

Content

| Chapter | Title | Page |
|----------------|--|-------------|
| 1 | Human Geography – Nature & Scope..... | 01 |
| 2 | The World Population - Distribution, Density & Growth..... | 04 |
| 3 | Population Composition..... | 09 |
| 4 | Human Development..... | 13 |
| 5 | Primary Activities..... | 17 |
| 6 | Secondary Activities..... | 25 |
| 7 | Tertiary and Quaternary Activities..... | 31 |
| 8 | Transport and Communication..... | 36 |
| 9 | International Trade..... | 46 |
| 10 | Human Settlements..... | 52 |

Credits

The NCERT of Class 12 Fundamentals of Physical Geography has been referred while preparing this PDF notes. All the facts, information and data has been taken from NCERT textbook itself. The facts, information and data has been organised in a reading friendly manner for students so that they can understand it easily.

Chapter 2 – The World Population (Distribution, Density & Growth)

The people of a country are its real wealth, ultimately a country is known by its people so It is important to know how many women and men a country has, how many children are born each year, how many people die and how, weather they live in cities or villages, can they read or write and what work do they do.

By studying the distribution of the people govt will be able to serve them well with better health planning, education planning, employment planning, housing planning, food supply etc.

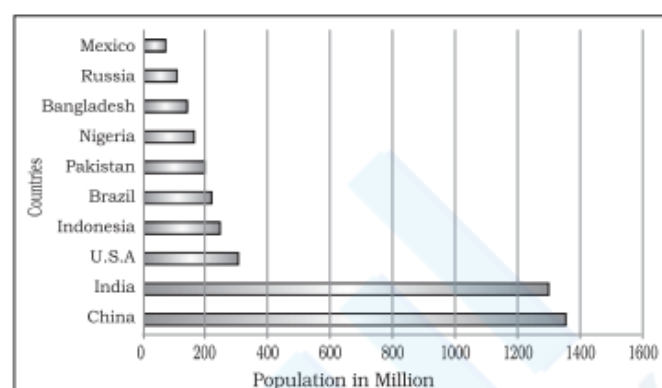
The population of the world is unevenly distributed. The remark of George B. Cressey about the population of Asia that “Asia has many places where people are few and few place where people are very many” is true about the pattern of population distribution of the world also.

Patterns of Population Distribution in the World

Patterns of population distribution and density help us to understand the demographic characteristics of any area. The term population distribution refers to the way people are spaced over the earth’s surface. Broadly, 90 per cent of the world population lives in about 10 per cent of its land area.

Note: Demographic characteristics means the age, gender, education, professions, occupation, income level and marital status of the people.

The 10 most populous countries of the world contribute about 60 per cent of the world’s population. Of these 10 countries, 6 are located in Asia, they are:



Most Populous Countries

Density of Population

Population density is a **measurement of the number of people in an area**. It is usually measured in persons per sq km.

How to calculate:

$$\text{Density of Population} = \frac{\text{Population}}{\text{Area}}$$

The most common way is to divide the total population of an area by the total land area. Population count is collected from the census and land area is collected from local municipality.

Check the table to know the region wise density of population:

Region wise Density of Population

| Region | Population (2018) | Land Area (Km ²) | Density (P/Km ²) | World Share (in percentage) |
|---------------------------------|-------------------|------------------------------|------------------------------|-----------------------------|
| Asia | 4,545,133,094 | 31,033,131 | 146 | 59.5% |
| Africa | 1,287,920,518 | 29,648,481 | 43 | 16.9% |
| Europe | 742,648,010 | 22,134,900 | 34 | 9.7% |
| Latin America and the Caribbean | 652,012,001 | 20,139,378 | 32 | 8.5% |
| Northern America | 363,844,490 | 18,651,660 | 20 | 4.8% |
| Oceania | 41,261,212 | 8,486,460 | 5 | 0.5% |

Factors influencing the distribution of population

1. Geographical Factors:

- Availability of water: People prefer to live in areas where fresh water is easily available, that is why river valleys are among the most densely populated areas of the world.

- Landforms: People prefer living on flat plains and gentle slopes. This is because such areas are favourable for the production of crops and to build roads and industries. The mountainous and hilly areas hinder the development of transport network, So, these areas tend to be less populated. The Ganga plains are among the most densely populated areas of the world while the mountains zones in the Himalayas are scarcely populated.
- Climate: people prefer areas with a comfortable climate where there is not much seasonal variation. Areas with very heavy rainfall or extreme and harsh climates have low population. Mediterranean regions were inhabited from early period due to their pleasant climate.
- Soils: Fertile soils are important for agricultural and allied activities. Therefore, areas which have fertile loamy soils have more people living on them as these can support intensive agriculture.

2. Economic Factors:

- Minerals: Areas with mineral deposits attract industries. Mining and industrial activities generate employment. So, skilled and semi-skilled workers move to these areas and make them densely populated. Example: Katanga Zambia copper belt in Africa
- Urbanisation: Cities offer better employment opportunities, educational and medical facilities, better means of transport and communication and that is what people draws to cities. It leads to rural to urban migration and cities grow in size. Mega cities of the world continue to attract large number of migrants every year.
- Industrialisation: Industrial belts provide job opportunities and attract large numbers of people. These include not just factory workers but also transport operators, shopkeepers, bank employees, doctors, teachers and other

service providers. Example: The Kobe-Osaka region of Japan.

3. **Social and Cultural Factors:** Places with religious or cultural significance attract more people. In the same way – people tend to move away from places where there is social and political unrest. Example: Haridwar

Population Growth

It refers to the change in number of inhabitants of a territory during a specific period of time. This change may be positive as well as negative.

Population change in an area is an important indicator of economic development, social upliftment and historical and cultural background of the region.

Some Basic Concepts of Population Geography

- Growth of Population: Change of population in particular area between two points of time is known as growth of population.
- Growth Rate of Population: This is the change of population expressed in percentage.
- Natural Growth of Population: This is the population increased by difference between births and deaths in a particular region between two points of time.
 - Natural Growth = Births - Deaths
 - Actual Growth of Population: This is Births - Deaths + In Migration - Out Migration
- Positive Growth of Population: This happens when the birth rate is more than the death rate between two points of time or when people from other countries migrate permanently to a region.
- Negative Growth of Population: If the population decreases between two points of time, It occurs when the birth rate falls below the death rate or people migrate to other countries.

Components of Population Change

There are three components of population change – births, deaths and migration:

- **Births:** It refers to the number of new births i.e population increases. The crude birth rate (CBR) is expressed as number of live births in a year per thousand of population. It is calculated as:

$$\text{CBR} = \frac{B_i}{P} \times 1000$$

Here, CBR = Crude Birth Rate; B_i = live births during the year; P = Mid year population of the area.

- **Death:** It refers to the number of people dying every year i.e population decreases. Crude Death Rate (CDR) is a simple method of measuring mortality of any area. It is expressed in terms of number of deaths in a particular year per thousand of population in a particular region. It is calculated as:

$$\text{CDR} = \frac{D}{P} \times 1000$$

Here, CDR = Crude Death Rate; D = Number of deaths; P = Estimated mid-year population of that year.

- **Migration:** When people move from one place to another, the place they move from is called the **Place of Origin** and the place they move to is called the **Place of Destination**. The place of origin shows a decrease in population while the population increases in the place of destination. Migration may be permanent, temporary or seasonal. It may take place from rural-to-rural areas, rural to urban areas, urban to urban areas and urban to rural areas.

Note: Immigration: Migrants who move into a new place are called Immigrants.

Emigration: Migrants who move out of a place are called Emigrants.

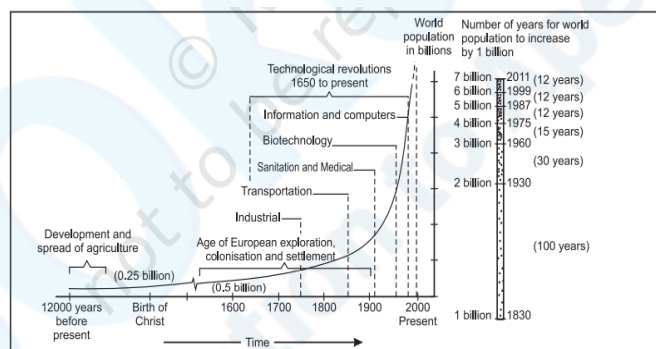
There are two sets of factors that influence migration:

- **The Push factors** make the place of origin seem less attractive for reasons like unemployment, poor living conditions, political turmoil, unpleasant climate, natural disasters, epidemics and socio-economic backwardness.

- **The Pull factors** make the place of destination seem more attractive than the place of origin for reasons like better job opportunities and living conditions, peace and stability, security of life and property and pleasant climate.

Trends in Population Growth

The population on the earth is more than seven billion. It has grown to this size over centuries. In the early periods population of the world grew very slowly. It is only during the last few hundred years that population has increased at an alarming rate.



Resource, Technology and Population Growth

Look at the figure we will notice that, after the evolution and introduction of agriculture about 12,000 to 8,000 years ago, the size of population was small – roughly 8 million.

The expanding world trade during the sixteenth and seventeenth century, set the stage for rapid population growth.

Around 1750, at the dawn of the Industrial Revolution, the world population was 550 million.

And after the 18th century population growth took a massive jump because of Industrial Revolution, transportation, medical advancement, biotechnology, information technology etc. due to this life expectancy increased, standard of living improved, mortality rate decreased and due to this world population exploded in the eighteenth century.

Doubling Time of World Population

There is a great variation among regions in doubling their population. Developed countries take more time to double their population as compared to developing countries. Most of the

population growth is taking place in the developing world, where population is exploding.

Doubling Time of World Population

| Period | Population | Time in which Population Doubles |
|-------------|--------------------------------|----------------------------------|
| 10,000 B.C. | 5 million | |
| 1650 A.D. | 500 million | 1,500 years |
| 1804 A.D. | 1,000 million | 154 years |
| 1927 A.D. | 2,000 million | 123 years |
| 1974 A.D. | 4,000 million | 47 years |
| 2025 A.D. | 8,000 million projected figure | 51 years |

Source: Demographic Year Book, 2009-10

Spatial Pattern of Population Change

The growth of population is low in developed countries as compared to developing countries. There is negative correlation between economic development and population growth.

Growth of Population 2010-15 over 1990-95

| Region | Growth Rate | |
|--|-------------|---------|
| | 1990-95 | 2010-15 |
| World | 1.6 | 1.2 |
| Africa | 2.4 | 2.6 |
| Europe | 0.2 | 0.1 |
| North America | 1.4 | 0.8 |
| Latin America & Caribbean | 1.7 | 1.1 |
| Asia | 1.6 | 1.0 |
| Oceania (Australia, New Zealand and Fiji) | 1.5 | 1.5 |

Although the annual rate of population change (1.4 per cent) seems to be low, it is actually not so. This is because:

- When a small annual rate is applied to a very large population, it will lead to a large population change.
- Even if the growth rate continues to decline, the total population grows each year. The infant mortality rate may have increased as has the death rate during childbirth.

Impact of Population Change

A small increase in population is needed in a growing economy, however if it increases beyond a certain level leads to problems. Because the natural resources are limited and allocating them among the population will be difficult that can lead to depletion of resources resultant inflation, price rise, poverty basically economic imbalance.

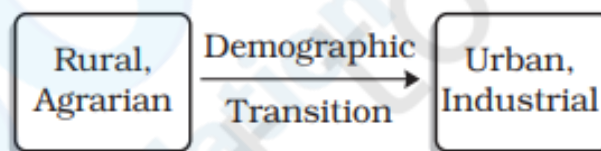
Population decline is also a matter of concern. It indicates that resources that had supported a

population earlier are now insufficient to maintain the population. Example: The deadly HIV/AIDS epidemics in Africa and some parts of the Commonwealth of Independent States (CIS) and Asia have pushed up death rates and reduced average life expectancy. This has slowed down population growth.

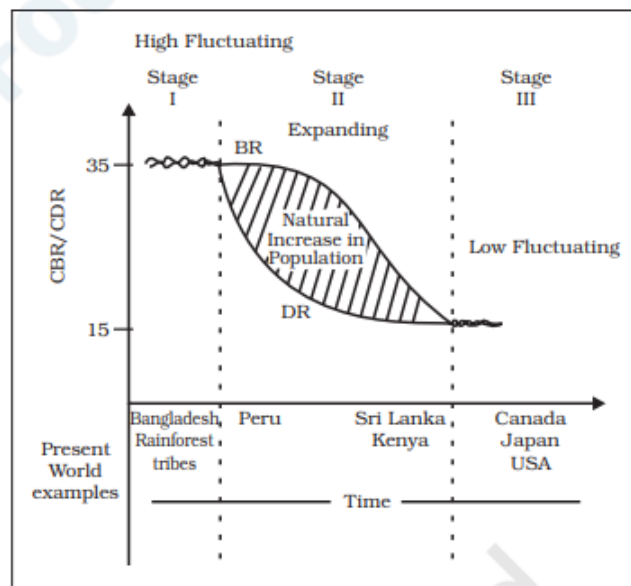
Demographic Transition

Demographic transition theory can be used to describe and predict the future population of any area.

The theory tells us that population of any region changes from high births and high deaths to low births and low deaths as society progresses from rural agrarian and illiterate to urban industrial and literate society. These changes occur in stages which are collectively known as **the demographic cycle**.



This demographic cycle can be classified in 3 stages:



Demographic Transition Theory

- In the first stage, around two hundred years ago i.e pre industrial society people are only engaged in agriculture. Life expectancy is low, people are mostly illiterate and have low levels of technology however has high fertility and high mortality because people

reproduce more to compensate for the deaths due to epidemics and variable food supply.

- In the beginning of second stage fertility remains high but it declines with time. This is accompanied by reduced mortality rate. Improvements in sanitation and health conditions lead to decline in mortality.
- In the last stage, both fertility and mortality decline considerably. The population is either stable or grows slowly. The population becomes urbanised, literate and has high technical knowhow and deliberately controls the family size.

This shows that human beings are extremely flexible and are able to adjust their fertility. So, this stage defines the demographic transition theory.

Population control measures

Some of the measures that are used to help in population control are:

- Family planning services.
- free availability of contraceptives
- Tax disincentives for large families.

Thomas Malthus in his theory (1798) stated that the number of people would increase faster than the food supply. Any further increase would result in a population crash caused by famine, disease and war.

The preventive checks are better than the physical checks. For the sustainability of our resources, the world will have to control the rapid population increase.

Chapter 3 – Population Composition

People of any country are diverse in many respects. People can be distinguished by their age, sex and their place of residence. Some of the other distinguishing attributes of the population are occupation, education and life expectancy.

Sex Composition

The ratio between the number of women and men in the population is called the Sex Ratio. It is calculated by using the formula:

$$\frac{\text{Female Population}}{\text{Male population}} \times 1000$$

or the number of females per thousand males.

The sex ratio is an important information about the status of women in a country. In regions where gender discrimination is rampant, the sex ratio is bound to be unfavourable to women.

Such areas are those where the practice of female foeticide, female infanticide and domestic violence against women are prevalent and these all problems are the outcomes of low socio-economic status of women in these areas.

On an average, the world population reflects a sex ratio of 102 males per 100 females. The highest sex ratio in the world has been recorded in Latvia where there are 85 males per 100 females. In contrast, in Qatar there are 311 males per 100 females.

The sex ratio is favourable for females in 139 countries of the world and unfavourable for them in the remaining 72 countries listed by the United Nations.



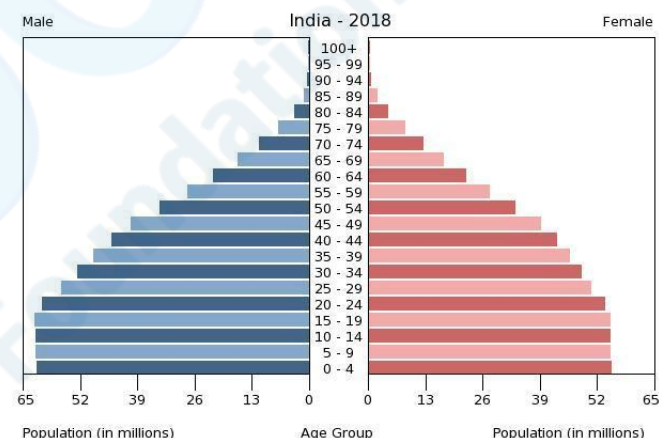
In general, Asia has a low sex ratio. Countries like China, India, Saudi Arabia, Pakistan, Afghanistan have a lower sex ratio.

On the other extreme is greater part of Europe (including Russia) where males are in minority.

A deficit of males in the populations of many European countries is attributed to better status of women, and an excessively male-dominated out-migration to different parts of the world in the past.

Age Structure

Age structure represents the number of people of different age groups. This is an important indicator of population composition, since a large size of population in the age group of 15-59 indicates a large working population.

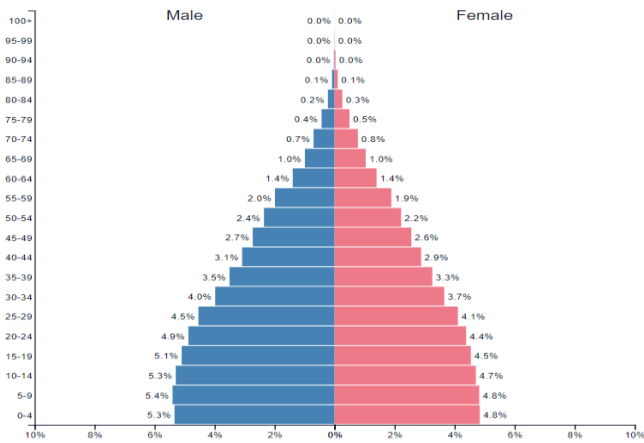


A greater proportion of population above 60 years represents an ageing population which requires more expenditure on health care facilities.

Similarly high proportion of young population would mean that the region has a high birth rate and the population is youthful.

Age-Sex Pyramid

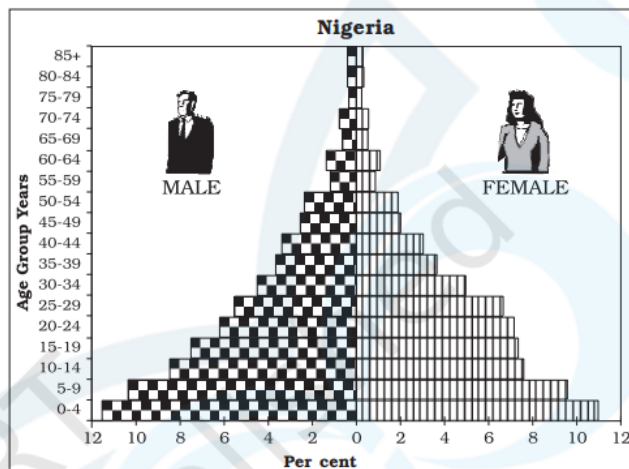
It refers to the number of females and males in different age groups. A population pyramid is used to show the age-sex structure of the population.



The shape of the population pyramid reflects the characteristics of the population. The left side shows the percentage of males while the right side shows the percentage of women in each age group.

Expanding Populations

The age-sex pyramid of Nigeria as mentioned below is a triangular shaped pyramid with a wide base and is typical of less developed countries. These have larger populations in lower age groups due to high birth rates.

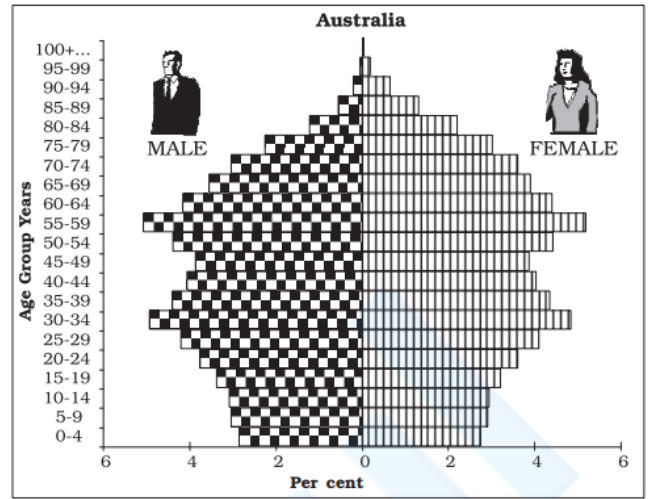


Source: Demographic Year Book, 2009-10

Expanding Population

Constant Population

Australia's age-sex pyramid is bell shaped and tapered towards the top. This shows birth and death rates are almost equal leading to a near constant population.

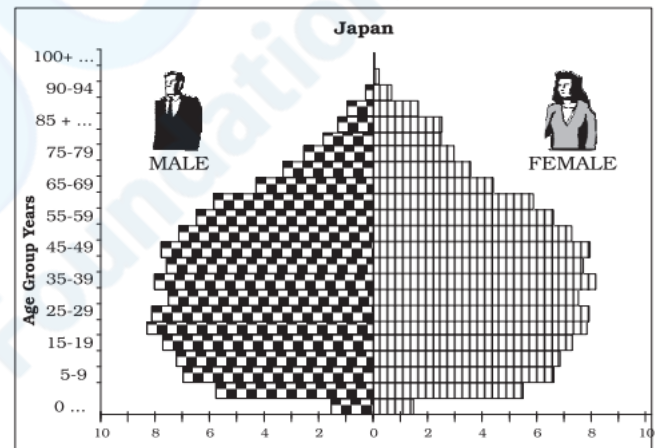


Source: Demographic Year Book, 2009-10

Constant Population

Declining Populations

The Japan pyramid has a narrow base and a tapered top showing low birth and death rates. The population growth in developed countries is usually zero or negative.



Source: Demographic Year Book, 2009-10

Declining Population

Ageing Population

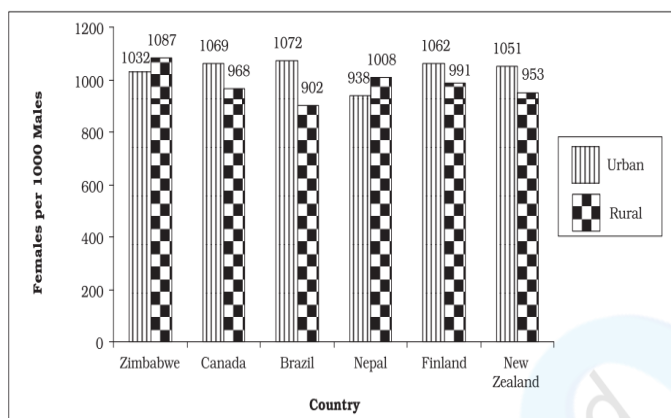
Population ageing is the process by which the share of the older population becomes proportionally larger. This is a new phenomenon of the twentieth century. In most of the developed countries of the world, population in higher age groups has increased due to increased life expectancy. With a reduction in birth rates, the proportion of children in the population has declined.

Rural Urban Composition

The division of population into rural and urban is based on the residence. This division is

necessary because rural and urban lifestyles differ from each other in terms of their livelihood and social conditions, their age-sex-occupational structure, density of population and level of development.

The criteria for differentiating rural and urban population varies from country to country. In general terms rural areas are those where people are engaged in primary activities and urban areas are those when majority of the working population is engaged in non-primary activities.



Source: Demographic Year Book, 2015

Rural Urban Sex Composition (Selected Countries)

Mentioned figure shows rural urban sex composition of selected countries.

The rural and urban differences in sex ratio in Canada and West European countries like Finland are just the opposite of those in African and Asian countries like Zimbabwe and Nepal respectively. In Western countries, males outnumber females in rural areas and females outnumber the males in urban areas.

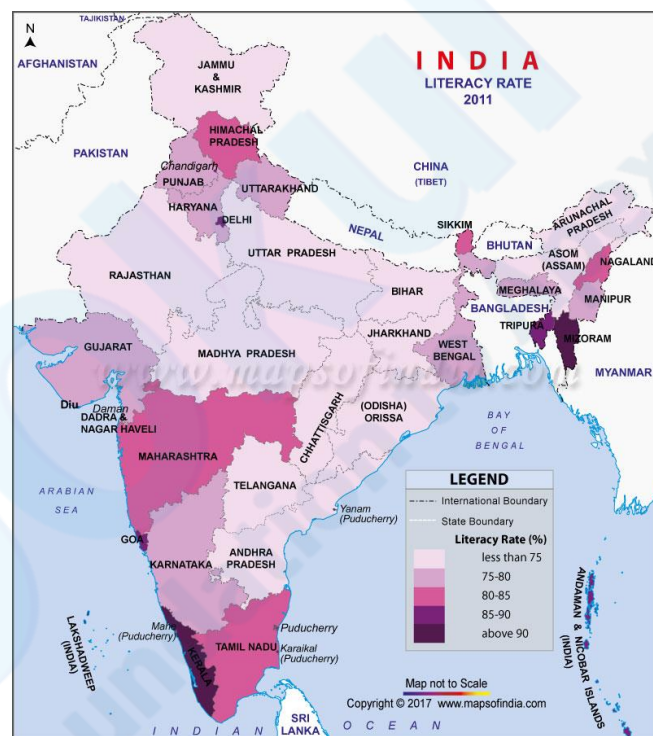
In countries like Nepal, Pakistan and India the case is reverse. The excess of females in urban areas of U.S.A., Canada and Europe is the result of influx of females from rural areas to avail of the vast job opportunities. Farming in these developed countries is also highly mechanised and remains largely a male occupation.

By contrast the sex ratio in Asian urban areas remains male dominated due to the predominance of male migration. It is also worth noting that in countries like India, female participation in farming activity in rural area is fairly high. Shortage of housing, high cost of living, paucity of job opportunities and lack of

security in cities, discourage women to migrate from rural to urban areas.

Literacy

Proportion of literate population of a country in an indicator of its socio-economic development as it reveals the standard of living, social status of females, availability of educational facilities and policies of government.



In India – literacy rate denotes the percentage of population above 7 years of age, who is able to read, write and have the ability to do arithmetic calculations with understanding.

Occupational Structure

This is also an another key indicator of a working population, working population refers to the people of the age group of 15 to 59 who are engaged in various occupations ranging from agriculture, forestry, fishing, manufacturing construction, commercial transport, services, communication and other unclassified services.

Agriculture, forestry, fishing and mining are classified as primary activities manufacturing as secondary, trade, transport, communication and other services as tertiary and the jobs related to research, information technology and developing ideas as quaternary activities.

The proportion of working population engaged in these four sectors is a good indicator of the levels of economic development of a nation.

This is because only a developed economy with industries and infrastructure can accommodate

more workers in the secondary, tertiary and quaternary sector. If the economy is still in the primitive stages, then the proportion of people engaged in primary activities would be high as it involves extraction of natural resources.

