turning point which means the beginning of common turn of events and moreover the beginning of a quick and tremendous people increase. Plainly, the outright people has gotten more than twofold in a period of 40 years that is from 1921 to 1961. It shows that mortality has been declined essentially in light of the improvement in clinical office and correspondence.



Totally the general population change at the district level for instance Kolhapur region compares with that of Maharashtra state and India. This model owes to a reduction in mortality and doing combating decline in wealth. During latest fifty years the quantity of occupants in the assessment area extended in altogether numbers yet the assortment rate showed declining design from 1961-71 to 2001-2011 as it is the delayed consequence of Five Year Plans, improvement in clinical workplaces to control ailments and plagues, execution of Family Welfare Programmers to control pace of birth, openness of informational workplaces, improving proficiency rate particularly among ladies.

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