

3.Syllabus – Semester 2 Unit 2: Rules and Regulations of Environmental Education

- Necessity of rules and regulations, Different types of rules and regulations, Mistakes in implementation of environmental rules, Problems in implementing environmental rules
- Environmental Laws in India, Wildlife Protection Act, Forest Conservation Act, Water (Prevention and Control of Pollution) Act, Air (Prevention and Control of Pollution) Act, Environment Protection Act, Biodiversity Act.
- International Agreements: Montreal Protocol, Kyoto protocol and climate negotiations, Convention on Biological Diversity.

Necessity of rules and regulations

- To overall improve the condition of environment and to prevent damage to environment
- To promote social equity (rich can escape environmental pollutions like air and water pollution through expensive technological gadgets, law limits the pollution putting the financially advantaged and disadvantaged on the same platform)
- To prevent excess expense (economic costs of effective implementation of environmental regulation is much less than effective remediation of environmental degradation)

Types of environmental regulations

- Command and control type regulation (Air Act, Water Act etc)
- Market-incentive type (Pollution Cess Act 1977, Public liability Insurance Act 1991)
- Voluntary participatory Act (Ganga Action Plan)

Mistakes/problems in implementation of Environmental rules

- Lack of public awareness
- Poor enforcement and lack of accountability
- Financial and technological constraint
- Ambiguous regulations and poor coordination between agencies
- Failure to address economic constraints of general public
- Constant conflict between development and environment.

Key Areas of Environmental Regulation

Resource conservation

Waste Management

Pollution control

Environmental Protection

Environmental Laws in force in India:

1972 – Wildlife Protection Act (After Stockholm Convention on human environment)

1974 - Water (Prevention and Control of Pollution) Act,

1980 - Forest Conservation Act,

1981 - Air (Prevention and Control of Pollution) Act,

1986 - Environment Protection Act,

2002 - Biodiversity Act

2010 – Green Tribunal Act

Green Tribunal: It was established in 2010 for effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources. It also includes cases regarding enforcement of any legal right relating to environment and giving relief and compensation for damages to persons and property. Green Tribunal main bench is at Delhi and four other centres, Kolkata, Chennai, Bhopal and Pune. Green tribunal is presided over by a chairperson (having rank of High Court Chief Judge/Supreme Court Judge), 10-20 members (judicial officers and 10 to 20 experts as designated by central govt).

The legislations not under the purview of Green Tribunal is Wildlife Protection Act

International Conventions:

1971- Ramsar convention – Conserving wetlands

1972 - Convention on Human Environment Stockholm

1987 – Brundtland report – Sustainable development

1989- Basel Convention – Transboundary movement of hazardous substance

1992- Earth Summit -Rio De Janeiro, Convention on Biological Diversity

1997 – Kyoto protocol – Global Warming – Effort to limit Greenhouse gases

1971 Ramsar – Convention on Wetlands – Promoting conservation and wise use of wetlands

91 Ramsar sites in India, last two, both in Rajasthan added in June 2025. 2521 as of Oct 2024

(The definition of the word 'wetland', under the Convention, is any land area that is saturated or flooded with water, either seasonally or permanently. Inland wetlands include aquifers, lakes, rivers, streams, marshes, peatlands, ponds, flood plains and swamps. Coastal wetlands include all coastlines, mangroves, saltmarshes, estuaries, lagoons, seagrass meadows and coral reefs)

1972 Convention on Human Environment Stockholm

1987 - World Commission on Environment Development – Brundtland report – Our common Future – on sustainable Development

1989- Basel Convention – Transboundary movement of hazardous substance-The convention utilizes a "notice and consent" system (PIC) for the export of hazardous and other wastes. This means that exporting countries must obtain written consent from the importing country before the waste can be shipped, and they cannot proceed if they believe the waste will not be handled responsibly.

1992 – Rio de Janeiro - Earth Summit – Agenda 21- A global action plan to promote Sustainable Development

1992 - Convention of Biological diversity (CBD- in earth Summit) – came into effect from 1993

Objectives:

1. Conserving biodiversity
2. Using components of biodiversity in a sustainable manner
3. Fair and equitable sharing of benefits from genetic resources

1987 -Montreal protocol

Montreal Protocol - A global agreement to protect the Earth's ozone layer by phasing out the chemicals that deplete it. This includes both the production and consumption of ozone-depleting substances (ODS). Signed in 1987 and entered into force in 1989.

The parties to the Protocol meet once a year to make decisions aimed at ensuring the successful implementation of the agreement. These include adjusting or amending the Protocol, which has been done six times since its creation. The most recent amendment, the Kigali Amendment, called for the phase-down of hydrofluorocarbons (HFCs) in 2016. These HFCs were used as replacements for a batch of ozone-depleting substances eliminated by the original Montreal Protocol. Although they do not deplete the ozone layer, they are known to be powerful greenhouse gases and, thus, contributors to climate change.

Developing countries for which per capita production of ODS is < .3kg is exempted.

Multilateral fund established to provide financial and technical assistance to developing countries fulfilling above criteria. Funds activities to be monitored by UNEP, UNDP, UNIDO, World Bank

1989 - Basel Convention – This is a global treaty to regulate the transboundary movement of hazardous and other wastes. It entered into force in 1992.

1997 - Kyoto protocol, went into effect - 2005

Aims to reduce emissions of GHGs (CO₂, CH₄, N₂O, HFCs, PFCs And SF₆)

Salient Features:

- International Emissions Trading (A country which reduced GHGs below their required level would be able to sell the surplus internationally) .
- Clean Development Mechanism – A developed country that implemented a project to reduce GHGs in a developing country can obtain salable credits through this process.
- Joint Implementation – Joint implementation by developed and developing countries with both types having different targets.

Countries that did not ratify Kyoto protocol - U.S. was a signatory but did not ratify the protocol and Canada signed and ratified but later withdrew from Kyoto protocol.

A **carbon credit** (often called a carbon offset) is a credit for greenhouse emissions reduced or removed from the atmosphere by an emission reduction project. This can be used by governments, industry, or private individuals to compensate for the emissions they generate elsewhere. Since GHG mitigation projects generate credits, this approach can be used to pay for carbon reduction schemes between trading partners around the world.

1992 - Convention of Biological diversity (CBD) – came into effect from 1993

1972 – Wildlife Protection Act – Salient features

- Provides for the protection of wild animals and plants and regulates the hunting, trade and commercial exploitation of wildlife
- Includes provisions for declaring protected areas and empowers Government to take measures to conserve and protect wildlife
- Provides for the establishment of the Wildlife Advisory Board to advise the government on wildlife-related matters.

1974 - Water (Prevention and Control of Pollution) Act – Salient features

- The Act provides for prevention, control and abatement of water pollution.
- The water act is designed to assess pollution levels and punish polluters
- The water Act requires Central government and state governments have set-up pollution control boards to monitor water pollution

1980 - Forest Conservation Act – Salient features

- Forests were transferred from State list to concurrent list and were treated as national asset
- State Governments were empowered to use forests only for forestry use. Permission from Central Government was necessary for conversion of forest land.
- Provides for fines in case of non-compliance

1981 - Air (Prevention and Control of Pollution) Act – Salient features

- Giving the boards powers to declare air pollution control areas,
- Require industries to obtain permission before operating in such areas, set emissions limits, conduct inspections and testing, and establish air quality laboratories.
- Non-compliance can result in fines and imprisonment.

1986 - Environment Protection Act – Salient features

The Central Government is empowered to

- take all such measures as it deems necessary or expedient for the purpose of protecting and improving the quality of the environment in coordination with the State Governments.
- to plan and execute a nation-wide programme for the prevention, control and abatement of environmental pollution.
- Lay down standards for the quality of environment in its various aspects.
- Lay down standards for emission or discharge of environmental pollutants from various sources.
- The restriction of areas in which any industries, operations or processes or class of industries, operations or processes shall/ shall not be carried out subject to certain safeguards.

2002 - Biodiversity Act – Salient features

- Regulates access to biological resources found in India for research, commercial utilization, or any other purpose, requiring prior approval from the NBA.
- Benefits derived from the use of biological resources and associated traditional knowledge are shared equitably with local communities and other stakeholders.

- The Act promotes the conservation of biological diversity and encourages the sustainable use of its components.
- It recognizes and protects the knowledge of local communities related to biodiversity and ensures that they are involved in decision-making processes.
- The Act establishes a 3-tier structure - the NBA at the national level, SBBs at the state
- The Act allows for the declaration of areas of importance as biological diversity heritage sites for their protection.

2010 – Green Tribunal Act – Salient features

- Effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources
- Enforcement of any legal right relating to environment
- Giving relief and compensation for damages to persons

NGT applies the following principles while passing any order: sustainable development, the precautionary principle, and the polluter pays principle