

The background of the slide is a light gray gradient. It is decorated with several realistic water droplets of various sizes, some with highlights and shadows, scattered across the top and bottom edges. In the center background, there is a faint, circular, wireframe-like globe or sphere.

HUMAN COMMUNITIES & THE ENVIRONMENT

UNIT 02

HUMAN POPULATION AND GROWTH

- **Population:** The term “population” encompasses a group of organisms of a single species that can interbreed and live in a definite geographic area at a given time.
- **Demography:** The study of population, their characteristic and changes.
- There are other important terms in the study of population, such as:
 - a) **POPULATION ECOLOGY** – Population ecology explains how species populations interact with their environment.
 - b) **POPULATION SIZE** – Population size refers to the number of individuals in a population.
 - c) **POPULATION BOTTLENECK** – Population bottleneck occurs when there is a reduction in the size of a population
 - d) **OVERPOPULATION** – When an increase in the population of any species exceeds the ecology’s carrying capacity, the phenomenon is called overpopulation
- Our global human population at present is 7.9 billion as of November 2021.

HUMAN POPULATION AND GROWTH [CONT..]

- Factors affecting Human Population

a) CHANGE IN POPULATION SIZE = (Births – Deaths) + (Immigrants – Emigrants)

b) CRUDE BIRTH RATE– the number of individuals born alive annually per 1000 population.

$$\text{CRUDE BIRTH RATE} = \frac{\text{No.of births}}{\text{Total Population}} \times 1000$$

c) CRUDE DEATH RATE– the number of deaths per 1000 population per year.

$$\text{CRUDE DEATH RATE} = \frac{\text{No.of deaths}}{\text{Total Population}} \times 1000$$

d) TOTAL FERTILITY RATE – The average number of children a women has during her reproductive years

HUMAN POPULATION AND GROWTH [CONT..]

- We have two growth models which describe the basic growth trend in a population. These are:

(a) **Exponential growth** – In an ideal condition where there is an unlimited supply of food and resources, the population growth will follow an exponential order. Consider a population of size N and birth rate be represented as b , death rate as d , Rate of change of N can be given by the equation

$$dN/dt = (b-d) \times N;$$

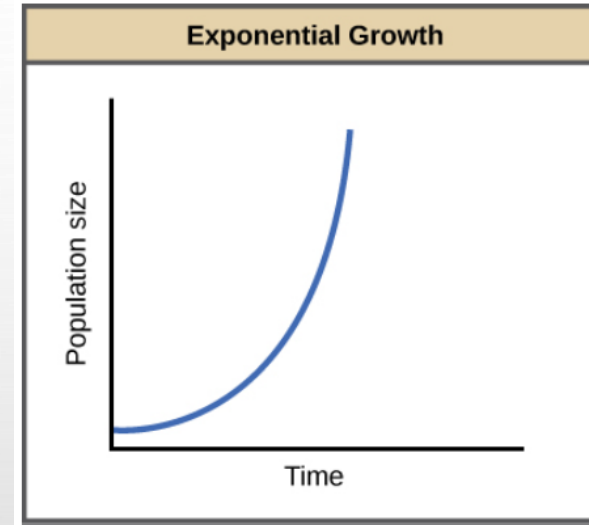
$$\text{If, } (b - d) = r, \quad dN/dt = rN$$

Where, r = intrinsic rate of natural increase

According to calculus

$$N_t = N_0 e^{rt}$$

Where, N_t = Population density at time t N_0 = Population density at time zero



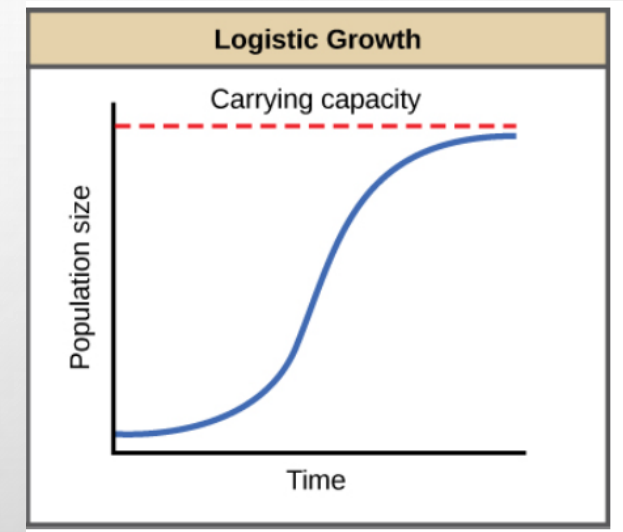
HUMAN POPULATION AND GROWTH [CONT..]

(b) **Logistic Growth** - Exponential growth is possible only when infinite natural resources are available; this is not the case in the real world.

To model the reality of limited resources, population ecologists developed the logistic growth model.

World population

- a) 7.9 billion (**carrying capacity**: 6 to 14 billion according to models)
- b) near extinction 60,000 years ago-2,000 people
- c) increasing by 80 million per year
- d) growth rate has declined
- e) 1965 – 2% increase (peak)
- f) 1998 – 1.4% increase
- g) Demographers-scientists who study human population statistics project world population will become stationary by end of 21st century.



HUMAN POPULATION AND GROWTH [CONT..]

- Environmental factors limit population growth

A. **Density-dependent factors**

- i. regulate population growth by affecting a larger proportion of the
- ii. population as population density rises
- iii. Examples: **predation, disease, competition**

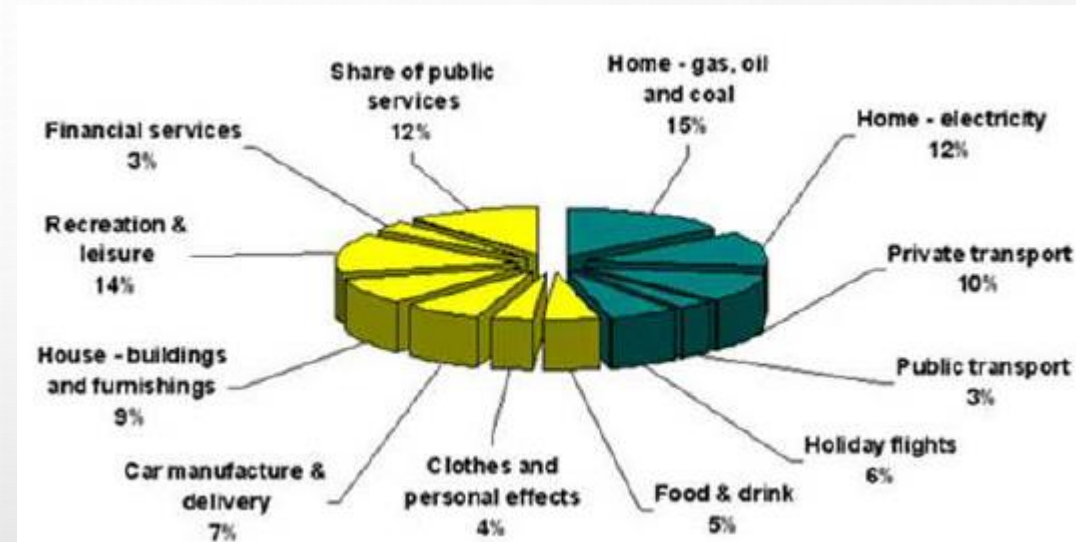
B. **Density-independent factors**

- i. limit population growth
- ii. not influenced by changes in population density
- iii. Examples: **hurricane, fires**

WHAT IS A CARBON FOOTPRINT?

- A carbon footprint is “the total set of GHG emissions caused directly and indirectly by an individual, organisation, event or product”
- A carbon footprint is made up of the sum of two parts: The primary footprint (shown by the green slices of the pie chart) and the secondary footprint (shown as the yellow slices).

1. The primary footprint is a measure of our direct emissions of CO₂ from the burning of fossil fuels including domestic energy consumption and transportation (e.g. Car and plane). We have direct control of these.
2. The secondary footprint is a measure of the indirect CO₂ emissions from the whole lifecycle of products we use - those associated with their manufacture and eventual breakdown.



WHAT IS A CARBON FOOTPRINT? [CONT..]

- To put it very simply – the more we buy the more emissions will be caused on our behalf.
- A ton of carbon is released when you:
 - travel 5,000 miles in an airplane
 - drive 2,500 miles in a medium-sized car
 - cut down and burn a tree that was about one foot in diameter and 40 feet tall
- The average carbon footprint for a person in the united states is 16 tons, one of the highest rates in the world. Globally, the average carbon footprint is closer to 4 tons. To have the best chance of avoiding a 2°C rise in global temperatures, the average global carbon footprint per year needs to drop to under 2 tons by 2050.
- Lowering individual carbon footprints from 16 tons to 2 tons doesn't happen overnight! By making small changes to our actions, taking fewer connecting flights and line drying our clothes, we can start making a big difference.

WHAT IS A CARBON FOOTPRINT? [CONT..]

The facts

- The principal greenhouse gases released as a direct result of human activities are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and several types of fluorinated gases.
- These gases are responsible for trapping heat in the atmosphere and causing global warming.
- There has been a 0.9 f (0.5 °C) rise in the average sea temperatures over the last four decades;
- Between 1965 and 1995, over 20,000 square kilometers of ice melted in the arctic;
- Over the last 100 years, the global sea levels have risen on average between 10 and 25 cm.
- Surface temperatures worldwide have risen 0.7 C over the past 100 years.
- Average annual arctic temperatures have risen at twice the rate of the rest of the globe over the past century.
- There is a worldwide trend of glacial retreat.

WHAT IS A CARBON FOOTPRINT? [CONT..]

Easy green living tips to use for discussion with your students in **how they can reduce their carbon footprint**:

- **TIP 1:** travel light. Walk or bike instead of driving a car. Cars and trucks run on fossil fuels, which release carbon dioxide into the atmosphere. In the united states, automobiles produce over 20 percent of total carbon emissions. Walk or bike and you save one pound of carbon for every mile you travel.
- **TIP 2:** teleconference instead of flying. For office meetings, if you can telephone or videoconference, you will save time, money, and carbon emissions. Airplanes pump carbon emissions high into the atmosphere, producing 12 percent of transportation sector emissions.
- **TIP 3:** see the light. Use compact fluorescent light bulbs. These energy-efficient bulbs help fight climate change because they reduce the amount of fossil fuels that utilities burn. You will save 100 pounds of carbon for each incandescent bulb that you replace with a compact fluorescent, over the life of the bulb.
- **TIP 4:** recycle and use recycled products. Products made from recycled paper, glass, metal and plastic reduce carbon emissions because they use less energy to manufacture than products made from completely new materials. For instance, you'll save two pounds of carbon for every 20 glass bottles that you recycle. Recycling paper also saves trees and lets them continue to reduce climate change naturally as they remain¹⁰ in the forest, where they remove carbon from the atmosphere

WHAT IS A CARBON FOOTPRINT? [CONT..]

- **TIP 5:** inflate your tires. If you own a car, it will get better gas mileage when the tires are fully inflated, so it will burn less gas and emit less carbon. Check your automobile monthly to ensure that the tires are fully inflated. Follow this tip and save 300 pounds of carbon dioxide for every 10,000 miles you drive.
- **TIP 6:** plant native trees. Trees absorb carbon dioxide from the air and use it as their energy source, producing oxygen for us to breathe. A tree in the temperate zone found between the tropics and the polar circles can remove and store 700 to 7,000 pounds of carbon over its lifetime. A tree that shades a house can reduce the energy required to run the air conditioner and save an additional 200 to 2,000 pounds of carbon over its lifetime.
- **TIP 7:** turn down the heat. Heating and air conditioning draw more than half of the energy that a home uses in the united states. Turn down the heat or air conditioning when you leave the house or go to bed. You can easily install a programmable thermostat that can save up money and carbon.
- **TIP 8:** buy renewable energy. Electricity generation produces 40 percent of carbon emissions from the united states. A growing number of utilities generate electricity from renewable energy sources with solar panels, windmills and other technologies. If your utility offers renewable energy, buy it. If not, send them a message asking for clean energy.
- **TIP 9:** act globally, eat locally. If you shop at a supermarket, the food you buy may travel in a plane from the other side of the world, burning fossil fuels the entire trip. Shop at a local farmers? Markets and you will find fresh and healthy food, and help save our climate.

RESETTLEMENT AND REHABILITATION OF PROJECT-AFFECTED PERSONS

- Resettlement refer to the process of settling again in a new area. Rehabilitation means restoration to the former state.
- Resettlement of displaced persons is a problem for which there is no ready solution.
- **Example:** Most dam projects have been unable to resettle people that were affected and displaced.
- Therefore, opposition to many large hydroelectric schemes are growing. Solution for this problem is smaller dams.
- Multiple small dams have less impact on the environment. China has the largest number of these - 60,000, generating 13,250 megawatts, i.e. 30% of China's electricity.
- Sweden, the US, Italy and France also have developed small dams for electrical power generation.
- The development of small hydroelectric power units could become a very important resource in India, which has steeply falling rivers and the economic capability and technical resources to exploit them.

RESETTLEMENT AND REHABILITATION OF PROJECT-AFFECTED PERSONS

Reasons for displacement of people

- Natural disasters like earthquake, cyclones, tsunamis, volcanic eruptions, prolonged droughts conditions, floods, hurricanes etc.
- Man made disasters like industrial accidents (e.x. Bhopal gas tragedy), nuclear accidents(current disaster in Japan), oil spills(exxon valdez oil spill), toxic contamination of sites etc.
- In search of better employment opportunities.
- Developmental projects like: construction of dams, irrigation canals, reservoirs etc.
- Infrastructural projects like flyovers, bridges, roads etc.
- Transportation activities like roads, highway, canal etc.
- Energy related project like power plants, oil exploration, mining activities, pipelines like hbj pipeline etc.
- Agricultural projects
- Projects related with the conservation of wildlife like national parks, sanctuaries and biosphere reserves.
- As per the world bank estimates, nearly 10 lakh people are displaced worldwide for a variety of reasons.

RESETTLEMENT AND REHABILITATION (SUFFERINGS)

- Little or no support: Displacement mainly hits tribal and rural people who usually do not figure in the priority list of any political authorities or parties. Why do you think that the rural people have become the red robinhoods of today which are the maoists?
- Meager compensation: the compensation for the land lost is often not paid, it is delayed or even if paid, is too small both in monetary terms and social changes forced on them by these mega developmental projects.
- Loss of livelihood: displacement is not a simple incident in the lives of the displaced people. They have to leave their ancestral land and forests on which they depend for their livelihood. Many of them have no skills to take up another activity or pick up any other occupation. Usually, the new land that is offered to them is of poor quality and the refugees are unable to make a living.
- Lack of facilities: when people are resettled in a new area, basic infrastructure and amenities are not provided in that area. Very often, temporary camps become permanent settlements. It is also a major problem of displacement or resettlement that people have to face.

RESETTLEMENT AND REHABILITATION (SUFFERINGS)

[CONT..]

- Increase in stress: resettlement disrupt the entire life of the people. They are unable to bear the shocks of emptiness and purposelessness created in their life. Payment of compensation to the head of the family often lead to bitter quarrels over sharing of compensation amount within the family, leading to stress and even withering of family life. Moreover, land ownership has a certain prestige attached to it which cannot be compensated for even after providing the new land. With the loss of property and
- Prestige, marriages of young people also become difficult as people from outside villages are not willing to marry their daughters to the refugees.
- Increase in health problems: lack of nutrition due to the loss of agriculture and forest based livelihood, lead to the general decline in the health of the people. People are used to traditional home remedies. But th herbal remedies and plants gets submerged due to the developmental projects.
- Loss of identity: tribal life is community based. The tribal are simple people who have a lifestyle of their own. Displacement have a negative impact on their livelihood, culture and spiritual existence in the following ways:
- break up of families and communities are the important social issues of displacement. The women suffer the most as they are deprived even a little compensation.

OBJECTIVES OF REHABILITATION

- Tribal people should be allowed to live along the lines of their own patterns and others should avoid imposing anything on them.
- They should be provided means to develop their own traditional art and culture in every way.
- Villagers should be given the option of shifting out with others to enable them to live a community based life.
- Removal of poverty should be one of the objectives of rehabilitation.
- The people displaced should get an appropriate share in the fruits of the development.
- The displaced people should be given employment opportunities.
- Resettlement should be in the neighborhood of their own environment.
- If resettlement is not possible in the neighbor area, priority should be given to the development of the irrigation facilities and supply of basic inputs for agriculture, drinking water, wells, grazing ground for the cattle, schools for the children, primary healthcare units and other amenities.
- Villagers should be taken into confidence at every stage of implementation of the displacement and they should be educated, through public meetings, discussion about the legalities of the land acquisition act and other Rehabilitation provisions.

EXAMPLES OF RESETTLEMENT AND REHABILITATION

Displacement due to dams

- India has been constructing dams and other hydel projects. In the last 50 years, *20 million* people have been affected by the construction of such projects. *The hirakud dam displaced about 20000 people living in about 250 villages.*
- The bhakra nangal dam was constructed around 1950's and displaced a number of people. Some of them could not be rehabilitated even today.

Sardar Sarovar Project

- The World Bank's withdrawal from the Sardar Sarovar Project in India in 1993 was a result of the demands of local people threatened with the loss of their livelihoods and homes in the submergence area.
- This dam in Gujarat on the Narmada has displaced thousands of tribal folk, whose lives and livelihoods were linked to the river, the forests and their agricultural lands.
- While they and the fishermen at the estuary, have lost their homeland, rich farmers downstream will get water for agriculture.

EXAMPLES OF RESETTLEMENT AND REHABILITATION

Displacement due to mining

- Due to possibility of the accidents or sinking of the land, people have to be displaced in and around the mining area. Mining takes up several hectares of land and thousands of people have to be evacuated. Some 3 lakh people were to be shifted and it became a problem to find an alternative site.
- Jharia coal fields posed a problem years ago to the local residents due to the underground fire. Some 3 lakh people were to be shifted and it became a problem to find an alternative site. A huge amount of money to the tune of Rs 115 crores has been spent to put out the fire. Still the problem persists.

Displacement in Japan due to nuclear crisis

- the nuclear crisis in Japan where there was an explosion in three of the major reactors of Fukushima city due to tsunami. Currently, more than 2,00,000 people have been displaced from their native place and yet many are unable to find an alternative home. People were evacuated to protect them from the possible nuclear hazard and exposure.
- They are suffering from acute hunger as all the food supply was interrupted due to contamination of food particles by radiation.

DISASTER MANAGEMENT

What is disaster management?

- The disaster management act of 2005 defines disaster management as an integrated process of planning, organizing, coordinating and implementing measures which are necessary for-
 - 1.Prevention of threat of any disaster
 - 2.Reduction of risk of any disaster or its consequences
 - 3.Readiness to deal with any disaster
 - 4.Promptness in dealing with a disaster
 - 5.Assessing the severity of the effects of any disaster
 - 6.Rescue and relief
 - 7.Rehabilitation and reconstruction

DISASTER MANAGEMENT

- Disasters can be classified into the following categories:
 1. **Water and climate disaster:** flood, hailstorms, cloudburst, cyclones, heat waves, cold waves, droughts, hurricanes.
 2. **Geological disaster:** landslides, earthquakes, volcanic eruptions, tornadoes
 3. **Biological disaster:** viral epidemics, pest attacks, cattle epidemic, and locust plagues
 4. **Industrial disaster:** chemical and industrial accidents, mine shaft fires, oil spills,
 5. **Nuclear disasters:** nuclear core meltdowns, radiation poisoning
 6. **Man-made disasters:** urban and forest fires, oil spill, the collapse of huge building structures

DISASTER MANAGEMENT (INDIA)

- Disasters that commonly occur in India: Droughts, floods, cyclones, earthquakes, landslides, avalanches and forest fires.
- Among the 36 states and union territories in the country, 22 are prone to disasters.
- Among all the disasters that occur in the country, **floods** are the most frequently occurring natural disasters, due to the irregularities of the Indian monsoon.
- India has a long coastline of 5700 kms, which is exposed to **tropical cyclones** arising in the Bay of Bengal and the Arabian Sea.
- The Indian ocean is one of the six major cyclone prone regions of the world. In India, cyclones occur usually between April and may and also between October and December.
- The eastern coastline is more prone to cyclones as it is hit by about 80 percent of the total cyclones generated in the region

DISASTER MANAGEMENT (INDIA)

- **Droughts** are a perennial feature in some states of India.
- Sixteen percent of the country's total area is drought prone.
- Drought is a significant environmental problem as it is caused by a lower-than-average rainfall over a long period of time.
- Most of the drought prone areas identified by the government lie in the arid and semi-arid areas of the country.
- **Earthquakes** are considered to be one of the most destructive natural hazards.
- The impact of this phenomenon occurs with so little warning that it is almost impossible to make preparations against damages and collapse of buildings.

DISASTER MANAGEMENT (MITIGATION STRATEGY)

The main elements of a mitigation strategy are as follows:

- Risk assessment and vulnerability analysis
- Applied research and technology transfer
- Collaboration with educational institutions or universities
- Public awareness and training
- Incentives and resources for mitigation
- Landuse planning and regulations
- Hazard resistant design and construction

DISASTER MANAGEMENT (MITIGATION STRATEGY)

The **mitigation measures for floods** include both Structural and non-structural measures.

- The Structural measures include:
 - a) Reservoirs for impounding monsoon flows to be released in a regulated manner after the peak flood flow passes.
 - b) Prevention of over-bank spilling by the construction of embankments and floodwalls.
 - c) Improvement of flow conditions in the channel and anti-erosion measures.
 - d) Improved drainage.
- The non-structural measures include:
 - a) Flood plain management such as flood plain zoning and flood proofing including disaster preparedness
 - b) Maintaining wetlands
 - c) Flood forecasting and warning services
 - d) Disaster relief, flood fighting and public health measures
 - e) Flood insurance

DISASTER MANAGEMENT (MITIGATION STRATEGY)

Cyclones and mitigation measures

- Installation of early warning systems
- Developing communication infrastructure
- Developing shelter belts:
- Developing community cyclone shelters
- Construction of permanent houses

Landslides and mitigation measures

- A significant reduction in the hazards caused by landslides can be achieved by preventing the exposure of population and facilities to landslides and by physically controlling the landslides.
- Developmental programs that involve modification of the topography, exploitation of natural resources and change in the balance load on the ground should not be permitted.
- Some **critical measures** that could be undertaken to prevent further landslides are drainage measures, erosion control measures such as bamboo check dams, terracing, jute and coir netting and rockfall control measures such as grass plantation, vegetated dry masonry wall, retaining wall and most importantly preventing deforestation and improving afforestation.

ENVIRONMENTAL MOVEMENT

Definition:

- An environmental movement is a type of social movement that involves an array of individuals, groups and coalitions that perceive a common interest in environmental protection and act to bring about changes in environmental policies and practices.
- Environmental and ecological movements are among the important examples of the collective actions of several social groups.

Cause of Environmental Movements:

- The increasing confrontation with nature in the form of industrial growth, degradation of natural resources, and occurrence of natural calamities, has resulted in imbalances in the bio-spheric system.

ENVIRONMENTAL MOVEMENTS IN INDIA - CAUSES

Major reasons for the emergence of environmental movements in India are as follows:

- Control over natural resources
- False developmental policies of the government
- Right of access to forest resources
- Non-commercial use of natural resources
- Social justice/human rights
- Socioeconomic reasons
- Environmental degradation/destruction and
- Spread of environmental awareness and media

ENVIRONMENTAL MOVEMENTS IN INDIA

Major Environmental Movements in India

Many environmental movements have emerged in India, especially after the 1970s. These movements have grown out of a series of independent responses to local issues in different places at different times.

Some of the best known environmental movements in India have been listed out below:

- (1) The Silent Valley Movement**
- (2) Chipko Movement**
- (3) Bishnoi Movement**
- (4) Appiko Movement**
- (5) Narmada Bachao Andolan**
- (6) Jungle Bachao Andolan**

ENVIRONMENTAL MOVEMENTS IN INDIA

(1) The Silent Valley Movement

- The silent valley is located in the Palghat district of Kerala.
- It is surrounded by different hills of the State.
- The idea of a dam on the river Kunthipuzha in this hill system was conceived by the British in 1929.
- The technical feasibility survey was carried out in 1958 and the project was sanctioned by the Planning Commission of the Government of India in 1973.
- In 1978, the movement against the project from all corners was raised from all sections of the population.
- The movement was first initiated by the local people and was subsequently taken over by the Kerala Sastra Sahitya Parishad (KSSP).
- Many environmental groups like the Narmada Bachao Andolan (NBA), Bombay Natural History Society (BNHS) and Silent Valley Action Forum participated in the campaign.

The Silent Valley Movement - Quick Facts	
Year of the Movement	1978
Place	Kerala
Leaders	Kerala Sastra Sahitya Parishad (KSSP) and local people
Reason/Aim of the Movement	To save the silent valley and its rich biodiversity from the hydroelectric dam project that had been proposed.

ENVIRONMENTAL MOVEMENTS IN INDIA

(2) The Chipko Movement

- Chipko Movement started on April 24, 1973, at Mandal of Chamoli district of Gharwal division of Uttarakhand.
- The Chipko is one of the world-known environmental movements in India.
- The movement was raised out of ecological destabilisation in the hills..
- The fall in the productivity of the forest produces forced the hill dwellers to depend on the market, which became a central concern for the inhabitants.
- Forest resource exploitation was considered the reason behind natural calamities like floods, and landslides.
- On March 27 the decision was taken to 'Chipko' that is 'to hug' the trees that were threatened by the axe and thus the chipko Andolan (movement) was born.

Chipko Movement - Quick Facts	
Year of the Movement	1973
Place	Uttarakhand
Leaders	Chandi Prasad Bhatt, Sunderlal Bhauguna and others
Reason/Aim of the Movement	To protect the Himalayan forests from destruction

ENVIRONMENTAL MOVEMENTS IN INDIA

(3) Bishnoi Movement

- This movement was led by Amrita Devi, in which around 363 people sacrificed their lives for the protection of their forests.
- This movement was the first of its kind to have developed the strategy of hugging or embracing the trees for their protection spontaneously.
- It started in Rajasthan to stop the destruction of the village's sacred trees for building a new palace for the king.

Bishnoi Movement - Quick Facts	
Year of the Movement	1700s
Place	Rajasthan
Leaders	Amrita Devi Bishnoi
Reason/Aim of the Movement	To stop the destruction of the village's sacred trees for building a new palace for the king

ENVIRONMENTAL MOVEMENTS IN INDIA

(4) Appiko Movement

- It is a movement inspired by the Chipko movement by the villagers of Western Ghats, in the Uttar Kannada region of Karnataka, the villagers of Western Ghats started the Appiko Chalewali movement during the month of September – November 1983.
- Here, the destruction of forest was caused due to commercial felling of trees for timber extraction. Natural forests of the region were felled by the contractors, which resulted in soil erosion and drying up of perennial water resources.
- In the Saklani village in Sirsi, the forest dwellers were prevented from collecting usufructs like twigs and dried branches and non-timber forest products for the purposes of fuelwood, fodder, honey etc. **They were denied their customary rights to these products.**
- In September 1983, women and youth of the region decided to launch a movement similar to Chipko, in South India.
- The agitation continued for 38 days, and this forced the state government to finally concede to their demands and withdraw the order for the felling of trees.

Appiko Movement - Quick Facts	
Year of the Movement	1983
Place	Karnataka
Leaders	Panduranga Hegde, Villagers of Western Ghats; Women and youth from Saklani and surrounding villages
Reason/Aim of the Movement	To stop cutting trees by the fellers and the contractors of the forest department. The people demanded a ban on the felling of green trees.

ENVIRONMENTAL MOVEMENTS IN INDIA

(5) Narmada Bachao Andolan

- Narmada is one of the major rivers of the Indian Peninsula.
- The scope of the Sardar Sarovar project, a terminal reservoir on Narmada in Gujarat in fact is the main issue in the Narmada Water dispute.

Year of the Movement	1985
Place	Gujarat, Madhya Pradesh and Maharashtra
Leaders	Medha Patkar and other activists
Reason/Aim of the Movement	To question the rationale behind the developmental projects, especially dam construction across the river.

ENVIRONMENTAL MOVEMENTS IN INDIA

(6) Jungle Bachao Andolan

- Jungle Bachao Andolan began in the 1980s in the Singhbhum district of Bihar (presently in Jharkhand).
- It was a movement against the government's decision to grow commercial teak by replacing the natural Sal forests.
- The tribal community is the most affected by this decision as it disturbs the rights and livelihood of Adivasis of that region.
- This movement was widely spread in states like Bihar, Jharkhand and Odisha in various other forms..

Jungle Bachao Andolan - Quick Facts	
Year of the Movement	1982
Place	Singhbhum district of Bihar (now Jharkhand)
Leaders	Tribals of Singhbhum
Reason/Aim of the Movement	To oppose the government's decision to replace natural Sal forest with commercial teak plantations.

ENVIRONMENTAL ETHICS

- Ethics is a part of philosophy and guide us to follow righteous path which is in the larger interest of the society as a whole. Environmental ethics is related to environmental philosophy and defines what is right and wrong at ecological level. It is more a moral binding than legal compulsions.
- Practicing environmental ethics is, therefore, left to an individual. The outcome of such practices is always par excellence since it comes from voluntarily and hence with dedication. Educating today's youths, thus, becomes more significant in order to achieve expected outcome.
- Environmental ethics deals with issues related to the rights of individuals that are fundamental to life and well being. This concerns not only the needs of each person today, but also those who will come after us. It also deals with the rights of other living creatures that inhabit our earth.

There are primarily three views on environmental ethics:

- Libertarian view: LIBERTARIAN VIEW this view is correlated to the principle of civil liberty
- Ecological view : ecological view demonstrates ecological functioning.
- Conservation view: conservation ethic' is an extension of instrumental value to the natural environment.

WHY STUDY ENVIRONMENTAL ETHICS?

Resource consumption patterns and the need for their equitable utilization:

- Environmental ethics deals with issues that are related to how we utilize and distribute resources.
- There are rich and poor communities in every country. And there are rich and poor families. In this era of modern economic development, the disparity between the haves and have-nots is widening
- This unequal distribution of wealth and access to land and its resources is a serious environmental concern. An equitable sharing of resources forms the basis of sustainable development for urban, rural and wilderness dwelling communities.

Urban – rural equity issues

- The urban rich must appreciate where their resources are derived from and be willing to pay a fair price for using them.

WHY STUDY ENVIRONMENTAL ETHICS?

Equity – disparity in the northern and southern countries

- At the global level it deals with the great north –south divide between the rich industrialized nations of north America and Europe, as against the needs of developing countries of the south such as in south and southeast Asia and south America. The economically advanced west has exploited their own natural resources to such an extent that they have exhausted them nearly everywhere.

The need for gender equity

- All over India, especially in the rural sector, women work on the whole longer hours than men. They must constantly collect fuelwood for their homes and for sale to nearby urban areas, collect fodder for their cattle. And finally must cook meals in a smoky unhealthy atmosphere on crop waste or other inefficient sources of energy.
- All this can take 10 to 12 hours a day of very hard work, every day of the year. The great divide between women and men is most apparent in communities that live near forests and have by tradition made the woman play a greater role than men in collection of natural resources

WHY STUDY ENVIRONMENTAL ETHICS?

Preserving resources for future generations:

- This ethical issue must be considered when we use resources unsustainably. If we overuse and misuse resources and energy from fossil fuels, our future generations would find survival much more difficult. A critical concern is to preserve species and natural undisturbed ecosystems that are linked with bioresources, which must be protected for the use of future generations.

The rights of animals:

- Within our world there are a variety of living beings. The plants and animals that share the earth with us too have a right to live and share our earth's resources and living space.

ENVIRONMENTAL COMMUNICATION

- Environmental communication is the pragmatic and constitutive vehicle for understanding our environment as well as our relationships to the natural world. It is symbolic medium that we use in constructing environmental problems and negotiating society's different responses to them.

What its purpose?

- Environmental communication is pragmatic: it educates, alerts, persuades, mobilizes and helps to solve environmental problems.

Environmental communication: the stakeholders

1. Citizens and community groups 2. Environmental groups 3. Scientists 4. Corporations and business lobbyists 5. Anti-environmentalist groups 6. Media and environmental journalism 7. Public officials and regulators



THANK YOU