



Modern Education Society's  
**Nowrosjee Wadia College**

# ENVIRONMENTAL POLICIES AND PRACTICES

*- Asst Prof Swapnil Pardikar*



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# I. Need for Environment Laws





**Ethics is knowing the difference  
between what you have a right to  
do and what is right to do.**

Potter Stewart

# Environmental law

- Environmental law is a collective term encompassing aspects of the law that provide protection to the environment. A related but distinct set of regulatory regimes, now strongly influenced by environmental legal principles, focus on the management of specific natural resources, such as forests, minerals, or fisheries



# Why is Environmental Law Important?

- There are a few key areas that environmental law works to regulate in order to lessen the impact on the environment. Some of these areas include:
  - Air Quality
  - Water Quality
  - Waste Management
  - Contaminant Cleanup
  - Chemical Safety
  - Resource Sustainability
- As you can see from the list above, environmental laws play a huge part in protecting humans, animals, resources, and habitats. Without these laws, there would be no regulations concerning pollution, contamination, hunting, or even response to disasters.
- Environmental law works to protect land, air, water, and soil. Negligence of these laws results in various punishments like fines, community service, and in some extreme cases, jail time. Without these environmental laws, the government would not be able to punish those who treat the environment poorly.

# Need of Environment Laws

- Protecting humans, animals, resources and habitats.
- Promoting economic growth with environmental, human health and cultural safeguards.
- The challenges highlight the need for decision-making processes, management agreements and procedures for dispute resolution.
- Illustrate the necessity of creating administrative and legal structures capable of enabling ecologically sustainable and socially acceptable development.
- Our future generations would be destroyed.
- They also determine who can use natural resources and on what terms.

# INDIAN CONSTITUTION:-

- Art. 21:- Right to Life includes Right to pollution free environment.
- Part IV: Art. 48A:- Protection for improvement of environment and safeguarding of forest and wild life.
- Part IV A: Art. 51A clause (g):- It imposes a fundamental duty on every citizen to protect and improve the natural environment.

- Art. 253 says that Parliament has power to make laws for the country.
- The Environment Protection Act, 1986 was enacted under Art. 253.



# International Standard:-

- The United Nation Conference on Human Environment was held at Stockholm in 1972.
- The program was set up in Geneva in June, 1972.
- It was the first conference on international protection of environment.

## Conventions and Protocols:-

- Vienna Convention, 1985: Adopted for Protection of Ozone layer.
- Montreal Protocol, 1989: Adopted for Reduce Ozone depletion.
- Basel Convention, 1992: For trans-boundary movement of hazardous waste.
- Kyoto Protocol, 1997: For Climate change.

Activate Wi

**Important**



## **2. Environment Protection Act Introduction**

# Environment Protection Act, 1986

- The spirit of the proclamation adopted by the **United Nations Conference** on Human Environment which took place in Stockholm in June 1972, was implemented by the Government of India by creating this Act.
- The Stockholm Conference **international environmental issues** motivated countries around the world to monitor environmental conditions as well as to create environmental ministries and agencies.

# Why was it enacted ?

- **Article 253** of the Constitution of India empowers the Parliament to enact laws to execute international obligations or decisions from international conferences and associations.
- India was an active participant of the UN Conference on Human Environment held at Stockholm in June 1972.
- It was an important event in the history of world environmental laws and is still considered as a **turning point** in international environmental politics.


# Need of Environment Protection Act


- It was necessary to have a **general legislation** for environmental protection because the existing laws focused on very specific types of pollution.
- Certain areas of environmental hazards were not covered.
- Thus, there was a need for an authority which could assume the **lead role** for studying, planning and implementing long term requirements of environmental safety and **give directions** to, as well as **coordinate a system** of speedy and adequate response to emergency situations threatening the environment.



# Environment Protection Act 1986


- Environment Protection Act, 1986 extends to whole India and it **came into force on 19th November 1986**. It deals with environment, environmental pollutants, and hazardous substances. The Environment (Protection) Act, 1986 authorizes the central government to protect and improve environmental quality, control and reduce pollution from all sources, and prohibit or restrict the setting and /or operation of any industrial facility on environmental grounds.

- 
- It **empowers the Central Government** to establish authorities charged with the mandate of preventing environmental pollution in all its forms and to tackle specific environmental problems that are peculiar to different parts of the country.
  - The Environment (Protection) Rules lay down procedures for **setting standards of emission** or discharge of environmental pollutants.
  - The objective of **Hazardous Waste (Management and Handling) Rules, 1989** is to control the generation, collection, treatment, import, storage, and handling of hazardous waste.

- 
- **The Manufacture, Storage, and Import of Hazardous Rules** define the terms used in this context, and sets up an authority to inspect, once a year, the industrial activity connected with hazardous chemicals and isolated storage facilities.
  - The Manufacture, Use, Import, Export, and Storage of **hazardous Micro-organisms/ Genetically Engineered Organisms or Cells Rules 1989** were introduced with a view to protect the environment, nature, and health, in connection with the application of gene technology and micro-organisms.

# The rules of Environment protection

- 1. The **standards of quality of air, soil and water** for various areas and purposes of environment.
- 2. The standard set up to know about the **limits of the environmental pollutants**.
- 3. **Rules** include the procedure and safeguards needed to **handle the hazardous substance**.
- 4. Restrictions and some **prohibitions on handling the hazardous substances** in different areas and premise
- 5. The procedures and safeguards required for the **prevention of accidents** which may cause environmental pollution and **also the remedies** for it.
- 6. The prohibition and possessed on the **location industries** in different areas.

- 
- **Section 15** states that any person who is not complying with the provisions stated in this act and its failure or contravention will make liable and punishable as the following:
  - 1 In terms of imprisonment up to the extension of the time span of five years.
  - 2. With fine which may extend to the term of one lakh rupee.
  - 3. Or the liable person has to deal with both of the punishments.
  - 4. If the contravention of the offence that continues for one year the punishment can extend up to seven years.



# Salient features of the Act

- Establish **quality standards** vis-a-vis environment including standards for discharge of pollutants.
- **Inspect** premises, plants, or machinery and direct officers or authorities to take requisite measures.
- Stringent **penalties and punishment**.
- Hazardous wastes are defined and **special procedures are laid down**.
- This Act is also applicable to Government Department.
- The Act empowers common citizens to approach the Courts .
- The establishment of **environmental laboratories** that work to protect the environment and people from contamination.

# Cases made under this Act

- M.C. Mehta v Union of India (*Taj Trapezium Case*)
- M. C. Mehta v Union of India, 1997 (*Groundwater Depletion Case*)
- Indian Council for Enviro-Legal Action v Union of India (*The “Polluter-Pays” principle*)
- Tarun Bharat Sangh v Union of India (*the mining activities undertaken inside the Sariska Wildlife Sanctuary*)
- Rural Litigation and Entitlement Kendra, Dehradun v State of Uttar Pradesh (*limestone quarrying in the Dehradun valley*)

## Salient Features Of The Act

- This Act deals with criminal jurisdiction.
- Central Government is most powerful.
- Environmental labs are established or authorised by Central Govt., State Govt., CPCB or State PCB.
- Standards are laid down by Central Govt., State Govt., CPCB or State PCB.
- Stringent penalties and punishments.
- Person having highest authority is prosecuted.
- Hazardous wastes are defined and special procedure is laid down.
- Locus standi is relaxed. Any person can file a case.
- This Act is also applicable to Government Department.
- This is an Umbrella Legislation.





### **3. Air (Prevention and Control of Pollution) Act**

# India's Air (Prevention and Control of Pollution) Act, 1981







**Never mistake law for justice.  
Justice is an ideal, and law is a tool.**

L.E. Modesitt Jr.

“ quote fancy

# Air Pollution



[https://youtu.be/\\_GO6aQvL2yE](https://youtu.be/_GO6aQvL2yE)

# INTRODUCTION

- Decisions were taken at the UN Conference on the Human Environment held in Stockholm in June, 1972, to take appropriate steps for the preservation of the natural resources of the earth which, among other things, include the preservation of the quality of air and control of air pollution.
- The **Air (Prevention and Control of Pollution) Act, 1981** is an Act of the Parliament of India to control and prevent air pollution in India.
- The law was amended in 1987. This was the first attempt by the government of India to combat air pollution.

# Objectives of the Act

- To provide the **prevention, control and abatement** of air pollution.
- To confer on the Boards the powers to implement the provisions of the Act and **assign to the Boards functions** relating to pollution.
- To provide the establishment of **central and State Boards** with a view to implement the Act.

# Functions of Central Board

- Plan and execute a nation-wide programme for the prevention, control, or abatement of air pollution
- Co-ordinate activities of state board
- To collect, compile and publish technical and statistical data relating to air pollution, measures for prevention and abatement of the same
- Central Board may discharge the functions of State Board
- To perform such other functions as may be prescribed from time to time



# Functions of State Board

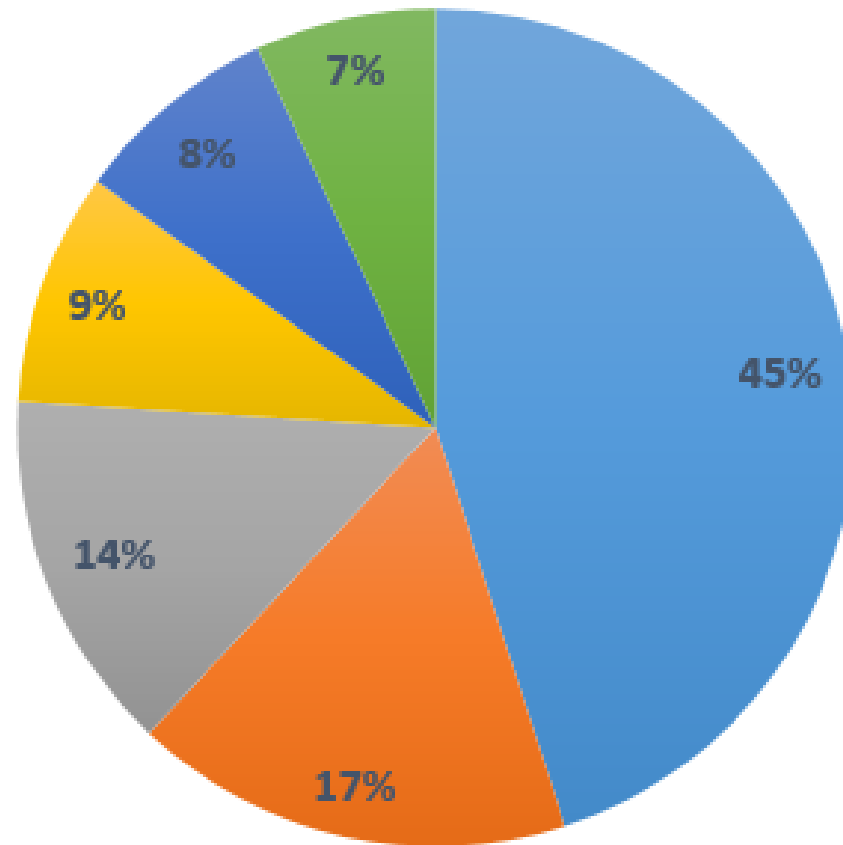
- The State Boards can advise the State Government on any matter concerning the prevention and control of air pollution.
- to inspect any control equipment, industrial plant, or manufacturing process and give orders to take the necessary steps to control pollution.
- empowered to provide standards for emissions to be laid down for different industrial plants
- To establish a laboratory to perform this function.
- Declare air polluted areas and give instructions.

# Penalties:

- 1. The persons managing industry are to be penalized if they produce emissions of air pollutants in **excess of the standards laid down by the State Board**. The Board also makes applications to the court for restraining persons causing air pollution.
- 2. Whoever contravenes any of the provision of the Act or any order or direction issued is punishable with imprisonment for a term which may extend to **three months or with a fine of 10,000 Rs or with both**, and in case of continuing offence with an **additional fine** which may extend to **5,000 Rs for every day** during which such contravention continues after conviction for the first contravention.

# Sources of Air Pollutants

Sources of Air Pollution



■ Dust & Construction ■ Waste Burning ■ Transport  
■ Diesel Generator ■ Industries ■ Domestic Cooking

# Government Initiatives to Combat Air Pollution


- Introduction of cleaner gaseous fuels like CNG, LPG
- Launching of National Air Quality Index (AQI)
- Banning of burning of biomass;
- Promotion of public transport network;
- Installation of on-line continuous (24x7) monitoring devices by highly polluting industrial sectors;
- Regulating the bursting of pollution-emitting crackers
- Compulsory PUC (pollution under control) certificate of petrol driven vehicles which test for carbon monoxide and hydrocarbon



## **4. Water (Prevention and Control of Pollution) Act**

# **Water (Prevention and Control of Pollution) Act**

- The **Water Prevention and Control of Pollution Act, 1974** (the "**Water Act**") has been **enacted** to provide for the **prevention and control of water pollution** and to maintain or restore wholesomeness of **water** in the country.
- The purpose of the act is to assign a set of responsibilities, powers, and functions to the Boards for the prevention and control of water pollution.

- 
- The act is mainly emphasizing on following points.
  - 1. Water Act 1974 aims to **prevent and control water pollution**.
  - 2. Under Water Act, 1974, **pollution control boards were created**, who are responsible for implementation of its provisions.
  - 3. One of the important provisions of the Water Act, 1974 is to **maintain and restore the wholesomeness** of our aquatic resources.
  - 4. Under Water Act 1974, **Sewage or pollutants cannot be discharged into water bodies** including lakes and it is the duty of the state pollution control board to intervene and stop.
  - 5. Anyone failing to abide by the laws of under is liable for imprisonment under **Section 24 and Section 43** ranging from not less than **one year and six months to six years along with monetary fines**.



# Water Pollution



# Functions of Central Board

## (Section 16)

- Advise the Central Government on any matter concerning the prevention and control of water pollution.
- Co-ordinate the activities of the State Boards and resolve disputes among them.
- Provide technical assistance and guidance to the State Boards, carry out and sponsor investigations and research relating to problems of water pollution and prevention, control or abatement of water pollution.
- Plan and organize the training of persons engaged or to be engaged in programs for the prevention, control or abatement of water pollution.
- Collect, compile and publish technical and statistical data relating to water pollution and the measures devised for its effective prevention and control.

# Functions of State Board

## (Section 17)

- Encourage, conduct and participate in investigations and research relating to problems of water pollution and prevention, control or abatement of water pollution.
- Collaborate with the Central Board in organizing the training of persons engaged or to be engaged in programmes relating to prevention, control or abatement of water pollution.
- Inspect sewage or trade effluents, works, and plants for the treatment of sewage and trade effluents and to review plans, specifications or other data relating to plants set up for the treatment of water.
- Evolve methods of utilization of sewage and suitable trade effluents in agriculture.
- Evolve economical and reliable methods of treatment of sewage and trade effluents, having regard to the peculiar conditions of soils, climate and water resources of different regions.
- Set up Laboratories

# PENALTIES

1. If any person fails to comply with the orders of the board under **subsection 2 and 3 of Section 20** then in that case on conviction, he is punishable for imprisonment for **3 months or fine or both**.
2. If the person fails to comply with orders of the board under **clause e of subsection 1 of Section 32 or with subsection 2 of Section 33** then, in that case, the person would be punishable with **imprisonment for 6 months extending to 6 years or a fine or both**.
3. Apart from the above-mentioned penalties. **Section 42** mentions penalties for different kinds of Acts namely,
4. If any person **removes, destroys or pull down any notice put up**
5. If someone **obstructs the member of the board** or any other person who is acting under the board.
6. If a person **fails to produce any information** as required by the member of the board for the performance of his duties.
7. Or if he **gives any information** to the members which he knows to be **false**.
8. Then In all the above Acts if the person is convicted, he would be punishable by imprisonment for a maximum period of **3 month or fine that may extend up to 10,000 rupees or both**.

# Government Initiatives to Combat Water Pollution

- Ganga Action Plan (1985)
- Treatment of sewage water and the industrial effluents before releasing it into water bodies.
- National Water Quality Monitoring Network comprising 1245 monitoring stations in 27 states and 6 in Union Territories on various rivers and water bodies across the country.
- The **monitoring** is done on monthly or quarterly basis in surface waters and on half yearly basis in case of ground **water**.
- Oil spills in water can be cleaned with the help of bregoli — a by-product of paper industry resembling sawdust, oil zapper, microorganisms.

# CPCB

- <https://cpcb.nic.in/index.php>

# MPCB

<https://www.mpcb.gov.in/node>



# QUIZ

- Ganga Action Plan year ?  
→ (1985)
- National Water Quality Monitoring Network comprises of how many monitoring stations?  
→ 1245 stations
- **ANY 2 Functions of State Board for water pollution.**
- **ANY 2 Functions of Central Board for water pollution.**

## FULL FORMS OF

- CNG-  
→ Compressed natural gas
- LPG  
→ Liquefied petroleum gas
- (AQI)-  
→ National Air Quality Index
- PUC  
→ (pollution under control)



- **United Nations Conference** on Human Environment which took place in  
→ Stockholm in June 1972
- Article \_\_\_\_\_ of the Constitution of India empowers the Parliament to enact laws to execute international obligations or decisions from international conferences and associations.  
→ **Article 253**
- Which Act is aka the “Umbrella Act”?  
→ **Environment Protection Act, 1986**
- Define Environmental law  
→ It is a collective term encompassing aspects of the law that provide protection to the environment
- **Objectives of the Air Act 1981**



## **5. Wildlife Protection Act**




**IF WE SAVE  
OUR WILD PLACES,  
WE WILL ULTIMATELY  
SAVE OURSELVES.**

**STEVE IRWIN**  
**SAYINGSPPOINT.COM**



# Introduction

- The Wild Life Protection Act, 1972 is an Act of the Parliament of India enacted for protection of plants and animal species.
- A drastic decrease in the flora and fauna can cause ecological imbalance, which affects many aspects of climate and the ecosystem.
- There were only five national parks in India prior to the enactment of this Act.



The Wild Life (Protection) Act, 1972 is an Act passed by the Parliament of India on August 21, 1972, and later implemented on 9th September 1972.

**This Act contains 66 sections and six schedules.**

### Objectives of Wild Life (Protection) Act, 1972

1. One of the main objectives is to **prohibit the hunting of wild animals**, various species of birds etc.
2. It lays down various **punishments for the violation of rules** and regulations to have proper control over the activities of human beings and to serve the various purposes of this Act.
3. **Various Schedules** contained under this Act give absolute protection to some endangered species so that they can be protected.
4. To provide shelter and **protect the animals which are not in danger** but need protection and security.
5. **the hunter has to obtain a license from the District Officer.** If the license is granted, he would be given a certain restricted area to shoot the animals and in a particular season.
6. powers in the hand of **officers to punish the one who is guilty** under this Act.



- 
- 7.To help the state government and central government to **declare any area as sanctuaries or national parks.**
  - 8.To establish wildlife advisory **boards, wildlife warden** and to appoint the members with their duties and power.
  - 9.To support the Convention of International Trade in Endangered Species of Fauna and Flora **(CITES, 1976).**
  - 10.To support the **UNESCO's Man and Biosphere** Programme, 1971.
  - 11.To impose a ban on trade and commerce of certain protected species.
  - 12.To provide trade and commerce of some wild species by providing a **license for possession, sale, and transfer.**



# Salient features of Act

- The Act provides for the formation of wildlife **advisory boards**, wildlife wardens, specifies their powers and duties, etc.
- For the first time, a comprehensive **list of the endangered** wildlife of the country was prepared.
- The Act prohibited the **hunting** of endangered species.
- It provides for the establishment of wildlife sanctuaries, national parks, etc.
- The **National Board for Wildlife** was constituted as a statutory organization under the provisions of this Act.

# Salient Features of the Wildlife Protection Act, 1972



- Schedules I, II, III & IV list different protected species, the killing or trade of which is prohibited.
- Schedule V lists vermin which may be killed
- Schedule VI lists protected plants
- A Schedule I offence can earn a repeat offender 6 years in prison and a fine of Rs.25,000.
- Rules of a protected area



# **Government Initiatives to conserve wildlife**

- The provisions for the setting up of national parks, wildlife sanctuaries.
- Project Tiger is being implemented which has caused the dwindling tiger population to increase.
- To assist eco-tourism





# **The Protected areas include**

- The sacred Himalayan Landscape
- Kibber Wildlife Sanctuary
- Dibang Wildlife Sanctuary
- Pin Valley National Park





## **6. Forest Conservation Act**

<https://youtu.be/M-FLnUqAmxQ>

# Salient features of Act

- The **Forest (Conservation) Act**, 1980 was passed with a view to check deforestation.
- This **act** covers the aspects left out by the **act** of 1927.
- It aims at putting a restriction on the de-reservation of **forests** or the use of **forest-land** for non-**forest** purposes.
- It was further amended in 1988. It was enacted by Parliament of India to control further deforestation of Forest Areas in India.

# Features:

- This Act has the following features:
- 1. This Act has made the restrictions on the State government and other authorities **cannot make decisions** in some matters without the prior permission of the **central government**.
- 2. Under this Act, the **whole power is in the hand of the Central government** to carry out the laws of this Act.
- 3. This Act also provides **penalties for the infringement** of the provisions of this Act.
- 4. Under this Act, an **advisory committee may be formed for advising the Central government** in matters related to forest conservation.

# Objective of the Act

- To protect the forest, its flora, fauna and other diverse ecological components.
- To protect the integrity, territory and individuality of the forests.
- To protect the forests and prevent deforestation that will lead to land erosion and subsequent degradation of the land.
- To prevent the loss of forest biodiversity.
- To prevent the conversion of forests into agricultural lands, or grazing lands, or building of business or residential units.



# **Government initiatives to conserve forest**

- National Forest Policy
- Conservation of Reserve forest
- Local People Involvement
- Adopting afforestation Scheme

# Cases made under this Act

- Tarun Bharat Singh v. Union of India (1993)
- State of MP v. Krishnadas Tikaram (1994)
- Krishnadevi Malchand Kamathia v. Bombay Environmental Action (2011)



## **7. International Agreements**



A photograph of Al Gore standing at a podium, speaking into a microphone. The podium is illuminated with green light. The background is dark.

**“NOW IS  
THE TIME**

**for people all over  
the world to lend  
their voices to the  
cause and urge  
their leaders to  
take this historic  
first step.”**

**- AL GORE**

*Chairman and Founder,  
The Climate Reality Project*

**DEMAND A STRONG GLOBAL CLIMATE AGREEMENT:**

[www.ClimateRealityProject.org/RoadtoParis](http://www.ClimateRealityProject.org/RoadtoParis)



**Convention:**

- Gathering of individuals
- Meet at an arranged place and time
- Discuss or engage in some common interest
- Based upon industry, profession, and fandom

**Treaty:**

- Agreement under international law
- Entered into by sovereign states and international organizations
- May also be known as an **agreement, protocol, covenant, convention, pact, or exchange of letters**



**Treaties can be loosely compared to contracts:**

- Both are means of willing parties
- Assume obligations among themselves
- A party that fails to live up to their obligations can be held liable under international law.

# Montreal Protocol

- The **Montreal Protocol**, finalized in **1987**, is a global agreement to protect the stratospheric ozone layer by phasing out the production and consumption of ozone-depleting substances (ODS).
- It was designed to stop the production and import of ozone depleting substances and reduce their concentration in the atmosphere to help protect the earth's ozone layer.
- The Montreal Protocol phases down the consumption and production of the different ODS in a step-wise manner, with **different timetables for developed and developing countries**.

# Montreal Protocol

- All parties have specific responsibilities related to the phase out of the different **groups of ODS**, control of **ODS trade**, annual reporting of **data, national** licensing systems to control **ODS imports and exports**, and other matters.
- Developing and developed countries have equal but differentiated responsibilities, but most importantly, both groups of countries have binding, **time-targeted and measurable commitments**.

# Phase out of HCFC

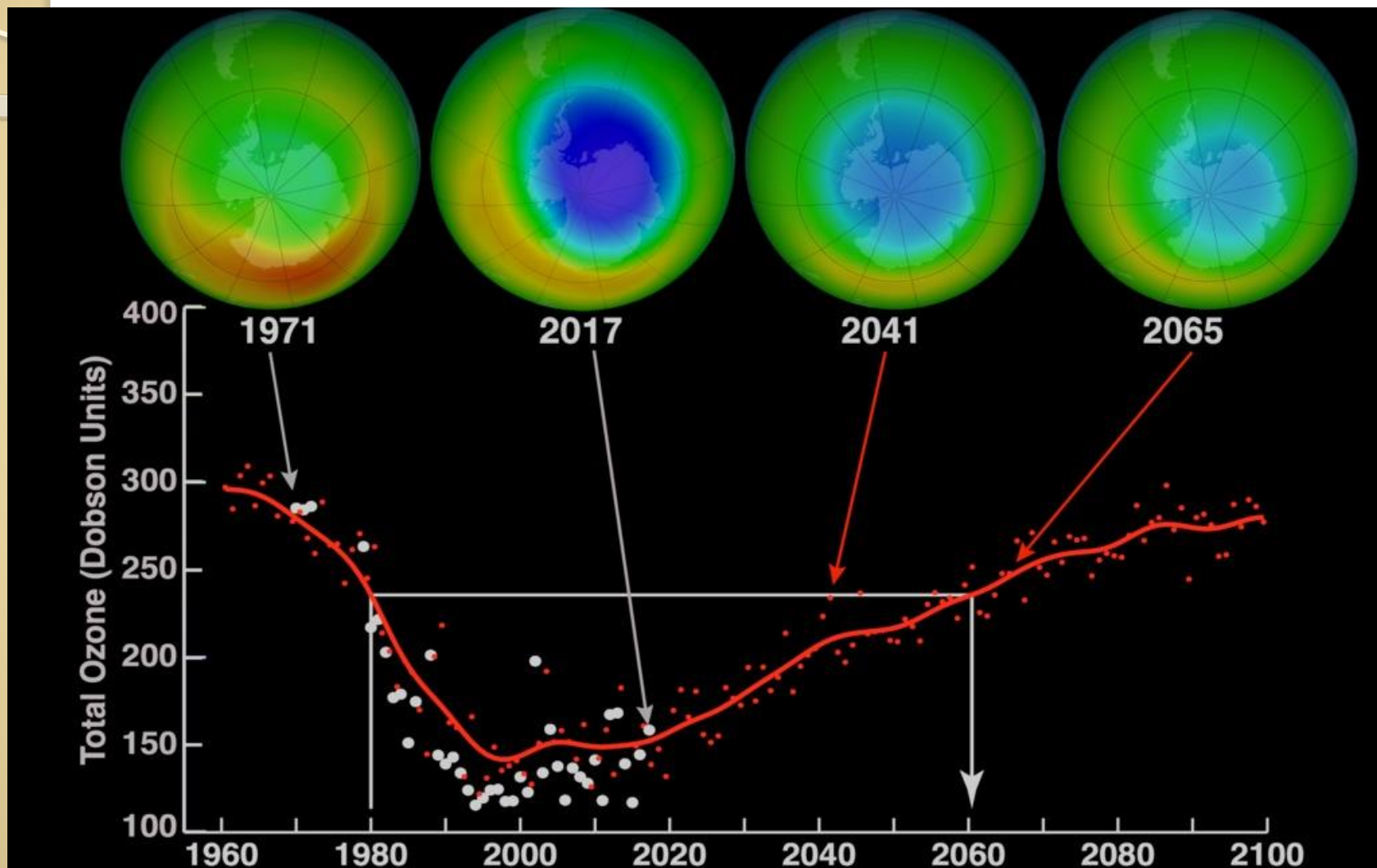
- Hydrochlorofluorocarbons (HCFCs) are gases used worldwide in refrigeration, air conditioning and foam applications.
- In September 2007 the Parties decided to accelerate their schedule to phase out HCFCs.
- Developed countries have been reducing their consumption of HCFCs and will completely phase them out by 2020.
- Developing countries agreed to start their phase out process in 2013 and are now following a stepwise reduction until the complete phase-out of HCFCs by 2030.

# Phase out of HFC

- Hydrofluorocarbons (**HFCs**), were introduced as **non-ozone depleting alternatives** to support the timely phase out of CFCs and HCFCs. HFCs are now widespread in air conditioners, refrigerators, aerosols, foams and other products.
- The first reductions by developed countries are expected in 2019.
- **Developing** countries will follow with a freeze of **HFCs** consumption levels in 2024 and in 2028 for some nations.
- The pathway to implement the HFC phase down is to **reduce dependency on high-GWP** alternatives and increase the adoption of low-GWP, energy-efficient technologies as part of the HCFC phase-out process.



Globes were created with data from NASA's Nimbus-4 Backscatter Ultraviolet instrument and Aura's Ozone Monitoring Instrument.





# Success achieved

- Without this treaty, ozone depletion would have increased tenfold by 2050 compared to current levels, and resulted in millions of additional cases of melanoma, other cancers and eye cataracts.
- The Protocol have phased out 98% of ODS globally compared to 1990 levels.
- Actions to limit the use of HFCs is expected to prevent the emissions of up to 105 million tonnes of carbon dioxide equivalent of greenhouse gases, helping to avoid up to 0.5 degree Celsius of global temperature rise by 2100.

# KYOTO PROTOCOL

<https://youtu.be/DFhuNKNDrLg>

[https://youtu.be/4FVY4\\_UWfVc](https://youtu.be/4FVY4_UWfVc)

- <https://youtu.be/l-4F5MJEeqs>

# Kyoto Protocol

- The targets for the first commitment period of the Kyoto Protocol cover emissions of the six **main greenhouse gases**, namely:
  - Carbon dioxide (CO<sub>2</sub>);
  - Methane (CH<sub>4</sub>);
  - Nitrous oxide (N<sub>2</sub>O);
  - Hydrofluorocarbons (HFCs);
  - Perfluorocarbons (PFCs); and
  - Sulphur hexafluoride (SF<sub>6</sub>)

# Kyoto Protocol

- The Kyoto Protocol is an international agreement that called for industrialized nations to reduce their greenhouse gas emissions significantly.
- Other accords, like the Doha Amendment and the Paris Climate Agreement, have also tried to curb the global-warming crisis.
- Today, talks begun by the Kyoto Protocol continue and are extremely complicated, involving politics, money, and lack of consensus.

# Responsibilities of the countries

- The Kyoto Protocol recognized that **developed countries are principally responsible** for the current high levels of GHG emissions in the atmosphere.
- As such, the protocol placed a heavier **burden on developed nations than less-developed nations**.
- The protocol placed **emission limitations on developed countries only**. Developing nations participated by investing in projects designed to lower emissions in their countries.

# End of Kyoto Protocol 2012

- The **United States and China**—two of the world's biggest emitters—produced enough greenhouse gases to mitigate any of the progress made by nations who met their targets.
- In fact, there was an **increase of about 40%** in emissions globally between 1990 and 2009.

# The Doha Amendment

- In December **2012**, after the first commitment period of the Protocol ended, parties to the Kyoto Protocol met in **Doha, Qatar**, to adopt an amendment to the original Kyoto agreement.
- This so-called Doha Amendment added **new emission-reduction targets** for the second commitment period, 2012–2020, for participating countries.
- The Doha Amendment had a **short life**. In 2015, at the sustainable development summit held in Paris, all UNFCCC participants signed yet another pact, the Paris Climate Agreement, which effectively replaced the Kyoto Protocol.



# The Paris Climate Agreement

- The Paris Climate Agreement is a landmark environmental pact that was adopted by nearly every nation in 2015 to address climate change and its negative effects.
- The agreement includes commitments from all major GHG-emitting countries to cut their climate-altering pollution and to strengthen those commitments over time.
- A major directive of the deal calls for reducing global GHG emissions so as to limit the earth's temperature increase in this century to 2 degrees Celsius above preindustrial levels while taking steps to limit the increase to 1.5 degrees.
- The Paris Agreement also provides a way for developed nations to assist developing nations in their efforts to adapt climate control and it creates a framework for monitoring and reporting countries' climate goals.

# The Kyoto Protocol today

- In 2016, when the Paris Climate Agreement went into force, the United States was one of the principal drivers of the agreement.
- Donald Trump criticized the agreement as a bad deal for the American people and pledged to withdraw the United States.
- In 2019, the dialogue is still alive but has turned into a complex quagmire involving politics, money, lack of leadership, lack of consensus, and bureaucracy.
- Today, despite myriad plans and some actions, solutions to the problems of GHG emissions and global warming have not been implemented.



# ***CONVENTION ON BIOLOGICAL DIVERSITY (CBD)***

# objectives

- The **conservation of biological diversity**,
  - The **sustainable use** of the components of biological diversity and
  - The **fair and equitable sharing** of the benefits arising out of the utilization of genetic resources.
- 
- Preamble: Parties acknowledge that "special provision is required to meet the needs of developing countries, including the provision of new and additional financial resources and appropriate access to relevant technologies and, in this regard, note "the special conditions of the LDC least developed countries and SDIS Small Island States".

# The Convention has two protocols, **Nagoya Protocol**

- **Access to Generic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization:** Parties committed to taking into account the needs of, and cooperating with, developing country Parties and in particular LDCs, SIDS and Parties with economies in transition (Article 22 on capacity: Article 23 on technology transfer, collaboration and cooperation; Article 25 on Financial Mechanisms and Resources).

# Cartagena Protocol

- **Biosafety to the Convention on Biological Diversity** (governs the movements of living modified organisms - LMOs resulting from modern biotechnology from one country to another)
- In regard to the establishment of a Biosafety Clearing-House, Parties committed to " Assist Parties to implement the Protocol, taking into account the special needs of developing country Parties, in particular the least developed and small island developing States among them, and countries with economies in transition as well as countries that are centres of origin and centres of genetic diversity" (Article 20)



# QUIZ

- What was the main Objective of the FOREST Act ?  
→ To stop DEFORESTATION

How many schedules are present in the Wildlife Protection Act?  
→ 6

The Wild Life Protection Act, 1972 is an Act of the Parliament of India enacted for?  
→ protection of plants and animal species.

The **Montreal Protocol**, finalized in which year ?  
→ 1987

FULL FORMS

(ODS) → ozone-depleting substances

(HCFCs)

→ Hydrochlorofluorocarbons

Difference between convention and protocol?

The **Montreal** Protocol have phased out \_\_\_\_\_% of ODS globally compared to 1990 levels.  
→ 98

# QUIZ

Kyoto Protocol cover emissions of the six main greenhouse gases, namely

→ (CO<sub>2</sub>);(CH<sub>4</sub>);(N<sub>2</sub>O);(HFCs);(PFCs); (SF<sub>6</sub>)

There was an increase of about \_\_\_\_\_ % in GHG emissions globally between \_\_\_\_\_ and \_\_\_\_\_.

→ 40. 1990 and 2009.



“We still have time to avoid the worst, unacceptable consequences of climate change, but we need to get busy right away.”

-Former Vice President Al Gore

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**THE END**