



ENVIRONMENTAL COMMUNICATION BA(JMC)-306

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SYLLABUS UNIT 4

ENVIRONMENTAL AND HUMAN WELFARE :

- Industrialisation, Consumerism and Development
- *Global Warming and Climate Change*: Shift to Alternate Sources of Energy
- *Environment and Social Movements*: Chipko Movement, Narmada Bachao Andolan
- Media, Environment and Human Welfare

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Industrialisation

DEFINITION:

- Industrialization is the process of transforming the economy of a nation or region from a focus on agriculture to a reliance on manufacturing. Mechanized methods of mass production are an essential component of this transition.
- The positive characteristics of industrialization include economic growth, a more efficient division of labor, and a growth spurt in technological innovation.

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Impact of Industrialisation

- Each industrial revolution also resulted in rapid urbanisation, with growing cities becoming increasingly crowded due to the new machineries, presenting new opportunities for people to travel and become factory workers in these places (common jobs included working as a labourer in textile factories, coal mining, working in a cotton mill, or working in iron production).
- Dirt accumulated on the streets, fossil fuels from the factories working at an unprecedented rate were emitted into the atmosphere, and waterways were infiltrated with various debris from the factories as well.
- The amount of carbon dioxide began to steadily increase throughout the industrial revolution, and those emissions have been on the rise ever since – with the dramatic increase in greenhouse gas and carbon dioxide emissions showing no signs of slowing down anytime soon.
- the need for mass production and the accumulation of waste have also increased dramatically since the start of the industrial revolution.


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Consumerism and Development

- Consumerism is the idea that increasing the consumption of goods and services purchased in the market is always a desirable goal, and that a person's well-being and happiness depend fundamentally on obtaining consumer goods and material possessions.
- Effects on Environment:
- Every product made requires some amount of resources extracted from the natural world; whether that be wood, water, metal, plastic, oil, or any number of things. As consumption of goods increases, the amount of resources that need to be extracted from the Earth also increases.
- The extraction of resources to create the extra goods demanded in a consumption driven society cause a lot of harm to the environment. However, it's not just the creation of goods that causes environmental harm, but disposing of used products can also cause serious problems. Consumerism drives people to constantly be buying more and newer products, making many people throw out their old products, creating a massive influx of trash and waste.


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Global Warming

- **Global warming** is the phenomenon of a gradual increase in the temperature near the earth's surface.
- **Causes of Global Warming:**
- **Deforestation-**Plants are the main source of oxygen. They take in carbon dioxide and release oxygen thereby maintaining environmental balance. Forests are being depleted for many domestic and commercial purposes. This has led to an environmental imbalance, thereby giving rise to global warming.
- **Use of Vehicles-**The use of vehicles, even for a very short distance results in various gaseous emissions. Vehicles burn fossil fuels which emit a large amount of carbon dioxide and other toxins into the atmosphere resulting in a temperature increase.
- **Chlorofluorocarbon-**With the excessive use of air conditioners and refrigerators, humans have been adding CFCs into the environment which affects the atmospheric ozone layer. The ozone layer protects the earth surface from the harmful ultraviolet rays emitted by the sun. The CFCs have led to ozone layer depletion making way for the ultraviolet rays, thereby increasing the temperature of the earth.
- **Industrial Development-**With the advent of industrialization, the temperature of the earth has been increasing rapidly. The harmful emissions from the factories add to the increasing temperature of the earth.


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Effects

- **Effects of Global Warming**
- **Rise in Temperature-** Global warming has led to an incredible increase in earth's temperature. Since 1880, the earth's temperature has increased by ~1 degrees. This has resulted in an increase in the melting of glaciers, which have led to an increase in the sea level. This could have devastating effects on coastal regions.
- **Threats to the Ecosystem-** Global warming has affected the coral reefs that can lead to the loss of plant and animal lives. Increase in global temperatures has made the fragility of coral reefs even worse.
- **Climate Change-** Global warming has led to a change in climatic conditions. There are droughts at some places and floods at some. This climatic imbalance is the result of global warming.
- **Spread of Diseases-** Global warming leads to a change in the patterns of heat and humidity. This has led to the movement of mosquitoes that carry and spread diseases.
- **High Mortality Rates-** Due to an increase in floods, tsunamis and other natural calamities, the average death toll usually increases. Also, such events can bring about the spread of diseases that can hamper human life.
- **Loss of Natural Habitat-** A global shift in the climate leads to the loss of habitats of several plants and animals. In this case, the animals need to migrate from their natural habitat and many of them even become extinct. This is yet another major impact of global warming on biodiversity.


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Alternate Sources of Energy

- Alternative energy refers to energy sources other than fossil fuels (such as coal, petroleum, and diesel) and includes all renewable and nuclear energy sources.
- The major advantage of alternative energy technology is that it won't run out. Our days using fossil fuels are numbered, and so any and all alternative energy sources are beneficial over traditional sources. Another huge advantage is that many of them do not require the same damaging and expensive extraction techniques, as much of it is available to us here on the surface.
- There is a surprising number of forms of alternative energy, some well known, while others are relatively unheard of. They are:
 1. Wind energy: This is one of the cleanest and most accessible sources of energy. Wind power is sustainable and does not release carbon emissions as a by-product. It's also entirely renewable, as there will always be wind.


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- **Solar energy:** This is probably the most commonly known source of alternative energy, and for good reason. Solar energy is completely renewable, and the costs expended on installation can be made back through energy bill savings.
- **Nuclear energy:** This is taken from the core of an atom, which must be split to gain its energy, a process called fission. This is harnessed in a power plant, where rods of nuclear material adjust how much electricity is produced. The more rods that are present during the chain reaction, the slower and more controlled the reaction will be. Removing the rods will allow a stronger chain reaction and create more electricity.
- **Hydrogen gas:** This is an important energy carrier and a potential alternative clean energy fuel with a notable stake in the global fuel market.
- **Biomass energy:** Biomass energy can include anything from burning wood to burning waste. With biomass in the form of burning wood, the heat generated is often equivalent to that of a central heating system, and the costs involved tend to be lower than a household or building that uses fossil fuels.


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Benefits

- **Conserve fossil fuels:** We generate renewable energy by tapping into virtually inexhaustible resources. When we use these natural resources, we're allowed to conserve and extend our time with non-renewable fossil fuels, which are dangerously close to depletion.
- **Slow and reverse climate change:** Carbon dioxide and additional greenhouse gas emissions are leading contributors to climate change and global warming. Alternative energy sources have a much lower carbon footprint than natural gas, coal, and other fossil fuels. Switching to renewable energy sources to produce electricity will help the planet by slowing and reversing climate change.
- **Save lives:** Making the switch to just hydropower, wind energy, and solar energy can potentially save up to 7 million lives each year by reducing air pollutants.
- **Reduce severe weather:** By slowing the effects of climate change and eventually reversing them, we can expect to see a reduction in extreme weather like droughts, floods, and storms caused by global warming.
- **Minimize fuel dependency:** We can diversify our energy supply by implementing the widespread use of large-scale renewable energy technologies and minimizing our imported fuel dependency.
- **Economic and job development:** Producing even more utility-scale energy systems can create economic growth as well as jobs in the installation and manufacturing industries, not to mention the sustainable energy industry.


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CHIPKO MOVEMENT

- Environmental movements are generally understood as those movements that are taken up against the development projects as the latter depend on vast amounts of natural resources and their injudicious use and exploitation.
- The Chipko movement is considered the first ecofeminist environmental movement that started in India in the 1970s to protect trees and forest areas from deforestation.
- The name comes from the Hindi word "chipko", meaning "to cling" or "to hug", as the villagers embraced the trees to prevent them from being felled.
- During the 1970s, forests were being cleared for logging and commercial development across India, leading to extensive deforestation and the destruction of large swaths of wildlife habitat. This caused significant ecological damage, and the disruption of traditional ways of life for those who depended on the forests for their livelihoods.
- The movement was formed in the Himalayan foothills where a village community took a stand against loggers, led by female community leader Gaura Devi. It was this instance of activism where the Chipko movement began; from here this method of resistance was emulated in other communities, spreading across India and beyond.
- The Chipko Movement is often considered the first ecofeminist movement. Although men were involved and had leadership roles in the movement, women were its mainstay as they were the backbone of many regional agrarian economies and so were most directly affected by environmental degradation and deforestation. The activism of those involved in the movement has had a lasting legacy on the way forests are managed in India and contributed to the global effort to preserve forests and other natural resources.

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- As the movement continued, protests became more project-oriented and expanded to include the entire ecology of the region, ultimately becoming the "Save Himalaya" movement. Between 1981 and 1983, Bahuguna marched 5,000 km (3,100 miles) across the Himalayas to bring the movement to prominence. Throughout the 1980s many protests were focused on the Tehri dam on the Bhagirathi River and various mining operations, resulting in the closure of at least one limestone quarry. Similarly, a massive reforestation effort led to the planting of more than one million trees in the region.
- **Chipko Movement - Impact**
 - After a decade of fierce protests, the Chipko Movement produced results in 1980.
 - Additionally, the government put a 15-year prohibition on cutting down trees in Uttar Pradesh's Himalayan forests.
 - Additionally, forests in the Vindhya and the Western Ghats were included in the prohibition on green-felling.
 - Along with this movement, it aided in raising awareness of forest rights and the power of grassroots activism to shape public policy.
 - Additionally, India's forest cover increased somewhat between 2015 and 2017, as reported by the yearly State of Forests Report 2017.
 - It was a major source of inspiration for the massive Appiko campaign in the Western Ghats, which helped to galvanize support for other anti-environmental destruction initiatives.

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Narmada Bachao Andolan

- Narmada Bachao Andolan – NBA is an Indian social movement led by native tribes, farmers, environmentalists and human rights activists against the construction of a number of large dams under the Narmada Dam Project across river Narmada.
- The river Narmada flows through the states of Gujarat, Madhya Pradesh and Maharashtra. Sardar Sarovar Dam in Gujarat is one of the biggest dams on the Narmada river and was one of the first focal points of the Save the Narmada Movement. SSD is a part of the Narmada Dam Project that aims to provide irrigation and electricity to people of the above states.
- The proposed Sardar Sarovar Dam and Narmada Sagar were to displace more than 250,000 people. The big fight of the Save the Narmada Movement was over the resettlement or the rehabilitation of these people.

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Impact of the Andolan


- The Narmada Bachao Andolan plays an important role in the political history of India as it highlighted one of the biggest mass movements against the government to save nature. Mainly led by the native tribes, along with farmers, Human Rights activists, and environmentalists the movement gained a lot of popularity and support from all corners of the country. The multi-crore project gained financial assistance from even the World Bank which was largely frowned upon and protested against forcing them to withdraw their support in 1992. The people took this matter to the court where the Supreme Court ordered the height of the Dam to be brought down to 90 as a post to 130m. The withdrawal of the support of the World bank has left the state government and market borrowings to finance the current project.

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Media and Human Welfare

- In the near future, fossil fuel from oil fields will run dry. It will be impossible to meet the demands for food from existing agro systems. Pastures will be overgrazed by domestic animals and industrial growth will create ever-greater problems due to pollution of soil, water and air. Seas will not have enough fish. Larger ozone holes will develop due to the discharge of industrial chemicals into the atmosphere, which will affect human health. Global warming due to industrial gases will lead to a rise in sea levels and flood all low-lying areas, submerging coastal agriculture as well as towns and cities.
- Water famines' due to the depletion of fresh water, will create unrest and eventually make countries go to war. The control over regional biological diversity, which is vital for producing new medicinal and industrial products, will lead to grave economic conflicts between biotechnologically advanced nations and the bio rich countries. Degradation of ecosystems will lead to extinction of thousands of species, destabilizing natural ecosystems of great value.
- These are only some of the environmental problems related to an increasing human population and more intensive use of resources that we are likely to face in future. These effects can be averted by creating a mass environmental awareness movement that will bring about a change in people's way of life. Increase in production per capita of agricultural produce at a global level ceased during the 1980's. In some countries, food shortage has become a permanent feature. Two of every three children in South Africa are underweight.
- In other regions famines due to drought have become more frequent. Present development strategies have not been able to successfully address these problems related to hunger and malnutrition. On the other hand, only 15% of the world's population in the developed world is earning 79% of income! Thus the disparity in the extent of per capita resources that are used by people who live in a 'developed' country as against those who live in a 'developing' country is extremely large

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- Population explosion is the most serious problem facing our country today. The phenomenal growth rate in population is largely because of the industrial and technological revolutions that had taken place in the recent times. The new technologies have not only brought down the death rate because of the vastly improved Medicare resulting in increased life expectancies, but had also facilitated increased food production to take care of food needs of the increasing population. To check ill-effects of population growth on the socio-economic front, the Indian government had launched the Family Planning Programme in 1951. This was later rechristened as the Family Welfare Programme. This programme promotes on a voluntary basis, responsible Planned Parenthood, through independent choice of family planning methods best suited to the people.
- There are several environmental factors that are closely linked to the welfare of women and children. Each year, close to eleven million children worldwide are estimated to have died from the effects of disease and inadequate nutrition. The mass media plays an important role in democratic societies to impose checks and balances on the functioning of various institutions of the state, and in shaping public opinion by informing people about the performance of these institutions.
- Free media is essential to human welfare because, without information, people won't know what's going on locally, nationally, or internationally. Their ability to respond to laws, policies, and events – including human rights violations – is limited by ignorance. Free media has a responsibility to share information and help explain that information to the public in a clear, accessible way. The media also has a duty to hold people in power accountable.

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