

Section 3

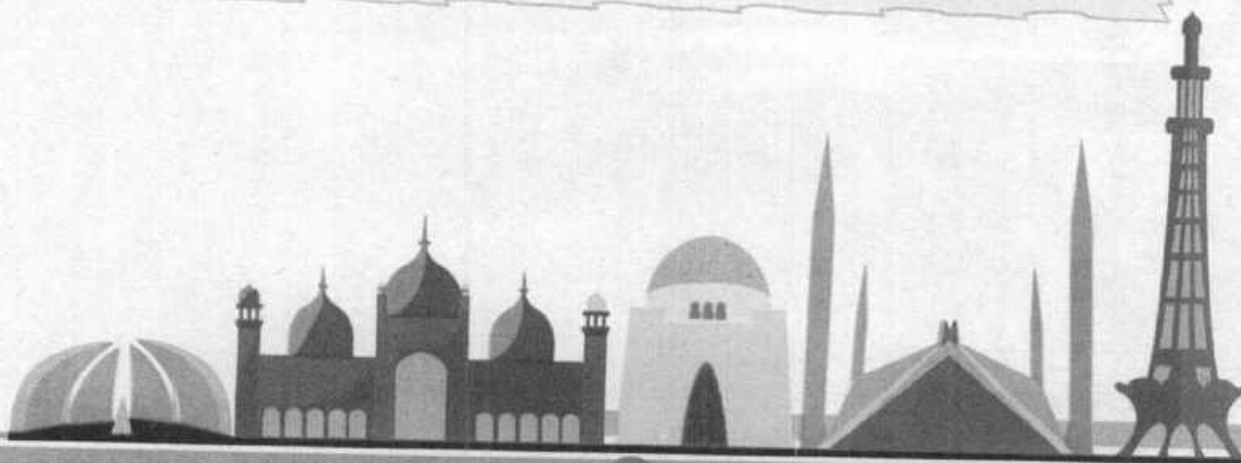
Resources and Economic Development of Pakistan

UNIT 07

POPULATION STRUCTURE AND GROWTH

In this unit the students will be able to:

- Analyze the demographic changes occurring in Pakistan, specifically in terms of population growth, density and structure, (using the demographic transition model and population pyramids) to interpret statistical trends, and consider the various social, religious, educational, economic, and political factors that contribute to sustainable population growth.
- Analyze the causative factors of rural-urban and seasonal migrations, their influence on population distribution while considering their consequential geographical and socio-economic impediments.
- Evaluate the problems of youth and dependent population in Pakistan and the role of the government/ NGOs in addressing the issue while identifying measures for sustainable human resource development.



Density of Population

Density of population is the number of people living per square kilometer unit of an area. The formula used to calculate density of population is $\text{total (population of the country)} / (\text{total area of the country}) = \text{density}$. Pakistan is the 5th largest country in the world, according to its population, after China, India, USA, and Indonesia respectively. In 1947 the population of West Pakistan was 32.7 million which increased to 207.68 million in 2017 census with a density of 260.88/sq.km (Pakistan Bureau of Statistics). In 2023 census population has risen to 241.49 million in 2023 with density of population as 302.08/sq.km.

The population indicators census of years 2017 and 2023.

Table 1. Population Indicators

	2017	2023
Population in millions	207.68	241.49
% of Rural Population	64	61.18
% of Urban Population	36	38.82
% of Male Population	51.2	50.4
% of Female Population	48.8	49.6
Population Density / sq.km	260.88	302.08
% of growth rate	2.40	2.55
Life Expectancy	66.82 years	67.79 years

Source: Pakistan Bureau of Statistics (pbs.gov.pk)

Reasons for High Density of Population

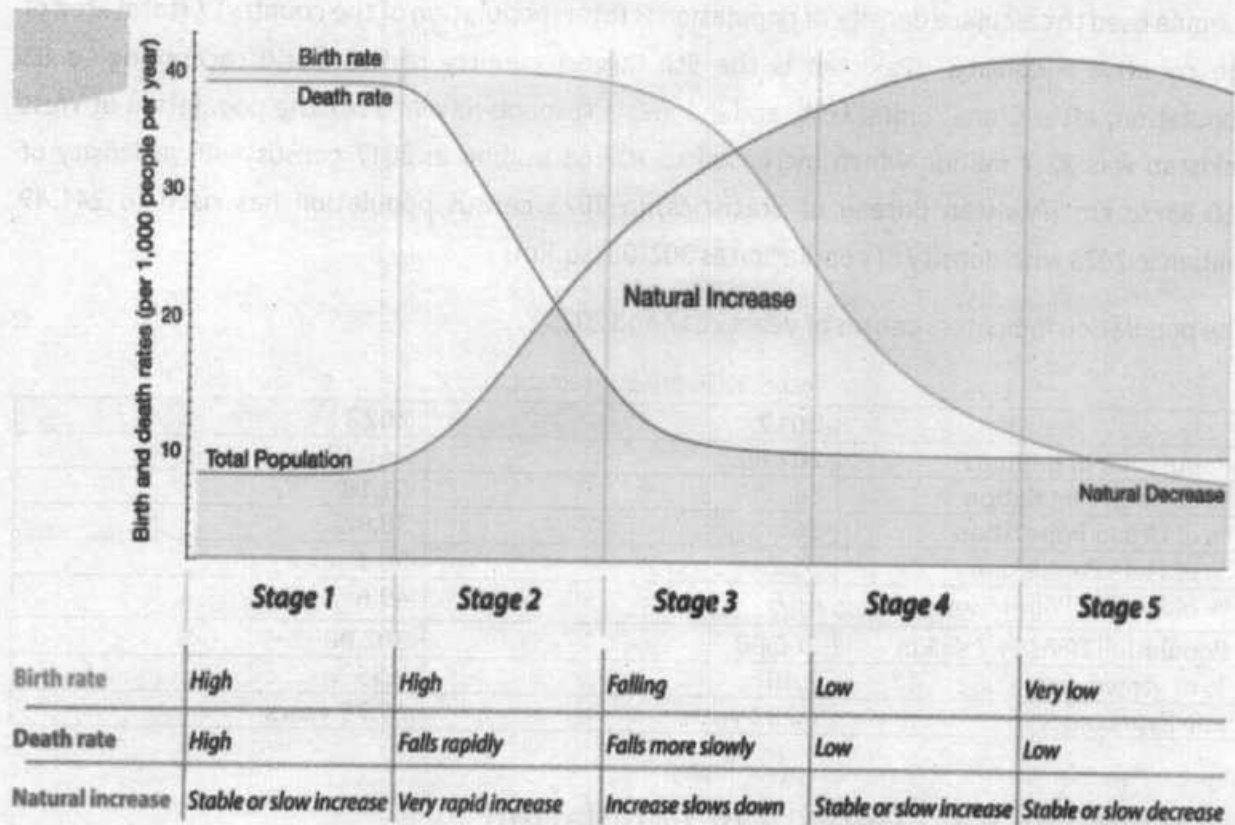
The increase in density is not only because of high birth rate or low death rate but also because of increasing life expectancy of the people. This increasing trend is due to better hygiene, better healthcare and awareness of better lifestyle. Life expectancy means an expected average age of a person of a country for a particular period of time. The life expectancy of Pakistan in year 2017 was 66.82 years which has increased to 67.79 years in 2023.

Density of a country is directly related to population growth. Natural factors play an important role in this issue. For example, lofty mountains in the north, lack of water and rugged terrain of Balochistan and desert areas of Sindh have low density of population due to lack of basic resources. People practice subsistence agriculture or nomadic herding prefer to have large families, increasing the density of population of these areas. Pakistan is an agricultural country; people mostly ignore the benefits of small families. They follow their traditional way of life increasing the population as well the density of population of the country.

Classification of population growth

Growth rate of population is determined by Birth rate, Death rate and Migration of the people of a country for a specific period of time.

1. Demographic Transition Model



Demographic transition theory suggests that population grows along a predictable 5 stage model.

Stage 1 Pre-industrial society: both birth rate and death rate are high and roughly in balance and population growth remains slow. Farming is the main occupation. High birthrate is due to many children needed in agriculture. High deathrate is a consequence of poor medical facilities, sanitation, and food.

Stage 2 Birth rate is still high but death rate decreases due to better medical facilities, sanitation and food.

Stage 3 Death rate is low due to improved economic conditions, food, healthcare and sanitation. The birth rate is decreasing due to awareness in family planning, female education, ambitious plan of the government and NGOs to encourage people to have small families and better education, late marriages and desire for high standard of living.

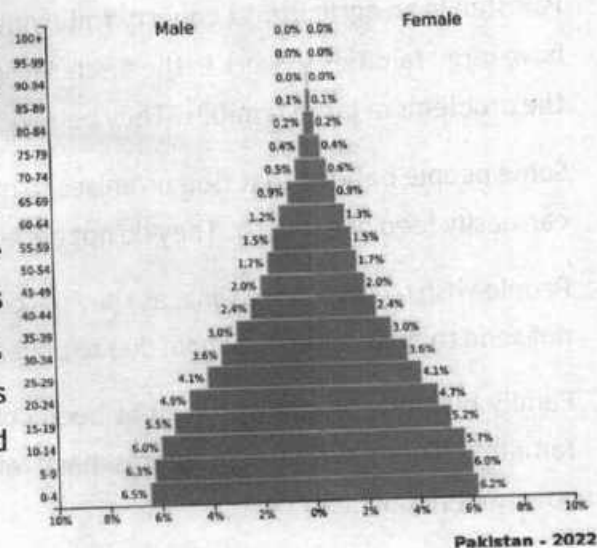
Stage 4 Both death and birth rate are gradually low, an ideal placement for a country. Examples are Argentina, Australia, China, Brazil, most of Europe and USA.

Stage 5 Both rates remain relatively low and death rate is now higher than the birth rate but total population is still high and not showing a decline due to higher life expectancy.

2. Population Pyramid

Population structure is the percentage of male and female and different age groups shown by a population pyramid.

As indicated in the figure, it represents Birth rate, Death rate, different age groups of male and female population and migration. It also represents dependent population from early years to 10 years, Active group from 14 years to 60 years also known as labour force, above 60 years is known as old age and dependent group.



Population trends shown by the Population Pyramid

Below 14 years

Birth rate of Population of Pakistan has declined from 2.6% in 1998 to 2.4% in 2017, indicating less dependency ratio in the early group.

14–60 years is a large group of active labour force; Government can easily plan for its positive work plan for development of the country. Better technical education can be designed to improve ratio between primary, secondary and tertiary activities. According to year 2017-18, 44% people were in **Primary sector**, employed in agriculture, fishing and mining, 25% in **Secondary sector** were employed including industry and manufacturing of machine-made quality products for domestic and foreign markets. For example, textiles, cement, sugar and many more. 37% in **tertiary sector** including services. Like, banking, insurance, health care and teaching etc.

Above 60 years has been increasing demanding more healthcare better food and healthy lifestyle. Government and NGOs can plan for qualified old people may volunteer and counsel the younger generation.

Political stability is the dire need of the country. As without peace and stability, there can be no development of various projects, decreasing job opportunities in the country, leading to unemployment and migration.

Causes of population growth

Pakistan is an agricultural country following mostly subsistence farming methods. People like to have large families to work in the fields rather than to focus on hired labour. They are not aware of the problems of large families. They believe in early marriages due to primitive lifestyles.

Some people believe that God promises to meet all human needs and also believe that two hands can easily feed one mouth. They do not believe in the need for the family planning system.

People wish to have more sons, as they perceive them to be an economic support. Many people do not send their children to school due to poverty.

Family planning programs have not been convincing enough to encourage people to have small families. These welfare programs have also suffered because of the frequent changes in government policies.

Due to better medical facilities and better hygiene, the death rate is decreasing, leading to increase in growth of population in the country.

The effects of population growth on the economy and development of Pakistan

The effects of high population growth are shortage of food water and basic needs of the people. Country is unable to provide skill-based quality education and health facilities according to the requirement of the people. The country has to increase its import to fulfill the needs of the people. Many important development projects are delayed leading to slow economic progress. Population growth is also causing increasing unemployment and child labour. The growing population also influences the inflation in the country, as increasing demands of a large population puts pressure on available resources, thereby driving prices higher.

Migration

Migration is the frequent movement of people from one area to another on large scale. In Pakistan Rural - Urban population is on the increase; people usually move from villages to cities. This migration is on the increase since independence because of difference of resources and lifestyle. Cities have better facilities of infrastructure, education, health, sanitation, housing and recreation and better paid jobs. These facilities are known as PULL factors which work like magnet to force the people to move to the cities.

On the other hand, the limited resources of rural areas force or PUSH the people to leave their homes. People in rural areas have large families to the point that the land is unable to meet their needs. Overgrazing and drought make the land they depend on for food unproductive, which

forces them to urban areas to fulfill their needs. Furthermore, they do not have access to latest technology and are dependent on primitive tools and methods, which contributes to low yield of crops per acre.

Following table shows the change of % ratio of urban population

Year	Population (millions)	Urban (% share)
1981	84.25	28.30
1998	132.35	32.52
2017	207.69	36.44
2023	241.49	38.82

Source: Government of Pakistan Finance Division.

Seasonal Migration

1 Transhumance

Pakistan has lofty mountains in the north, living conditions during winter become too difficult for the people to remain there. They move from these cold areas to surrounding low lying areas with their cattle. This type of seasonal migration is known as **Transhumance**.

2. Nomadism

Nomadic people with their cattle, move from one area to the another in search of food and water. This type of movement is known as Nomadism or subsistence Livestock farming, which is common in Dry areas of Punjab, Baluchistan and Sindh such as Thal, Kharan and Cholistan desserts.

They mostly keep sheep, goats, camel, and donkeys. These are their source of food and income. They sell meat and milk and donkeys and camels are used for transport.

3. Migration of people for harvesting season

People who have moved from rural areas to urban areas for small and low paid jobs move back to their villages to help out with harvesting, transporting and storing of crops. This way they can also take a share of the crops for their need and make supplementary income. For example, people help in cotton picking and transporting sugarcane to the factories.

Urbanisation

Urbanisation means town or city life. These are areas with large population and high density of population. The system is mostly based on non-agricultural or non-primary activities. Main occupation of the people is in a variety of secondary industries and various types of tertiary industries including services, trade and commerce. The services provide high paid jobs which result in agglomeration of population and high standard of living.

Problems caused by urbanisation

Urbanisation attracts more people to cities as they provide better quality of life. This is leading to various serious economic, social and political problems. These are as follows:

1. Lack of accommodation

Migrating people are unable to get standard houses. There is a great decline in living conditions. They live in slums or kachi Abadis which have poor standard of living, shortage of safe drinking water, electricity, and natural gas leading to many hazards.

2. Environmental issues

Sanitation facilities are not enough to meet the unprecedented growing urban population. This leads to untreated domestic and industrial waste, which causes water and land pollution, resulting in health hazards (Malaria, Dengue, Typhoid etc.). Large number of vehicles causes air pollution since they release smoke and increase carbon emissions. Furthermore, this leads to traffic jams and many drivers do not follow the traffic rules resulting in frequent accidents. Industrial estates form around major cities contribute to very dense air pollution, for example there is now heavy smog in Lahore

3. Degradation of resources

People migrating from rural areas mostly settle in unplanned houses in the outskirts of cities where there is a great shortage of basic facilities of education, health, transport, and electricity which effects the main city life as well, this also leads to unemployment.

4. Increase in crime rate

Crime rate increases due to unemployment as well as inter mixing of people from different areas based on their lifestyle and culture. The great economic difference between the people of the planned city and rural people settled in the outskirts of these cities create a great economic difference leading to crime.

Solution to the problems of urbanisations

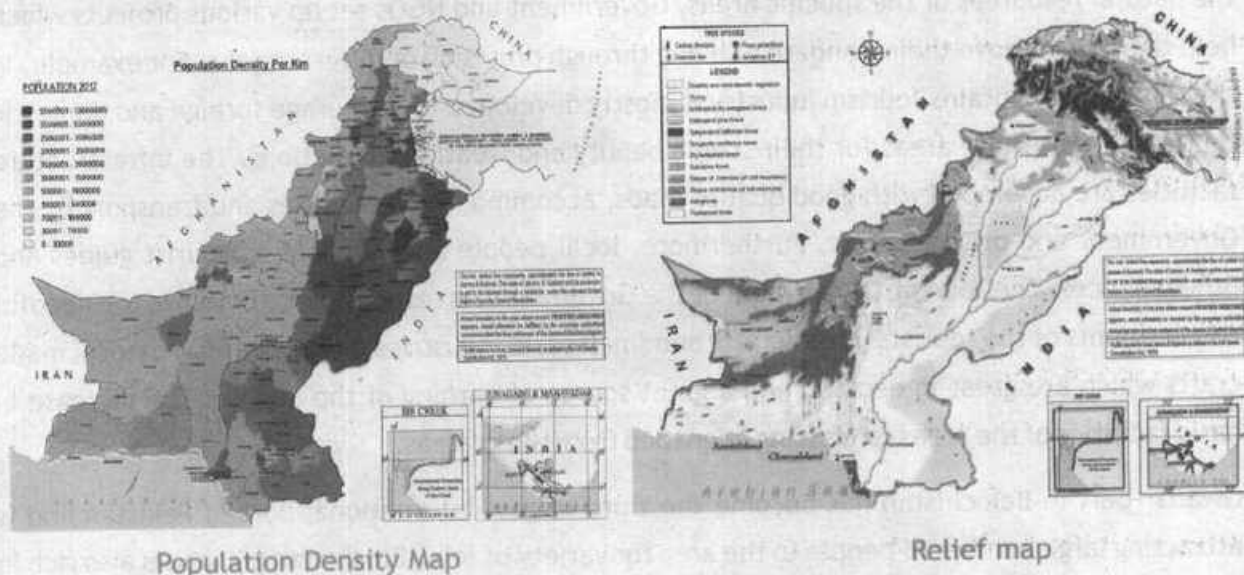
The transport systems need to be improved by developing better roads, overhead bridges and underpasses to reduce the distances between places. Metro service, Orange and Green line and Rapid bus transport system for urban centres are present to provide public transport. However, these facilities need to be further expanded to meet needs of growing population. This way the transport system will be cheaper and affordable and reduce the chances of a traffic jam occurring.

Awareness should be given to realise the conservation of electricity, gas and water. To maintain the sustainability and the importance of these resources.

Rural-Urban migration should be controlled by providing quality education, electricity, safe drinking water and encourage people to develop more small-scale industries in rural areas.

More housing schemes may be planned by private and public sector with better facilities for the people of different income groups. Government should also introduce more housing schemes at subsidised rates to accommodate more and more people according to their needs.

Population distribution according to climate, topography and agriculture



Pakistan has lofty mountains in the north. In these areas the temperature remains below freezing. Most of the year there is heavy snowfalls and frequent land slides which lead to low population. Examples of such areas are Karakoram, Himalayas and Hindukush mountains along with most of their valleys. People move to warmer areas due to lack of development and job opportunities. Kohat, Banu, Waziristan in KPK, Balochistan also has low population density due to the rugged terrain, low rainfall, poor transport links and lack of industrial development.

In contrast to this, Punjab and Sind provinces have higher densities of population due to flat and fertile land, moderate rainfall, reliable water from river Indus and its tributaries, lakes and canals. Human resources have contributed to urbanisation and expansion of cities. Karachi (Sindh) is the biggest city with a population density of 1500persons / sq.km followed by Lahore, Faisalabad, with 1000-1500persons/sq.km (Punjab). The cities have better transport, power

resources, housing schemes, education, health and recreational facilities. All these natural and human factors have attracted a large number of people to these big cities in search of better paid jobs.

The above maps can easily be compared how the density of population is being affected by the physical features of the country.

Population distribution and Physical, economic, social and political factors

Physical and Economic factors

Relief features of the country have a great influence on the population distribution. According to the natural resources of the specific areas, Government and NGOs set up various projects which help them to improve their standard of living through provision of different jobs. For example, In the Northern Mountains Tourism Industry is mostly developed to encourage foreign and domestic tourists to visit these areas for their scenic beauty and weather attractions. The infrastructure facilities are developed with good quality roads, accommodation facilities and transport by the Government and private sector. Furthermore, local people also get jobs as tourist guides and other services. The Tourism Department of the Government is responsible to organise the needful requirements of the tourists. Handicrafts and small scale industries provide variety of local made crafts which are great in demand and a great source of earning of the people. The increase in basic facilities of the areas is reducing migration from these areas.

Gwadar port in Balochistan has become the third largest international port of Pakistan and is attracting large number of people to the area for variety of jobs. Balochistan plateau is also rich in gold, copper, coal and variety of other minerals. Sandak gold and copper project is also attracting large number of people to the north west of Balochistan. There is a great possibility that population of Balochistan may increase with greater speed in future with better economic standards.

Thar Coal power project in Sindh has been developed to increase thermal power in the country. It is a great source of variety of jobs to the local people contributing better facilities of infrastructure and accommodation to the area. Similarly Physical facilities may be used for the development of various projects in the country, according to the needs of the people. This will improve economic progress automatically solving the distribution and density problems of the country. By this, the resources will become more sustainable for better future.

Social factors

Due to economic progress, the social needs of the people will also increase. They will get better education, healthcare, safe drinking water, better housing and recreational opportunities to increase the economic progress and better living standards of the people.

Political factors

A stable government plays a very important role for the welfare of the people. It implements planning and security to provide the future progress of the country. The various development projects will complete on time improving the problems of the people.

Sustainable Population Growth

Sustainable population means the size of population of a country, that can be easily supported by its economic resources at all times. It is achieved when development in resources is proportionate to population growth. Pakistan's population is increasing at a greater rate than its economic growth, many development plans are not meeting the demand of its population. There is an extra burden on food resources, land, energy resources transport system, education and health care facilities.

Pakistan is an agricultural country with most of its population living in rural areas practicing subsistence farming which is not meeting the needs of the growing population. In order to combat this issue the government should encourage the farmers for mechanization of agriculture or cash crop farming to increase yield per acre crops. Irrigation system should be improved to provide reliable source of water for cultivation of more areas under agriculture..

Government should also increase literacy ratio by introducing compulsory and free primary education. More technical and skill based institutions according to international standards maybe set up to provide quality education. Country needs more skillfull labour force to increase the ratio of secondary and tertiary activities. Government should encourage people to increase exports by finding more international markets. Population is increasing all over the world and in order to meet the demand of this growing population many developed countries have started mass production of goods. Pakistan should follow the same to improve its economy and to become self sufficient. Increasing population growth of the country is becoming a serious issue for its progress and development. Government should encourage the NGOs to contribute more for the economic and social progress of the country. Pakistan is blessed with variety of natural and human resources, if the economic and social issues are planned properly. The nation can easily overcome its difficulties and problems.

Exercise

1. Fill in the blanks with most appropriate answer.

- (i) According to the census of 2017, the density of population of Pakistan was -----
- a) 287.93 people / sq. km. b) 250.5 people /sq.km
b) 260.88 people /sq.km d) 270.4people /sq. km
- (ii) According to the census of 2017, the urban population of Pakistan was -----
- a) 84.69 million b) 75.67 million
b) 65.4 million d) 90.00million
- (iii) Karakoram mountains are in the ----- of Pakistan
- a) West b) East
c) North d) South
- (iv) Balochistan is a -----populated province of Pakistan
- a) scarcely b) densely
b) evenly d) unevenly
- (v) ----- is the capital of Punjab
- a) Karachi b) Peshawar
c) Quetta d) Lahore
- (vi) Transhumance is the migration of people -----
- a) In the northern mountains b) in the desert areas
d) In Indus plain d) in the coastal areas
- (vii) Most farmers in rural areas practice ----- farming.
- a) commercial b) subsistence
b) cash crop c) poultry

(B) Answer the following questions briefly.

- (I) Analyse causes of the difference of population density in different areas of Pakistan
- (ii) How Push and Pull factor effect the rural- urban migration
- (iii) Analyse why seasonal migration is important.
- (iV) Describe different causes for the growth of population in Pakistan.

(v) Analyse why rural-Urban migration is harmful for the economy of the country

(vi) suggest measures to discourage rural-Urban migration

C) Answer the following questions in detail.

(i) Explain how population Pyramid is important to understand the growth rate of population in Pakistan.

(ii) Evaluate the importance of Demographic model for different stages of population growth.

(iii) Evaluate the possibilities of sustainable population in Pakistan.

(iv) Explain why urbanisation is important for Pakistan.

Class presentations

Class may be divided into two groups to discuss

(i) One group for Rural-Urban migration and other for Seasonal Migration

There can be a convincing debate between the two for better understanding.

(ii) Class may be divided into two groups,

Compare the presentation of population by population Pyramid and Demographic Transition Model for the study and analysis of population of a country for its future plans of development.

There can again a debate about the topic for better understanding and involvement of the whole class.

List more words and write their meaning that you find difficult in this chapter.
