

# A Study on Population Geography: An Overview of Basic Tool in Population Geography

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**Abstract – Geography of populations is a branch of human geography, which focuses on the study of individuals, geographical distribution, features and density. It is the analysis of how spatial differences in births and deaths are connected to location, distribution, structure, migration and population development. Geographers of cultures aim to explain their communities, the composition of a society and the manner in which social changes and processes alter. The regional population represents ethnic variability but is often strongly associated with migration and spatial demography. New theoretical insights have become more and more important in the sub disciplinary sector.**

**Key Words: Geography, Geographic Distribution, Geographic Information Systems**

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## INTRODUCTION

The biggest resource in the world is people. Every country's economic development relies on a given country's population. If a country's population increase is very high so the planning initiatives would be hard to guarantee that socio-economic increase levels are reduced. Citizens should be appropriate to exploit the country's natural resources. Consequently, citizens are one of the main tools that play a critical role in deciding a region's economy. The value of geography studies is that it plays an significant role in the strategy of the city. Any practical area preparation is feasible with the aid of demographic forecasting. The distribution pattern of the individual on the earth's surface is the topic of population geography. Studies were deeply underlined as they present a key concept those circles around other regional concepts. Population studies can then take centre stage in spatial study. [1]As the population expands in space and time, diverse theories about the population's position in various areas of the planet must be understood. Since in certain places demographic demands on crops are so strong that it nullifies a region's rhythm of economic growth and jeopardizes social and economic planning steps. Population pressure on natural capital is rising with the increasing population increase particularly in emerging and underdeveloped nations of the world, which are in need of more strategic preparation and usage of resources.

Public geography, a specialization of human geography and a component of demographic sciences, sciences how spatial differences of distribution, form, features and population

development contribute to the existence of location. As a theoretical domain of population geography the trends and processes of changes in population density in each defined region take place in spatial and temporal discourses. The geographer of the community therefore answers many issues such as: what is the demographic trend of any area? What are the mechanisms contributing to the observed population distribution pattern? How do the community of every city and environmental factors of the region contribute to each other? Then the definition of community size and the rise, age, distribution and composition are widely discussed in community geography. Migration, reproduction, death, race, age, etc. are some.[2]

## POPULATION GEOGRAPHY

Population is not a demographic survey that is directed at increasing consciousness of the negative results of population development and remediation steps for the economy and the community.

- Prevention and remedial action on population development.
- Information on demographic problems such as ageing, ageing and relocation, as well as its corrective steps to monitor increasing population development.
- The aim is to improve people's quality of life. A demographic research is performed in the different areas of healthcare in a sample of people from the general community who have a similar trait, such

as old age, sex or fitness. For multiple factors, such as their reaction to a medication or their chance of contracting an illness, this category can be observed.[3]

The most significant fields analyzed include large demographic growth, pregnancy and family trends; wellness, ageing and mortality; and consumer and labor markets.

- Population studies Researchers often work on methods of demographic research.
- Interdisciplinary field of research is the community analysis: students from social studies, epidemiology, sociology, finance, anthropology and several other disciplines study populations.

## NATURE OF POPULATION GEOGRAPHY

The word 'people' refers to the topic and 'geography' refers to the context of the inquiry in the expression 'urban geography.' The geography of people includes studying the human nature of the planet and its varied aspects in terms of the physical and cultural climate. Even though communities are an existing subfield of human geography at the beginning of the 21st century, that was not always the case.[4]

- G. T. Trewartha, 1953 is remembered as an initial invitation to create a sub-disciplinary population geography. Because much of mankind in the planet resides in less-developed areas of the world, the world's first half of the 20th century accounted for a considerably higher proportion of the net adds.
- The need for a more comprehensive accounting of community characteristics culminated in a shift from macro- to micro-level research, encouraging demographic mapping in turn.
- Growing global population increase persists. The the availability of population data after the Second World War rendered it possible to chart such demographic statistics from numerous parts of the world. The understanding of population growth and its effect on economic development among individuals has increased.
- Migration of the population within its borders from agricultural to urban areas has also started in the least developed countries. The disaster and the many challenges in major cities became an significant subject for geographers' study. [5]

## MODERN POPULATION GEOGRAPHY

However, in reaction to the winds of intellectual and quantitative transition, which swept through human geography over the last couple of decades, the subject's space and ecologic approach to population phenomena is still a major feature and distinctive element of population geography. Almost all of those developments have been adopted and implemented in areas other than population geography, especially in economic and urban geography where new insights and techniques have come from other disciplines, but their acceptance by population geographers is rapid and significant – to the degree that methods used are less special to demographics. Some may lament this, which erodes the reduction in the population geography, but another opinion is that such a system and culture of ideas forecast the well-being of the broader body of geography, the parent discipline. [6]

## BASIC TOOLS IN POPULATION GEOGRAPHY

Several methods for describing the space differences in the existence of people in a specific region are used in population geography. Geographical interpretation of population dynamics are the methods most widely employed (i) count (ii) rate (iii) ratio (iv) proportion, and (v) proportion (vi) Cohort measure (vii) Period measure

### Count

This is the total number of individuals or population incidents that arise in a geographic location at a particular moment. In 2016, for example, there were 7.4 billion people globally.[7]

### Rate

This corresponds to the incidence level (usually one year) of every demographic occurrence in a population dispersed by the population at risk of the incident in a defined time frame. It shows the normal or unusual incidence of a demographic phenomenon. For example, the worldwide fertility rate (number of births per 100 people worldwide) for 2016 was 2.5%.

### Ratio

This is the percentage of one sub-group community and one sub-group or another. For eg, for 2016, 101 males per 100 female population are the world's sex ratio, and 20 births per 1000 female population worldwide.

## Proportion

This applies to a sub-group's interaction with the general population. This may be taken from the separation of a nation by the nation as a whole. 54% of the world's people resided in metropolitan regions, for example in 2016.

## Cohort measure

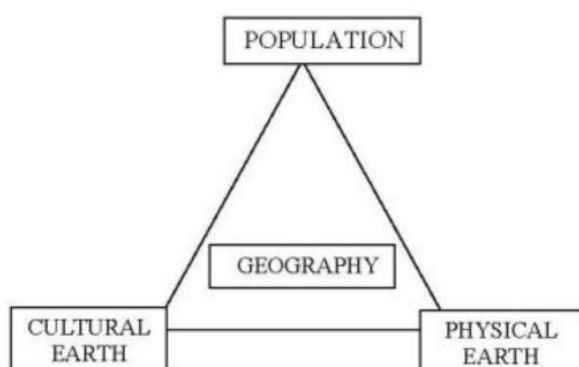
This is a dataset measuring cohort demographic occurrences (that is a community of individuals with similar demographics who have been experienced over time). For example, the birth cohort refers to the historical database of individuals who are born in a specified year). Others comprise the class of marriage and graduation.

## Period measure

This instrument analyses incidents that arise over a span of time for all or a portion of a population. In other terms, at any given moment, this test "takes a snapshot" of a community or of some group. E.g. the global population death rate was 36 per thousand births in 2016.

## THE MAKING OF POPULATION GEOGRAPHY

Population geography owes the presidential address given at the Association of American Geographers' Annual Meeting in 1953 to its structured origins as a sub discipline of geography. Geography was then usually split into two areas : physical geography and cultural geography. In his speech he made a spatial bureaucratic tirade comprising of the people, the natural environment and the spiritual universe. This tirade involves individuals, the physical world and the cultural climate in more modern terms. The natural and cultural ecosystems have been put at the base and community at the top (Figure).[8]



**Figure. Trewartha's depiction of Population as the apex of the field of Geography**

## Population distribution/density

The human race is unevenly distributed worldwide. The global population of 7.4 billion is projected to

exist on 510 million kilometres of land and their number varies between areas. The distribution of the population is a scheme or multiplication of citizens who reside in a specific region and is often the most popular indicator of demographic strain on the surface of the land according to sex caste, urbanisation, age, etc. It indicates the number of citizens in the region of the network. The amount of people can be determined by dividing the estimated population of a country by the total area of land in the nation. World density of the population.[9]

## POPULATION DISTRIBUTION

The distribution of populations is a community structure in a given region in line with the circumstances and demands of society. Geography of people is a human geography category. It explores how spatial changes in distribution, structure, migration and demographic development are connected to the existence of locations. In spatial terminology, populations are used in community geography. It concentrates on the properties of spatially shifting population distributions. For example, population density maps will explain. Such map forms that reflect the population's geographical structure are choropleth, separated and maps.<sup>4</sup> The distribution of communities is a collective process when a variety of variables have been incorporated. Furthermore, the element will help to determine how the community divides the workers, the economic property at the moment, the past of slavery, and immigration to the benefit of natural conditions. The world population is unequal since some areas are deemed agricultural, while others are heavily settled and more developed. Geographers with an interest in population growth often research historical demographics in order to explain whether and how small regions are currently converted into major urban centres. The population of the planet is rising high. The population of the planet surpassed 1 billion in 1820. Six billion individuals were achieved in 1990. The world's population currently stands at more than 7 billion, most of them in the developed world. As the Manufacturing Revolution slowed down from 1700 on, population development accelerated dramatically. Owing to medical advancements and a large rise in agricultural production, particularly in the early 1960s, triggered by the Green Revolution, the population growth trend has risen much more rapidly over the last 50 years. The world's population is projected to plateau in the future and then decrease because of demographic, health, land depletion and environmental risks. One estimate predicts that by the end of the 21st century, the world's population would most definitely cease to rise. Moreover, the population is expected to drop until 2100.[10]

## URBANIZATION

Urbanization is an economic and social phenomenon with an indication that the growth of the urban world is steadily increasing and the population is growing in towns, especially the big towns, and the expansion of metropolitan life. By 2050 64.1% and 85.9% of emerging and industrialized countries are expected to be urbanized respectively. Urbanization is strongly correlated with growth, industrialization and the sociological rationalization phase. Today, more than 20 million people reside in Asian urban centres, including Dhaka, Karachi, Mumbai, Delhi, Manila, Seoul and Beijing while in the Delta of the Pearl River, Shanghai-Suzhou and Tokyo it is expected that each would exceed or surpass 40 million inhabitants within the next decade. The country's implementation of a hybrid economy has contributed to growth of the private sector. This has contributed to urbanisation in India increasing since independence. In India, urbanisation happens more quickly. According to a census of 1901, the population of metropolitan areas of India was 11.4%. According to the 2001 Census this number rose to 28,53%, then by 30% according to the 2011 Census, to 31,16%. In 2007, 40.76 percent of the region's population is anticipated to live in metropolitan areas before 2030, according to a United Nations State Global Population Report.[9] As it stands for the World Bank, India will lead the global urban population by 2050 alongside China, Indonesia, Nigeria and the United States. It is the biggest city by population in China, preceded by Delhi with a population of 11 million. Mumbai accommodates up to 12.5 million inhabitants. The population of Delhi increased by 4.1 per cent, Mumbai by 3.1 per cent and Kolkata by 2 per cent as per 2011 census, compared with the 2001 census, the highest pace of urbanisation in the country, according to the 2011 census. Estimated population growth figures by 2015 at current rate; 26 million in Delhi; 24 million for Mumbai, 16 million for Kolkata, 11 million for Bangalore, Chennai and 10 million for Hyderabad. The Technological Revolution of the 18th century contributed to powerhouse nations such as the USA and England, but the situation is declining. The urban development trend in India is 2.07%, a major improvement compared to 7.6% in Rwanda. The population in India is about 300 million.

## CONCLUSION

This paper illustrates how population growth is rising increasingly. The distribution of citizens would rise exponentially in the next year. Countries with a big population can regulate immigration and population growth as they are legal like China. In the future high demographic countries would therefore face a huge amount of demographic-related challenges in environment, infrastructure, etc. In the statistics we see how mostly the population density in India is growing. Owing to certain variables including

geography, vegetation, altitude and latitude, human distribution in the world is unequal.

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