

CHAPTER 9 Environment and Natural Resources

After reading this chapter you should be able to under the following

Learning Objectives:

- Meaning of environment
- Different treaties, agreements among countries.
- Division of North South.
- Environmental issues, factors, solutions.
- Global commons.
- Common but differentiated responsibilities.
- Common property resources.
- Source of Geopolitics.
- Different movement.
- Indigenous people.
- Indian Standard on Environmental issues.

Introduction: The term “environment” refers to the natural setting around an object. It refers to an ecological awareness that concerns itself with rectifying and sustaining the planet during its current challenges. The key aspect of natural resources is that they dedicate the survival of humans and other life forms of earth. These resources include, land, rocks, forests (vegetation) fossil fuels animals, (fish, wildlife, domestic animals). Water (oceans, lakes, streams, seas and rivers) minerals, sunlight and air. Thus in common parlance the term environment means everything whether biotic or abiotic which surrounds an object is called its environment.

The contemporary environmental issues

The contemporary world is facing the following issues:

1. **Barrenness of Agricultural land:** The cultivable land is decreasing and substantial part of agricultural land is losing fertility, gross land has been overgrazed and fisheries have been overharvested water bodies have suffered depletion and pollution resulting in reduction of food grains.
2. **Water pollution:** According to (UNDP) United Nations Development Programme 2.6 billion people have no proper sanitation and 1.2 billion people do not have safe water resulting in the death of more than 3 million children every year.
3. **Deforestation:** Natural forests which are essential for stabilizing climate, moderate water supplies and harbor a majority of planets diversity on land__ are being cut down and people are being displaced. Loss of biodiversity has led to destruction of certain species which live in that particular habitat.
4. **Ozone depletion:** A rapid decline in the total amount of ozone in earth`s stratosphere, which is commonly referred to ozone hole poses a real danger to ecosystem and human health.

5. **Coastal pollution:** The coastal pollution has increased due to urban sewage, drilling, and shipping of crude oil, industrial effluents like chemicals, heat, etc. and radioactive wastes. Most ocean pollution begins on land based activities. If it goes unchecked, it will lead to further deterioration of marine environment.
6. **Global warming:** A gradual increase in the overall temperature of earth's atmosphere generally attributed to the greenhouse effect caused by increased levels of Carbon Dioxide, methane CFC's, Hydro fluoro carbons and other pollutants.

Define the nature and establishment of following:

1. The club of Rome,
 2. UNEP.
 3. Earth summit.
 4. Global North.
 5. Global South.
 6. Agenda 21.
 7. Sustainable Development.
1. **The club of Rome:** - The club of Rome was founded on 7th of April 1968 in Rome Italy. Its headquarter is in New York (USA). It consists of current and former heads of state. UN bureaucrats, high level politicians, diplomats, scientists, economists and business leaders from around the Globe. It is also called Global Think Tank. It came with a book in 1972 called "**Limits to the Growth**". This book dwelt upon the dramatic depletion of earth's resources against the steady increased in world population.
 2. **UNEP:** United Nations environmental programme (UNEP) was founded in June 1972 in Nairobi (Kenya) as a result of the Stockholm conference on human environment. It is the coordinating body for the United Nations Environmental Activities. It is also known for assisting developing countries in implementing environmentally sound policies and practices.
 3. **Global North:** Global North refers to the developed societies of Europe and North America, which are characterized by established democracy, wealth, technology, advancement, political stability, aging population, zero population growth and dominance of world trade and politics. The north south divide is a socio-economic and political division of earth popularized in the late 20th century. Generally global north includes G8 countries. USA, Canada, UK, all member states of EU, Israel, Japan, Singapore, South Korea, Australia, New Zealand and four of the five permanent members of UNSC.
 4. **Global South.** Global South refers to developing countries of Africa, Latin America and Asia and Middle East. It is home of (BRIC) Brazil, Russia, India and China and South African countries. The south largely corresponds with the third world and eastern world. These are generally poor developing countries with younger, more fragile democracies heavily dependent on primary sector and frequently share a history of past colonialism by northern states.
 5. **Earth Summit:** The conference held at Rio-De- Janeiro Brazil (June 3-14, 1992) to reconcile worldwide economic development with protection of the environment. The Earth Summit was largest gathering of world leaders in history, which was attended by 117 heads of states and representatives of 178 nations. By means of treaties and other documents signed at the conference most of the world nations accepted to follow the pursuit of economic development in ways that would protect the Earth's Environment and non-renewable resources.

6. **Agenda 21:** It is a non-binding actions plan of UN with regard to sustainable development. It is the product of Earth Summit held at Rio-De- Janeiro Brazil. It is the action agenda for the UN, other MNC's and individual governments around the world that can be executed at local, national and global levels. It was published on 23-04-1993. The (21) in Agenda refers to 21st century. The main objectives among others are adopting and implementing policies concerning with issues such as recycling, energy efficiency, conservation and rehabilitation of damaged landscapes.
7. **Sustainable Development:** Sustainable development is that development that meets the needs of present without compromising the ability of future generations to meet their own needs. It is also called Brundtland report e.g. using recycled materials or renewable resources.

Define Global Commons, Their Exploitation and Protection

The global commons are those resources which are not owned by anyone but are rather shared by community. These areas therefore need common governance by international community. These are also called (res communis) humanitatis Roman law-common heritage of mankind. The global commons include the earth's atmosphere, Antarctica, the ocean floor and outer space.

Exploitation and Pollution of Global Commons

The Global Commons are mostly exploited by the developed countries by the way of emission of toxic gases from the industries and the means of transport. The high sea is mostly used for the navigation of commercial ships, warships, passenger ships, boats etc. The sea floor is polluted by these ships as such these are driven by diesel power. The outer space is being exploited for the more and more information purposes and new satellites are being sent out the outer space which has made outer space a hub of satellites and rocket wastes. The developed countries pollute the environment by their nuclear experiments.

Factors responsible for Environment Pollution

The main factors responsible for environmental pollution are as under:

Population: The rapid increase in the world population has been a major threat to environment. It has been posing severe threats such more people need more food and for that purpose more land is needed. For which more land, forests need to be cleared which causes desertification of land.

Deforestation and Soil Erosion: The cutting of trees leads to soil erosion which causes droughts and floods. So this is an important factor of environmental pollution.

Industrialization: Rapid industrialization has caused environmental pollution. The emission of greenhouse gases from the industries have severely damaged the ozone layer, the discharge of the industrial wastes in the water resources causes water pollution and industrialization have been one of the cause of the global warming.

Means of transport: Another important factor in environmental pollutions is means of transport which is responsible for emission of greenhouse gases and increase in the noise which is increasing day by day.

Protection of Global Commons

Various steps have been taken to protect the global commons, like the 1959 Antarctic treaty, 1987 Montréal protocol and the Antarctic protocol in 1980's. The ozone hole was discovered which has revealed the opportunity and dangers inherent in tackling global environmental problems. The

history of outer space as a global common shows that management of these areas is thoroughly influenced by North South inequalities. Regarding the earth's atmosphere and the ocean floor the major problem is the technology and industrial development.

Common but Differentiated Responsibility

This is an argument between north and south. It was accepted at Rio summit in 1992 known as (CBDR) as a principle within the (UNFCCC) that acknowledge the different capabilities and differing responsibilities of individual countries in addressing the climate change. (CBDR) is principle of international environmental law establishing that all states are responsible for addressing global environmental destruction yet not equally responsible.

Kyoto Protocol

The Kyoto Protocol known as Kyoto Accord is an international treaty among industrialized nations that sets mandatory limits on greenhouse gas emissions. The greenhouse effect is the warming effects of sun on greenhouse gases, such as carbon dioxide that act to trap this heat in our atmosphere. The framework pledges to stabilize greenhouse gas concentrations at a level that prevent dangerous anthropogenic interference with climate system. A total of 192 countries have signed and ratified the Kyoto Protocol 1997.

Common Property Resources

Common property resources (environmental) our natural resources which are owned and managed by a community or society rather than by an individual's its examples include irrigation system, Fishing grounds, pastures, forests, water or the atmosphere.

Sacred Groves

Certain societies respect and worship a particular tree which they have preserved from time immemorial sacred groves are the forests of god or goddesses i.e. the Mundas and the Santals of Chotanagpur region worshipping Mahur and Kandamba trees.

Environment Movements

The governments as well as conscious voluntary groups have launched diverse, vibrant and powerful social and environmental movements across the globe to control the endangered environment. These movements have given long term perspectives on what should be done and what should not be done for the survival of individual and collective lives. These also aim at their attitude towards protection of ecological diversity. **Examples of such movements are as follows:**

1. **Pro-Forest Movement:** Clearance of forests by third world countries, depletion of grand forests has led to the rise of forest movement in the south especially in states like China, India, Mexico, Malaysia, Brazil, Chile, Continental Africa etc. all these movements face enormous pressure to fight for ecological conservation. Chipko movement is an example of this movement.
2. **Movements Related to Mining:** over extraction of earth, over use of chemicals, pollution of land and water ways, clearance native negotiation, displacement of local communities. As a member of MNC's have opened their networks in the south with the onset of the global economy. The MNC's criticize that there has been the misuse of mineral industries. (WMC) western meaning corporation Australia and Philippines are its examples.
3. **Anti- Dam Movement:** Anti-Dam Movement rose whenever, a mega dam is built in a country. These are pro-river movements for more sustainable and equitable management of river

systems and river valleys. First such movement began in early 1980's in the north (Australia) to save franklin river and its surrounding forests. Such movements were seen in Turkey, Thailand, South Africa, India, Indonesia and China. Tahri Dam and Narmada Bacha Andholan (NBA) are its examples.

World Wildlife Fund (WWF)

On 20th of December 2013 UNGA at its 68th session proclaimed 3rd march- the day signature of the convention on international trade in endangered species of wild flora and fauna in 1973 as UN worldwide life day to celebrate and arise the awareness of the world wide animals. In Africa campaign have started against ivory trade. A battle is on in India to protect Bengal tigers in Philippines organization are fighting to protect eagle and our birds.

Resource Geopolitics

Resource geopolitics means who gets what, when, where and how. The western powers have always thought about the control over resources to regulate the relationship of trade, war and power and Centre of this relationship have been maritime navigation and over sea resources. During the cold war era, the global north undertook a number of strategies to ensure smooth flow of resources. They deployed their military forces near exploration sites and along sea-lanes of communication. They even helped in establishing friendly governments in resource producing states.

After the disintegration of erstwhile USSR, the security of supply continues to bother the west. This includes the radio- active minerals, oil and water. The geopolitics focused on.

Oil: oil is supposed to be the most portable and indispensable fuel of the 20th century. The wealth generated by oil has led to the several political struggles. Central Asia and west Asia popularly known as gulf region contributes 33% of oil production at global level. However, it contributes 64% planets reserves and is only region to satisfy rising demands of oil. Saudi Arabia with ¼ of world's reserves followed by Iraq. USA, Europe, Japan, India and China are the largest consumers of oil are located at a distance from gulf. It is argued by critics that USA conquered Iraq to get a control over its oil reserves.

Water: water is another most relevant resource in global politics. Regional differences and security of fresh water has become another bone of concentration during 21st century. Some proponents have predicted possibility of a violent war over this life sustaining resource. States sharing river waters can dispute over downstream pollution, excessive irrigation or construction of Dams.

The dispute between Israel, Syria and Jordan over Jordan and yarmuck rivers (1950 and 1960) Turkey, Syria and Iraq over building of a Dam over Euphrates river are the examples of this uprisings.

Indigenous People/Problems/Rights

Indigenous people are communities and nations who are native to particular area. The UNO defines indigenous people as composing the descendants of people who inhabited the present territory at the time when persons of different culture or ethnic origin arrived there from other parts of the world and overcome them. In other words, the indigenous people are those who have a distinct identity and communities as yet. The indigenous people occupy areas in central and south America, Africa, India and South Asia. There doesn't seem to be one definitive definition of

indigenous people, but generally indigenous people are those people who have historically belonged to a particular region or country, before its colonialization or transformation into a nation state, and many have different- often unique- cultural, linguistic, traditional and other characteristics to those of dominant culture of that region or state. The indigenous people in India are called Tribals.

Problems and Rights

Despite their cultural differences, the various groups of indigenous people around the world share common problems related to protection of their rights as distinct people. Indigenous people around the world have sought recognition of their identities, their ways of life and their right to traditional lands, territories and natural resources yet throughout the history, their rights have been violated. Indigenous people are arguably among the most disadvantaged and vulnerable groups of people in the world today. The international community now recognizes that special measures are required to protect the rights of the world's indigenous people. During 1970's growing international contacts among indigenous leaders from around the globe across a sense of common concern and shared experience. The world council of indigenous people was formed in 1975. However, the indigenous throughout the world face a number of problems in relation to their identity, rights etc.

Indian Stand and Environmental Issues

On the principle of common but differentiated responsibility India was pioneered the idea that the major responsibility of limiting greenhouse effect rested with the developed states since they have accumulated it over a long time period. India calls it unfair to impose restrictions on itself when its per capita carbon emission norms in 2030 are likely to be less than half of the world's average of 3-8 tonnes in 2008.

However, India an active participant through participation in number of programmes for instance India's national auto fuel policy, makes uses of clearer fuels for vehicles mandatory. The energy conservation act (2001) electricity act (2003) are aimed at improving energy efficiency. And Eco-Friendly technology to overcome its needs without harming the environment.

Now you should be able to answer following questions

Long Answer Type Questions

1. What are the environmental concerns at global level?
2. Describe the efforts done to resolve the environmental issues.
3. What do you mean by sustainable development?
4. Describe exploitation and protection of global commons.
5. What do you mean by common but differentiated responsibilities?
6. Define, common property, resources and sacred groves?
7. Describe the factors responsible for environmental pollution.
8. What is the environment movement? Support your answer with three movements.
9. Write a short note on world wildlife fund?
10. Discuss resource geopolitics.
11. Who are the indigenous people? Discuss their problems and rights.
12. Write a short note on Indian stand about environmental issues.

Short Answer Type Questions.

1. What environmental issues are faced by the contemporary world?
2. Define following in brief.
 - a. The club of Rome.
 - b. UNEP
 - c. Earth Summit
 - d. Global North
 - e. Global South
 - f. Agenda 21
 - g. Sustainable Development
 - h. Kyoto Protocol
3. What factors are responsible for environmental pollution?
4. What are global commons?
5. What do you mean by (CBDR)?
6. What are common property resources?
7. What do you mean by sacred groves?
8. Write a note on pro-forest movement.
9. How is mining responsible for environmental pollution?
10. Discuss anti-dam movement with reference to India.
11. What do you mean by (WWF)?
12. Discuss geopolitics with regard to oil and water.
13. Who are called indigenous people?

Very Short Answer Type Question

1. Define environment.
2. What is full form of UNDP, UNFCCC, UNEP, BRICS and CBDR?
3. Why Agenda 21 is suffixed with "21"?
4. Name three countries each of global north- south.
5. When was first earth summit held?
6. What is meant by sustainable development?
7. Write any three global commons.
8. Write any two steps to taken to protect global commons.
9. What do you mean by greenhouse effect?
10. When was ozone hole discovered?
11. Where is Kyoto?
12. Define common property resource.
13. Name any two sacred trees.
14. Write any two factors responsible for environmental pollution.
15. What is the full form of (NBA)?
16. Chipko movement is a pro-forest movement. How?
17. Where is Franklin river?
18. What is full form of (WMC)?
19. Which animal in India is about to extinct?
20. Is oil and water for a resource of Geopolitics.
21. Where are Tribals living in the India.
22. When was energy conservation act passed in India?