

## 4 Population

### 4.1 Natural increase as a component of population change

Natural Increase: The difference between the birth rate and death rate in a population.

Crude Birth Rate (CBR): Total number of live births per 1,000 population per year.

Crude Death Rate (CDR): Total number of deaths per 1,000 population per year.

Fertility Rate: The average number of children a woman is expected to have during her lifetime.

Infant Mortality Rate: The number of infant deaths (under one year) per 1,000 live births annually.

Maternal Mortality Rate: The number of maternal deaths per 100,000 live births annually.

Life Expectancy: The average number of years a person is expected to live at birth.

Population Growth Rate: The percentage change in a population size over time, excluding migration.

Total Fertility Rate (TFR): The average number of children born to a woman over her lifetime in a specific area.

Replacement Fertility: The fertility rate required for a population to replace itself without migration.

### 4.2 Demographic transition

Demographic Transition Model (DTM): A theoretical model showing population change over time through four or five stages.

Stage 1: High birth and death rates; slow population growth.

Stage 2: Decline in death rates; high birth rates; rapid population growth.

Stage 3: Decline in birth rates; slowing population growth.

Stage 4: Low birth and death rates; stable population size.

Stage 5 (optional): Population decline due to very low birth rates.

Population Pyramid: A graphical representation of the age and gender structure of a population.

Ageing Population: A population with a high proportion of elderly people.

Youthful Population: A population with a high proportion of young people under the age of 15.

Age Dependency Ratio: The ratio of dependents (young and old) to the working-age population.

Population Structure: The composition of a population, often shown by age and gender.

### 4.3 Population-resource relationships

Carrying Capacity: The maximum population size that the environment can sustain indefinitely.

Overpopulation: When the number of people exceeds the resources available in a given area.

Underpopulation: When a region has more resources than the population can efficiently use.

Optimum Population: The ideal population size that can maximise resource use and standard of living.

Resource Scarcity: The lack of sufficient resources to meet the population's needs.

Malthusian Theory: The idea that population grows exponentially while food supply grows linearly, leading to shortages.

Neo-Malthusian: Modern interpretations of Malthus, focusing on sustainability and resource depletion.

Boserupian Theory: The idea that population pressure stimulates innovation in resource use and technology.

Sustainable Development: Meeting the needs of the present without compromising the ability of future generations.

Ecological Footprint: The land and water area required to sustain a population's consumption and waste.

Food Security: The availability, access, and use of food to meet nutritional needs sustainably.

#### 4.4 Management of natural increase

Pro-Natalist Policies: Policies to encourage higher birth rates (e.g., financial incentives, parental leave).

Anti-Natalist Policies: Policies to reduce birth rates (e.g., family planning, education on contraception).

Population Policies: Strategies implemented by governments to influence population size or growth.

Family Planning: Education and access to contraception to control birth rates.

Healthcare Improvements: Measures to reduce infant mortality and improve maternal health.

Education for Women: Increasing female education levels to delay marriage and reduce fertility rates.

Urbanisation: The growth of urban areas that influences population distribution and fertility.

Economic Development: Rising incomes and improved living standards that reduce birth rates.

Environmental Carrying Capacity: The ability of an environment to support its population without degradation.

## 5 Migration

### 5.1 Migration as a component of population change

- Migration: The movement of people across a specified boundary, national or international, to establish a new permanent place of residence, lasting more than 1 year.
- Immigration: The act of individuals moving into a region or country from another country for the purpose of permanent residence.
- Emigration: The act of individuals leaving a region or country to reside permanently in another country.
- In-migration and Out-migration: Terms used for internal movements within a country, referring to people moving into and out of specific regions or areas.
- Origin: Point where migration begins, usually the area where individuals or groups move away from.
- Intervening Obstacles: Challenges or barriers faced by migrants between their origin and destination, which can include physical, social, or economic factors.

### 5.2 Internal migration

- Internal Migration: The movement of people within the boundaries of a specific country, involving in-migration and out-migration.
- Rural-Rural Migration: The movement of individuals from one rural area to another, often driven by factors like employment opportunities, family reasons, or marriage.
- Rural-Urban Migration: The migration flow from rural areas to urban centers, influenced by factors such as job prospects, better living conditions, and access to services.

### 5.3 International migration

- Voluntary Migration: Migration where individuals choose to move to another country for many reasons.
- Forced Migration: Migration that occurs due to factors such as conflict, persecution, or environmental disasters, where individuals are compelled to move.
- Impelled Migration - An involuntary or coerced movement (but optional).
- Net Migration: The overall difference between the number of immigrants and emigrants somewhere.
- Push Factors: Aspects in the area of origin that drive individuals to migrate, such as lack of job opportunities, political instability, or environmental issues.
- Pull Factors: Factors in the destination area that attract migrants, including better job prospects, higher living standards, and quality of life improvements

### 5.4 Case Study

- Primitive Migration: Earliest form of migration patterns by humans, usually in search of food & shelter.
- Remittances: Money or goods that migrants send back to their home country to support their families.
- Counterurbanisation: The movement of people from urban areas to rural areas.

## 6 Settlement Dynamics

### 6.1 Changes in rural settlements

Rural Settlement: A settlement located in the countryside, often with a small population and predominantly primary economic activities.

Site: The physical characteristics of a settlement's location, such as water availability and relief.

Situation: The location of a settlement relative to surrounding features, including other settlements and transport networks.

Nucleated Settlement: A settlement where buildings are clustered together, often around a central point like a market or church.

Dispersed Settlement: A settlement where buildings are spread out over a large area, often in agricultural regions.

Linear Settlement: A settlement arranged along a line, such as a road, river, or valley.

Rural Depopulation: The decline in population in rural areas due to migration, often to urban centers.

Counterurbanisation: The movement of people from urban areas back to rural areas, seeking better quality of life.

Rural Dilution: The process where urban activities and influences spread into rural areas, often due to migration.

Village Morphology: The shape and layout of a rural settlement, influenced by physical and cultural factors.

Rural Decline: The economic and social downturn in rural areas due to factors like agricultural mechanisation and out-migration.

### 6.2 Urban trends and issues of urbanisation

Urbanisation: The increase in the proportion of people living in urban areas compared to rural areas.

Suburbanisation: The outward expansion of urban areas, leading to the development of suburbs.

Reurbanisation: The movement of people back into urban areas, often as a result of regeneration projects.

Urban Sprawl: The uncontrolled expansion of urban areas into the surrounding countryside.

Megacity: An urban area with a population exceeding 10 million people.

Urban Hierarchy: The ranking of settlements based on their size and economic functions.

Urban Primacy: A situation where one city dominates the urban system and economy of a country.

Brownfield Sites: Previously developed land in urban areas that can be redeveloped.

Greenfield Sites: Undeveloped land on the outskirts of urban areas.

Slums/Shanty Towns: Informal settlements with inadequate housing and poor living conditions.

Urban Regeneration: Redevelopment of urban areas to improve physical, social, and economic conditions.

Deindustrialisation: The decline of industrial activity in urban areas, often leading to unemployment and urban decay.

Urban Heat Island (UHI): The increased temperature in urban areas compared to surrounding rural areas due to human activity.

### 6.3 The changing structure of urban settlements

Sustainable Urban Development: Managing urban growth to meet present needs without compromising future generations.

Smart Growth: Urban planning that focuses on compact, efficient, and environmentally friendly development.

Urban Planning: The process of designing and regulating land use in urban areas.

Zoning: Dividing urban areas into specific zones for residential, commercial, and industrial use.

Public Housing: Government-funded housing for low-income families.

Integrated Transport Systems: Linking different modes of transportation to improve urban mobility.

Gentrification: The process of renovating urban areas to attract middle- and upper-class residents.

Congestion Management: Strategies to reduce traffic congestion in urban areas, such as public transport and carpooling.

Green Infrastructure: Urban planning that incorporates parks, green roofs, and other environmentally friendly features.

Eco-Cities: Cities designed to be environmentally sustainable, with low carbon footprints.

Urban Resilience: The ability of urban areas to recover from challenges like natural disasters and economic downturns.

#### 6.4 Management of urban settlements

Urban Growth Case Study: Analysis of a rapidly growing city, including causes, effects, and management strategies.

Urban Decline Case Study: Examination of a city experiencing population loss and economic downturn.

Rural Management Case Study: Analysis of strategies to address rural depopulation, infrastructure development, or sustainable farming.

Informal Settlements Case Study: Study of slum development, challenges, and government interventions.

Sustainable Urban Development Case Study: Analysis of a city implementing environmentally friendly and socially inclusive urban planning.