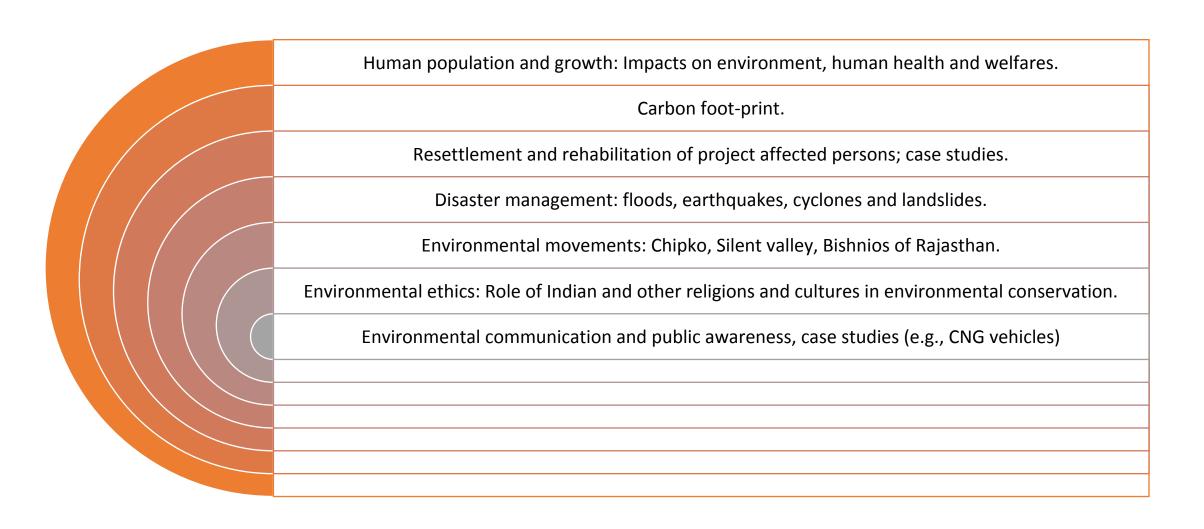
Module 7 - Human Communities and the Environment

Contents



Human population and growth



POPULATION GROWTH

• Is the change in a population over time, and can be quantified as the change in the number of individuals in a population using "per unit time" for measurement.



DEMOGRAPHY

 Refers to population characteristics and the information on it can be gained through census reports.



EXPONENTIAL GROWTH

• Occurs when the rate of growth, a mathematical function is proportional to the function's current value. (e.g. 10*10, 10*10*10, 10*10*10*10,). Here the quantity increases by a constant amount per unit time. Population growth takes place exponentially. The exponential growth model is also known as the Malthusian Growth Model.

Human population and growth

REPLACEMENT LEVEL FERTILITY

- Is the level of fertility at which a population exactly replaces itself from one generation to the next.
- In developed countries, replacement level fertility can be taken as requiring an average of 2 children per woman.
- In developing countries the average number of births may need to be much higher due to high infant mortality rates.

TOTAL FERTILITY RATES (TFR)

• It is defined as the average number of children that would be born to a woman in her lifetime.

INFANT MORTALITY RATE • It is the percentage of infants died out of those born in a year.

DEMOGRAPHIC TRANSITION

• The fall in death rates and birth rates due to improved living conditions and leading to low population growth is a phenomenon called demographic transitions.

POPULATION EXPLOSION

The literal meaning of population explosion is "a pyramiding of numbers of a biological population". As the number of people in a pyramid increases, it poses the problems related to the increased population.

The current rate of population growth is now significant burden to human well-being.

Over-population is defined as the condition of having more people than can live on the earth in comfort, happiness and health and still leave the world a fit place for future generations.

The main factors affecting the population change are the birth rate, death rate and migration.

POPULATION EXPLOSION

Birth Rate – is the ratio between births and individuals in a specified population and time.

Death Rate – is the ratio between the number of deaths and individuals in a specified population and time.

Migration – is the number of people moving in (immigration) or out (emigration) of a country, place or locality.

The population change is calculated by the formula:

Population change = (Births + Immigration) – (Deaths + Emigration).

Effects of Population Explosion

Insufficient resources – few years ago, resources available to one person to be shared by two persons currently which are not sufficient for either of them.

Clearing land, increasing use of pesticides, etc. are the down side of this advancement in meeting food requirements.

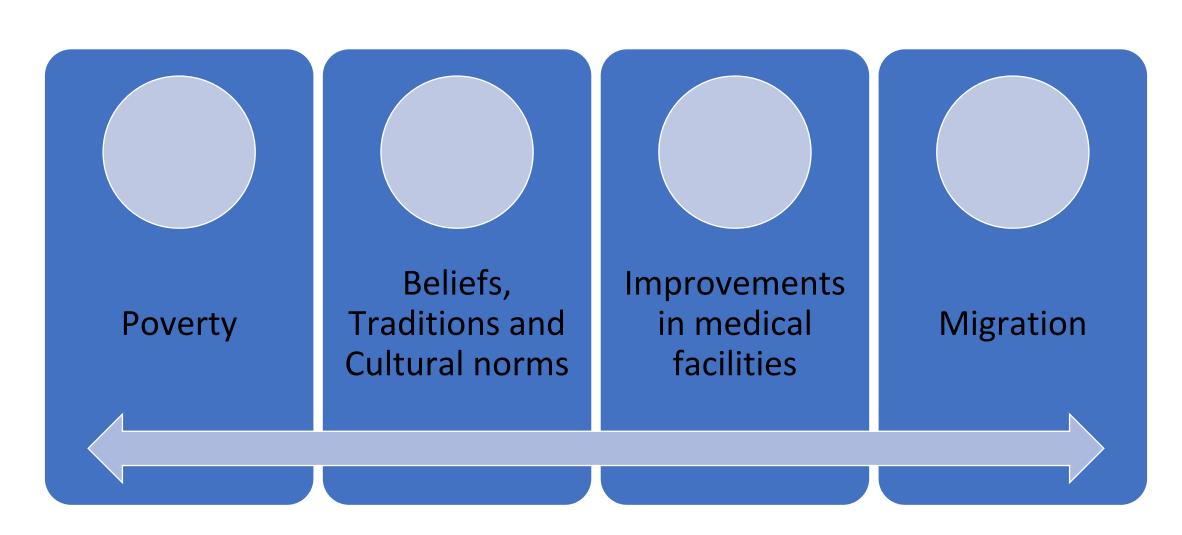
During the past 10 years, the world's food production has increased by 24 per cent, outpacing the rate of population growth.

Population growth also leads to clearing of more areas for industries and agriculture. Decrease in resources – becomes more and more competitive even for basic necessities of life like food, clothing and shelter.

Increase in Population – has led to air and water pollution, unemployment, poverty, lack of educational resources.

Speedy growth of population in the world's poorest countries – leads to further poverty and high childhood mortality rates.

Reason for Population Explosion



Environment and Human Health

A clean environment is essential for human health and well-being.

A deteriorated environment gives rise to more health issues. Air, water and land is polluted by industrial discharges and wastes which have direct impact on health causing diseases like cancers, etc.

Population growth is a major contributor to deteriorating the environment and in turns affect the health.

Population explosion has contributed to changing the human environment. People from rural areas move to urban areas in search of jobs, etc.

Urban areas utilize more of natural resources and generate more wastes than rural areas which are more hazardous to environment and health.

Environment and Human Health

Therefore, increasing population, expanding urbanization and industrialization have degraded the environment in all ways be it physical, biological, chemical or even ethical.

India has grown steadily in the last few decades and the percentage of poor persons in the population came down from 47 per cent in 1973-74 to 26 per cent in the year 2007.

Due to focus on improvement in public health and living conditions, a substantial enhancement in the health status of the people has been witnessed in the last 50 years.

Though there are lot of private hospitals and advanced health care availability, still the poor are often left out of the advancements.

Importance of woman and child welfare in India and over the world

In India, The Ministry for Women and Child Development encompasses areas like family planning, health

and

care, education

awareness.

There are NGOs mostly as "Mahila Mandals" which aim to create awareness amongst women of remote villages, educate them, empower them to become economically self-dependent.

The National Plan of Action for Children, 2005 had been introduced by Ministry of Human Resource Development, Government of India for priority areas like health, education, sanitation and environment.

On the International level, the United Nations Decade for Women (1975-85) witnessed inclusion of several women welfare related issues on international Agenda.

Importance of woman and child welfare in India and over the world

Within that decade an International standard for protection and promotion of women's human rights and socio-economic upliftment was accepted in the International Convention on the Elimination of all forms of Discrimination against Women (CEDAW), 1979.

The UN General Assembly in 1959 adopted the Declaration of the Rights of a Child. It became International Law in the year 1990.

The World Summit on Children, Sept 30, 1990 adopted a Declaration on the Survival, Protection and Development of Children and a Plan of Action for implementing the Declaration in the 1990s. India is also a signatory to it.

Role of Information Technology in Environment and Human Health

Data Base Online Remote Information Sensing Geographical Human Information Health System (GIS)

Disaster management

Disaster management is a process or strategy that is implemented when any type of catastrophic event takes place.

Sometimes referred to as disaster recovery management, the process may be initiated when anything threatens to disrupt normal operations or puts the lives of human beings at risk.

Various disasters like as follows:

- Cyclone,
- Flood,
- Earthquake and
- Landslide.